

Mapping the Creative Value Chains

A study on the economy of culture in the digital age

Final report







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Abstract

Cultural and creative sectors (CCS) have become well established in both an economic and policy context as important assets in strengthening Europe's economic structure and maintaining its competitiveness in the global economy.

This study maps the different value chains for visual arts, performing arts, cultural heritage, artistic crafts, book publishing, music, film, TV and broadcasting as well as multimedia.

The study also examines how the competitive position of CCS is affected by digitisation. From creation to consumption, all steps in the value chains have been influenced by new digital solutions. They have brought about new opportunities for innovative practices and new ways of interaction with audiences, but also challenges such as piracy and an increased pressure on existing models of remuneration and value creation. The study discusses aspects related to competitive dynamics, market imperfections, rights management, cultural diversity and other issues of importance to today's cultural and creative sectors.

Based on the analysis and supported by an online crowdsourcing process with experts and stakeholders, the study puts forward recommendations to policy-makers on what is needed for the CCS in today's digital world.

New actors have entered the market and boundaries between creative value chains and other value chains have become blurred. Innovative multidisciplinary approaches are needed to redefine the role of culture, arts and creativity in a complex society in transition.

<u>Key words</u>: Cultural and creative sectors, creative value chains, digitisation, market relations, competitive dynamics, market imbalances

Introduction sommaire

Les secteurs culturels et créatifs (SCC) sont désormais reconnus, au sein des milieux politiques et économiques, comme des atouts majeurs pour le renforcement de la structure économique européenne et le maintien de sa compétitivité à l'échelle de l'économie mondiale.

Cette étude cartographie les chaînes de valeur de neuf domaines culturels et créatifs : arts visuels, arts de la scène, patrimoine culturel, artisanat, édition, musique, film, diffusion à la radio et à la télévision, et multimédia.

Cette étude analyse également comment la numérisation a influencé les positions et les dynamiques concurrentielles au sein des SCC. De la création et à la consommation, toutes les étapes de ces chaines de valeur ont été impactées par de nouvelles solutions digitales. Ces dernières offrent de nouvelles opportunités pour les pratiques innovantes ainsi que des façons d'interagir avec le public qui sont radicalement nouvelles. Dans le même temps, la numérisation engendre des défis considérables pour les SCC tels que l'augmentation du piratage ainsi que la pression croissante exercée sur les modèles existants de création et rémunération de la valeur. Cette étude aborde plusieurs volets importants d'actualité pour les SCC, tels que les imperfections du marché, la gestion des droits et la diversité culturelle.

Sur base de ces analyses ainsi que du feedback reçu durant un processus d'interaction en ligne avec des experts et des représentants des milieux concernés, l'étude présente un certain nombre de recommandations aux décideurs politiques en vue de répondre aux besoins des SCC à l'ère du numérique.

De nouveaux acteurs sont entrés dans le marché et les frontières entre les chaînes de valeur créatives et les autres chaînes de valeurs tendent à s'estomper. Des approches multidisciplinaires et innovantes s'avèrent désormais nécessaires afin de repenser le rôle de la culture, des arts et de la créativité dans une société complexe et en transition.

<u>Mots-clés</u>: Secteurs culturels et créatifs, chaînes de valeur créatives, numérisation, relations de marché, dynamiques concurrentielles, déséquilibres du marché

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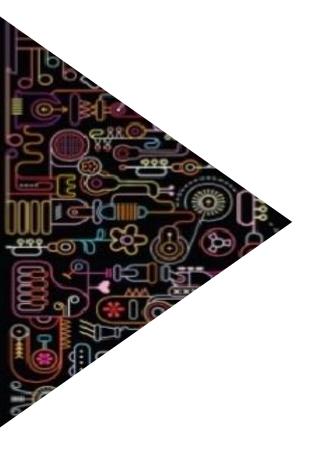
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Executive summary

Mapping the creative value chains - a study on the economy of culture in the digital age

Cultural and creative sectors (CCS) have become well established in both an economic and policy context as important assets in strengthening Europe's economic structure and maintaining its competitiveness in the global economy.¹

However, the competitive position of CCS is continuously challenged by exogenous factors affecting creative value chains, especially digitisation. From creation to actual consumption, all steps in the value chains have been influenced by new digital solutions, bringing about new opportunities for innovative practices and even creating radically new types of interaction with audiences. At the same time, digitisation poses significant challenges for CCS actors, such as the increase of piracy as well as increased pressure on existing models of value creation and remuneration.

New actors have entered the market and boundaries between creative value chains and other value chains have become more blurred. The process of blurring boundaries has been further reinforced by a relatively recent process of rethinking the role of culture, arts and creativity in a complex society in transition, confronted with different global challenges that require innovative multidisciplinary approaches.

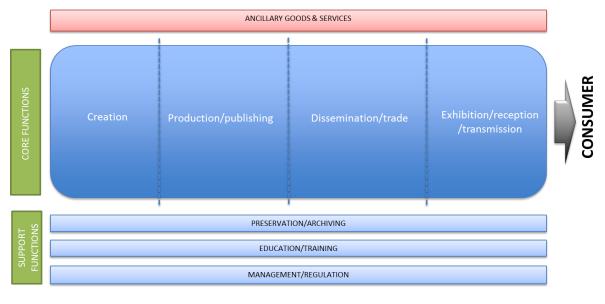
Changing interrelations and competitive dynamics

Against this background, the current study maps the economic structure of creative value chains and analyses how digitisation has influenced market relations and competitive dynamics.

To this end, we use the stylised value chain model in the figure below as the overarching framework for the economic analysis of activities and interrelations within creative value chains. We distinguish four core functions (Creation, Production, Dissemination/trade and Exhibition/reception), as well as a number of support functions and relations with other sectors for the supply of ancillary goods and services that are critical for value creation in the creative value chains.

To take into account the wide variety of activities and actors covered by the CCS, the analysis is not carried out at the level of the CCS but rather at the level of the following cultural and creative domains: visual arts, performing arts, cultural heritage, artistic crafts, book publishing, music, film, television and radio broadcasting, and multimedia.

Stylised Creative value chain model



¹ See e.g. TERA (2014), KMU Forschung Austria and VVA (2016)

Based on the value chain analyses, we find that digitisation has a multidimensional impact on the structure and market dynamics in all nine creative value chains. Digitisation gave rise to new tools that allow actors in all stages of the nine creative value chains to:

- automate or organise existing activities in a more efficient and/or effective manner (production, communication,...);
- explore new (cross-sectoral) market opportunities, including new roles in the value chain;
- take up completely new activities, including completely new business models whereby digitisation allows creators to bypass traditional intermediaries ('disintermediation'), sometimes even (radically) changing the rules of the (business) game.

But the impact has not been equal in all creative value chains. The differences in impact link back to a number of structural differences in the economic characteristics of the nine cultural and creative domains:

- The degree of complexity of creation: cultural and creative domains that are characterised by relatively simple production processes are more affected by a trend of disintermediation/re-intermediation, where new intermediary actors (mostly online platforms) become more important in the value chain and can gain a dominant position.
- **The level of upfront investment costs needed in production:** higher upfront investment costs to produce a creative work mean that stronger project coordination is needed to keep investment risks to a minimum and thus creative value chains are less affected by processes of disintermediation.
- ▶ **Economies of scale:** higher digitisation rates i.e. higher shares of revenue from digital business lines in the total global revenues can be found especially in those domains where cultural works can easily be reproduced at low marginal cost and without diminishing their cultural value.
- Degree of substitutability of digitised versus non-digitised cultural works: for some cultural works consumption of a digitised version is a close substitute for a non-digitised version, thus opening opportunities for a higher impact of digitisation on value creation. In other sectors this degree of substitutability is much lower (although new digital tools such as virtual tours or virtual reality experiences also affect this degree in those sectors).

No drastic reconfiguration, but rather increasing complexity of creative value chains

Digitisation has a multidimensional impact on the economic structure of creative value chains. At the same time, we observe that digitisation has not drastically reconfigured creative value chains. No actor has become obsolete so far; rather new actors have joined, thus increasing the complexity of value chains. Moreover, although power balances have changed in several value chains, those actors that have dominated the value chains as gatekeepers before digitisation, mostly remain playing a pivotal role in the current economic organisation. There are several reasons to explain this:

- Although new digital tools allow creators to get involved in activities along the value chain, they often lack the size and capacity to take full advantage of these opportunities on their own.
- Creators still need intermediary organisations to overcome their individual weak bargaining position vis-àvis users to control the exploitation of their works and to negotiate fair terms of remuneration.
- Building a reputation is of high importance to be successful in the "winner-takes-it-all" CCS market and to make a living. A strong reputation is seldom (if ever) built by creators alone without the support of gatekeepers.
- Getting access to good qualitative cultural content is very important for any distributor, including digital distributors such as online platforms. The catalogues of cultural works managed by the traditional gatekeepers (primarily producers and publishers) are still very valuable in that context.
- An important part of cultural consumption still remains non-digital. The traditional actors remain the key actors in delivering offline cultural experiences.

The online intermediaries that challenge the traditional structures (e.g. Google, Amazon, Apple, etc.) in some parts of the value chain (mainly dissemination) are (non-European) global businesses that currently lack a sufficiently strong network of contacts and insights into local cultural and creative markets to cover the highly-fragmented EU market without intermediation.

Rather than drastically changing the configuration of the creative value chains, digitisation resulted in challenging existing power balances and (inter)sectoral relations by providing alternative models to create, produce, promote or distribute.

Challenges to maximize the benefits of digitisation and minimize market imbalances

Building further on the value chain analyses, we examine five transversal thematic areas where specific challenges for the CCS and policy makers exist in fostering an enabling framework for CCS actors to get the most out of digitisation, while at the same time minimizing potential market imbalances.

Intertwining and convergence in creative value chains

Collaborations between cultural actors and non-cultural actors are nothing new; the CCS are said to have a natural 'convergence or confluence culture'. However, the degree of integration and intertwining of creative value chains with other sectors has never been so high. The increased complexity of societal challenges and (the speed of) technological advances have been important drivers of this process.

Some sub-sectors of the cultural and creative industries are more prone to intertwining and cross-sectoral innovation (e.g. broadcasting and gaming), while others show lower levels of openness to and integration with non-cultural sectors (e.g. artistic crafts or visual arts). This is also illustrated by the diversity of convergence processes in three specific case studies analysed: 1) gaming and healthcare, 2) broadcasting and telecom, 3) arts and science.

Despite the diversity of convergence processes, there are certain bottlenecks that currently limit CCS actors from exploiting the full potential of cross-sectoral collaborations:

- Traditional industries are underrepresented in the customer base of most cultural and creative organisations.
- The social capital in CCS organisations is often used in a sub-optimal way for intertwining due to market imperfections: e.g. co-operation occurs in an opaque marketplace, lack of common language, no continuum of institutional support and reliance on individual partners.
- The dynamics of knowledge sharing and crossovers are rather different when it comes to bottom-up versus top-down processes. Evidently, the bottom-up processes are more conducive to intertwining than top-down processes.
- Creators are often in a disadvantaged position to benefit fully from the potential benefits of the convergence as they lack skills and financial resources to reposition themselves vis-à-vis their new partners/clients from other industries.
- Public support (e.g. funding, support for networking opportunities) to stimulate cross-sectoral
 collaborations is often concentrated at the beginning of the value chain (creation). However, there are
 also important bottlenecks at the later stages of the value chain, especially in dissemination/exhibition
 (i.e. to get access to distribution channels/audience).
- Innovative developments that happen at the borderline of traditional sectors and/or policy areas, are
 often confronted with "silo thinking" and regulatory fragmentation that limit the flexibility to
 experiment.

Competitive dynamics in two-sided markets

Cultural sectors are increasingly becoming organised as two-sided markets, where new online companies play the role of platforms mediating between different categories of users (e.g. advertisers and readers).

Two-sided markets are often characterised by market dominance of one or a few platforms, as incumbents benefit from structural and/or strategic entry barriers. This may raise competition issues. Major concerns relate to, among others, platforms imposing unfair terms and conditions, platforms refusing access to important user bases or databases, unfair "parity" clauses with detrimental effects for the consumer as well as transparency issues - notably on platform tariffs, use of data and search results.

At the same time, the emergence of platforms has been accompanied by a huge amount of innovations, developed by third parties that make use of platforms, as well as by platforms themselves. However, platforms can also make use of their economies of scale or leverage market power in adjoining markets, leading to reduced innovation by third parties in the longer term. Such ambiguity in the relationship between platforms and innovation feeds the tendency to neither prevent nor penalise online platforms' dominance, since dominance relies on innovation and can be challenged by potential competitors.

Most classical tools fail when it comes to the assessment of two-sided markets from a competition policy point of view. The research suggests that regulatory measures concerning online platforms are best set up on a problem-driven basis, rather than applying a "one-size-fits-all" approach. Nevertheless, a set of common guiding principles when dealing with online platforms is needed – along the lines of the policy approach outlined by the European Commission in its Communication on online platforms in the Digital Single Market (2016).

Digitisation and new opportunities for creators

Disintermediation is increasingly regarded as an interesting way for creators to avoid possible market and revenue imbalances and ensure fairer remuneration. A rising number of creators take responsibility for creating and producing their own works and further distribute them, thus substituting themselves for traditional actors in the value chain. This allows for:

- removing filtering of content by other actors such as distributors and decreasing asymmetry of information;
- reducing the number of intermediaries and costs;
- building a different relationship with the audience, based on increased user engagement and cocreation.

Disintermediation thus leads to lower entry barriers for creators. At the same time, it results in increased competition as well as higher pressure on creators to become "creative entrepreneurs" and take the lead in innovating their business models. In order to be successful in the digital ecosystem, creators need to turn into *polymaths* (KEA, 2009) and master an increasing mix of abilities. To be more autonomous artists would need to combine their talent and creative skills with business, technical and social skills. Training does not often cover these topics and creators have to rely on learning-by-doing mechanisms (or outsourcing, since they need to dedicate their scarce time concentrating on their core artistic activities). Another obstacle relates to the limited access to finance and knowledge about opportunities in foreign markets.

Remuneration and rights management in the digital age

In recent years, the internet has become the main marketplace to access and consume copyright-protected content. At the same time, the enforcement of copyright and related rights has become more problematic in the digital world. Next to problems related to increased possibilities for illegal use of copyrighted works, there is growing concern as to whether the value generated by some of these new forms of online content distribution is fairly shared between distributors and rights holders and ultimately benefits the very creators who are at the origin of such value generation.

This concern is strongly linked to the lack of transparency in payment flows. Several elements are at the basis of this lack of transparency: (1) the role of new digital intermediaries and the impact of the new business models according to which they operate; (2) the complexity of licensing processes and clearance of rights; (3) the current practices with respect to contractual arrangements that foster information asymmetry and thus lack of transparency; (4) the fragmentation of the European market and the complexity of licensing schemes.

This study suggests two sets of measures as a way forward to improve transparency and creators' ability to receive fairer remuneration:

- A better application, recognition and control of metadata for identifying online copyrighted content, may result in a better basis for creators to leverage the use of their creative work, decrease information asymmetry and lead to better identification of rights holders;
- Making more use of collective rights management and licensing mechanisms may empower creators in providing them with the infrastructure and capacity needed to process large amounts of data relating to the digital exploitation of creative works. It might also improve their bargaining power while reducing transaction costs at the same time for service providers interested in the commercial exploitation of creative content. Initiatives and mechanisms such as MERLIN, BMAT/ARMONIA and WIN analysed in this study illustrate the potential positive impact.

Cultural diversity

Cultural diversity is an important component of European identity, and is as such a cornerstone in cultural policy development.

The impact of market structure on cultural diversity is ambiguous, in particular concerning the impact of online platforms. On the one hand, such platforms give access to a large diversity of content, a condition for diversified consumption. To some extent such platforms could contribute to overcoming the historical lack of cross-border circulation of cultural content.

On the other hand, greater availability of diverse content does not necessarily correspond to higher visibility, discoverability and thereby accessibility, in particular when it comes to the very diversified cultural production all across Europe. Furthermore, online markets are becoming increasingly concentrated, at the potential expense of creators and traditional intermediaries.

Policy makers may consider or are already undertaking at EU- or national level various actions and measures aiming at supporting cultural diversity (see also further below). They range from fostering regulatory harmonisation to facilitate cross-border circulation of content and ensure a level-playing field on the market to varied support schemes that encourage the production and circulation of creative works and the mobility of creators. However, further efforts seem crucial in terms of data collection and monitoring to properly assess how digitisation affects both supplied and consumed cultural diversity.

Actions to redress market imbalances

The sectoral value chains mapping and the five thematic papers clearly show that market relations and competitive dynamics in creative value chains have been subject to significant change over the last decade due to digitisation, even leading to market imbalances in a number of situations (e.g. increasing dominance of a number of online platforms, the use of creative content without transparency over remuneration flows, the installation of closed ecosystems leading to 'lock-in' effects, etc.).

For cultural and creative actors in Europe to make the most out of these significant evolutions and for European policy makers to further develop the right framework to support the competitive position of those actors and ensure cultural diversity in Europe, we recommend further actions at EU-level in six areas. The suggested areas for action as well as the proposed actions have been tested and validated during an online interaction process with a selected group of participants from the stakeholders' community.

Better statistics / data for monitoring

Official statistics on CCS provide an important amount of information that enable understanding and monitoring of how CCS are evolving. However, official data on the CCS mostly focus on data at the level of individual entities (business units) and traditional sectors (following the NACE classification), rather than taking a value chain perspective. Official statistics need to be complemented with data that go beyond the traditional delineation of the CCS.

To improve statistics / data to better monitor the impact of digitisation on the economic structure of and market dynamics in creative value chains, we recommend to invest in:

- new data gathering both quantitative and qualitative on market relations/dynamics within value chains to complement current official structural business statistics;
- the development of a monitoring system to adequately monitor evolutions in the remuneration and working conditions of creatives;
- finding new research methods to better monitor the impact of digitisation on creative businesses and CCS in general, including the use of internet data for such research.

Connect to overcome fragmentation

Powerful dynamics take place at the borderlines between various sectors, but sectors and policies are still often organised in sectoral silos, limiting the scope for synergies and the emergence of new solutions and businesses. To successfully overcome this fragmentation, we recommend that actions are taken at different levels to address the current fragmentation, focusing on:

- awareness creation with CCS actors, other businesses, academia, teachers and policy makers about the added value of cross-sectoral collaborations between CCS actors and other sectors ("inspire");
- the provision of supporting tools that lower the barriers therefore permitting engagement in cross-sectoral collaborations ("support cross-sectoral experiment");
- actively promoting the importance of "out-of-the-sector" thinking and cross-sectoral connections for the European economy and society at large by bringing together policy makers from different policy areas (education, innovation, economic policy, social affairs, ...) and stimulating exchanges of experiences, overcoming bottlenecks and regulatory silos,... ("stimulate supportive policy development").

Support capacity building

New developments require new skills. Many CCS organisations currently fail to get the most out of the opportunities that digitisation and the changing societal context brings, due to a lack of skills and/or lack of scale. To support capacity building with CCS actors, we recommend the following actions at EU level:

- Support intermediary organisations to further promote entrepreneurial and business skills as an
 integral part of CCS actors' curriculum. Support for entrepreneurial culture should already start during
 formal education, via innovative curricula in arts education with a better integration of business,
 marketing and entrepreneurial courses, and more flexibility in combining different disciplines.
- Invest in supporting environments conducive to creative entrepreneurship, such as creative hubs, living labs, creative business incubators and co-working spaces and to enhance peer-learning and business opportunities. Such support could follow on from the recent example of an EU-funded initiative, i.e. the European Network of Creative Hubs
- Stimulate intermediary organisations to develop adequate material and training about the business implications (opportunities and challenges) of digitalisation. One type of output could be a toolkit on how to make smart uses of all the data that CCS actors collect (including inspirational examples). Such toolkit should sufficiently take into account sector specificities to be relevant.
- Stimulate the CCS to find new models of co-operation to overcome the small size of most entities, and to join forces to increase their bargaining power, by facilitating exchange of good practices and learning lessons.
- Help the CCS to build collective representation through sector associations. Exchange good practices to prevent precarious working conditions for creators through new forms of work in today's collaborative economy.

Optimise the use of EU funding

Several EU funding programmes focus on increasing the competitiveness of organisations (through innovation, capacity building, etc.). These programmes are also accessible to CCS actors. However, barriers to accessing EU funding are still (very) high for most CCS actors, despite the many challenges that CCS actors face to remain competitive in the digital age. We recommend focusing EU actions in this area primarily on the following:

- Promote inter-clustering and cross-sectoral networking, for example via an annual event for EUsupported initiatives linked to culture and creativity (covering relevant programmes, in particular Creative Europe, COSME, H2020, Interreg and URBACT).
- Promote better and more differentiated access to finance for CCS: stimulate the uptake and integration
 of alternative finance instruments such as crowdfunding, microfinance, etc. in the overall mix of
 financial instruments available to CCS.
- Encourage crowdfunding for the CCS, notably via fiscal incentives/tax shelters (also for reward-based and donation-based crowdfunding) and increased exemption limits to encourage entrepreneurial activities. Public authorities (local, regional, national) should also partner with crowdfunding platforms to support the CCS through match-funding schemes, for example.
- Support for CCS SMEs to access markets outside of the EU and support collaboration and networking amongst creative entrepreneurs, as well as distribution and commercialization.
- Encourage equity investment in the CCS by supporting the development of a framework for the valuation of creation content.
- Lower the barriers to accessing EU funding for SMEs by limiting the administrative burden.

Promote cultural diversity

Digitisation opens up opportunities for creators and traditional intermediaries in terms of greater circulation of content, and greater diversity in consumption itself. However, as mentioned earlier, our findings confirm that various factors may prevent such positive impacts from materialising. The study therefore suggests to:

- promote the access to, and visibility of, the diversity in the offer of content services.
 - Quotas may be instrumental in some cases, but their efficiency needs to be assessed (see for e.g. the revision of the Audiovisual Media Services Directive);
 - In other cases, incentives could be considered for example through facilitating stakeholders' initiatives aimed at increasing the discoverability of European cultural production in sectors being especially reshaped by digitisation (e.g. music);
- foster regulatory harmonisation and level-playing field as appropriate in areas which are particularly relevant to ensure the availability and accessibility of a diverse content offer in a digital context and enable local and smaller cultural and creative players to fully benefit from digitisation;
- support the correct use of metadata to retrieve less visible cultural content and collective rights licensing initiatives to promote the distribution of small catalogues;
- develop tools to assess and monitor diversity. This requires overcoming challenges related to data availability and conceptualisation of cultural diversity. In this respect, we suggest the following to be considered:
 - assessing the impact of support programmes through independent studies, possibly combined with testing the feasibility of embedding cultural diversity indicators across programmes;
 - building on synergies with existing data collection and research resources (e.g. the European Audio-visual Observatory, Eurostat etc.) to define and narrow down relevant aspects of cultural diversity (e.g. discoverability) for policy assessment.

Improve the regulatory environment

Digitisation has led to new actors entering the CCS value chain and new types of relations being built across the value chain and between different value chains. The EU regulatory framework for the CCS is undergoing a significant overhaul under the Digital Single Market strategy.

European cultural production inherently caters mainly for local and different linguistic markets. Fostering a better accessibility and visibility of such diverse production across these markets is extremely challenging. Today Europe's incredible diversity and excellence in production has difficulty reaching consumers outside their country of origin.

In addition, the increased role of licensing deals in the CCS revenue flows adds pressure on often overstretched smaller players of the value chains, due to the multiplication of contracts and negotiating parties. Our recommendations thus propose regulatory solutions for the circulation of European cultural diversity, as well as easing the rights management processes, especially for creators and SMEs.

In further improving the regulatory environment, we recommend focussing EU policy actions on:

- promoting cultural diversity and a competitive European creative sector as part of EU innovation and cultural agendas and programmes, with implications for different policy areas (for example by supporting cultural consumption via a reduced VAT rate).
- fostering the circulation of cultural and creative works in the single market (for example through licensing hubs initiatives to ease the clearing of rights across European markets), and incentivise investment in content creation and production.
- increasing transparency across the creative value chains and achieve fair remuneration of creators, whilst also ensuring a level playing field for all digital service providers. Enforcement of the copyright legal framework could be strengthened also by supporting systems for a better application, recognition and control of cultural metadata, as well as supporting digital rights licensing infrastructures, notably in the context of collective rights management mechanisms.

ensuring social protection of creators in an increasingly precarious working environment. In its Resolution of 13 December 2016, the European Parliament reminds us that it is increasingly rare for cultural and creative artists to be in permanent employment and that they are, to an increasing extent, self-employed, alternating between self-employed and employed activity or engaged in part-time or irregular activity. Flexibility and mobility are inseparable in the context of professional artistic activity, and it is therefore important to offset the unpredictable and sometimes precarious nature of the artistic profession by a providing a guarantee of genuine social protection. Measures should be undertaken to help creators cope with these challenges.

Cartographie des chaînes de valeur créatives – une étude sur l'économie de la culture à l'ère digitale

Les secteurs culturels et créatifs (SCC) sont désormais reconnus, au sein des milieux politiques et économiques, comme des atouts majeurs pour le renforcement de la structure économique européenne et le maintien de sa compétitivité à l'échelle de l'économie mondiale.²

Néanmoins, la position concurrentielle des SCC est continuellement mise à l'épreuve par des facteurs exogènes qui affectent les chaînes de valeur créatives. La numérisation est un de ces facteurs exogènes, à l'influence considérable. De la création à la consommation effective, toutes les étapes de ces chaînes de valeur sont influencées par de nouvelles solutions digitales, ce qui apporte de nouvelles opportunités pour les pratiques innovantes ainsi que des façons d'interagir avec le public qui sont radicalement nouvelles. Dans le même temps, la numérisation engendre des défis considérables pour les acteurs des SCC tels que l'augmentation du piratage ainsi que la pression croissante exercée sur les modèles existants de création et rémunération de la valeur.

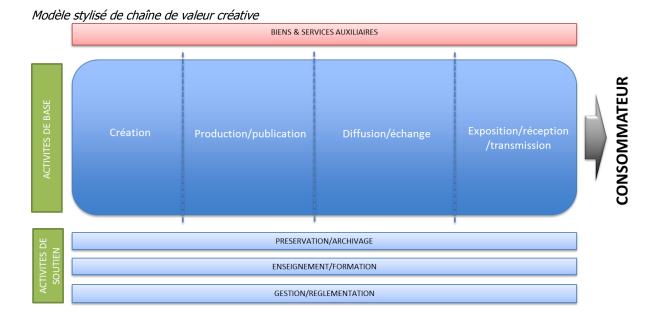
De nouveaux acteurs sont entrés dans le marché et les frontières entre les chaînes de valeur créatives et les autres chaînes de valeurs tendent à s'estomper. Ce processus d'effacement des frontières est d'autant plus renforcé par la façon relativement récente de repenser le rôle de la culture, des arts et de la créativité dans une société complexe et en transition, confrontée à différents défis mondiaux qui exigent des approches multidisciplinaires innovantes.

Changements dans les interrelations et les dynamiques concurrentielles

Au vu du contexte présenté ci-dessus, l'étude actuelle cartographie la structure économique des chaînes de valeur créatives et analyse comment la numérisation a influencé les relations sur le marché et les dynamiques concurrentielles.

À cette fin, nous utilisons le modèle stylisé de chaîne de valeur, présenté dans le schéma ci-dessous, comme la structure fondamentale pour l'analyse économique des activités et des interrelations au sein des chaînes de valeur créatives. Nous distinguons quatre activités de base (Création, Production, Diffusion/échange et Exposition/réception), ainsi qu'un certain nombre d'activités de soutien et des relations avec les autres secteurs pour l'approvisionnement de biens et services auxiliaires, qui sont essentielles à la création de la valeur dans ces chaînes de valeur créatives.

Afin de prendre en compte la grande diversité des activités et acteurs qui relèvent des SCC, l'analyse n'est pas effectuée au niveau des SCC dans leurs ensemble mais plutôt au niveau des domaines culturels et créatifs suivants : arts visuels, arts de la scène, patrimoine culturel, artisanat, édition, musique, film, diffusion à la radio et à la télévision et multimédia.



² Voir par exemple TERA (2014), KMU Forschung Austria et VVA (2016)

Sur base de l'analyse structurée de la chaîne de valeur susmentionnée, nous constatons que la numérisation a un impact multidimensionnel sur la structure et les dynamiques de marché dans les neuf chaînes de valeur créatives examinées. La numérisation offre de nouveaux outils qui, dans toutes les phases des neuf chaînes de valeur créatives, permettent aux acteurs de :

- automatiser et organiser les activités existantes de façon plus efficace et/ou efficiente (production, communication,...);
- explorer de nouvelles opportunités (intersectorielles) de marché, y compris de nouveaux rôles dans la chaîne de valeur;
- entreprendre de nouvelles activités, y compris des modèles économiques totalement nouveaux où la numérisation permet de contourner les intermédiaires traditionnels ('désintermédiation'), ce qui parfois peut changer (radicalement) les règles du jeu (commercial).

Toutefois, toutes les chaînes de valeur créatives n'ont pas été affectées de la même manière. Ces différences s'expliquent par des différences structurelles dans les caractéristiques économiques des neuf domaines culturels et créatifs examinés :

- Le degré de complexité de la création: les domaines culturels et créatifs qui sont caractérisés par des processus de production simples souffrent davantage d'une tendance à la désintermédiation/réintermédiation, où de nouveaux acteurs intermédiaires (des plateformes en ligne pour la plupart) gagnent de l'importance dans la chaîne de valeur et peuvent atteindre une position dominante.
- Le niveau des coûts d'investissement initiaux nécessaires à la production : des coûts d'investissement initiaux élevés dans le but de produire une œuvre créative signifient qu'une coordination de projet renforcée est nécessaire pour réduire autant que possible les risques inhérents à cet investissement. Les chaînes de valeur créatives s'en trouvent ainsi moins affectées par les procédés de désintermédiation.
- Économies d'échelle: des niveaux de numérisation plus élevés i.e. la part de revenus des secteurs d'activité numérique dans l'ensemble des revenus est plus élevée peuvent apparaître spécifiquement dans les domaines où l'œuvre culturelle peut être facilement reproduite à faible coût marginal et sans en diminuer la valeur culturelle.
- Le degré de substituabilité entre les œuvres culturelles numérisées et non-numérisées: pour certaines œuvres culturelles, la consommation d'une version numérisée est un substitut proche à une version non-numérisée, ouvrant ainsi la possibilité à la numérisation d'avoir un plus grand impact sur la création de valeur. Dans d'autres secteurs, ce degré de substituabilité est plus faible (bien que de nouveaux outils digitaux comme des visites virtuelles ou des expériences de réalité virtuelle affectent également ce niveau dans ces secteurs-là).

Pas de reconfiguration drastique, mais plutôt une complexité croissante des chaînes de valeur créatives

La numérisation a un impact multidimensionnel sur la structure économique des chaînes de valeur créatives. En même temps, nous observons que cette numérisation n'a pas drastiquement reconfiguré les chaînes de valeur créatives. A ce stade, aucun acteur n'est devenu obsolète ; ce sont plutôt de nouveaux acteurs qui émergent, complexifiant ainsi les chaînes de valeur. De plus, bien que l'équilibre des pouvoirs ait changé dans plusieurs de ces chaînes de valeur, les acteurs qui les ont dominées comme 'gatekeepers' / 'acteurs traditionnels' avant la numérisation continuent pour la plupart de jouer un rôle pivot dans l'organisation économique actuelle. Il existe plusieurs raisons pour expliquer ce phénomène:

- Bien que de nouveaux outils digitaux permettent aux créateurs d'être impliqués dans des activités tout au long de la chaîne de valeur, ces derniers manquent souvent de capacité et de taille afin de bénéficier pleinement de ces opportunités à eux seuls.
- Les créateurs continuent de s'appuyer sur des organisations intermédiaires, pour pallier leur faible pouvoir de négociation vis-à-vis des utilisateurs, afin de contrôler l'exploitation de leurs œuvres et négocier des conditions équitables de rémunération.
- Bâtir une réputation est capital pour pouvoir prospérer dans le marché culturel et créatif, dont la logique est celle « du gagnant qui remporte la mise », et ainsi vivre de son métier. Ce n'est que rarement (pour ne pas dire jamais) que les créateurs peuvent se faire une solide réputation sans le soutien 'd'acteurs traditionnels'.

- Avoir accès à du contenu culturel de qualité est primordial pour tout distributeur, y compris les distributeurs numériques comme les plateformes en ligne. Dans ce contexte, les catalogues d'œuvres culturelles gérés par les gardiens traditionnels (principalement les producteurs et les éditeurs) demeurent utiles et nécessaires.
- Une part importante de la consommation culturelle subsiste encore de façon non-digitale. Les intervenants traditionnels restent les acteurs-clé dans la distribution hors ligne d'expériences culturelles.
- Les intermédiaires en ligne qui défient les structures traditionnelles (par exemple Google, Amazon, Apple, etc.) dans certaines phases de la création de valeur (principalement la diffusion) sont des entreprises mondiales (non-européennes) qui ne disposent pas actuellement d'un réseau de contacts suffisamment solide et d'une connaissance en amont des marchés culturels et créatifs locaux suffisante que pour pouvoir aborder le marché européen, fortement fragmenté, sans avoir recours à l'intermédiation.

À défaut de changer de manière radicale la configuration des chaînes de valeur créatives, la numérisation a entraîné une remise en question de l'équilibre 'traditionnel' des pouvoirs et des relations (inter)sectorielles par l'arrivée de modèles alternatifs de création, production, promotion ou distribution.

Des défis liés à la maximisation des bénéfices de la numérisation et à la minimisation des déséquilibres du marché

A partir de l'analyse des chaînes de valeur dans les domaines sectoriels, nous examinons cinq thématiques transversales. Ces thématiques permettent d'analyser des défis spécifiques qui se posent, pour les SCC et les décideurs politiques, dans la création et le développement d'un environnement favorable permettant aux acteurs culturels et créatifs de tirer le maximum de la numérisation, tout en minimisant les potentiels déséquilibres de marché.

Entrelacement et convergence dans les chaînes de valeur créatives

La collaboration entre les acteurs culturels et non-culturels n'a rien de nouveau ; les secteurs culturels et créatifs sont présumés avoir une `culture de convergence ou de confluence' naturelle. Néanmoins, le degré d'intégration et d'entrelacement des chaînes de valeur créatives avec les autres secteurs n'a pas toujours été si présent. La complexité grandissante des enjeux sociétaux et (la vitesse des) avancées technologiques ont été des facteurs importants dans ce processus.

Certains sous-secteurs des industries culturelles et créatives sont davantage sujets à une innovation entrelacée et intersectorielle (par exemple le secteur du jeu et de la télédiffusion), alors que d'autres dénotent un niveau relativement moins important d'ouverture à et d'intégration avec les secteurs non-culturels (par exemple l'artisanat ou les arts visuels). Ceci est également illustré par la diversité des processus de convergence dans trois études de cas spécifiques : 1) les jeux et la santé, 2) la télédiffusion et les télécommunications, 3) les arts et la science.

En dépit de la diversité des processus de convergence, il y a certains goulots d'étranglement qui empêchent les acteurs SCC d'exploiter pleinement le potentiel des collaborations intersectorielles :

- Les industries traditionnelles sont sous-représentées dans la clientèle de la plupart des organisations culturelles et créatives.
- Le capital social des organisations SCC est souvent utilisé de façon sous-optimale dans cette imbrication à cause des imperfections de marché comme, par exemple, le fait que la coopération survient dans un marché opaque, qu'il manque un 'langage' commun, qu'il n'y a pas de continuité du soutien institutionnel et que subsiste une dépendance à l'égard de partenaires individuels.
- Les dynamiques de partage et croisement de savoir sont assez différentes quand il s'agit de processus descendants ('top-down') ou ascendants ('bottom-up'). De toute évidence, les processus ascendants sont plus propices à ces interrelations que les processus descendants.
- Les créateurs se retrouvent souvent en position désavantageuse quand il s'agit de bénéficier pleinement des avantages potentiels de cette convergence car ils manquent de compétences et de ressources financières pour se repositionner vis-à-vis de leurs clients/partenaires issus d'autres industries.
- Les aides publiques (fonds, soutien envers les opportunités de travail en réseau) visant à stimuler les collaborations intersectorielles sont souvent concentrées au début de la chaîne de valeur (phase de création). Cependant, il existe d'autres goulots d'étranglement importants aux étapes ultérieurs de la chaîne de valeur, tout particulièrement au stade de la diffusion/exposition (par exemple, pour avoir accès à des canaux de distribution ou à un public).

- Certains développements novateurs, qui se situent à la frontière des secteurs traditionnels et/ou des domaines politiques, sont souvent confrontés à une réflexion cloisonnée ('silo thinking') et à une fragmentation de la réglementation qui limitent la flexibilité d'expérimenter.

Les dynamiques concurrentielles au sein des marchés 'bifaces' ('two-sided markets')

Les secteurs culturels deviennent de plus en plus organisés comme des marchés "bifaces", où les nouvelles entreprises en ligne jouent le rôle de plateformes faisant office de médiateur entre les différentes catégories d'utilisateurs (par ex. annonceurs et lecteurs).

Les marchés 'bifaces' sont souvent caractérisés par une position dominante d'une ou de quelques plateformes, du fait que les plateformes en place bénéficient de barrières d'entrée structurelles et/ou stratégiques. Ceci peut entraîner des problèmes de concurrence. Des préoccupations importantes sont suscitées, entre autres, par les plateformes imposant des conditions générales jugées déloyales, les plateformes refusant l'accès à d'importantes bases d'utilisateurs ou base de données, les clauses de 'parité' injustes aux effets préjudiciables pour les consommateurs, tout comme les problèmes de transparence – notamment s'agissant des tarifs des plateformes, de l'utilisation des données et des résultats de recherche.

Parallèlement, l'émergence des plateformes s'est accompagnée d'un grand nombre d'innovations, développées par des tierces parties qui font usage de ces plateformes mais aussi par les plateformes elles-mêmes. Néanmoins, les plateformes peuvent se servir de leurs économies d'échelle ou forcer leur pouvoir de marché dans les marchés adjacents, au détriment des possibilités d'innovation des tierces parties sur le long terme. Une telle ambiguïté dans la relation entre les plateformes et l'innovation nourrit une tendance qui vise à ne pas pénaliser, ni empêcher la position dominante des plateformes en ligne, puisque cette position se base sur l'innovation et peut être défiée par des concurrents potentiels.

La plupart des instruments classiques parviennent difficilement à appréhender cette dimension bilatérale sous l'angle de la politique de concurrence. L'étude suggère qu'une intervention réglementaire concernant les plateformes en ligne doit de préférence viser à aborder des problèmes spécifiques, au lieu d'être basée sur une approche générale unique ('one-size-fits-all'). Toutefois, il est nécessaire d'établir un ensemble de principes directeurs en la matière – en accord avec l'approche politique énoncée par la Commission Européenne dans sa Communication sur les plateformes en ligne et le Marché Unique Numérique (2016).

La numérisation et les nouvelles opportunités pour les créateurs

La désintermédiation est de plus en plus considérée comme une opportunité intéressante permettant d'éviter les déséquilibres potentiels du marché et des revenus et d'assurer ainsi une rémunération plus juste. Un nombre croissant de créateurs prennent en charge la création et la production de leurs propres œuvres et ultérieurement la distribution. Ainsi, ils se substituent aux acteurs traditionnels dans la chaîne de valeur. Cela permet de :

- Empêcher le filtrage du contenu par d'autres acteurs comme les distributeurs et diminuer les asymétries d'information;
- Diminuer le nombre d'intermédiaires et les coûts;
- Construire une relation différente avec le public, basée sur l'implication croissante des utilisateurs et sur la co-création.

De ce fait la désintermédiation aboutit à de plus petites barrières à l'entrée pour les créateurs. Parallèlement, cela provoque une concurrence accrue ainsi qu'une plus grande pression sur les créateurs qui les poussent à devenir des « entrepreneurs créatifs » et à prendre l'initiative de réinventer leur modèle économique. Afin de réussir dans l'écosystème numérique, les créateurs doivent se transformer en *polymathes* (KEA, 2009) et maîtriser une combinaison croissante de compétences. Devenir des artistes plus autonomes requiert de combiner leur talent et aptitudes créatives avec des compétences commerciales, techniques et sociales. Les formations ne couvrent ces sujets que peu souvent et les créateurs se retrouvent à devoir user de mécanismes d'apprentissage par la pratique (ou la sous-traitance, puisqu'ils ont besoin de dédier le peu de temps qu'ils possèdent à se concentrer sur leur activité artistique principale). Un autre obstacle est associé à un accès limité au financement et à la connaissance des opportunités dans les marchés étrangers.

La rémunération et la gestion des droits à l'ère digitale

Ces dernières années l'internet est devenu le marché principal où accéder et consommer du contenu protégé par des droits d'auteur. En même temps, l'application des droits d'auteur et autres droits voisins est devenue de plus en plus problématique dans le monde numérique. À cela s'ajoutent les problèmes associés au nombre croissant de

possibilités d'utilisation illégale d'œuvres protégées. Dans ce contexte, il existe une préoccupation grandissante quant au fait de savoir si la valeur générée par certaines de ces nouvelles formes de distribution de contenu en ligne est partagée équitablement entre les distributeurs et les titulaires de droits, et si finalement les créateurs euxmêmes, à l'origine d'une telle génération de valeur, en bénéficient.

Cette préoccupation se rattache à une problématique de manque de transparence dans les flux de paiement. Plusieurs éléments sont à la base d'un tel manque de transparence : (1) le rôle des nouveaux intermédiaires digitaux et l'impact des nouveaux modèles économiques qui sous-tendent leur activité; (2) la complexité des processus d'octroi de licences et d'autorisations de droits; (3) les pratiques actuelles concernant les arrangements contractuels qui favorisent l'asymétrie d'information et donc le manque de transparence; (4) la fragmentation du marché européen et la complexité des régimes de licences.

Cette étude préconise deux axes d'intervention en vue d'avancer dans l'amélioration de la transparence et dans la capacité des créateurs à recevoir une rémunération plus juste :

- Une meilleure application, une meilleure reconnaissance et un meilleur contrôle des métadonnées pour identifier les contenus en ligne protégés par le droit d'auteur peut constituer un premier élément susceptible d'aider les créateurs à influencer l'utilisation de leur œuvre créative, de diminuer les asymétries d'information et d'aboutir à une meilleure identification des titulaires de droits;
- Faire un usage plus intensif de la gestion collective de droits et des mécanismes de licence peut renforcer la position des créateurs en leur fournissant l'infrastructure et la capacité nécessaire pour traiter des grandes quantités de données concernant l'exploitation digitale de leurs œuvres créatives. Cela peut également améliorer leur pouvoir de négociation tout en réduisant les coûts de transaction pour les prestataires de services intéressés à l'exploitation commerciale des contenus créatifs. Des initiatives et mécanismes comme MERLIN, BMAT/ARMONIA et WIN, analysés dans cette étude, illustrent l'impact positif potentiel qui peut en résulter.

Diversité culturelle

La diversité culturelle est une composante importante de l'identité européenne, et représente une pierre angulaire dans le développement de la politique culturelle.

L'impact de la structure du marché sur la diversité culturelle est ambigu, tout particulièrement en ce qui concerne l'impact des plateformes en ligne. D'une part, ces plateformes donnent accès à une grande variété de contenus, une condition préalable pour une consommation diversifiée. Dans une certaine mesure, ces plateformes peuvent contribuer à surmonter le manque historique de circulation transfrontalière du contenu culturel.

D'autre part, une plus grande disponibilité de contenus diversifiés ne se traduit pas nécessairement par une plus grande visibilité, "trouvabilité" et donc accessibilité, en particulier lorsqu'il s'agit d'une production culturelle très diversifiée à travers toute l'Europe. De plus, les marchés en ligne deviennent de plus en plus concentrés, au détriment potentiel des créateurs et intermédiaires traditionnels.

Les responsables politiques envisagent (ou sont déjà en train de mener) des actions et mesures variées, au niveau national ou européen, dans le but de soutenir la diversité culturelle (voir aussi plus bas). Ces mesures vont de la promotion d'une harmonisation de la réglementation pour faciliter la circulation transnationale des contenus et assurer des conditions équitables sur le marché, à des mécanismes de soutien variés qui encouragent la production et circulation d'œuvres créatives et la mobilité des créateurs. Néanmoins, des efforts supplémentaires en termes de collecte et de monitorage des données sont essentiels, afin d'analyser comment la numérisation affecte la diversité culturelle, offerte et consommée.

Rectifier les déséquilibres du marché

La cartographie des chaînes de valeur sectorielles et les cinq analyses thématiques montrent que les relations de marché et les dynamiques concurrentielles dans les chaînes de valeur créatives ont subi, au cours de la dernière décennie, des changements considérables dus à la numérisation, aboutissant même à des déséquilibres du marché dans plusieurs situations (la position de plus en plus dominante pour un certain nombre de plateformes en ligne, l'utilisation des contenus créatifs sans transparence sur les flux de rémunération, l'installation d'écosystèmes fermés qui mènent à des effets de « verrouillage », etc.).

Pour que les acteurs culturels et créatifs européens puissent exploiter au maximum ces évolutions importantes et que les responsables politiques puissent continuer à développer le cadre nécessaire pour soutenir la position concurrentielle de ces acteurs et assurer une diversité culturelle en Europe, nous recommandons des mesures additionnelles au niveau européen dans cinq domaines. Les domaines suggérés ainsi que les actions proposées ont été testés et validés durant un processus d'interaction en ligne incluant un groupe de participants sélectionnés au sein de la communauté des parties intéressées.

Amélioration des statistiques et données disponibles pour le monitoring

Les statistiques officielles des SCC fournissent une quantité importante d'informations qui permet de comprendre et surveiller comment les SCC évoluent. Cependant, les données officielles concernant les SCC se concentrent principalement sur les données au niveau de chaque entité individuelle (entités commerciales) et des secteurs traditionnels (selon la classification NACE), plutôt que d'aborder toute la chaîne de valeur en perspective. Ces statistiques officielles doivent être complétées avec des données qui vont au-delà de la démarcation traditionnelle des SCC.

Afin d'améliorer les données/statistiques nécessaires pour mieux surveiller l'impact de la numérisation sur la structure économique et les dynamiques de marché dans les chaînes de valeur créatives, nous recommandons d'investir dans :

- une nouvelle collecte de données autant quantitatives que qualitatives relatives aux relations/dynamiques de marché au sein des chaînes de valeur afin de compléter l'état actuel des statistiques officielles structurelles sur les entreprises:
- le développement d'un système de monitoring visant à surveiller d'une manière adaptée les évolutions de la rémunération et des conditions de travail des créateurs ;
- l'identification de nouvelles méthodes de recherche pour mieux surveiller l'impact de la numérisation sur les entreprises créatives et les SCC en général, y compris l'utilisation de données Internet pour une telle recherche.

Connecter pour surmonter la fragmentation

De puissantes dynamiques se déroulent aux frontières entre différents secteurs, mais les secteurs et politiques sont encore souvent organisés en fonction des silos sectoriels, limitant ainsi la portée des synergies et l'émergence de nouvelles solutions et entreprises. Afin de dépasser cette fragmentation, nous recommandons que des actions soient prises, à des niveaux différents, pour répondre à ce fractionnement actuel. Nous proposons de se concentrer en particulier sur :

- des initiatives de sensibilisation auprès des acteurs SCC, des autres entreprises, du monde académique, des enseignants et des responsables des politiques sur la valeur ajoutée des collaborations intersectorielles entre les acteurs SCC et les autres secteurs (« inspirer »);
- la disponibilité d'instruments de soutien qui diminuent les barrières, permettant ainsi un engagement dans ces collaborations intersectorielles (« soutenir l'expérimentation intersectorielle »);
- la promotion active de l'importance d'un réflexe « hors-du-secteur » et des connections intersectorielles pour l'économie européenne et la société en général, grâce au rassemblement des responsables politiques de différents domaines de compétence (enseignement, innovation, politique économique, affaires sociales, ...) et en stimulant l'échange d'expériences, par exemple pour franchir les goulots d'étranglement et une réglementation cloisonnée (« stimuler le développement d'une politique favorable »).

Soutenir le développement des compétences

De nouveaux développements requièrent de nouvelles compétences. Actuellement, un grand nombre d'organisations SCC n'arrivent pas à saisir pleinement les opportunités qu'offrent la numérisation et un contexte sociétal en mutation, à cause d'un manque de compétences et/ou parce qu'elles n'ont pas une taille suffisamment importante. Afin de soutenir le développement des compétences auprès des acteurs SCC, nous recommandons les actions suivantes au niveau européen :

- Soutenir les organisations intermédiaires dans la promotion des compétences commerciales et entrepreneuriales comme partie intégrante du cursus des acteurs SCC. Le soutien pour une culture entrepreneuriale devrait déjà commencer pendant l'enseignement formel, via un cursus innovant dans l'enseignement artistique avec une meilleure intégration des cours de business, marketing et entreprenariat, ainsi qu'une plus grande flexibilité pour combiner les différentes disciplines.
- Investir dans des cadres de soutien propices à l'entreprenariat créatif, comme par exemple des pôles de créativité, des laboratoires vivants, des incubateurs d'entreprises créatives, des espaces de travail collaboratif, et améliorer les opportunités de business et d'apprentissage entre pairs. Un tel support pourrait poursuivre un exemple récent d'initiative européenne : le "European Creative Hubs Network".

- Inciter les organisations intermédiaires à développer du matériel et des formations adéquates sur les implications commerciales (opportunités et défis) de la numérisation. Ceci pourrait aboutir à des réalisations telles qu'une boîte à outils permettant un usage intelligent de toutes les données collectées par les acteurs SCC (contenant, entres autres, des exemples pouvant servir de modèle). Un tel outil doit pouvoir prendre suffisamment en compte les spécificités de chaque secteur afin d'être pertinent.
- Inciter les SCC à trouver de nouveaux modèles de coopération pour surmonter la difficulté que peut représenter la petite taille de la plupart des entités concernées et les inciter à unir leur force pour augmenter leur pouvoir de négociation, à travers la simplification des échanges de bonnes pratiques et de leçons clés.
- Aider les SCC à bâtir une représentation collective au travers d'associations sectorielles. Echanger des bonnes pratiques pour empêcher des conditions de travail précaires pour les créateurs via de nouvelles formes de travail dans l'économie collaborative actuelle.

Optimiser l'utilisation du financement européen

Plusieurs programmes de financement européens se concentrent sur l'amélioration de la compétitivité des organisations (à travers l'innovation, le développement des compétences, etc.). Ces programmes sont également accessibles aux acteurs SCC. Cependant, les barrières qui limitent l'accès à ces fonds européens sont encore (très) importantes pour la plupart des acteurs SCC, et ce malgré les nombreux défis que ces acteurs doivent surmonter pour rester compétitifs à l'ère digitale. Dans ce domaine, nous recommandons d'axer les actions européennes sur les objectifs suivants :

- Promouvoir la mise en réseau inter-clusters et intersectorielle, à travers, par exemple, un évènement annuel pour les initiatives culturelles et créatives soutenues par l'Union Européenne (traitant des programmes pertinents ; en particulier Europe Créative, COSME, H2020, Interreg et URBACT).
- Promouvoir un accès au financement pour les SCC qui soit meilleur et plus différencié : stimuler l'adoption et l'intégration d'instruments financiers alternatifs comme le financement participatif ("crowdfunding"), la micro-finance, etc. dans l'ensemble des instruments financiers disponibles pour les SCC.
- Encourager le financement participatif chez les SCC, notamment via des incitations/exonérations fiscales (aussi pour le crowdfunding basé sur la donation et la récompense) et via des seuils d'exemption supérieurs pour favoriser les activités entrepreneuriales. Les autorités publiques (locales, régionales, nationales) devraient également collaborer avec les plateformes de "crowdfunding" afin de soutenir les secteurs culturels et créatifs à travers des mécanismes de "matchfunding", par exemple.
- Soutenir les PME SCC dans l'accès aux marchés extérieurs à l'Union Européenne et appuyer la collaboration et la mise en réseau entre les entrepreneurs créatifs, tout comme la distribution et la commercialisation.
- Encourager les investissements en capitaux dans les SCC en soutenant le développement d'un cadre de valorisation de la création de contenus.
- Diminuer les barrières qui empêchent l'accès au financement européen pour les PME, en limitant la charge administrative.

Promouvoir la diversité culturelle

La numérisation ouvre de nouvelles portes pour les créateurs et intermédiaires traditionnels en termes de plus grande circulation des contenus, et une plus grande diversité dans la consommation elle-même. Néanmoins, comme mentionné plus haut, nos conclusions confirment que plusieurs facteurs peuvent empêcher de tels effets positifs de se réaliser. L'étude préconise donc de:

- promouvoir l'accès à, et la visibilité de la diversité dans l'offre de services de contenu.
 - Des quotas peuvent avoir un effet déterminant dans certains cas, mais leur efficacité doit être évaluée (voir par exemple la réforme de la directive relative aux services de médias audiovisuels);
 - Dans d'autres cas, des incitants peuvent être envisagés; par exemple en facilitant les initiatives de parties prenantes qui visent à accroître la "trouvabilité" de la production culturelle européenne dans les secteurs qui sont particulièrement remodelés par la numérisation (par exemple, la musique);
- favoriser l'harmonisation des réglementations et des conditions équitables sur le marché, le cas échéant dans les domaines qui sont particulièrement pertinents pour assurer la disponibilité et accessibilité d'une offre de contenu diverse dans un contexte numérique, et permettre aux petits acteurs culturels et créatifs locaux de bénéficier pleinement de la numérisation;

- soutenir une utilisation correcte des métadonnées afin d'extraire un contenu culturel moins visible et des initiatives d'octroi de licences collectives de droits dans le but final de promouvoir la distribution de petits catalogues;
- développer des outils pour évaluer et surveiller cette diversité. Ceci inclut la nécessité de répondre aux défis liés à l'accessibilité des données et à la conceptualisation de la diversité culturelle. Dans ce contexte, nous suggérons d'examiner les pistes suivantes :
 - évaluer l'impact des programmes de soutien via des études indépendantes, éventuellement combiné à l'analyse de la faisabilité de l'incorporation d'indicateurs de la diversité culturelle dans ces programmes;
 - s'appuyer sur des synergies entre la récolte de données existantes et les ressources de recherche (comme Eurostat, l'Observatoire Européen de l'Audiovisuel, etc.) afin de définir et restreindre les aspects de la diversité culturelle (par exemple, la "trouvabilité") qui sont pertinents pour l'évaluation des politiques.

Améliorer le cadre réglementaire

La numérisation a entraîné l'entrée de nouveaux acteurs dans les chaînes de valeur de SCC et de nouveaux types de relations construites au travers de la chaîne de valeur et entre différentes chaînes de valeur. Le cadre réglementaire de l'Union Européenne pour les SCC connaît à l'heure actuelle des réformes importantes dans le cadre de la stratégie du Marché Unique Numérique.

La production culturelle européenne répond naturellement aux besoins des différents marchés linguistiques et locaux. Favoriser une plus grande accessibilité et une plus grande visibilité d'une telle production variée au travers de ces différents marchés représente un défi de taille. Aujourd'hui, l'incroyable diversité et l'excellence de la production en Europe rencontrent des difficultés à atteindre les consommateurs en dehors de leur pays d'origine.

En outre, le rôle grandissant des contrats de licence dans les flux de revenus des SCC augmente la pression exercée sur les petits acteurs, souvent déjà affaiblis, des chaînes de valeur; ceci est dû à une multiplication des contrats et des parties négociantes. Nos recommandations proposent donc des solutions réglementaires pour la circulation de la diversité culturelle européenne, ainsi que l'allègement des processus de gestion de droits, tout particulièrement pour les créateurs et les PME.

En vue d'une amélioration ultérieure du cadre réglementaire, nous recommandons d'axer l'intervention des politiques européennes sur les points suivants:

- promouvoir la diversité culturelle et la compétitivité du secteur créatif européen en tant que composante à part entière des stratégies politiques et des programmes en matière de culture et d'innovation de l'Union Européenne, avec des implications pour les différents domaines politiques (par exemple, en soutenant la consommation culturelle grâce à un taux de TVA réduit).
- favoriser la circulation des œuvres culturelles et créatives au sein du marché unique (par exemple, à travers des initiatives de pôles d'octroi de licences pour faciliter les autorisations de droits d'auteur à travers les marchés européens), et inciter les investissements dans la création et la production de contenus.
- augmenter la transparence au sein des chaînes de valeur créatives et atteindre une rémunération plus juste pour les créateurs, tout en assurant des règles du jeu équitables pour tous les fournisseurs de services digitaux. L'application du cadre légal des droits d'auteur peut également être renforcée par des systèmes de support visant à une meilleure application, reconnaissance et contrôle des métadonnées culturelles ainsi qu'en soutenant les infrastructures d'octroi de licences de droits digitaux, notamment dans le contexte des mécanismes de gestion collective de droits.
- assurer la protection sociale des créateurs dans un environnement de travail connaissant une précarité grandissante. Dans sa Résolution du 13 décembre 2016, le Parlement Européen nous rappelle qu'il est de plus en plus rare pour les artistes culturels et créatifs de se trouver dans une situation d'emploi permanent. Ils sont, dans une proportion de plus en plus importante, indépendants, dans une position pour laquelle ils alternent entre une fonction d'indépendant et une activité salariée ou sont alors engagés dans une activité irrégulière ou à temps partiel. La flexibilité et la mobilité sont indissociables dans le contexte d'une activité artistique professionnelle. Il est donc important de compenser la nature imprévisible et parfois précaire d'une profession artistique à travers la garantie d'une protection sociale authentique. Des mesures devraient être entreprises afin d'aider les créateurs à affronter ces défis.



Introduction to the study

1/ Context and scope

1.1 CCS in Europe

Cultural and creative sectors (CCS) have become well established in both an economic and policy context as important assets in strengthening Europe's economic structure and maintaining its competitiveness in the global economy. Culture and Creative Sectors (CCS) are increasingly attracting the attention of European policy-makers. Beyond its own intrinsic value, culture greatly contributes to social and economic development. Culture has become a transversal area playing a key role in generating new forms of innovation, contributing to companies' competitiveness and entrepreneurship as well as to urban regeneration, fostering attractiveness, and enhancing social integration. The study entitled "The Economy of Culture in Europe", carried out for the European Commission in 2006³ showed how culture drives economic and social development and cohesion, and in particular also new developments in the ICT sectors and innovation in general.

Since then, methodologically refined estimations on the contribution of culture to GDP have been carried out: TERA in 2014⁴ concludes that the core creative industries in the 27 countries of the European Union generate EUR 558 billion in value added to GDP, approximately 4.4% of total European GDP. The creative industries represent approximately 8.3 million full-time equivalent jobs, or 3.8% of the total European workforce. In addition, a recent study carried out for the European Commission by KMU Forschung Austria and VVA⁵ shows that the CCS (wide definition, including high-end and fashion)⁶ make up 7.5% of all persons employed in the European economy and generate 5.3% of the total European gross value added and that CCS have been more resilient to the economic and financial crisis compared to the rest of the economy.

At EU level, policy documents in different fields (from cultural to regional and industrial policies) strongly recognise the broad impacts of culture and the potential of the CCS for economic growth. The European Agenda for Culture and subsequent policy documents illustrate this⁷ – the most recent ones being the 2012 Communication on "Promoting cultural and creative sectors for growth and jobs in the EU"⁸, the 2014 Communication "Towards an integrated approach to cultural heritage for Europe"⁹, the Work Plan for Culture (2015-2018) as adopted by the Council on 25 November 2014, or the 2016 Communication "Towards an EU strategy for international cultural relations¹⁰". The European Commission has made almost EUR 1.5 billion available through the Creative Europe programme for organisations, professionals and artists active in the creative/cultural economic domain in order to strengthen their position and further fulfil their economic potential. The role of creative industries is also put forward in the Communication for a European Industrial Renaissance¹¹, recognising the CCS as a high growth sector generating surplus in trade, as well as a resilient sector in the face of the economic crisis.

³ KEA European Affairs (2006), "The Economy of Culture in Europe", Study for the European Commission, DG Education and Culture

⁴ TERA (2014) for the Forum D'Avignon, http://www.teraconsultants.fr/en/issues/The-Economic-Contribution-of-the-Creative-Industries-to-EU-in-GDP-and-Employment

⁵ KMU Forschung Austria and VVA (2016), "Boosting the competitiveness of cultural and creative industries for growth and jobs", study on behalf of the European Commission, June 2016. http://ec.europa.eu/growth/tools-databases/newsroom/cf/itemdetail.cfm?item_id=89008.

⁶ Including the following subsectors: advertising, architecture, archives, libraries, cultural heritage, books & press, cultural education, design, visual arts, music, performing arts & artistic creation, radio & TV, software & games, video & film, fashion industry (fashion design & manufacturing)

Ouncil of the European Union (2014) Conclusions of the Council and of the Representatives of the Governments of the Member States, meeting within the Council, on the adoption of a Work Plan for Culture (2015 - 2018). Brussels, 26 November 2014, 16094/14.

⁸ European Commission (2012), Communication on Promoting cultural and creative sectors for growth and jobs in the EU, Brussels

⁹ European Commission (2014) Communication "Towards an integrated approach to cultural heritage for Europe". COM(2014) 477 final, Brussels.

¹⁰ http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1465397367485&uri=JOIN:2016:29:FIN

¹¹ European Commission (2014) Communication "For an Industrial Renaissance", COM(2014) 14/2, Brussels.

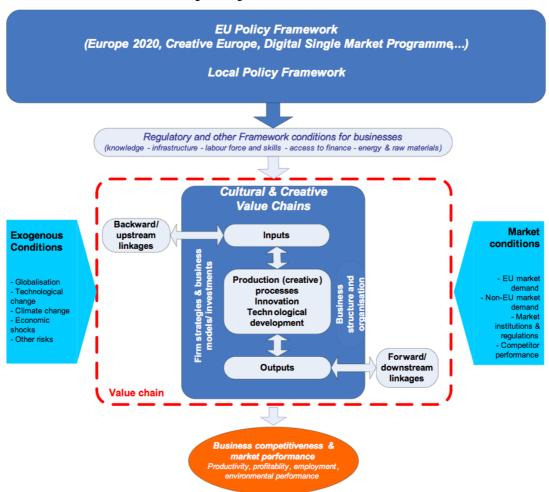
1.2 Scope of the present study

The present study on the economy of culture focusses on a mapping of the creative value chains in the digital age. It examines the economic structure of creative value chains and analyses how digitisation has influenced market relations and competitive dynamics in the European context.

2/ Digitisation and the organisation of creative value chains

Several transformations affect the context in which CCS actors operate and have an impact on the industrial organisation of CCS. The ability of cultural and creative actors to respond to and anticipate those changing exogenous and market conditions, largely determines their functioning and performance in the value chain, and ultimately, their overall competitiveness, as illustrated in *Figure 1*.

Figure 1: Framework conditions influencing the organisation of value chains



One of the most influential exogenous factors affecting creative value chains over the last decade, has been digitisation. The impact of digitisation on the value chains of the cultural and creative sectors is ubiquitous. On the one hand, digital technologies are a great opportunity for EU citizens, creators and intermediaries, as they lead to a constant emergence of new services, relying on innovative business models.¹² From creation to actual consumption, all steps in the value chains have evolved in parallel to new digital solutions:

- At creation level, new technologies often act as an enabler facilitating the creation of works and products, or allowing for radically new products or services (such as augmented or virtual reality-based content).¹³
- At production level, fast prototyping solutions (such as 3D printing) have brought new solutions to test and refine production processes for physical goods. For content-oriented industries, digital solutions have often brought down production costs (in book publishing, video games and audiovisual, to some extent).

 $^{^{\}hbox{\scriptsize 12}}$ Masnick, M., Ho, M. (2014). The Sky is Rising. Regional study, Floor 64.

 $^{^{\}rm 13}$ PwC (2014) "3D Printing and the New Shape of Industrial Manufacturing," PwC, June 2014.

- At distribution level, beyond cost reduction, radically new models have appeared with the widespread development of streaming solutions (for music and audiovisual of course, but also books and literature, multimedia, broadcasting).
- At marketing level, social media tools and other interactive applications enable the CCS to target more finegrained audience demographics, while potentially aiming at global audiences.
- At consumption level, a much larger amount of content is available to citizens, which leads to "ATAWAD" consumption ("anytime, anywhere and on any device") and new expectations in terms of accessibility. Besides, digitisation allows a greater interaction, as it gives audiences the freedom to 'pull' cultural and audiovisual services instead of the services being 'pushed' to them. User Generated Content, for example, affects the CCS with new forms of creativity that emerge. Just like for crowd-based solutions, the final consumer becomes an active actor across the value chain.

On the other hand, this redefinition of traditional business models can come at the expense of traditional CCS players. As well as opportunities, the digital shift has brought about major challenges for CCS actors, such as piracy, and increased pressure on existing financing and pricing models¹⁴. Digital technologies also put pressure on traditional CCS players (creators, intermediaries), to the benefit of non-traditional CCS players, such as online platforms (e.g. Google, Amazon, Facebook or Apple (called 'GAFA') as well as smaller players). ¹⁵ In some subsectors, these new actors have quickly gained economic weight in the value chain and have even taken a dominant position in particular functions (e.g. dissemination/trade). This reconfiguration forces existing players to reposition themselves and rethink their business models.

¹⁴ Rushton (2011) in Towse, Handbook of Cultural Economics, 350-355.

¹⁵ Zhu, F. & Seamans R. (2010), Technology Shocks in Multi-Sided Markets: The Impact of Craigslist on Local Newspapers, Net Institute, Working Paper #10-11, September.

3/ Aim of the study and structure

The above developments in the CCS form the backdrop of this study that analyses value chains in cultural and creative sectors and the impact of digitisation on the industrial organisation. The study has a qualitative focus based on the value chain concept. Building further on previous work, we discern and describe the sequential components of cultural and creative value chains, and analyse the role of and relationships between the different actors involved. Furthermore, we look at recent developments in the organisation of creative value chains due to digitisation: new actors, changing roles/positions/relationships, new business and revenue models. The study devotes specific attention to market imperfections related to the digital shift in the CCS. We investigate to what extent market distorting circumstances due to digitisation hinder the CCS in fully thriving and fulfilling their economic potential.

This study results from the shared efforts from IDEA Consult, KEA and VUB-SMIT, with IDEA leading the overall coordination of the study. In the section below we outline the structure of the mapping, as well as the partner primarily responsible for the drafting of this section.

Although generally referred to under their collective name, CCS actually cover a wide variety of activities and actors, that develop and behave in very different ways, as well as being affected by digitisation in very different ways. Therefore, the value chain analysis will not be carried out at the level of the CCS, but rather at the sub-sector level. More specifically, the **first part of the study** contains the analysis of the value chains in the following nine cultural and creative domains:

- Visual arts IDEA
- Performing arts IDEA
- Cultural heritage IDEA
- Artistic crafts KEA
- Book publishing (literature) VUB
- Music KEA
- Film KEA
- Television and radio broadcasting VUB
- Multimedia VUB

In the **second part of the study** the focus of analysis shifts from the sectoral value chains to a more in-depth analysis of five transversal topics related to the impact of digitisation on creative value chains:

- Intertwining and convergence in creative value chains IDEA
- Two-sided markets VUB
- Digitisation and new opportunities for creators KEA
- Remuneration and rights management in the digital age KEA
- Cultural diversity VUB

Finally, in the **third part of the study, led by IDEA and KEA** we formulate recommendations for action to redress market imbalances that find their origin in the changing market dynamics in creative value chains due to (primarily) digitisation.

4/ Glossary

- **ATAWAD** = Available anytime, anywhere at any device
- **CCS** = cultural and creative sectors. In the context of this study they cover the following nine domains: visual arts, performing arts, cultural heritage, artistic crafts, book publishing (literature), music, film, television and radio broadcasting, multimedia.
- **CRMO** = Collective Rights Management Organisation
- ▶ **DSP = Digital Service Provider / ISP = Internet Service Provider.** Company that provides access to the Internet and related services
- ▶ **IPTV** = Internet Protocol Television. System through which services are delivered using the Internet protocol suite, usually over a walled garden network.
- ▶ **OTT = Over-The-Top Services**: delivery of audio, video and other media over the internet without the involvement of a (network) operator in control of the distribution of the content
- ▶ **UGC** = User Generated Content
- ► VoD = Video-on-Demand
 - SVoD = Subscription-based Video-on-Demand
 - AVoD = Advertising-based Video-on-Demand
- ▶ **Information good:** a type of commodity whose market value is derived from the information it contains. An information good is anything that <u>can</u> be digitised—a book, a movie, a record, a telephone conversation, etc.
- **Experience good:** a product or service whose value can only be truly determined by consuming or experiencing it.
- ▶ **Credence good:** a product or service whose value can never really be known with certainty. To a large degree, the value of a credence good is often a matter of faith or belief.
- **Public good:** a pure public good has two defining features. One is 'non-rivalry,' meaning that one person's enjoyment of a good does not diminish the ability of other people to enjoy the same good. The other is 'non-excludability,' meaning that people cannot be prevented from enjoying the good.
- **Durable good:** a good that yields utility over time rather than being completely consumed in one use.
- Merit good: a commodity which is judged that an individual or society should have on the basis of some concept of need, rather than ability and willingness to pay. There are two basic characteristics of merit goods: the value of the good is not usually fully appreciated at the time of consumption, and consumption of merit goods has positive effects to other individuals.
- **Complex good**: a good that requires a lot of coordination between a wide range of actors and stakeholders across the value chain to be produced e.g. a theatre play.
- ▶ **Information asymmetry**: occurs in transactions where one party has more or better information than the other. This creates an imbalance of power in the transaction, which can sometimes cause the transaction to go awry, a kind of market failure in the worst case.
- ▶ **Monopolistic competition:** a market structure in which there are a large number of firms producing a slightly differentiated product. Monopolistic competition is a type of imperfect competition such that many producers sell products that are differentiated from one another (e.g. by branding or quality) and hence are not perfect substitutes. In monopolistic competition, a firm takes the prices charged by its rivals as given and ignores the impact of its own prices on the prices of other firms.¹6
- ▶ **Oligopsony:** a market structure in which there are only a few large buyers for a product or service. This allows the buyers to exert a great deal of control over the sellers and can effectively drive down prices.
- **Oligopoly:** a market structure dominated by a few suppliers. A high barrier to entry limits the number of suppliers that can compete in the market, so the oligopolistic firms have considerable influence over the market price of their product. However, they must always consider the actions of the other firms in the market when changing prices, because they are certain to respond in a way to neutralize any changes so that they can maintain their market share.
- **Vertical integration**: a strategy where a firm expands its business operations into different steps of the supply chain.

¹⁶ Wikipedia

- **Economies of scale**: cost advantages that an organisation can obtain due to its size of production, as the cost per unit of production decreases.
- **Economies of scope**: cost advantages that an organisation can obtain thanks to product diversification.
- ▶ Winner-takes-all market / natural monopoly: Market where the leading provider benefits from advantages that reinforce its leading position
- ▶ **Long tail**: Theory that assumes that digital technology (in particular the Internet) increases the diversity of content made available to people, thus leading to more diversity in the overall consumption
- ▶ **Second-degree price discrimination**: charging different prices for buying different volumes (volume discounts, package deals)
- ► Third-degree price discrimination: charging different prices for the same product for different customer groups or for different times, days, seats
- ▶ **Interoperability**: Ability of different information technology systems to communicate, exchange data and use the information that has been exchanged
- **Lock-in effect**: when customers become dependent on one specific combination of vendors for a device and access to a specific good. Switching to another vendor (combination) requires substantial switching costs
- Network effect (or externality): The effect that one user of a good or service has on the value of that product to other users
 - Cross-sided (or indirect or intergroup) network effect: Cross-sided network effects occur if an
 increased usage on one market side creates benefits for the distinct user group on the other side(s)
 of the market
 - Same-sided (or direct or intra-group) network effect: Network effects are same-sided when the number of users has a direct positive impact on the utility derived from the product
- Cross-platform effect: Cross-platform effects occur if an increased usage of one platform benefits to users of another platform
- **Two-sided markets**: Two-sided markets exist as soon as the utility of any customer A is correlated to the number of customers B.
- ► **Cross-subsidization**: Practice of supporting the losses of one activity by the profits generated by another activity
- ▶ **Multi-homing vs single-homing**: Multi-homing corresponds to the case when users choosing to join and use several platforms to perform the same task. Conversely, users *single-home* when they only use one platform.
- **Vertical commoditisation**: diversifying into a related vertical market and offering the same service as a competitor, but for a highly discounted price (or even for free)
- ▶ **Platform**: Mediating entity that creates value by facilitating interactions in a triangular fashion between upstream and downstream agents
- ▶ **Platformisation**: Development of platforms in an economic sector, including by traditional stakeholders
- ▶ **Platform silo competition**: Competition between groups of platforms (there are cross-platform effects within each group of platforms)
- **Desintermediation:** when intermediaries are removed from the value chain ("cutting out the middleman")
- **Re-intermediation**: when another intermediary (e.g. a platform) is introduced in the value chain after a process of desintermediation
- ▶ **Value creating ecology**: a "constellation" of firms working together creating value through clusters and networks in a dynamic way, including the consumer as co-creator of value



Creative Value Chains mapping

1/ The analysis of Creative Value Chains - approach

1.1 The concept of value chain analysis

Value chains have been studied in a wide range of academic domains, from industrial economics to development economics. The ToR for this study refers to the value chain concept as "a sequence of activities during which value is added to a new product or service as it makes its way from invention to final distribution¹⁷". Another similar description of value chains is provided by Kaplinsky and Morris (2000) that state that value chains can be defined as "the full range of activities which are required to bring a product or service from conception, production, delivery to final consumers, and final disposal". ¹⁸ Those descriptions highlight the following key aspects of value chains and demonstrate in which aspects it differs from the concept of "clusters":

- inclusion of both forward and backward relations necessary for producing the products or services;
- inclusion of the intermediate and final customers in the analysis;
- value chains are mapped at the level of activities and services, not companies;
- value chains analyse the interrelations between cooperating companies only (excluding competitors);
- value chains exclude framework conditions (however, these framework conditions are surrounding the value chain);
- Value chains are global in nature; indeed, value chains remain in place also after relocation of existing activities to other regions or countries.

In order to present those aspects, value chains are usually visualised through 'vertical links', i.e. the functional relationships that exist between all activities required to create, produce and disseminate a certain product or service. Any value chain entails upstream and downstream linkages connecting different activities.

Through the in-depth analysis of interrelations between actors that have to cooperate to create value, value chains are an interesting concept for both analysis and policy development. Indeed, value chains allow for an analysis that goes further than the traditional sectoral analysis, and better reveal the economic links and interrelations that exist between different actors. It leads to a deeper insight into the actual workings and dynamics of economic actors. It also provides a better understanding of the role that different activities play in creating economic value and employment.

1.2 Defining creative value chains

In line with the above definition, creative value chains consist of an initial creative idea, which is usually combined with other inputs to produce a cultural work, which then moves through a series of interlinked stages before it reaches the final consumer. Within one value chain analysis, all relevant activities and actors that play a role in the creation, production, dissemination, exhibition and preservation of the creative product or service should be analysed, as well as the interrelation between those actors.

However, the concept of (economic) value creation is not always as straightforward in creative value chains, as it is in many industrial value chains. This is the case, for example, in the subsector of cultural heritage. Creative/cultural value chains therefore can have a different shape and behaviour than that of a production based industry like cars or electronics.

1.2.1 The UNESCO 'Culture cycle' concept

To capture the process of value creation in culture, in 2009 UNESCO developed the concept of the 'culture cycle' that includes the following activities:

Creation: the origination and authoring of ideas and content;

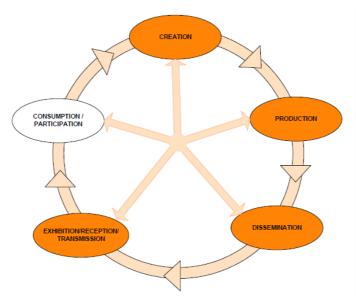
¹⁷ Botkin and Matthews 1992, p. 26

¹⁸ R. Kaplinsky and M. Morris (2000) "A Handbook for Value Chain Research". IRDC.

- **Production**: the making of cultural works, whether as one-off productions (e.g. crafts, paintings, sculptures) or as mass reproducible cultural forms (e.g. books, movies, TV programmes), as well as the manufacture of goods required for the production of cultural works;
- Dissemination: the distribution of cultural products to consumer and exhibitors;
- Exhibition/reception: provisions of live and/or unmediated experiences to audiences through granting or selling restricted access to consume/participate in often time-based cultural activities (e.g. play, concerts, museum and gallery exhibitions, festivals);
- **Consumption/participation**: the activities of audiences and participants in consuming cultural products and taking part in cultural activities and experiences.

To represent these activities, UNESCO consciously chose a network form instead of a linear presentation to draw attention to the interconnections between these activities, often associated with new technologies. For example, people can create and consume at the same time through a digital platform such as YouTube.

Figure 2: The culture cycle



Source: UNESCO (2009)

In addition to these five activities, UNESCO also defined three transversal domains that are not part of the culture cycle, but nevertheless play a key role in the different stages of the culture cycle:

- Education and training
- Archiving and preservation
- Equipment and supporting materials

The latter transversal domain is also referred to as 'ancillary goods and services'. These goods and services are not directly associated with cultural content, but facilitate or enable the creation, production, dissemination or exhibition of cultural works (e.g. music instruments, electronic devices such as e-readers).

The culture cycle is not concerned with making judgments on how 'cultural' any particular aspect of the cycle is. Rather, what is important is to understand and to be able to track the totality of activities and necessary resources that are required to transform ideas into cultural goods and services that, in turn, reach consumers, participants or users. The artefact (whether painting, craft object or performance) is meaningless without a value system and a production system that gives it value/meaning.

1.2.2 The ESSnet-Culture framework for cultural statistics

At the European level, in 2009 a network of European Statistical Systems (ESSnet-Culture) was set up at Eurostat to further coordinate the harmonization of statistics on the CCS.¹⁹ This has led to the publication of a guideline for the EU and Member States to collect data on culture in a harmonized manner.²⁰

Similar to UNESCO, the ESS-net study also defines a set of functions that correspond to different stages of the creative value chain (cfr. the UNESCO 'culture cycle' model). We distinguish three sequenced core functions (Creation, Production and Dissemination/trade) along with three support functions (Preservation, Education/training and Management/Regulation):

- Creation
- Production/Publishing
- Dissemination/Trade
- Preservation
- Education
- Management/Regulation

But unlike the UNESCO framework, the functions defined in the ESSnet-Culture framework do not aim at representing the whole economic cycle. The ESSnet-Culture framework's final objective is to produce sound data on cultural activities. As such, the ESSnet-Culture framework excludes e.g. manufacturing activities related to reproduction as well as ancillary goods and services.

1.2.3 Stylised creative value chain model in the context of this study

The baseline model to analyse creative value chains in the context of this study, builds further on the ESSnet-Culture framework. However, by definition, a value chain must cover the "whole economic cycle" of a good from the original act of creating a product or service, up to the processes of participation and/or consumption. Since the ESSnet-Culture framework does not "aim at representing the whole economic cycle" of creative value chains, there arises an important need to complement the ESSnet-Culture approach to the creative value chains' functions with UNESCO's 2009 framework for cultural statistics. As mentioned, UNESCO approaches the creative value chains from a slightly different angle of "culture cycle" of cultural goods, in order to cover the "contributory processes that enable the culture to be created, distributed, received, used, critiqued, understood and preserved"²¹.

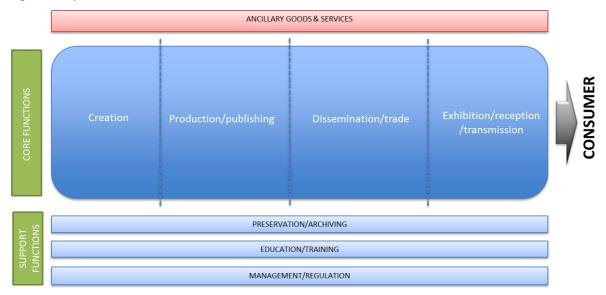
As a result, we will use the stylised value chain model in Figure 3 as the overarching framework for the mapping of the creative value chains in the rest of the study. The description and analysis will primarily focus on the four core functions in each of the nine creative value chains (Creation, Production, Dissemination/trade and Exhibition/reception), and the interrelations between the actors in those core functions.

¹⁹ http://ec.europa.eu/culture/our-policy-development/doc1577_en.htm

²⁰ Bina, V. et al. (2012), "European Statistical System Network on Culture – final report"

²¹ See p.19 UNESCO FCS http://www.uis.unesco.org/culture/Documents/framework-cultural-statistics-culture-2009-en.pdf

Figure 3: Stylised Creative value chain model



CORE FUNCTIONS

- Creation: the function of creation concerns the activities related to the elaboration of artistic ideas, contents and original cultural products.
- **Production/Publishing**: the production of cultural goods and services relates to activities, which help turn an original work into an available work. Production and publishing are connected to the same stage of the cycle, but production is linked to non-reproducible products when publishing is linked to reproducible ones. Production and publishing involve different formats and methods: the paper edition of a book is a publishing matter; so is the production of electronic books.
- **Dissemination/Trade**: the dissemination function corresponds to making created and produced work available; the bringing of generally mass-produced cultural products to consumers and exhibitors (e.g. the wholesale, retail and rental of recorded music and computer games, film distribution). In other words, dissemination includes the acts of communication and marketing, so as to make cultural goods and services available to consumers. On the other hand, cultural trade activities are those, which involve buying cultural products from a third party in order to sell them with no (or very little) transformation. Cultural trade activities sometimes only partly fit into the classification of cultural statistics (e.g. the sale of newspapers linked with stationery), and are sometimes considered entirely as cultural (e.g. the sale of books). Distribution networks are undergoing huge transformations with the advent of electronic trading and online trade is included within the concept of cultural activities.
- **Exhibition/Reception/Transmission**: This function refers to the provision of live and/or unmediated cultural experiences to audiences by granting or selling access to consume/participate in time-based cultural activities (e.g. festival organisation and production, opera houses, theatres, museums, (digital) cinema. Reception is the process by which the product is being delivered to the final end consumer (digital cinema, 3D, live performance or broadcasting). Exhibition/reception/transmission involves the transfer of knowledge and skills (informal learning) through the cultural experience, sometimes through a co-creative process with consumers (e.g. the transmitting of intangible cultural heritage from generation to generation).

SUPPORT FUNCTIONS

- **Preservation**: The "preservation" includes all activities that conserve, protect, restore and maintain cultural heritage (ESSnet, 2009). Digitisation is considered mainly as part of preserving activities, especially for the publishing subsector, even if it also has a function of dissemination.
- **Education/Training**: Education is understood as formal and non-formal education in the field of culture. It allows the development and transfer of skills within recognized cultural activities, as well as an awareness-raising function within cultural domains.
- Management/regulation: the management function relates to activities carried out by institutional, public or private organisations whose mission is to offer the means and a favourable environment for cultural activities, operators and spaces. This includes administrative activities and technical support activities to support culture. Regulation is necessary to both encourage cultural activities and to define and confer copyrights.

ANCILLARY GOODS AND SERVICES

Goods and services that are not directly associated with cultural content, but rather facilitate or enable the creation, production, dissemination or exhibition of cultural works (e.g. electronic devices such as e-readers, music instruments).

1.3 Methodology and value chain mapping structure

The value chain analysis is based on the combined information from existing literature and interviews with relevant stakeholders.

For the literature review, among others the following types of documents were used:

- Academic publications;
- Position papers of European and national associations and representatives;
- Web information;
- Etc.

We refer to the annexes for the bibliography of publications consulted in the context of this study, as well as for the list of interviews that have been conducted.

The value chain analysis for each of the CCS sub-sectors is structured as follows:

- Chapter 1 presents the sector and activities under the scope of the value chain analysis.
- Chapter 2 provides a stylised value chain mapping and description. More specifically, the following sections are included:
 - Main economic characteristics of the sector;
 - Stylised value chain mapping and description. This includes a description of the actors and of their
 role in the process of value creation (including discussions of the impact of digital shift on
 structure, new actors and new business models);
 - Value monetisation and price evolutions (for the value chain as a whole).
- Chapter 3 focuses on the interrelations between actors, and the identified and expected changes due to the digital shift. More specifically, the following aspects are discussed:
 - Market structure and bargaining power;
 - Contractual arrangements;
 - Revenue sharing.

Chapter 4 discusses value chain aspects in a broader context and presents some **key exogenous changes (in addition to digital shift) as well as key relations** with other sectors and actors.

2/ Visual arts – a value chain analysis

2.1 Introduction to the visual arts sector: definition and importance in the EU economy

Definition and scope

In the following analysis, the definition of visual arts largely follows the UNESCO FCS 2009 definition as well as the ESSnet-Culture 2012 definition. As stated in UNESCO (2009), "Visual arts are art forms that focus on the creation of works, which are visual in nature. They are intended to appeal to the visual sense and can take many forms²²". Unlike the UNESCO FCS 2009 definition, we do not include crafts. They are treated in a separate chapter in this study.

As further indicated in the ESSnet-Culture 2012 definition of visual arts, the visual arts domain encompasses all non-literary and non-musical fine arts (paintings, drawings, prints, watercolours, video, installations and sculpture) as well as photography²³. This therefore also encompasses all "Plastic arts" (see ESSnet-Culture, 2012)²⁴.

It is important to point out that digitisation led to the emergence of new forms of art (see Arora and Vermeylen, 2013), which have no physical presence and exist merely as a computer image. The UNESCO FCS 2009 definition of visual arts does not include multidisciplinary art forms such as "virtual art" in the visual arts domain. EY's 2014 definition²⁵ does not explicitly include this type of art either. However, because of its importance in terms of exhibitions and sales²⁶, we do include "digital arts" ²⁷ in our analysis. We focus on digital arts that have a physical and visual presence, e.g. through projection on a screen. We exclude from the analysis digital logos designed for websites (inputs), etc.

In this study, we focus on the core functions (creation, production, dissemination, trade, exhibition, reception) as well as on "support functions" such as management/regulation. As stated by Zorloni (2013), who provides a complementary definition of the visual arts sector, the system of visual arts is an aggregate of such size and complexity that it can be considered as a cluster of operators of varying value and importance (Porter 1990, cited by Zorloni, 2013). Those operators are closely interconnected and offer, for different purposes (commercial or cultural), and in appropriate structures (galleries, auction houses, fairs, museums, foundations), luxury goods with a high symbolic content designed to satisfy an aesthetic and cultural need that the consumer expresses as an alternative use of his economic power (Zorloni 2005b). This sector therefore groups together numerous heterogeneous activities and operators: from an institutional perspective (e.g. public- or private-sector organisations, whether or not with commercial objectives); from the perspective of the motivations met (e.g. cultural, financial or social ones) and from a financing perspective (whether or not public subsidy is prevalent).

Visual arts are in close relation with other Cultural and Creative Sectors. In particular, the differences between visual arts and tangible cultural heritage might be blurred (paintings in museums, sculpture on monuments, etc.). Contrary to the value chain in tangible cultural heritage (which is treated in a separate chapter and which focuses more on activities of preservation, dissemination and exhibition), at the core of the analysis of visual arts is the (contemporary) creation of visual arts (creation of the paintings etc.), which is a central part of the value chain²⁸.

²² Although it is acknowledged that some contemporary Visual Arts may include multidisciplinary art forms such as 'virtual art', these are not included in the domain.

²³ Contrarily to ESSnet-Cutlure 2012's definition, we do not include design (products) in the visual arts domain.

²⁴ The term 'plastic arts' also has a specific meaning referring to art forms which involve physical manipulation of a plastic medium by moulding or modelling such as sculpture or ceramics" (ESSnetCulture, 2009, P.306).

²⁵ For the purpose of the EY (2014) study, "visual arts" includes all artistic activities related to graphic creation (painting, sculpture, art crafts, photographic activities and special design), arts sales, gallery activities, museums and what is generally referred to as "heritage", such as ancient sites and monuments.

²⁶ See e.g. http://www.nytimes.com/2014/06/02/arts/international/on-screen-and-on-the-block-digital-artwork.html? r=0

²⁷ Digital arts are defined in the present study as "art that relies on computer-based digital encoding, or on the electronic storage and processing of information in different formats—text, numbers, images, sounds—in a common binary code" (Stanford Encyclopedia of Philosophy, 2016). See http://plato.stanford.edu/entries/digital-art/.

²⁸ The analysis however, does also cover commercial transactions related to visual works of deceased, not labelled as heritage.

Importance for the EU economy

Visual arts are of major importance for the EU economy. As indicated in EY (2014), visual arts account for almost a quarter of the creative economy, both in terms of employment and in terms of revenues²⁹.

- In 2011, Visual Arts employed 1.2 million people (directly or indirectly). In particular, art sales galleries and auction houses employed around 330,000 people, while 793,288 jobs were related to "visual arts creation".
- The total turnover of Visual Arts amounted to EUR 127 billion in 2011. While this amount is of particular importance for the EU economy, as further analysed in the study, revenues are unevenly distributed along the value chain, with most of the living artists struggling to make a living out of their art work.

Following a particularly sharp increase in European sales during the 90's and early 2000's, Europe now plays a major role in the global art market, with 34% of sales transactions taking place in Europe (in 2013, in value). The EU is a net exporter: in 2010, EUR 6.2 billion worth of arts and antiques were exported by the EU, and EUR 5 billion imported. The trading of art in Europe is largely dominated by the UK (accounting for 65% of the EU market), followed by France (17%) and Germany (5%). While the crisis impacted the sector, it recovers rather quickly, mainly due to an upsurge in Chinese buyers and spectacular prices reached for various fine arts transactions (see EY, 2014). This reflects the globalisation of the art market, which, as discussed in section 2.3.1, led to a consolidation in some segments of the art market.

Impact of the digital shift: a brief introduction

The main impact of the digital shift on the global art market so far has been:

- new possibilities for the creation of artwork thanks to new digital tools (software, etc.).
- opportunities for artists to promote their own work online, as well as possibilities for collectors to more directly contact artists or artists' representatives.
- online presence and exploitation (e.g. aggregators displaying or copying third party images at no cost) of digitised copies of visual artworks.
- online sales of artworks, both by traditional actors (e.g. auction houses) and by emerging new actors (e.g. "artlead").
- the availability and exploitation (by new or existing actors) of widespread information related to artworks: prices, characteristics, etc.

Despite those changes and when compared to other cultural and creative sectors analysed in this study (e.g. music, media, etc.), the digital shift has not (yet) deeply impacted the core structure of the visual arts value chain. Different reasons can be mentioned:

- First, from a consumer point of view, a digitised version of visual artworks is not a close substitute for a nondigitised version (with the exception of digital art): admiring a digital copy of a piece of visual art is hardly a substitute for experiencing the original (although digitisation can surely enrich the cultural experience).
- ▶ Furthermore, personal relationships between buyers and advisors or art dealers (who have insiders' knowledge/information and act as a reference for collectors) on the one hand, and between potential buyers and the artist/work of art on the other hand, are very important in the sector. According to Arora and Vermeylen (2013) among others, the widespread availability of information even increases the need for personal advice (and thus reinforces the role of traditional actors in the value chain).

Nevertheless, digitisation did already lead to the emergence of new actors at the dissemination/trade stage and it has the potential to deeply change the possibilities of disseminating artworks without the support of traditional distributors/intermediaries. While this potential has not yet strongly materialized, some interviewees and analysis tend to indicate that it could induce profound changes in the coming years. For example, the gallerist Sebastien Ricou stated in an interview³⁰ that emerging artists can be discovered through e.g. Instagram and that collectors can easily find information online about artists, so that they do not need to visit galleries but can contact artists directly (or those who represent the artists). On the other hand, this also implies that there is an overwhelming number of artists on the internet with hardly any chance of being "discovered".

²⁹ It must be noted that in EY (2014) framework, visual arts encompasses art crafts and "heritage", such as ancient sites and monuments while in our framework those domains are treated separately.

³⁰ See http://www.seeyouthere.be/new-kid-block-7-brussels-project-space-attic/.

2.2 Creative value chain mapping and description

2.2.1 Economic characteristics of visual arts value creation and impact on the global value chain structure

In order to understand the structure and dynamics within the Visual Arts value chain, it is important to first discuss key economic characteristics of the transacted goods: visual artworks.

- As indicated by Zorloni (2013), one of the economic features characterizing the exchange of artistic goods is that they are **"information goods".** This entails enormous difficulties in evaluating the quality of the object, especially for those consumers who do not have artistic sensitivity or historical-artistic skills. This results in a high asymmetry of information between buyers and sellers.
- As further pointed out by Arora and Vermeylen (2013), artworks are "**experience goods**", which denotes that art lovers and buyers only determine the quality of a work of art upon reception/consumption.
- According to Prendergast (2014) and in line with Zorloni (2013), information is not even fully revealed at the consumption stage. For many collectors, contemporary artworks are "**credence goods**", i.e. goods where even after we consume them, we are still uncertain about their merits. One reason is that for much of contemporary art, especially at its conceptual end, a new work can only be interpreted through the lens of previous work, and many collectors are not privy to that information.
- Another important aspect to take into account is that visual art is a "**durable good**" that (mostly) does not <u>physically</u> deteriorate over time. Like most durable goods, there is a developed secondary market (Prendergast, 2014).
- One of the main implications of the above listed characteristic is that, as recalled by Resch (2011), works of art have been considered as "investment goods" for years. This has an impact on the structure and functioning of the value chain. It leads to the presence of intermediaries and consultants, databases etc., in line with what exists on the stock market. In addition, there is a blurring line between sellers and buyers of artworks: buyers are often potential subsequent sellers, depending on their reasons for buying and on price evolutions.
- While artworks are often considered as investment goods, the **art market does differ widely from other markets for investment goods**, such as for example the stock market. Velthuis (2005) describes how classical economists such as Smith, Jevons and Marshall encountered great difficulties in applying conventional economic theory to art markets. Even now, researchers have difficulties in understanding the specific art market characteristics. Among others, the **uniqueness** of artworks (with the exception of reproducible visual artworks such as photography, lithography, etc.) is one key difference between the art market and markets for commodities like stocks. While stocks can be easily and perfectly substituted, works of art are unique and even two works on the same theme by the same artist are not substitutes for one another (Gérard-Varet, 1995). As further discussed in section 2.3, this uniqueness offers artists (or sellers) a monopolistic position (which is however reduced by the lack of entry barriers and a certain degree of substitutability between goods). A further distinguishing factor is that artworks form part of the cultural capital of mankind, and thus have **public-good characteristics** (Frey & Pommerehne, 1988).
- A last important characteristic of visual artworks (except when considering "visual digital arts") is the relatively **low "degree of substitutability"** between the original artwork (made from the chosen medium and that offers a visual/physical experience) and its digitised production/copy. Consumers' utility and willingness to pay will therefore widely differ between those two "versions" of the good. This implies that the main structure of the value chain has not yet been widely affected by the digital shift, in comparison to some other cultural and creative sectors (where the degree of substitutability between the "original" and the "digitised copy" is much higher).

2.2.2 A stylised value chain mapping and description

2.2.2.1 Description of the actors in the value chain and their role in value creation³¹

The figure below presents the value chain for visual arts, based on literature review³² as well as on insights from interviews.

In the figure, actors in the visual arts value chain are categorized along three main stages: (1) Creation, (2) Production, (3) Dissemination/Trade/Exhibition/Reception. The functions of Dissemination/Trade and Exhibition/Reception are (visually) merged in order to illustrate the non-linear process related to these functions (e.g. an artwork can be first disseminated/traded then exhibited while the contrary can occur as well). A visual artwork can indeed follow different paths along the value chain (a market versus an exhibition path - see further) and the different functions in the value chain are linked to each other and can have iterations. It is important to note that this is a stylised value chain, which gives, for reasons of clarity, an abstract overview while the reality is more complex.

This stylised value chain is relevant for all European countries, as no major structural differences at the national level have been identified.³³

Both actors at the core of the value chain process as well as supporting actors are mapped. The difference between the core and supporting actors is based on the following criteria: actors at the core (1) might, at one point in time, be the owner of the good and/or (2) provide activities directly related to value creation or monetisation of the good: promotion, etc. Supporting actors on the other hand facilitate the transactions between core actors (intermediaries).

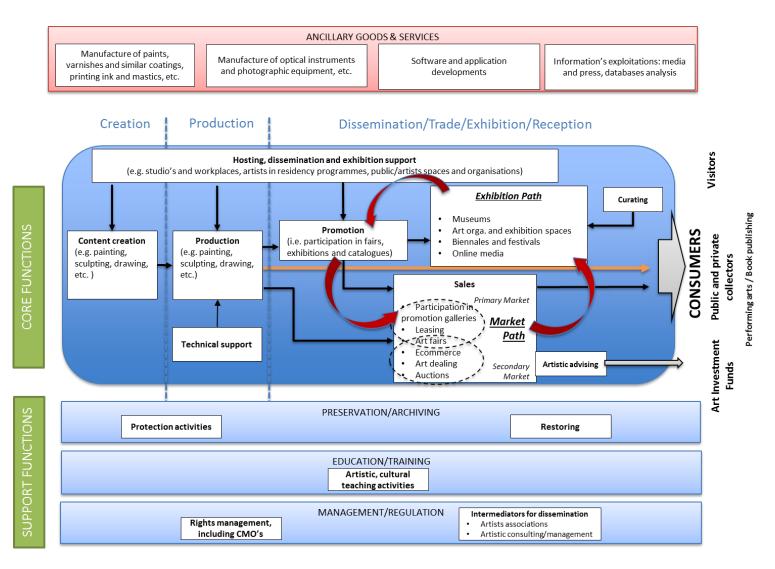
³¹ Based on Flanders DC (2014), Zorloni (2013), Arora and Vermeylen (2013), Prendergast (2014).

³² Including e.g. Flanders DC (2014) or Zorloni (2013).

⁻

³³ However, some national specificities can be observed. For example, it appears that there is no CMO (i.e. Collective Management Organisations) in countries such as Poland, Slovenia and Bulgaria (as stated by an interviewee). The administering of the resale right on behalf of visual artists and their beneficiaries is therefore not collectively and nationally organized in those countries.

Figure 4: Stylised Value Chain for Visual Arts



The role of each actor and their interrelation are described in the text below. For reasons of clarity, we first describe a "standard and generic path" that an artwork can follow along the different stages of the value chain. After that, we present in more detail the actors active in 1) the creation and production functions, 2) the dissemination/trade and exhibition/reception functions and 3) the consumption stage. In the value chain analysis, we devote a specific paragraph to 'consumers', as some of these consumers such as private collectors can have a specific impact on the value monetisation process of an artwork (for example, some collectors can have a rather strong market power and thus a strong impact on demand evolutions). Moreover, consumers can also be active in the dissemination function, as they sometimes sell artworks that they bought previously.

A generic and stylised path for an art work

The visual arts sector includes different types of artwork that do not necessarily follow a similar trajectory. A very generic stylised description of a path for an artwork could be:

- An artist creates and produces (eventually with supporting service companies/actors) an artwork.
- He subsequently tries to get some first exposure in the non-profit field (exhibitions in public/artists' spaces, artists in residency programmes and other types of visibility).
- The next step for the artist is to find a gallery. This requires a lot of time/effort/contacts from the artist.
- If the artist succeeds, a promotion gallery promotes and tries to sell (exhibitions, catalogues, participation to art fairs, etc.) the artwork to e.g. a private/public collector or an art dealer/ sales gallery. This first sale is considered as the "primary sale" and occurs in the primary market.
- Of these primary sales, a limited number of artworks may eventually enter the secondary market, with subsequent sales that might take place in auctions houses, as well as between art dealers (incl. sales galleries) and private/public collectors.
- The artwork might also enter the "high-end exhibition path". The artwork might be exhibited after primary or secondary sale, e.g. in museums.

In the following paragraphs, we describe the role of each actor along the different functions of the value chain.

Creation and production

Visual artists are obviously the main actors involved in the creation and production process. In line with other CCS, the definition of a visual artist is blurred. In line with Laermans (1996) (cited by Flanders DC (2014)), we consider visual artists as "persons who consider themselves as visual artists, and who are also considered as visual artists by some peers".

The visual artist conceives the image and/or idea, and chooses the medium (Zorloni, 2013). Artists are active in the creation and production stage and (to a lesser extent) in the dissemination/trade stages. Digitisation does increase the possibilities for artists to be more active in dissemination/trade and exhibition/reception as well (through online promotion, etc.).

Some key characteristics of visual arts creation:

- There is no barrier to entry or exit. The only barrier might be income: as discussed in section 0, only a very small proportion of visual artists make a living from their art.
- As indicated in Prendergast (2014), the contemporary art market possesses a "Winner Takes All" feature, where only a very small number of artists make up the majority of sales. This is a structural feature of the art market, as collectors associate an artist's authorship with quality, and so purchases are concentrated on particular artists (and galleries). The literature and the interviews conducted do not seem to indicate a significant change brought about by the digital shift on sales and revenue distribution among artists in the visual art sub-sector.

Artists are sometimes supported by other actors or mechanisms in the creation and production stage:

Studios/workplaces/associations/creative hubs all offer different possibilities for an artist to use a space (for free or against rent) or to benefit from an "artist in residency programme". These actors often group several artists and mainly support them during the creation and production process. They are particularly important for rather unknown/emerging artists, as they also support artists to enhance their visibility (building networks, etc.) and can provide them with access to specific technical expertise. They can also play a role in the dissemination/trade and exhibition/reception phase, as they often have exhibition spaces available for artists.

According to various interviewees, emerging and young artists tend to group more and more in artists associations and creative hubs in order to have access to places (studio's workplaces), benefit from possible dissemination/trade/exhibition/reception of the artworks, by sharing some costs related to this stage (art manager, etc.) and to be part of a creative community and co-create.

- Artists sometimes lack the technical abilities required to produce the work on the selected medium. For this, he or she may need to work together with production companies (e.g. steel plant, foundry, technology lab (Flanders DC, 2014). They may also find these services in associations, tech hubs or creative hubs. Some artists have their own production assistants.
- Visual artists can find financial support for creation and production from different sources:
 - Visual artists may benefit from public financial support (e.g. particular benefits to artists granted by unemployment regulations). As further discussed in section 2.4, according to several interviewees this financial support is however often considered inadequate (in terms of admission criteria) for the specific situation of visual artists (see chapter 4 for more information), which leads them to search for other solutions (a bread-winning job, general social welfare). Apart from financial support, (semi) public entities can also play a role in offering training or administrative, legal, fiscal and financial advice (e.g. Cultuur+ondernemen in the Netherlands).
 - In some cases, visual artists may receive support from their promotion gallery for the creation/production (fixed wages, acquisition of artwork by the gallery in order to sustain the creation and production, etc.).
 - Other types of financial support such as sponsorship, patronage or crowdfunding³⁴ can also be available for artists.

Once the production process has finished, the physical properties of the artworks do not change anymore throughout the rest of the value chain.

The impact of digitisation on the creation or production process is mainly technical and relates to the production process: for example, it is now possible to build up sculptural work directly from computer-based designs with 3D printing. The use of 3DP in visual arts also has a legal impact, as it is stated by some (e.g. ADAGP, Collective management organisation in France) that unauthorized copies/reproduction of artworks could be done through 3DP, and that the legislative framework for authors' retribution should be adapted³⁵. Another impact of the digital shift in the creation and production stage is the opportunity it offers to artists to find financial support more easily through crowdfunding in order to finance the production of an artwork.

Dissemination/Trade and Exhibition/Reception

Various types of actors are active along the value chain to take care of the dissemination and exhibition of artworks. The boundaries between these different actors (their role, definition, etc.) might be blurred³⁶. At these stages, the uptake of artwork by actors with a strong reputation, can have an enormous influence on the future valuation of an artist's work and on the artist's career. It is a key stage in the monetisation of visual artworks.

For reasons of clarity and based on interviews and Flanders DC (2013), we distinguish actors according to two interrelated paths that bring the artwork to consumers: the <u>market path</u> (both the primary and the secondary market) and the <u>exhibition path</u> (where the main objective of actors is not to sell it but to exhibit it for the wider public). The market path primarily groups the actors active in the dissemination/trade function, while the exhibition path groups actors active in the exhibition/reception function. Of course, the boundaries between both are blurred. For example, promotion galleries also have a function of exhibiting artworks. But in contrast with exhibiting in e.g. a museum, the rationale behind a gallery's exhibition is to sell the artwork.

Dissemination/trade: "the market path"

Promotion galleries

Based on the literature and on interviews, we distinguish between two types of galleries: the promotion galleries and the sales galleries (see description below). Contrarily to the sales galleries (that have a similar role as "art

³⁴ For more information on instrument that facilitate access to finance in CCS, see the EC report on "Towards more efficient financial ecosystems": http://bookshop.europa.eu/en/towards-more-efficient-financial-ecosystems-pbNC0416091/

³⁵ See ADAGP (2014), 3D Printing.

³⁶ Artists often take up the role of promoter/manager/distributor.

dealers"), promotion galleries have a strong focus on the promotion/management of selected artists in order to enhance their visibility and market value. Promotion galleries also attempt to sell artworks, but they provide various promotion services (organizing exhibition, drafting catalogues, participating in art fairs, networking, etc.) and act as an intermediary between artists and curators, art critics, collectors and museums. Galleries sometimes act as a "promotion gallery" for some artists, while at the same time acting as a "sales gallery" for other artworks.

Promotion galleries are active in the primary market: they select an artist, often work with him on an (at least local) exclusivity agreement and for a rather long period of time (1-2 years). They attempt to sell the artworks (mainly to art dealers or collectors). They usually claim a share between 40% and 60% of the selling price for their services. This has to cover the often high fixed costs (rent/space maintenance, personnel, prospection, etc.), as well as the costs for promoting the artists (printing catalogues etc.). Promotion galleries maintain close relations with certain collectors, art dealers or auction houses and act as an advisor for them.

They conduct activities of selection and prospection in order to attract artists that match with the gallery's policy. Besides management and promotion services, promotion galleries sometimes also provide financial support for the production of artwork by the artists with whom they work (fixed wage, acquisition of artworks, etc.). Promotion galleries play a key role in the national and international promotion of artists, and are often linked to museums (exhibition path) as first "selectors".

The activities of the promotion galleries are rather risky and returns on investment are uncertain. This is also reflected in the contractual arrangements between artists and promotion galleries. Galleries demand a rather high share of the selling price and mostly request exclusivity for the dissemination/distribution of the work.

The digital shift has allowed information to be more easily available. Moreover, it allows for online sales of artwork. However, until now, the role of promotion galleries has not been weakened. For some (e.g. Arora and Vermeylen, 2013), digitisation has even reinforced their position, as the need for a point of reference is increasing due to the widespread availability of an abundant amount of information. Prendergast (2014) further states that galleries with a strong reputation play an important certification role, in a market where asymmetry of information is very important.

Until now, promotion galleries have responded to the digital shift mostly by developing accessible digital versions of their collections. These tools have the potential to make work available to the public much longer than is the case during an exhibition, and for consumers to assemble (curate) personalized collections online. Galleries have also introduced interactive guides to exhibitions, to make the viewing experience richer and more personalized.

Sales galleries

Sales galleries have a comparable role as art dealers (see below), except that they have an identified location and space for exhibiting artworks. Contrarily to promotion galleries, they do not provide promotion nor management services for artists.

They are mostly active in the secondary market (even if they might also be active as a buyer in the primary market) and often focus on coherent artworks (style, period). Contrarily to promotion galleries, they do not focus on a specific artist. According to BUP (2014), in contrast to the promotion gallery, they attach little or less importance to profound reflection and research. Sales galleries are not necessarily open to the wider public.

Art dealers

In line with the activities of sales galleries, art dealers focus on buying and selling works of art, mainly (but not only) on the secondary market. For the purchase of artworks, an art dealer mainly relies on either other art dealers or promotion galleries, and sometimes on the artist himself (primary market). One of the aspects highlighted by an interviewee is that some art dealers are self-employed and not registered as professional entities, which may entail tax losses as well as a lack of transparency regarding sales (and therefore a lack of revenues from subsequent resales).

Art fairs

In the contemporary art scene, art fairs are increasingly important. Next to the traditional big actors (Art Basel, Art Cologne, FIAC Paris, Frieze (London)), fairs are increasingly being organised in emerging markets (Dubai, etc.). In parallel, various smaller art fairs are being held worldwide (Affordable Art Fair, etc.). Finally, some art fairs (e.g. Liste in Basel) focus explicitly on emerging artists. In 20th century arts, TEFAF Maastricht is the top of the world.

Art fairs group different (promotion) galleries/dealers that present their portfolio and sell their work. Art fairs can be both active on the primary and secondary market.

Promotion galleries or dealers must send an admission file/dossier and pay a registration fee in order to be admitted. This can be very challenging for smaller galleries, as admission files often include heavy requirements, admission criteria can be very strict and admission fees very high. According to Zorloni (2013) the average registration fee to attend a fair ranges from a minimum of EUR 300 to a maximum of EUR 2,000, and is returned (with the exception of the Armory Show) if the galleries are not selected; as for the stands, the prices range from over EUR 200 to EUR

500 per square meter (excluding VAT). In addition, the cost of transport of the artworks ranges between EUR 2,000 and EUR 6,000. If you then add travel, meals and lodging for the art dealer, the staff, and featured artists, it is no surprise that the average cost of a fair easily exceeds EUR 25,000, which, multiplied by five to ten fairs per year, makes investments in promotion through art fairs consistently high.

The recent consolidation of art fairs (see section 2.3.1) has worsened access for small galleries to important art fairs. As indicated by Zorloni (2013), only around 34% of applicants succeed in entering Frieze (170 galleries out of 500 applicants), and fewer than 30% at Art Basel (300 out of more than 1,000 applicants).

The costs to participate in art fairs are often paid for by private funds. However, in various European countries or regions (e.g. Austria or Flanders), public (financial) support is available in order to help promotion galleries to participate in art fairs abroad.

Art fairs gather together a lot of galleries, collectors, art dealers, etc. As stated by Zorloni (2013), the added value of participating is therefore obvious: for the galleries, many people visit one's stand, many more than those who normally attend galleries. The audience, on the other hand, gets a chance to see in a few hours what many galleries from different parts of the world offer, compare prices and get an update on the latest trends. For early collectors, this helps to develop tastes and knowledge.

The table below indicates the total number of visitors to some of the well know fairs in 2013-2014.

Rank Number of visitors Number of galleries ARCO Madrid 1 100,000 219 **IFEMA** 2 Art Basel 92,000 285 MCH Group Art Basel Miami Beach 258 3 75,000 MCH Group TEFAF 74,000 TEFAF 4 295 Reed Exhibitions **FIAC** 73,543 5 184 6 Art Miami 72,500 258 Art Miami LLC 7 Frieze London 70,000 152 Frieze The Armory Show Merchandise Mart 8 65,000 222 Art Basel Hong Kong 9 65,000 303 MCH Group 10 Paris Photo 55,239 136 **Reed Exhibitions**

Table 1: Top 10 Most Attended Art Fairs, 2013-14 Season

Source: Talkinggalleries (2014)

Auction houses – Art auctions

Auction houses are mainly engaged on the secondary market. They (mostly) sell artwork to collectors or art dealers through an auction system. The functioning of auctions has received quite some attention in economic literature. We will not provide in this study the specific properties/characteristics of auctions (as compared to other types of selling strategies). We refer to, for example, Zorloni (2013) for more information. In general, the key features are that auctions allow the artworks to be sold, without reserve, to the highest bidder ("highest possible price"). This provides a validation of artwork as a serious commodity. Prices from auctions are the sole reliable source of information related to artwork sales. The first appearance of an artist's work at an auction is comparable to an IPO on the stock market, a publicly known and referenced price.

The auction houses receive a percentage of the selling price from the buyer's side (around 12 to 25% from the buyer side), as well as 10% of the selling price from the seller's side (in case of selling below a certain amount, not for important sales).

Auction houses work in close collaboration with owners of artwork (collectors, art dealers, galleries) and potential buyers (also collectors, art dealers, etc.). Auction houses have to be well aware of the existing collections of collectors and dealers, to be able to act proactively and contact collectors to proposing that they sell/buy an artwork during a given auction (auctions are organized in a limited number of editions worldwide). Auction houses then provide some sort of promotional support (catalogues) to collectors willing to sell parts of their collections.

According to an interviewee, there is a trend toward having artworks more rapidly on the secondary market. While previously most of the clients of auction houses were art dealers, collectors now sell artworks more often (dealing directly with auction houses) and do not wait for the highest possible price. Auction houses thus act closer to the primary market than before. According to an interviewee, also some primary sales occur in auction houses nowadays.

Another trend is that, before the crisis, auction houses often worked with "in-house guarantees" that ensure a minimum sales price to the seller. However, as a consequence of the financial crisis of 2008, auction houses had to buy several artworks due to these "in-house guarantees" (because the auctions were unable to reach the minimum target). Nowadays, auction houses rather propose "third-party guarantees": a buyer promises a certain price, and in case the price is higher, he receives (for example) 30% of the difference.

Regarding the impact of digitisation and according to Arora and Vermeylen (2013), auction houses have been rather conservative in their engagement with the virtual realm. The catalogues are routinely digitised and put online along with the practicalities of a live auction, but the established auction houses such as Christie's and Sotheby's so far have not been successful in capitalizing on the opportunities that new technologies offer for purely online sales. Discussions with interviewees tend to indicate that purely online sales are being organized by Christie's etc., although not for bigger auctions. Interviewees agree that the sector has not yet fully embraced the digital shift. This is often explained by the need for collectors/estimators (people from the auction houses themselves) to physically see the artwork. They expect that an increasing number of sales will be organized online, and they closely monitor the evolutions in this regard.

According to Arora and Vermeylen (2013), auction houses in emerging art markets have been far more cutting-edge in applying online interactive technologies in the marketing of art. For instance, India-based Saffronart introduced mobile phone bidding and has been a pioneer in organizing lucrative online auctions for fine art (as opposed to online sales organized by eBay which offers far less valuable pieces). In some cases, these virtual public sales include newly created artworks, and proceed without a reserve price which precludes any buy-in³⁷. Both strategies are considered to be detrimental by Western auction houses.³⁸

E-commerce

The Internet is increasingly a place for art sales, even if traditional 'offline' actors remain the main actors for sales. E-commerce is primarily organized by auction houses and sites such as artnet.com, and to a much lesser extent by galleries and art dealers. In addition, new platforms have emerged (such as artlead, which focuses on edited copies of artwork).

Exhibition/Reception: "the exhibition path"

Closely interrelated with the market circuit is the "exhibition circuit". The main difference between the two circuits is that selling artwork is not the main objective of the actors that are present in the "exhibition circuit", whereas the main objective of actors in the market circuit is to sell. For them, exhibiting only serves the purpose of selling artworks.

Art library - Arthoteque

Art libraries or arthoteques, also active in the "market path", rent artworks to consumers for a specific time period. It is often possible for the consumers to buy the rented artwork during or at the end of that period. The objective of such structure is often to promote visual arts and especially local artists. These art libraries are often subsidized, mostly at local level and are particularly present in the Netherlands and Belgium (Flanders, Brussels), but also in other European countries. They play a role as incubator for artists, by allowing them to have first sales/first appearance on the market. They do not demand exclusivity agreements with the artists. However, artists are sometimes forced (by galleries) to remove artworks from those art libraries in case exclusivity agreements are later agreed with galleries.

Museums

Whereas the role of museums in the presentation and preservation of cultural heritage is described in more detail in the analysis of the Cultural Heritage value chain, we focus here specifically on the relationship between museums and (mostly) living artists.

For the purchase of their artworks, museums use various channels. They rely on promotion galleries, curators, art dealers, collectors (e.g. donations) or directly on the artist himself (e.g. long term loans of artworks). Museums tend to have smaller budgets/smaller subsidies now than in the past and tend to acquire less artworks of high value. When they take part in auctions, they have no means to participate in very high value sales. Given these budgetary restrictions, museums are more and more diversifying their activities (shops, etc.), in order to diversify revenues (see also the chapter on Cultural Heritage).

In visual arts, museums act as a sort of "validation" of an artist's status and of collectors' collections of artwork (through shows of private collections, often with follow-up donations to the museum by the collectors). They further enhance prestige, perceived market value, and ultimately cash value of the subsequent transactions. For an artwork, being exhibited in some museums might be considered as the highest possible validation, since it sometimes takes the work out of the "market circuit" and makes it "priceless".

³⁷ As indicated in Sothebys (2016), "if there are no bids on a lot, or if bidding does not reach the reserve price, the lot is "bought in," meaning it is left unsold and remains the property of the owner". See http://www.sothebys.com/en/Glossary.html

³⁸ See Arora and Vermeylen (2013).

Museums have largely embraced the digital shift (see chapter on Cultural Heritage), with possibilities for public interactions, comments and critics and online communities. New sites are offering extraordinarily detailed views on the collections, which sometimes raises concerns about the online exploitation of artworks and the retribution to artists (see chapter on Cultural Heritage and section 2.3 in this chapter).

Art organisations, exhibition spaces and creative hubs

Compared to museums, these actors usually do not have permanent collections and do not have an explicit function of preserving heritage. Next to providing space for exhibitions, they also often have workplaces or studios available for artists. These types of organisations can be fully or partially subsidised, many of them being non-profit organisations. As indicated in the section on Creation and production, these actors play a key role for (especially emerging) artists, as they often promote (local) emerging artists and offer them visibility.

Biennale and festivals

Biennales and festivals are more "project-oriented" temporary events, without a fixed location. They are often organized by entities that have a temporary status and rely on curators with a defined artistic line (cfr chapter on Cultural Heritage). In contrast to museums, and thanks to their often smaller structure, they are able to catch up quickly with emerging trends.

Online media

In this section we do not focus on evolutions in the online sales market for artworks (see above), but rather on the possibilities of consumers to have (free) access to (digitised) copies of artworks. We specifically consider websites/platforms or aggregators (Pinterest, Wikimedia, Google art project, Google images, Curiator, Artstack, etc.) that host copies of artworks. Those websites can help to promote artworks and to reach out to a larger audience. However, the exploitation of digitised copies presents several challenges for the fair remuneration of artists. The following issues have been pointed out by an interviewee from an organisation representing visual artists, as well as in several press articles (e.g. ADAGP³⁹) and particularly relate to images/photography:

- Artworks are being published and exploited online, without authorization and remuneration of the right holder.
- Many websites or platforms are increasingly framing images instead of hosting the image (and paying for a licence). This implies that website visitors perceive the image as appearing on that website (even though the image is technically hosted on a third party site) and that the website does not pay any licence fee, etc.. This practice deprives images creators of recognition of their authorship, revenue and ability to control where the image appears online.
- There is a lack of clear information for consumers regarding rights related to the use of images.
- Durable enforcement of copyrights is difficult to manage.
- "Hosting providers" have specific liability privileges. It must be noted that the EC "will explore options to strengthen the involvement of intermediary service providers in the protection of IPR, such as liability of intermediaries in cases where the intermediary is aware that its services are used by a third party to infringe an IPR but fails to act" (EC, 2016, p.20)⁴⁰.
- It is difficult to identify individual infringers (protected by platforms).
- There is a notion of "implied consent": when image providers do not use technical tools to block aggregators from using their images, it might be recognized as illustrated by some court trials as an implied consent to aggregators to use their images.

Support functions

Next to the above presented actors, which are at the core of the value chain, several other actors allow/facilitate the intermediation between the core actors in the value chain:

³⁹ Société des Auteurs Dans les Arts Graphiques et Plastiques (ADAGP). The French royalty collecting and distribution society in the field of graphic and visual arts, see http://www.adagp.fr/en/adagp/about-adagp.

⁴⁰ See EC (2016), Communication from the commission to the European parliament, the council, the European economic and social committee and the committee of the regions: Promoting a fair, efficient and competitive European copyright-based economy in the Digital Single Market.

- Very few artists have the necessary skills and knowledge to manage their business interests in a professional manner. Art consultants or artist managers provide such services and can play an important role for an artist to give his / her artistic qualities more visibility in the visual arts network. Currently, the following services are often offered: general consultancy for projects, preparation of grant applications, financial and tax advice (Espeel, 2006). These services are sometimes offered by the promotion galleries as well. In addition and as mentioned before, also (semi-)public entities such as e.g. Kunstenloket in Belgium or Cultuur+ondernemen in the Netherlands offer, among others, legal and financial advice.
- Curators play a role in the transactions between artists (or representatives) and museums/biennales. They select artworks that will be part of exhibitions. The role of curators, however, is ambiguous as they are often perceived as "gatekeepers" and can do exhibitions (with public funds) according to topics and criteria that they select. This top-down approach is often criticised and leads to the emergence of a different set of more bottom-up curators, the "cultural activists".
- Artistic advisors are paid by collectors in order to advise them about future sales/buying. They are often former gallerists, museums directors or collectors.
- Recently, online databases such as Artsy.net, Artprice.com and Artnet have developed. These databases are increasingly being used to find and analyse information. Some of these databases are exclusive, while others are open to access. Those databases allow in-depth analysis of price developments and information on return on art pieces and on art as an investment (see Ginsburgh et al. (2006)⁴¹, cited by Arora and Vermeylen (2013)). Based on those data, services (developed e.g. by Artsy) have been developed in order to target potential buyers directly, by offering artistic discoveries based on works that are in line with the revealed preferences of collectors. Currently, these databases act only as intermediaries; they only provide information, without directly selling the artwork (they redirect to the gallery).
- Other important actors for managing and regulating the interactions between some actors in the value chain are the Collective Management Organisations (CMOs). In visual arts, CMOs particularly play a role in the secondary market and in the dissemination stage, by collecting royalties for artists (resale rights, copyrights from book publishing, etc.). In addition, based on their ability to track sales, they can inform artists about the value of their different works. In general (but not always), there is only one collecting society representing (all or some of the) rights of right holders in a given territory.

The role of consumers

Market path: private collectors

Collectors often act as investors/dealers and from time to time present their collections. As such the role of collectors is not limited to "consuming", as they also take on other roles in the value network of art (Schrauwen & Schramme 2013). Collectors play a very important role in the art market. Regarding private collections, this includes both collections of companies as well as collections of private individuals. Some private collectors are organized in a legal structure (e.g. non-profit organisation or foundation), others operate as individuals, or in the name and structure of a company. Recently, the emergence of collectors from Asia has sustained growth in the sector. Contrarily to other sectors, as further discussed in section 2.3, collectors can have a rather strong market power and consequently have a strong impact on demand evolutions.

As discussed in the previous sections, the digital shift has had, until now, a relatively limited impact on the way that artworks are being bought and consumed (general business models were not deeply altered). However, as highlighted in Arora and Vermeylen (2013), the vastly increasing amount of information (on auction prices etc.) about artists and their works has had some (limited) salutary effects on the transparency of a market that has long been characterized as secretive, and transaction costs may have been reduced. New communication technologies helped to connect dealers and collectors more efficiently, thereby lowering search costs. In the case of auctions (prices related to sales in galleries are not publicly available), empowered consumers can now gather crucial information on price histories of their favoured artists without the help of an expert, allowing them to make more educated decisions about what to buy or not, and how much to spend.

Theoretically, this increasing amount of available information could reduce the opportunities for arbitrage for dealers and other intermediaries, who can theoretically be bypassed altogether. However, until now, this effect has remained limited.

⁴¹ Ginsburgh et al. (2006), The Computation of Prices Indices, available at: http://www.sciencedirect.com/science/article/pii/S1574067606010271

Market path: art investment funds

Over the last years (see e.g. Itsartlaw, 2016⁴²), art investment funds have gained importance. Those funds "provide the opportunity for investors to tap into the potential of artworks as investments, to diversify portfolios and potentially obtain significant returns" (see Itsartlaw, 2016).

Exhibition path: visitors

As indicated in Flanders DC (2014), this group is mainly important because of the social support that they create for (contemporary) art, but relatively less regarding the economic value they bring to the sector.

Consumers/visitors are sometimes invited to participate in the act of creation itself: visual artists are orchestrating pieces that can be completed by the visitors. This type of crowdsourcing is facilitated with the development of social media etc.

Finally, the visual arts domain is also influenced (indirectly) by other actors such as media and press (that provide reviews and information, and which play an increasingly important role in inciting visiting exhibitions by numerous promotional campaigns), awards (that help to enhance artists' visibility), theorists, critics, art lovers, etc.

2.2.2.2 Impact of digitisation on the value chain structure

As indicated above, the business models in visual arts did not change much due to the digital shift. In general, the structure of the value chain has remained the same, even though some new actors have entered the market (e.g. in e-commerce) and others (e.g. auctions houses through online bidding) have started to adapt to the digital shift.

The (medium term/long term) impact of the digital shift on promotion galleries/dealers is yet unknown. For some, the availably of vast amounts of information reinforces the need for arbitrage (because of the impossibility for collectors to evaluate the artworks themselves). For others, the opportunities for artists to promote their goods as well as the opportunities for online platforms to sell their goods to informed consumers, could imply that promotion galleries and art dealers can be bypassed. However, it seems that it will not be the case in the near future, as visual arts are based on an ecosystem with strong links between promotion galleries, collectors, art dealers and auctions houses.

Currently, one of the main challenges related to the digital shift is the online exploitation of artworks by online platforms or media. As discussed in section 2.2.2.2, solutions still have to be found in order to ensure fair retribution to artists (see also section 2.3).

2.2.3 Value monetisation and evolution of prices

The **core of the monetisation process has not (yet) changed due to digitisation**. It is still characterized by a primary sale (that follows promotion efforts by a third party), that is (sometimes) followed by secondary sales (sometimes with the intermediation of auction houses that ensure highest possible bids through auction mechanisms). Those sales occur mainly through traditional actors (despite e-commerce). Online sales are seen by some as a potential threat, while it is seen by others as a complementary process. For further information about the monetisation process in visual arts (i.e. the process of monetizing artworks in both primary and secondary markets), we refer to the sections on the role of the different actors in the value adding process, as well as to the section on contractual arrangements and revenue sharing (see section 2.3.2).

Besides sales, digitisation allows for new ways of exploiting and monetizing artworks, such as through online monetisation of digitised copies, online sales, etc.).

Regarding **price evolutions**, artworks can follow very different price paths: linear, exponential, etc. For artworks that enter the secondary market and are being sold in auction houses, an exponential evolution is often observed, as primary sales often occur at a rather low price (see the section on the market structure).

As indicated by Prendergast (2014), the analysis of the price setting process and price evolution is not an easy task, as galleries almost never publish primary market prices. The analysis of prices of primary sales is difficult, as the monetary value of an artwork depends on very unpredictable aspects (e.g. production of new works by the artist in the future etc.).

⁴² See https://itsartlaw.com/2015/05/19/art-investment-funds-intro/.

2.3 In-depth analysis of interrelations between actors

2.3.1 Market structure and bargaining power

The visual arts market is highly fragmented. Except for a trend towards more concentration at the level of international (sales) galleries and auction houses (see further), there is no trend of vertical integration, nor do major equity ties appear between different actors in the value chain.

As indicated in Zorloni (2013), markets in visual arts differ strongly according to the type of works that are exchanged (junk market, avant-garde market, classic contemporary market, alternative market). Zorloni (2013) further states that the contemporary art sector is structured in segments which are often very distant from one another, so much that it is possible to speak of different markets and systems with little mutual interaction. It is therefore very difficult to analyse the market structure, competitive dynamics and bargaining power when considering the art market as a whole.

Moreover, the competitive dynamics in a given specific (sub)segment/market (e.g. between promotion galleries and dealers/collectors) have an impact on the dynamics in other segments/markets (e.g. between artists and promotion galleries).

The next paragraphs provide a brief analysis of the market structure in the following stages:

- Stylised market structure Global art market
- Primary art market Artist and promotion galleries / museums
- Primary art market Promotion galleries and collectors/art dealers
- Primary and secondary market Art fairs and collectors
- Secondary art market Auction houses and private / public collectors

Stylised market structure – Global visual art market

In order to understand the competitive dynamics in the global visual art market, two main characteristics of artworks have to be taken into account. **Visual artworks are non-homogenous goods** and are **experience goods**, for which widespread information asymmetries exists. Insider trading, for example, is considered as normal and a key source of profit (Resch, 2011). Non-economic characteristics such as reputation are key in the visual arts market.

According to Resch (2011), who analyses the art market as a whole, the art market is characterized by **monopolistic supply competition**: many producers and many consumers interact with each other, and no single business has total control (Resch, 2011). Consumers perceive that the products on offer are similar (same function, etc.), but not identical. Every supplier is therefore in a monopolistic situation, but this monopoly is alleviated through the substitutability of products⁴³. This leads to (weak) competition among suppliers (Schumann, 1992). The originality of each work implies that prices are not equal and leaves room for price differences (Grampp, 1989).

The globalisation that occurs in the art market (growing sales in Asia, Latin America, etc.) has led to a **"gravity effect"** (EY, 2014) in most stages of the value chain: the globalisation of the art market has concentrated sales in fewer, bigger marketplaces. This induces a more concentrated global art market (even if this gravity effect is hampered by free entry, as well as by a lack of economies of scale).

Primary art market - Artist and promotion galleries / museums

On the supply side of the market, artists are numerous, there are no barriers to entry (the only barriers to entry might be income, as pointed out by Zorloni, 2013) or exit. Generally, artists have no market power and face intense competition. Only few established artists have market power and can influence their relationship with buyers (see below).

This implies that prices are low (Throsby 1994, cited by Resch 2011). Moreover, although most serious visual artists follow significant periods of training to qualify as professional artists, as a group they lack the credentialing

⁴³ Substitutability exists when artworks resemble each other, for example when artists have the same educational background or work on the same theme.

mechanisms of doctors and attorneys. This reinforces their inability to exert any supply-side power in this market in order to restrict competition or to raise prices (Throsby, 1994⁴⁴, p. 7).

Also on the demand side of the market, there are very few barriers to entry or exit. Setting up a gallery does not require any particular diploma nor large capital. As a result, there are numerous (small) galleries facing strong competition. We could therefore consider the market as **a monopolistic competition** (freedom of entry and exit, but firms have differentiated products).

However, a trend towards more market concentration at the level of the galleries has been pointed out by some of the interviewees, as well as in articles⁴⁵, with international galleries (with several selling points) popping up in cities and sometimes taking over smaller (local) galleries. These international galleries have international visibility and a strong reputation, and thus have a strong competitive advantage compared to the smaller and local ones. The market structure thus rather resembles an **oligopsony**: a market structure in which the number of buyers (here, the international galleries) is limited, while the number of sellers (artists) is large. And indeed, despite the large number of (small and local) galleries where artists can go to, Mc Andrew (2010) did find a highly uneven distribution of total turnover among galleries: only 3% of all galleries (art dealers included) account for 50% to 75% of the total turnover by value by art galleries.

When looking at the exhibition path and the relationship between artists and museums, the market structure is a true **oligopsony**: there are only few museums that can buy and exhibit artworks, compared to numerous artists that want to get into these museums. Museums thus have a strong bargaining power over (emerging) artists.

In each of the above markets (artists-galleries and artists-museums), the buyers have a major advantage over the sellers. They can play off one supplier against another and impose contractual arrangements, thus lowering their costs. This will be further discussed in the next sections.

Primary art market - Promotion Galleries and collectors/art dealers

On the supply side of this market and as discussed above, competition between promotion galleries to attract emerging and young artists is strong, even if there is a trend towards more concentration for larger galleries. This competition becomes even more intense when artists gain visibility, as they tend to leave the gallery at that moment for another one with a stronger international reputation.

The demand side is composed of many collectors (private /public), some of them having rather large market power. Therefore, this segment could be characterized as **monopolistic competition** (or as **oligopsony**, if we take into account the high market power of some collectors/art dealers).

Again, transactions are distorted by information asymmetry. According to Krepler (2007)⁴⁶ prices vary depending on the client (price discrimination). For example, a famous collector and an unknown collector will each pay a very different price for the same work. These practices and others foster the impression that the art market is not a free market, but bound to any number of agreed, unspoken, but widespread practices (Krepler, 2007).

Mainly thanks to digitisation, the market has become more transparent, with a reduction of transaction costs. Digitisation has lowered search costs, and more easily connects dealers and collectors. But although consumers have access to more information, it remains very difficult to understand/interpret information and digitisation has not (yet) changed the need for intermediaries to help (Zorloni, 2013).

In most other markets, firms compete on price or quality, and the principal beneficiaries are consumers. However, because of the more complex pricing methods in the visual arts market, price competition does not work that well here. As a result, galleries compete on other terms - one way being through increasingly opulent gallery spaces.

Primary and secondary market - Art fairs and collectors

An important competitive dynamic occurs at the level of art fairs, where consolidation follows the global art market trend and leads to a concentration of the sales in fewer and bigger market places. There is a growing importance of "international" labels (for example, Art Basel is now also held in Miami and Hong Kong). EY (2014) expects that further globalisation of the art market could lead to an increased concentration of very few major international events being organized in art market hot spots, at the expense of smaller events. The market structure tends to look more like an **oligopoly**.

⁴⁴ Ibidem.

⁴⁵ See e.g. http://www.blouinartinfo.com/news/story/1263644/can-the-single-venue-gallery-survive.

⁴⁶ Cited by Resch (2011).

Regarding the ownership and equity ties of art fairs, there are five operators that organize and control most of the fairs (except TEFAF, Art Dubai, Art Cologne, and ARCO). The three most important art-fair operators are MCH Group (Art Basel and Design Miami), Reed Exhibitions (FIAC, Paris Photo, and Viennafair) and Frieze.

Secondary art market - Auction houses and private or public collectors

There are only few auction houses that are active on a global scale, and this market segment tends to concentrate even further. Nevertheless, auction houses face intense competition, as their services are comparable and potential sellers/buyers are not attached to a single auction house. The market is therefore characterized by oligopolistic competition. In order to survive, auction houses must be able to build on long term relations with buyers and sellers, and must have wide information about the collections of those actors.

In particular Christie's and Sotheby's dominate the global market for artworks of great value, while a small number of other organisations control the national markets for less important artworks. A large number of organisations manage the auctions of decorative items of lower value.

Conclusion

It is clear that artists and (small) promotion galleries face an intense competition within the primary market. Further downstream (secondary market), the market is more concentrated and a trend towards more consolidation can be observed. This implies that actors at the end of the value chain (large international galleries, art dealers and, to a lesser extent, auction houses, collectors) have more bargaining power than actors at the earlier stages (creation, production, primary sales) of the value chain. The weakest position in the value chain is for artists (most of them) and small promotion galleries, for whom, even with differentiated goods, it is not easy to earn money from their businesses. This power balance is also reflected in the contractual arrangements and revenue sharing process, as described in the next section.

2.3.2 Contractual arrangements and revenue sharing

In terms of contractual arrangements and revenue sharing, the visual arts sector is a rather opaque sector; the only exception being the auction houses, where information about transactions is publicly available, prices of sales are registered and widely analysed. In the other stages of the value chain it is much more difficult to collect transparent and representative information about contracts and revenue sharing. Contractual arrangements can differ widely from one relation to another. In some cases, agreements on revenue sharing/contractual relationships are not available in writing. Some transactions take place in the shadow economy.

In the next paragraphs, we specify <u>some key characteristics</u> of contractual arrangements between the main actors in the value chain.

Contractual arrangements between galleries and artists

Contractual arrangements between galleries and artists are not always made in writing. Sometimes, arrangements are only based on mutual trust. A survey, of which the results are presented in Zorloni (2013) confirms those opaque relationships: the dealers and artists surveyed indicate that the most common form of agreement is the one of the informal agreements based on trust, in which the art dealer commits to promote and exhibit the works of art in return for exclusivity and a percentage of revenues and sales.

There are, however, attempts to provide more standardized contractual arrangements (e.g. standardized contracts drafted by London galleries associations and provided by the FEAGA). We provide below some key aspects of such standard arrangements between artists and galleries:

- **Duration.** The duration of the agreement depends on the services offered by the galleries. For promotion galleries, this might last one or two years. During this period, the gallery promotes the artist (organizes exhibitions and participation in art fairs, etc.).
- **Exclusivity**. The gallery may or may not have exclusivity on the sales of the artworks. Often, promotion galleries have a local exclusivity. Exclusivity aims at offering a chance for return on investments for the galleries (especially for promotion galleries that take higher risks).
- **Services provided**. Promotion galleries invest in the reputation of the artist by organizing and/or financing promotional activities, by making advance payments and/or investments in production costs, or by organizing catalogue production, all of the above according to the specific and mutual agreements between the artist and the gallery.

- **Commissions**. The (promotion) gallery often takes around 50% of the selling price. However, this share depends on the promotional services provided and can vary from 20% (sales galleries) to 80% or more of the selling price. This particularly high share is explained by the high costs of the gallery as well as the risk taken by the gallery, which is twofold: (1) the uncertainty about the potential of sales and (2) the risk that the artist, once he has gained visibility, joins other more international galleries.
- **Ownership**. Again, this aspect differs from one contract to another. In some cases, ownership of the work remains in the hands of the artist until it is being sold. In other cases, galleries directly buy the artworks.

In addition to these aspects, it must be noted that artists are often not well informed or lack the knowledge/skills to best manage their business interests. There are information asymmetries between artists and galleries (as well as other buyers such as art dealers, collectors, etc.), as the former have often no information on potential market prices for their artwork nor the right network. In some cases, this can lead to contractual arrangements that are potentially detrimental for the artists.

Secondary sales: a focus on resale rights

As indicated in Zorloni (2013), the European Community directive entitled 'Resale right for the benefit of the author of an original work of art' aims to guarantee an appropriate and uniform level of protection to the creators of an original work of art, and to eliminate distortions of competition in the contemporary art market. Member States shall provide, for the benefit of the author of an original work of art, a right of resale, defined as an inalienable right to receive a percentage on each sale subsequent to the first transfer of the original work of art, starting from a certain price limit. In practice, this is a percentage commission that the seller of an artwork must pay to the artist or his heirs as an acknowledgment of the art work's creation, every time it is resold. This rule does not apply to the first sale, nor to transfers of artworks between individuals⁴⁷.

Resale right is a reciprocal right. The resale right does not exist in the USA (except in California) nor in Australia: for transactions occurring in those countries, artists do not receive compensation.

Contractual arrangements between artists and other distributing channels: book publishers, etc.

As indicated in EP (2014)⁴⁸, authors of visual arts generally do not sign an assignment contract with a producer or publisher, but rather manage their rights directly with the different exploiters that want to make use of a work, either by a licence or by assignment (for instance, in order to insert a photograph in a book). "CMOs in visual arts can sometimes act as a sort of agent, providing access to the artworks of their members for use. A large part of the remuneration received by visual artists can also come from sources other than remuneration for specific exploitations, such as commission contracts" (EP, 2014, p.26).

As already highlighted in 2.2.2.1 by the list of issues, contractual arrangements for the online use of digitised copies of artwork by online platforms and websites such as Wikimedia, Google images, etc., remain challenging. Several sector stakeholders (e.g. CEPIC) push for "improving the legislative framework for image providers online and at bridging the value gap experienced by content providers" (CEPIC, 2015, p.1).

Revenue sharing

The analysis of both bargaining power and contractual arrangements tends to indicate that the revenue sharing process rather would favour actors at the end of the value chain, where actors are more concentrated (have some market power) and where risks are lower, while at the earlier stages of the value chain, prices are lower and risks can be higher. Below, we present the share of the revenues earned by each actor. At the end of this section, a figure includes a stylised and illustrative example of the distribution of revenues from a hypothetical sale of an artwork.

⁴⁷ The resale right is intended to allow the author of works of fine arts to appropriately participate in the increase in value of his work. Resale rights provides compensation equal to 4% for sales prices lower than EUR 50,000, 3% for prices ranging between EUR 50,000 and EUR 200,000, 1% for amounts from EUR 200,000 to EUR 350,000, 0.5% for prices between EUR 350,000 and EUR 500,000 and 0.25% for sales proceeds of over EUR 500,000. The resale right is applied to all objects with a minimum value of EUR 3,000 and limits to a maximum of EUR 12,500 the amount to which an artist is entitled for any resale (Table 3.17).

^{48 &}quot;Contractual arrangements applicable to creators: law and practice of selected Member States", see http://www.europarl.europa.eu/RegData/etudes/etudes/join/2014/493041/IPOL-JURI ET(2014)493041 EN.pdf

Artists receive around 50% of the primary sale. Then, they can receive resale rights from subsequent sales (see previously), which is around 4% of the selling price. For most of the artists, the revenues that they earn from their artwork production are limited (except for well-established artists). For artists, pricing an artwork is not an easy task especially when there is not a consistent track record of hours spent on the artwork and overlapping overheads (e.g. when they have their studio in their private house). This leads to a situation whereby artists have difficulties in monetizing their artwork and labour, hence often an undervalued price for their artworks.

Studies on living and working conditions of contemporary artists highlight that artistic income alone is insufficient for most artists, who often need a second non-artistic job (Bondi and Sitton, 2007, cited in Zorloni, 2013). Similarly, a study of Ipso (2008) on behalf of Terna and based on a sample of 400 subscribers to the Terna award, found that only 32% of artists make a living from art alone, while 68% of them have to perform another parallel activity. Some interviewees stated that, according to them, the share of artists who could make a living from art alone was smaller than 32%. These results are further complemented with findings by EY (2015)⁴⁹, that in the period 2011-2014, 71% of artists exhibiting in publicly funded galleries received no fee for their work. In fact, 59% did not even receive payment for their expenses, leaving them not only unpaid, but also having to cope with out-of-pocket expenses when presenting exhibitions for the public to enjoy, according to a Paying Artists study (*Securing a Future for the Visual Arts in the UK*). 57% of artists generate less than a quarter of their income through their art. The results in a loss of art exhibition and dissemination: 63% of artists have had to turn down requests from galleries to exhibit their work, because they cannot afford to do so without payment.

- **Promotion galleries** face high risks. For young and emerging galleries, it is difficult to cover operational costs. Only some galleries that have a high visibility and reputation and strong links with a network of collectors can earn a substantial but still limited share of revenues. Those difficulties are also highlighted by Resch, who surveyed more than 1,300 galleries in the United States, Britain and Germany, and found that some 30% lost money in their gallery operations, while the average profit margin for those with positive profits was a low 6.5%⁵⁰. There are various costs attached to promoting an emerging artist (promotional material, exhibition space, art fairs, etc.). When supplemented with fixed costs such as rents and wages, profits (if any) are rather slim (Resch, 2015)⁵¹.
- Sales galleries or art dealers receive around 30% of the selling price (secondary sale of a given artwork or new artworks of a rather established artist, who has already entered the market through previous primary sales). Compared to promotion galleries, sales galleries and art dealers can more easily diversify their portfolio and the risk. They are active at a level in the value chain where uncertainty about the future path of an artwork is lower than for most promotion galleries. In general, art dealers and sales galleries earn therefore a larger share of revenues than promotion galleries, but trajectories of prices of artwork can vary to a large extent.
- **Auction houses** receive a percentage of the selling price from the buyer side (around 12 to 25% from the buyer side), as well as 10% from the selling price from the seller side (this occurs only in the case the artwork is sold below a certain amount, this is not the case for important sales).

Based on the above description, the example below further illustrates the share of the selling price earned by different actors when selling an artwork (both primary sale and secondary sales (taking into account resale rights)). The example includes three consecutive sales:

- A primary sale occurs between "collector 1" and the promotion gallery. Both the artist and the promotion gallery earn money from this sale.
- A secondary sale then takes place between "collector 1" and another collector ("collector 2"). A sales gallery or art dealer acts as an intermediary, having no ownership of the artwork.
- Finally, the artwork is sold in an auction house, to a third collector.

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⁴⁹ See http://www.ey.com/Publication/vwLUAssets/ey-cultural-times-2015/\$FILE/ey-cultural-times-2015.pdf.

⁵⁰ See e.g. http://www.blouinartinfo.com/news/story/1263644/can-the-single-venue-gallery-survive.

⁵¹ See Resch (2015), "Management of art galleries".

Promotion Gallery PRIMARY SALE (50%) (500 €) Artists (50%) Sales SECONDARY SALE 1 Collector 1 Gal. (1 500€) (68%)Artists (4%) SECONDARY SALE 2 Collector 2 (10 000€) Artists (4%)

Figure 5: An illustrative and hypothetical example of revenue sharing in the visual arts sector

Source: Own calculations, based on insights from interviews

This example presents a "successful" case of an artwork being sold 3 times, including a sale in an auction house. This path is not aimed at being representative (only a small share of artworks are sold at auction houses) and this process can take several years.

2.4 Other exogenous changes and relations with other sectors

Legal and fiscal framework

An important issue often pointed out by interviewees is **VAT**. In some EU countries, the visual art sector does not benefit from reduced VAT rates, as is the case in e.g. the book industry. This hampers the development of the market. According to some interviewees, a relatively large amount of transactions occurs in the shadow economy, which is harmful for artists and dealers. In addition, VAT rates differ from country to country. More specifically, as pointed out by Center for Art Law (2016)⁵², VAT rates vary from 5% (Malta) to 25% (Sweden) (although there is a reduced rate for independent artists' sales). In addition, the way in which VAT is being calculated differs from one country to another. More specifically, VAT may be calculated on the margin (i.e. the difference between the original sale price and the purchase price), instead of under the standard or reduced rate (whichever is applicable to artwork in that particular member state). Moreover, in a number of member states, "VAT may be set at multiple rates: one for independent artists; another for galleries and dealers; and still another for the import or export of art" (Center for Art Law, 2016). It was therefore also stated by some interviewees that VAT should be harmonized at the European level in order for all European countries to be able to develop a sustainable art market.

Another barrier related to the previous aspect is the presence of **unregistered actors** (self-employed art dealers) that operate in the shadow economy. This is harmful for established actors, as well as potentially for artists (resale rights not registered, etc.).

Interviewees also stated that **public (financial) support** for artists is often not tailored to the specific needs of visual arts activities. In particular, when admission criteria for receiving public funding are based on previous monthly (or even annual) revenues, some visual artists might not be eligible for the support (sales might occur once every two years, etc.) (e.g. Belgium).

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⁵² See https://itsartlaw.com/2015/03/04/el_vat/

Globalisation

As already mentioned, globalisation has impacted the global visual art market, mainly through the demand side. It has allowed the market to grow, with important buyers emerging in Asia, Qatar, etc. Globalisation currently also leads to market consolidation in some segments (international galleries and auction houses). However, to what extent globalisation has led to **global sourcing** in the visual arts value chain, is unclear. In the context of this study no reliable studies could be found that provide representative information on the evolutions of exports and imports of inputs in the creation of visual arts.

Links with other sectors

Visual arts is a domain that is closely related (in various ways) to different sectors:

- First, as indicated in the value chain mapping, visual arts activities rely on various ancillary goods and services that are necessary to produce artworks. The dynamics in the visual art domain have therefore important spillover effects to those sectors, such as:
 - Manufacture of paints, varnishes and similar coatings, printing ink and mastics, etc.
 - Manufacture of optical instruments and photographic equipment, etc.
- Visual artworks are also widely "consumed" / "used" by other sectors as inputs: photos are used in books, sculptures or paintings in performing arts, etc.

3/ Performing Arts – a value chain analysis

3.1 Introduction to the performing arts sector: definition and importance in the EU economy

Definition and scope

In line with the ESSnet-Culture definition (ESSnet-Culture, 2012), performing arts is considered a presentation of live art to a live audience; if recorded or displayed on a screen, a performance falls under other domains (e.g. Film). In our analysis, the following forms of performing arts are included: theatre and theatrical performances (e.g. musicals, opera, ballet, etc.), dance, cabaret, puppetry and object theatre, circus, performances by stand-up comedians, ventriloquists, jugglers, etc⁵³. Contemporary performing arts also include any activity in which the artist's physical presence acts as the medium, such as mime.

The core functions in the performing arts specifically relate to the following activities:

- Activities related to the **creation of performing arts**. Creation activities in a broad sense include also covers and remakes within the following main artistic genres: dance, drama, circus, cabaret, combined arts and other live shows (street shows, one man show etc.). The scope is limited to only the creation of the performance itself, excluding the creation of other types of cultural work (e.g. audiovisual production) that might be incorporated in a performance.
- Activities related to the **production and dissemination/exhibition activities of performing arts** (producing a show for stage, distributing and commercializing, then performing in theatres, on podia, festivals etc.), of live shows as well **as the support activities for producing live shows (stage-set design, promoting activities, technical and administrative support); and the activities for operating halls for live shows.** In line with UNESCO's framework for cultural statistics (2009), it also includes the celebration of cultural events such as festivals, feasts and fairs that occur locally.

The core functions in the performing arts are supported by **education**, **preservation and management activities** (e.g. dance and theatre schools, preservation by restoring musical instruments or when recording a live performance, administration and protection by copyrights, management of information about live performances).

The sector also benefits from ancillary goods and services of (among others) specialized technology providers (e.g. for immersive theatre), costume designers, or actors in value chains of other cultural works to support creation, production, dissemination and exhibition of performing arts (for e.g. live streaming of performances in cinema, DVD production of live performances).

Importance for the EU economy

According to the EY study "Creating growth" (2014), total turnover of the performing arts sector in Europe (including live music) equalled EUR 31.9 billion in 2012⁵⁴.

The performing arts sector is the largest employer among the CCS in Europe, directly or indirectly employing 1,234,500 people. It is a labour intensive sector, with a strong concentration of employment in creation and production. Over three quarters (78%) of employees are creators and/or performers; 15% are technicians and 7% are involved in venue management and organisation of ballet, music and stage performances (EY, 2014).

Impact of digitalisation

At first sight, performing arts companies seem to be less exposed to the digital shift. As performing arts organisations produce 'experience goods' (see also below) there is a general perception that performances cannot be digitised without losing their essential characteristic i.e. the live experience that they offer. For this reason, the

⁵³ Although the performing arts normally includes live music, in the context of this study, we will not discuss it in detail in the value chain analysis of the performing arts sector but rather in the value chain analysis of the music sector as an increasingly important channel of dissemination and monetisation, next to the music recording business. That being said, the figures refer to the performing arts in general, including live music for the reasons beyond our control (aggregation of the data at the source level, comprehensive nature of cultural events in performing arts such as Glastonbury Festival of Contemporary Performing arts including both live music and other forms of performing arts, etc.).

⁵⁴ Concerts and music festivals generated more than a third (37%) of global performing arts revenues in 2011.

sector has not been forced to transform its business model in the way the music industry has. Instead, performing arts organisations have been able to adapt more gradually to the demands of modern audiences (Walmsley, 2011).

Nevertheless, the digital shift has an impact on business models and processes in the performing arts sector too. The following examples demonstrate the potential benefits that arise from digitisation (AMPAG, 2011; Syndaec, 2015; Proscenium, 2015; IETM, 2016):

- Increasing public access to or participation in the performing art and increasing paying audiences for the performing arts, at live performances in cinemas and online retransmissions
- Big data and online marketing for the performing arts (e.g. cross-channel marketing, etc.)
- Experimenting with the art form (e.g. "augmented" experiences, virtual stages, holograms, etc.)
- Nurturing collaborative creation (e.g. user-generated content, online rehearsal platforms, etc.)
- Using more efficient business practices and new models of value monetisation (e.g. cloud ticketing, bundling and subscription packages)
- New complementary financing mechanisms (e.g. crowdfunding)

In the same vein, the following examples demonstrate that there are new issues and some pitfalls associated with the digitisation process (AMPAG, 2011; Syndaec, 2015; Proscenium, 2015; IETM, 2016):

- 'Cannibalising' established revenue streams for live "physical" performances
- Industrial negotiations and rights for incremental revenue generated through online platforms
- Finding a sustainable model that is economically self-sufficient
- Handling potential piracy or misuse of the online (user-generated) content
- Logistical constraints and dependency of cultural actors on non-cultural service providers

3.2 Creative value chain mapping and description

3.2.1 Economic characteristics of the performing arts business and impact on the global value chain structure

Arts products are characteristically difficult to value. The enjoyment of an art product is a personal experience that is unique for every individual. Also, the value for the performer or producer can be different from that of the audience. As with all arts products, performances are "**experience goods**": consumers cannot accurately evaluate the value of a performance until after they have paid for it and have seen the performance (Johnson, 2014).

Furthermore, musicals, shows, festivals are "**scarce commodities**" (e.g. your favourite show only comes to a city 3-4 times for the whole life cycle or a famous festival takes place only once per year). There are very few substitutes for these unique experiences, and they cannot be replicated in response to increased demand (Haller, 2013). Also, live performances could be considered as "**merit goods**" or "**public goods**" because they do not only benefit those who see and pay for it but also society in general (e.g. social cohesion, national prestige, international recognition, etc.). Since consumers are not fully informed of these societal spillovers, they are unable to evaluate all its benefits in a correct way without public intervention (Ginsburgh, 2012).

At the supply side, live performances can be judged as "**complex goods**" as they require a lot of coordination between a wide range of actors and stakeholders along the value chain. Moreover, certain sub-sectors of performing arts are constrained by language barriers (e.g. cabaret, performances by stand-up comedians), substantially limiting the internationalisation process.

From a macroeconomic perspective, the performing arts sector is often associated with the so-called "cost-disease", which contends that despite any improvement in the productivity levels (indeed, Molière's Tartuffe still takes 90 minutes as it was the case in the 17th century), the prices have increased exponentially due to an increase in productivity and wages in other sectors of the economy - assuming that there is a certain level of inter-industry mobility of labour (Baumol & Bowen, 1966). There are two important types of costs related to a performance: costs related to the production of a play (fixed costs or production costs hereafter) and costs related only to each presentation of a play (marginal costs hereafter). Economically speaking, these two types of costs should be charged to the consumer along with a profit margin in order to be financially profitable and sustainable. The main problem in the performing arts sector is that due to the labour-intensive nature of the sector, the sum of fixed and marginal costs is too high to be reflected in final ticket prices.

According to ONDA (2014), the production deficit⁵⁵, which should normally be charged to the consumer through the ticket price, is often financed by the performing arts company's own capital/equity. On average between 5 to 55% (on average 24%) of the production deficits are financed by producers' own capital (ONDA, 2014).

As a result of this fundamental "cost disease" market failure, public intervention is particularly important both for the price-setting and revenue sharing in the performing arts. As such, subsidization in the performing arts' sector is very common, however there are large differences across EU countries with regard to the way that the sector is subsidized and with regard to the volume of subsidization. In general, subsidies in the performing arts are given to (Towse, 2014):

- support the creation of new works by composers, playwrights, choreographers, either independently or in conjunction with an organisation that intends to perform the work. The grant must cover both the fee of the creator and the costs of the production to the arts organisation (since new work often requires more rehearsal and generates less revenue from ticket sales).
- cover the fixed costs of the operation of the organisation through the endowment of lump sum grants to an arts organisation for a specific period for use in accordance with a business plan. Overall, there is little control by the grant awarding body over the detail of the use of the grant once it has been awarded.

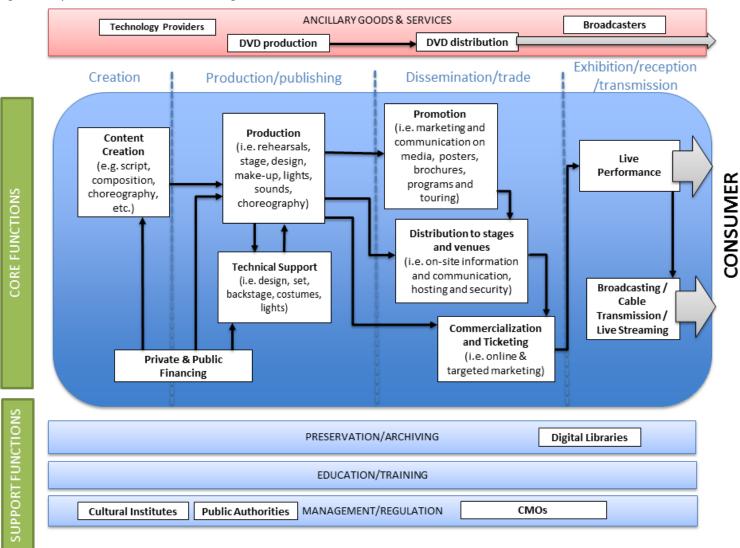
3.2.2 Stylised value chain mapping and description

The figure below represents the value chain in performing arts and the interrelations between different actors across the value chain.

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⁵⁵ The production deficit is equal to the sum of revenues (e.g. ticket pre-sales, public subsidies, coproduction and initial capital invested and private donations) minus charges (decorations, costumes, rehearsal rentals, labour costs).

Figure 6: Stylised Value Chain for Performing Arts



It is important to note that this is a **stylised** value chain, which gives an **abstract and semi linear** overview of the value chain in performing arts. The **reality is more complex**, as the value chain is not static but dynamic. In performing arts, the different functions in the value chain become more hybrid i.e. one person can take up multiple functions in the value chain.

3.2.2.1 Description of the actors and their role in value creation

Creation

The creation function refers to the act of conceptualizing and creating an original artwork such as the script of a play, choreography for a dance performance, the composition for an opera. At this stage of the value chain, the possibilities or requests for funding are being explored or submitted e.g. subsidy applications can already occur or crowdfunding campaigns can be set up. When applying for a subsidy at the creation stage, it can be required that the distribution of the performance to a number of venues is already guaranteed.

Authors often lie at the basis of the creation of a performance. They are the playwrights, composers, opera librettists, etc., and create the script for a play, the choreography for a dance performance, etc. Their role is primarily concentrated in creation (and to a lesser extent in production, to guide their concept/creation throughout the production). However, nowadays, the role of authors is often not confined to creation alone, as they do not develop a concept in isolation. They may work with or be influenced by audiences or other social groups; or the work might be devised by a collaborative group of artists, including the performers themselves. Increasingly, the creative process is the result of a network of dialogues – between critics and audiences (via blogs and social media, for example); between producers and audiences (via post-show events and social media); between critics, creators and creative teams; and between audience members themselves.

Production

Once a performance is conceptualised, the performance can be produced i.e. the creation is shaped into an actual performance for the stage through rehearsals, stage design, light choreography. The production of a performance involves authors, artists, technical crew and designers:

- Artists are at the core of the value chain. In performing arts, these artists can be actors, dancers, singers/musicians, but also directors or choreographers. They can already be involved from the creation stage onwards, and can play a role in the creation, production and dissemination. Their role in the dissemination phase varies, as they can take up the distribution towards the venues/stages themselves or use the support of a manager or booking agency to do so. In general, directors and choreographers have a leading role in performing arts productions. In the past, they were mainly active behind the scenes. However, nowadays, a lot of performing artists combine the functions of both performer and producer (in the form of director or choreographer)⁵⁶. As a matter of fact, 45% of the artists declare that they combine both the role of performer and producer, which is partly explained by the shortening of the contracts and loosening of the labour market in performing arts 75% of the artists have short-term contracts and half of the artists in performing arts work as part-time artists (Urrutiaguer, 2015).
- Along with artists/authors, producers constitute the core of production of a performance. The producer (whether an association, individual company, commercial society or a public organisation) is responsible for bringing together physical, human and social capital necessary for the concretization of a performance. As such, the producer bears the financial risk of the project, hires artists, technical crew/designers and administrative staff and negotiates with promoters, distributors for the dissemination of the performance. As per so-called "commercial" performances, such as musicals, producers can possibly also take up the public and private financing and organisation of the production.

The focus of producers lies on coordinating and managing the production of a performance; yet after the production they can either present the performance in an own venue (the producer here combines both production and dissemination) or sell the production to one or more other local and/or foreign venues through agents/promoters.

⁵⁶ Interviews

In order to create, produce and present a performance, a lot of technical support is needed. The technical crew supports the artists, authors and designers in this aspect. This technical equipment could concern light, stage, set or sound equipment but also transport. Influenced by digitisation, the role of the technical crew gains in importance during the creative process, as digital means gain in importance in the creation and production of a performance. In other words, rather than being an ancillary service that supports the performing arts value chain, the technical support is integrated into the core of the value chain. Similarly, designers design the costumes, lights and stage and contribute to the creation and production of a performance.

There is a general tendency towards **co-production** i.e. to produce a performance with several partners together. Co-production can offer a means for artists to get larger and more expensive performances funded. In the context of budgetary cuts in public funding, co-production is also a way to bundle resources more efficiently. But most importantly, beyond these financial considerations, co-productions enhance co-creation, creativity and cultural mobility as different organisations/artists pool knowledge, ideas, skills and resources together in an (intercultural) exchange format. Therefore, co-productions are crucial for artistic innovation and development (IETM, 2011).

Dissemination/trade

The dissemination/trade function refers primarily to **distribution of produced events towards stages** and venues along with all the **promotion, marketing and communicating activities** that parallel the distribution as well as **commercialization of the events** towards end-consumers by ticketing agencies. Different channels for the dissemination of performances exist, involving different actors.

- Agents are responsible for selecting places to perform, setting the calendar of tours and organizing the touring of performances, bearing the financial costs of touring (accommodation, staff, travel costs, etc.) so as to maximize returns to artists and performances. It is often the case that agents and producers are one and the same person. As such they are represented along with producers in the figure above.
- The promotion of the performance is assumed by the producer or the agents themselves. It might also be outsourced to a promoter an independent and professional third party for their expertise for instance in a particular genre or a specific geographic area. In some EU countries such as France and the UK, promoters take up an important role: they buy the performance from producers and/or agents and sell the latter to venues/stages, mostly locally but also nationally or internationally. In these cases, they take up the role of distributors by arranging contracts for promotion, information, hosting, ticketing, venue and security of the events. Thus, the financial risk of the production is passed on from the producer to the promoter/distributor.
- Ticket distributors are responsible for making the final product available to the end-consumer and conduct most of the communication, marketing and ticketing activities related to it. They arrange the ticket sales, the on-site marketing of the programme, and all related information and communication services in the venues/stages.

The dissemination can be completed by the artists/producers themselves, in which case they contact the venues directly themselves. Depending on the organisational structure of the actors (see Box 2), the company/producing house may choose not to distribute the performance other than through their own venue.

Exhibition/reception

The exhibition function refers to the live performance of the play to an audience. This can happen in independent venues or stages, or sometimes also in the public space (e.g. street festivals). Venues or stages usually do not have own productions, but offer a stage for performances in exchange for a lump-sum rent (or to a lesser extent a net share of the profits). They mainly have an organising role (e.g. hosting, security, catering, etc.). Examples of such venues are cultural centres, arenas, performance halls, etc. However, as highlighted in Box 2, other (more integrated) structures exist in the performing arts sector that can also provide a stage for the exhibition of performances.

Once the final product is exhibited to the audience in live performance, digitisation also allows to reach out to a wider audience that is not necessarily present in the live performance: live streaming, cable transmission and broadcasting play an important role therein. This stage of the value chain is heavily impacted by the digital shift (see also below), as digital innovation allows to reproduce and transmit performances more easily and to alleviate some of the linguistic and geographical barriers to participation/consumption.

Festivals have a special position in the performing arts. They have a temporary character and are not necessarily linked to one specific location (even though producing/receiving houses, certain venues or producers with an own venue take up the organisation of a festival in their yearly programme). Festivals are mostly "receiving" – they offer a stage for live performances. However, sometimes, they can also be "producing" i.e. they (co)produce a performance. Festivals are often organized by small and/or temporary organisations, although there are examples of well-established and renowned European festivals. The programming is led by a curator or jury, and mostly follows a clear artistic vision. Major examples in the performing arts include the Festival of Avignon in France; Edinburgh International Festival or Glastonbury Festival in the UK and the Oerol Festival in the Netherlands, etc.

- **On the supply side**, the rise in the number of festivals during the 20th century can be associated with the so-called cost disease explained above. In fact, festivals are often said to have a relative competitive edge with respect to their permanent counterparts (which face increasing labour costs and regulations). Frey (2011) argues that festivals are an attempt to lower the wage costs, an important cost factor in the labour-intensive performing arts sector. Timing of the festivals and their concentration during the summer months (when permanent cultural organisations are often closed) play a significant role in making this logic operational. In fact, festivals scheduled for summer months (e.g. Bayreuth Opera Festival or Salzburg Festival in Germany) can hire high-quality performers who, otherwise, would have been most likely on a fixed contract with a permanent cultural operator (Towse, 2010).
- On the demand side, the growth of households' disposable income during the last decades has raised demand for festivals which is often income elastic (whereas most standalone opera and ballets are often considered as income inelastic). Also, the concentration of festivals during the summer months (apart from its effect on arranging lower wages), also lowers the opportunity cost of traveling to festivals. Bundling different events under the same roof also increases the visibility and decreases the transactions costs associated with obtaining tickets (Frey, 2003).

In terms of cost structure, the festivals are thought to have a competitive advantage over their permanent counterparts as they generally benefit from lower fixed costs when they make use of existing venues and cultural infrastructure (e.g. Festival International d'Art Lyrique d'Aix en Provence in France or Bayreuth Festival in Germany).

High upfront costs and demand uncertainty (due to reputation effect, unexpected weather affecting sales for last-minute "walk-up" tickets, etc.) make greenfield festivals a relatively risky business. In that sense, the business and value monetisation models have evolved over time from relying mainly on ticket sales towards enriching the consumer experience with "glamping" (i.e. glamourous camping), quality food and beverages in order to build customer loyalty. In a given festival, the revenues of the festivals are generally made up in the following way: 60% of the festivals' revenues come from ticket sales, while 25-30% comes from sponsors and the remaining 10-15% from assorted concessions and vendors (The Guardian, 2015).

Despite the risky nature of the business, festivals occupy an important place in the cultural ecosystem, because there are important cultural, economic and social spillovers: festivals can boost cultural tourism to the local area, which creates income for the local businesses (accommodation, retail, etc.), contributes to urban regeneration and image-building of a city, enhances sense of identity of the local population, increases local cultural participation and leverages other public/private funds for development of cultural infrastructure (KEA, 2015).

The performing arts value chains also involve some support functions. These support functions are not necessarily sequenced along the value chain, but play an important role in the support, exploitation, regulation and professionalization. As such, they facilitate and support the value creation process.

Preservation/Archiving

By definition, preserving implies gathering homogenous or heterogeneous elements that are archived, conserved and protected with care because they have strong representative historical, aesthetic, and/or symbolic value. The performance-based arts are traditionally labelled as "non-collectible" due to the fact that a performance cannot exist independently from the artists realising them, a precondition to be included in the collection market (McCarthy, 2001). The preservation/archiving of text-based drama is the exception. Recently the attention has shifted towards the creative process as a whole from playwright to the director, from the text to the staging (IETM, 2016). There are few performing arts archives that focus on staging and direction of the specific works rather than texts. There are topical examples in several European countries such as France (e.g. Numeridanse the international online video-library of dance) and Greece (e.g. Digital Library of the National Theater which proposes all the documents, archives

and production videos of the Greek National Theater). At this moment, every recording of a performance that is preserved or archived must be negotiated with all right holders involved, even if it is for non-commercial purposes⁵⁷.

Role of collective rights management and other intermediary bodies

Collective Management Organisations⁵⁸ collect the authors' and neighbouring rights for authors and performers in the performing arts sector. At EU level for example, AEPO-ARTIS is the European federation of collective management organisations that collect the (secondary) neighbouring rights of performers. These collective management organisations mainly play a role in the exhibition/reception function of the value chain.

Intermediary organisations support the different above mentioned actors in the value chain through:

- **Advocacy**: these organisations are often sector organisations or unions that advocate for the interests of certain actors in the value chain. Examples at the EU level are PEARLE (the European umbrella organisation advocating for the interests of employers in performing arts) or the IETM (International Network for Contemporary performing arts).
- **Business/legal/funding advice and support**: certain intermediary organisations provide information and advice on business and legal aspects to certain actors in the value chain, most often artists, authors, companies or governments. These intermediary organisations are often supported/initiated by the public authorities although they operate at arms-length from the government. Examples of such organisations are the Arts Council in the UK, Kulturrådet in Sweden and Raad voor Cultuur in the Netherlands, etc. These organisations are often the entry point to public funding: either they might provide advice on how to find funding and/or they manage the allocation of public funding.
- Research and documentation: These intermediary organisations provide research about the practice, theory and history of performing arts. Examples include the Flemish Theatre Institute, the Centre for Contemporary and Digital Performance in the UK or Media and Performance Laboratory in the Netherlands.

Public authorities support the sector in the form of subsidies or tax reliefs, business/legal/funding advice, research and documentation, promotion, etc. As mentioned above, these functions are often taken up by intermediary organisations that are (partly) financed by the public sector. Moreover, public authorities provide the legal and regulatory framework for the sector. Laws and regulation in the sector can be very diverse and can concern the following aspects: social security regulation of artists, safety rules in venues, copyright and neighbouring rights laws, taxation in the sector, etc.

Ancillary Goods and Service Providers

Technology providers and material suppliers supply special technologies which can be (1) software such as specific apps tailored to festivals to enhance the individual experience of audience members, online ticketing software or (2) hardware such as VR glasses used to augment a theatre experience; materials such as light equipment, tailored stage equipment, sound devices, etc.

Broadcasters and DVD producers are part of the broadcasting value chain (see chapter on broadcasting), but they also play a particular role in the ancillary part of the value chain for the performing arts. Broadcasters and film producers can record a performance and then broadcast it live, retransmit it via cable, make DVD/CD copies of the performance or (live) stream the performance via digital platforms. Therefore, they acquire the rights to the performance and at that moment add value to the value chain.

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⁵⁷ Interviews

⁵⁸ Under collective administration, authors and other rights owners grant exclusive licences to a single entity, which acts on their behalf to grant authorizations, to collect and distribute remuneration, to prevent and detect infringement of rights, and to seek remedies for infringement. An advantage for authors in collective administration lies in the fact that, with multiple possibilities for unauthorized use of works resulting from new technologies, a single body presents the advantage of facilitating rights clearance for mass uses on the basis of authorizations which are easily obtainable from a central source. (WIPO)

The different core functions in the value chain can be executed by standalone actors that work together on a project-by-project basis. Alternatively, several of these functions can be vertically integrated into "more formal" structures, such as companies, producing/receiving houses, labs or residences:

- Companies usually consist of a number of artistic staff members, such as artists, directors/choreographers, technical crew, etc. and a group of administrative crew that take up the distribution towards venues, the promotion, the administration and subsidy applications. As such, the theatre and dance companies integrate both the creation, production and part of the dissemination function. They do not possess their own venue (in contrast to producing/receiving houses). Companies have an artistic vision that guides their productions (often in the person of the artistic director). Artists can be engaged in a longer-term affiliation to the company, but are most often also free to take up other engagements in other productions or companies. Recently, the model of a company with a relatively large permanent ensemble of artists is being replaced by a model of companies with a small number of permanent artists that collaborate with freelance artists and producers on a project basis. Examples of public/private performing arts companies in Europe include "Rambert Dance Company" for contemporary dance (UK, with the choreographs Kim Brandstrup, Aletta Collins, Shobana Jeyasingh, Ashley Page and Artistic Director Mark Baldwin); "Familie Flöz" for theatre and mime (Germany, with Björn Leese, Benjamin Reber and original members Schüler and Vogel) or "Cirque Plume" for contemporary circus (France, with the director Bernard Kudlak).
- Producing/receiving houses are performing art organisations that have an own venue or stage and that make own productions. Their venue can also serve to receive other theatre/dance/...companies or productions. Examples of such houses are e.g. city theatres such as the National Theatre in London or the Deutsches Theater in Berlin. Also art centres are part of these producing/receiving houses: they offer a stage/venue for performances and often co-produce performances or act as a partner for individual artists or companies (both national and foreign). Examples include "Ballet de l'Opéra National de Paris" for ballet (France, with the dance director Aurélie Dupont) or "mac Birmingham" for performing arts (UK, with artistic director Deborah Kermode).
- Labs/ Residences/ Creative Hubs offer support and guidance to artists, dancers, theatre producers, choreographers throughout the whole value chain (up to the presentation of the performance). They offer a rehearsal space, organize the presentation of a performance, offer support in the search for production or project funding, offer logistical and business support, etc. They possibly also offer a venue to perform if they are connected to/associated to a venue. Not every lab or hub has its own venue, they often coproduce performances together with other labs or residences. In that case, performers can create a performance in studio A, rehearse/produce the performance in studio B and then perform the creation in studio C before returning to studio A and B to present the performance there as well. The definition of a "residence" differs a lot across different EU countries. In this study, we use the term as description of a lab or creative hub that supports players from the conception phase up to the distribution phase, and in some cases also the presentation phase. Examples include the "The DAAD Artists-in-Berlin Program" (Germany) for residencies and "Ars Electronica FutureLab" (Austria) for creative labs.

The choice for a specific organisational structure is often influenced by the policy framework and financing mechanisms that are available at the national level⁵⁹. Since the early 1980s and until the beginning of the 21st century, the way the public subsidies were allocated (e.g. in Ireland, France and UK), often encouraged individual artists to professionalise their practice by establishing their own companies and administrative structures. With the advent of the financial crisis and the decrease of public subsidies along with it, the focus has shifted away from financing company structures per se, towards supporting more standalone projects, while incentivizing existing organisations to share resources and knowledge with freelance artists.

3.2.2.2 Impact of digitisation on different functions of the Value Chain

The impact of digitisation on the performing arts' value chain is rather limited but also heterogeneous across European countries, mirroring necessarily divergent degrees of penetration of digitisation in national arts industries (IETM, 2016). In the performing arts sector, new "digital" practices are not adopted industry-wide and the level of adoption of digital practices depends primarily upon actors' individual "receptiveness and openness" to research and innovation.

⁵⁹ See, https://www.ietm.org/sites/default/files/ireland-mapping_may2015.pdf

In terms of new business models and industry practices, there seems to be different trends across different functions of the value chain in reaction to digitisation. Digitisation has not yet revolutionized the core of the performing arts' creation and production function, albeit there do indeed exist interesting examples recollected below.

Creation and Production

Artists, companies, labs/residences/creative hubs make use of digital techniques to enrich their performance, cocreate with other artists and improve their outreach to the audience by pooling resources and knowledge: Examples of performances enriched by digital tools are numerous across Europe: digital performances combining computer graphics, 3D elements and captors (e.g. "The Builders Association", a theatre company superposing virtual spaces to the real scene). Also, there are some companies that integrate fixed or mobile captors such as the French dance company "Pulso" that video-projects the image captured by a surveillance camera and translates it into sound with a specific software. Performances might also make use of artificial "performers" like robots, androids, humanoids or interconnect to another -virtual or real- stage.

- To support co-creation, the use of software is slowly but surely bringing new opportunities to the sector. One of the most emblematic examples in Europe relates to ISADORA software, a graphic programming environment allowing for real time manipulation of digital videos. At a more national level, the French OSSIA project funded by the National Research agency is a promising example of how a software can allow users to combine different kinds of digital tools to write new scenarios for interaction between different medias in real time.
- Digitisation allows for new types of audience involvement and audience experiences in live performances. This is often achieved by virtual reality equipment, cinematic processes, interactive videos and audio interaction. An example can be found with the Belgian company "CREW", which, in collaboration with Hasselt University proposes immersive productions and installations for audiences. In a similar vein, the role of social media, social networking and community building is an important asset for small-and-medium performing arts structures. The advent of Web 2.0 and increased interactivity on Internet through Facebook and Twitter, etc. gives to the smaller, often regional performing arts structures, new opportunities to strengthen their niche market at the local/regional level, rather than directly competing with vertically integrated, significantly larger companies at the national level (Precepta, 2011).

Box 3: Crowdfunding in performing arts

In performing arts, crowdfunding is often considered with certain reservations and has not destabilized the role of traditional producers to raise funds for performances⁶⁰. Especially for sectors which do not produce a tangible and commodified output like performing arts, **crowdfunding is not seen as a viable alternative to structural (public/private) funding**. It remains often limited to one-off and/or specific projects⁶¹. This sustainability is further hindered by the high opportunity cost of running a successful crowdfunding campaign, which requires important investments in time and skills with the possibility of no return on investment (i.e. threshold-based crowdfunding platforms where the campaigner gets nothing if s/he fails to reach the target).

That being said, **crowdfunding** is increasingly being considered as a complementary source of finance and/or a market signal from the consumers that facilitate the inclusion of independent artists and/or small-to-medium sized companies (with little or no reputation and/or experience) into the value chain (Precepta, 2014). The comparative findings from a pan-European (Kickstarter) and a Dutch crowdfunding platform (Voordekunst) tend to confirm these trends: performing arts projects rank amongst the top five categories with highest success rates in both platforms, with 69% for dance and 54% for theatre in Kickstarter against 92% for dance and 78% for theatre in Voordekunst.nl (Meurs, 2015). These findings suggest that indeed there is a positive market signal from the consumers with respect to performing arts' creation. Yet, the amounts targeted are often quite small ranging between EUR 4,000 and EUR 10,000 on average, especially in relative terms to technological projects which target on average EUR 25,000.⁶²

⁶¹ Interviews

⁶⁰ Interviews

⁶² See, http://dare.uva.nl/cgi/arno/show.cgi?fid=605454

Dissemination/Trade

The impact of digitisation on the dissemination and trade of performing arts has been significant and new business models have been increasingly embraced by the sector, especially with respect to dissemination and marketing.

With the advent of big data and increasing digital penetration and synchronization across devices, marketing strategies have undergone remarkable changes. Especially the use of cross-platform marketing strategies in both distribution and marketing by producing/receiving houses, companies, labs/residences/creative hubs and venues/stages can be considered as of one the main impacts of digitisation on the business models of actors in the performing arts value chain. By optimizing the simultaneous and/or complementary use of different marketing channels (traditional media, online platforms, merchandising sites, mobile application and venues/stages), crosschannel marketing allows firms to reallocate a certain part of their consumer base to their shows or to provide them with a continuous entertainment offer before, during and after the performance (flash sales, fan services, live customer service during the performance, surveys, invitations, etc.). As a result of these various combinations, the consumer often finds himself/herself in a performing arts/entertainment ecosystem provided by the same company. This leads to a locked-in ecosystem as long as the goods and services provided are complete (Precepta, 2014), One such example is Vivendi, the mass media conglomerate and mother company of Universal Music Group, which is able to mobilize and channel their already existing customer base from their TV channel "Canal+" (and its mobile applications) to their ticketing website "digitick.com". Digitick.com advertises and commercializes live performances organized in Vivendi's venues such as "Olympia" in Paris, which advertises in return for their telecom company "SFR" prior to the show.

Exhibition

In the exhibition function, the main contribution of digitisation lies in the "intermediation", where broadcasters, online platforms and actors from the ICT sector are introduced in the value chain to transmit the performances to a wider audience:

- Live transmission of performances allows to **break down the barriers to access a physical venue**, **increase the audience and geographical reach and attract new audiences**⁶³. Research by Bakhsi and Throsby (2010), based on a case study of the live broadcasting of a play to 70 digital cinema screens by the National Theatre in London, showed that live streaming enabled the National Theatre to bring the play to people who would otherwise not have attended the play, because of distance constraints or the unavailability of tickets. The National Theatre thus was able to increase its geographical reach as well as its "virtual capacity".
- Social media and the possibilities of uploading user-generated content on online platforms, allows consumers to become part of a collaborative production process⁶⁴. Initiatives like Fanfootage (that proposes to audiences to upload their versions of live performances to obtain a completely overhauled experience of the performance by combining them) show to what extent the audience can become part of the production and exhibition process or simply "prosumer"⁶⁵ thanks to digitisation process.
- In the same logic, digitisation can also help to alleviate some of the linguistic barriers inherent to the exhibition and internationalization of most performances (e.g. a play in French available to French-speaking audience). One example is the collaboration between ICT company "ATOS" and the French cultural tourism company "Theatre in Paris" in a living lab format, which resulted in the launch of multilingual augmented-reality surtitling through connected glasses for theatrical performances during the Festival of Avignon⁶⁶. The glasses are also deployed in a number of theatres in Paris to increase the accessibility of plays to a larger and more international audience.

64 Interviews

⁶³ Interviews

⁶⁵ The term "prosumer" was first coined by Alvin Toffler, in his 1980 book The Third Wave. Toffler defines the prosumer as someone who blurs the distinction between a "consumer" and a "producer." The term has since come to mean a variety of things, but here we define it as someone who engages in activities belonging to either production or consumption/participation, regardless of time or location.

⁶⁶ http://www.theatreinparis.com/uploads/2/6/5/8/26584449/atos_avignon_festival_press_release.pdf

Cinema broadcastings of live performances are increasingly adopted in the performing arts sector, especially in opera and ballet. The Royal Opera house in London, La Scala in Milan, Gran Teatro del Liceu in Barcelona are already providing live opera feeds, while "Emerging Pictures" (a European distributor) is broadcasting eight live ballets from the Royal Ballet London, the Paris Opera Ballet and Bolshoi Ballet.

The rationale behind broadcasting into cinemas lies somewhere between **granting access to a wider audience** and **generating extra revenues**. Across the Atlantic, the Metropolitan Opera's main motivation for its HD Live Program was mainly related to revenue generation to revitalize the company's income, whereas mostly the European publicly-funded organisations use these occasions as a way to broaden access to cultural activities, as an extension of their public missions (AMPAG, 2011).

These types of initiatives often require a relatively important **reconfiguration of creation**, **production and dissemination functions** and there have been cases where performing arts companies buy audiovisual distributors and internalize the "post" production into their structures so as to facilitate filming & redistribution and to reduce the transaction costs. An example of this type of vertical integration is the Royal Opera House that bought in 2008 the distributor Opus Artes (active in online and cinema distribution).

3.2.3 Value monetisation and price setting

3.2.3.1 Pricing strategies

The conventional value monetisation model in the performing arts sector is still predominantly linked to selling tickets to consumers for live performances. The price of the ticket reflects both the costs of production or cost of buying a production, the consumer's willingness to pay, and the expected revenue from other sources, taxes and other fixed and marginal costs.

The figure below summarises how the value-added created by one actor is monetised and in exchange for which (main) services.

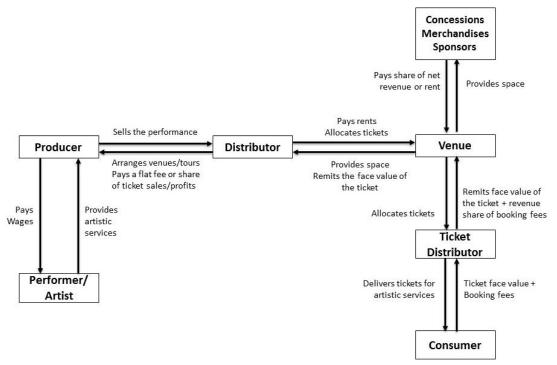


Figure 7: Value monetisation in performing arts (simplified)

At the most basic level, the purpose of charging a price for attending a theatre performance is to enable the company to earn revenue to offset the costs of production. For venues/stages or producing/receiving houses, setting the initial price is a matter of balancing the costs of production or cost of buying a production, the consumer's willingness to pay, and the expected revenue from other sources, such as subsidies or earned income from other productions or performances. As performances fall into the category of experience goods, products that must be consumed before they can be accurately evaluated, consumers cannot determine the true value of attending a theatre performance until after they have attended, but they must purchase tickets in advance. While some information is available to help consumers decide whether this is likely to be an experience that they will value, such as reviews or online previews, purchasing a theatre ticket always remains a bit of a gamble. As such, the price of a ticket must in part communicate the value of the experience to the consumer. Performances that have higher ticket prices are often perceived to be higher quality experiences. This relationship is however not infinite; there is an upper limit on consumers' willingness and ability to pay for a ticket to a theatre performance. By nature, a performance is a unique experience, fundamentally different from any other performance taking place at that time in that city or in any other city. Consequently, many houses set their initial prices using an economic valuation process, where the price of a ticket is the sum of a consumer's reference price for similar experiences (tickets to similar performances) plus an additional differentiation value, which is the value of the uniqueness of this particular performance.

As a consequence of the physical capacity constraints of a venue/stage, pricing strategies for live performances are relatively sophisticated, with excessive use of price discrimination strategies such as second and third-degree price discrimination (charging different prices for the same product for different customer groups, especially when a company occupies a monopolist position):

- One of the most basic forms of **second-degree price discrimination** is the **volume discount** (or non-linear pricing). This is often designed as a subscription package, which involves the purchase of tickets to multiple performances in advance at a discounted price. Although subscription packages are wide spread for some cultural sub-sectors such as cinema and music, the prohibitively high costs of a live performance relative to the other cultural goods can be considered as an obstacle in the development of subscription packages for performing arts (e.g. the mean value of a live performance ticket is generally five-to-tenfold more than the average price for a cinema ticket). Nevertheless, some companies across Europe have developed subscription packages at relatively high costs (e.g. La Scala in Milan⁶⁷ proposes subscription packages for opera, ballet and symphonies that vary between EUR 500 and EUR 3,000). The underlying logic behind subscription packages is that the venues can balance demand, increase attendance for less popular shows and stabilize cash flows (Johnson, 2005). In some European countries, subscription is the formula that ensures a good and stable volume of ticket sales throughout the year.
- Third-degree price discrimination refers to different value packages with different prices for different days, times, or seat locations (by scaling the house), or different prices for the same product for different consumer groups. Third-degree price discrimination thus reflects willingness to pay of the consumers (e.g. a Saturday night performance is more desirable than a Wednesday afternoon performance, or students might be less willing to pay for an opera) or differences in the consumption experience (e.g. a seat in the seventh row will have a better view and better acoustics than a seat in the thirtieth row).
- Indeed, a brief overview of the theatre companies in the UK shows that the third-degree discriminated prices can be as low as 60% and 80% of the mean value of a ticket for a live performance (excluding any booking fees incurred) for certain customer groups such as students and seniors⁶⁸. Also, many houses simplify their efforts by using a basic peak-load pricing model, in which the overall pricing schedule is shifted upward for shows that are expected to have higher demand and downward for shows that are expected to have lower demand.

3.2.3.2 Impact of digitisation on value monetisation and pricing strategies

Digitisation has slowly but surely allowed the introduction of **new models of value monetisation** in the performing arts sector, in particular in the exhibition function with the examples of live transmissions in cinemas and online broadcasting of live performances. Following this relatively limited diversification of content generation in performing arts, the value monetisation models have also undergone a change towards subscription packages for online and on-demand streaming as well as bundling with Internet Service Providers and/or an audiovisual

⁶⁷ http://www.teatroallascala.org/en/box-office/subscriptions/types/subscription-types.html

⁶⁸ Author's data collection

company (AMPAG, 2011). For instance, the Berlin Philharmonic Orchestra (BPO) has been showing its opening nights live in more than 60 theatres worldwide since 2010 as well as on internet via its "Digital Concert Hall", which provides high-quality online and on-demand streaming with daily, monthly and annually subscription packages ranging from EUR 10 to EUR 150. Moreover, the BPO has a strategic partnership with Sony since 2010, which extended subscription packages for the Digital Concert Hall with purchases of Sony televisions or Blu-Ray players. Furthermore, in the creation and production phase, there is an increasing trend to monetize rehearsals and valorise artistic staff through official backstage footages, interviews and online broadcasted rehearsals⁶⁹.

That being said, there remains an open question to know whether these new value monetisation models are to replace the current models or to remain "incremental" as suggested by "long-tail" theory. In other words, most online "subscription" packages or "live transmissions" in performing arts fail to obtain a critical mass to become profitable, let alone lucrative, which is not necessarily a problem per se: heavily public-funded organisations such as the Royal Opera House in London justify these secondary activities as a natural extension of their public mission to increase *access to* and *participation in* cultural activities (AMPAG, 2011). Recent developments in monetisation models are also subject to underlying values and principles (access vs. revenue generation) guiding the organisation's mission. There is also a certain risk of cannibalising live performance revenues by these newer and relatively cheaper digital options. As evidenced by the National Theatre case study by Bakshi and Throsby (2010) however, audiences are still biased towards and willing to pay more for the live performances than for cinema tickets to a live broadcast of the event, reinforcing the "experience goods" nature of performing arts.

Box 6: Yield management & Cloud Computing in performing arts

Apart from introducing new monetisation models in the "exhibition" function as explained above, digital technologies can also have an impact on conventional pricing strategies. Dynamic pricing or yield management, i.e. changing prices depending on demand - has been the core pricing strategy of accommodation and airline businesses already for years. This method is particularly useful when there is an uncertainty about the demand, as is the case with most live performances with no reputation. Partly due to the high prohibitive costs in investing, managing and scaling up the necessary IT technologies, the (mostly small) companies in the performing arts in the EU are mostly reticent in switching to yield management, except for some recent examples such as Opera Holland Park (UK) and Dutch National Opera & Ballet⁷⁰.

The advent of another digital technology, cloud-computing (the practice of using a network of remote servers on the Internet, rather than physical ones) seems quite promising to tackle logistical constraints that small-and-medium companies face for **upgrading both their pricing and ticketing strategies**. For example, Utick.be, a Belgian low-cost, cloud-based ticketing start-up, has managed to enter and survive in the extremely concentrated ticketing market in Belgium and as of today 65 performing arts organisations are using the services of this cloud-based ticketing and pricing system. Cloud-computing empowers smaller organisations to emulate the distribution, marketing and ticketing functions by giving them control over customer contact and rich consumer data, otherwise monopolized by intermediaries (see also Box 8 in section 3.3.2.1) on access to usage data). Nonetheless, it remains to be seen whether these new businesses will be able to win and maintain a sizeable piece of the very concentrated ticketing market across Europe (Haller, 2013).

3.3 In-depth analysis of interrelations between actors

3.3.1 Market structure and bargaining power

Market concentration increases as we move along the value chain in the performing arts sector. Even though there is monopolistic competition with an abundant number of artists/authors in the creation function and a relatively atomized market in the production function, the ticket distribution market is extremely concentrated across Europe, and can be considered as an oligopoly with a competitive fringe. There is no dominant trend across sub-sectors of the performing arts industry in the exhibition function.

Creation

⁶⁹ See, https://www.digitalconcerthall.com/en/home

⁷⁰ See, http://volpeversion.blogspot.be/2014/10/what-price-opera-some-musings.html

The creation function is well known for its abundance of offer as there are in theory many artists that can be easily substitutable from the perspective of producers. For instance, the number of artists in the performing arts industry in France has tripled from 22 500 artists (of which 6 800 dancers and performers) in 1982 to 66 443 artists (of which 23 500 dancers and performers) in 2012 while the population only increased by 18 % in the same period (INSEE, 2013)⁷¹.

Live performances are both "experience" goods and substantially differentiated; there is no perfect substitution of goods due to "customer loyalty" for a specific genre or artist, hence the monopolistic competition. The reputation effect is also likely to induce a segmentation of the market based on the reputation of artists (Precepta, 2011). Talent, popularity and "commercial potential" of an artist creates a situation wherein the reputable artists will mostly pick up a few big and famous producers and vice-versa. Artists with low reputation are likely to work with local/regional producers that occupy a monopolistic position in their niche regional market⁷².

On the one hand, the digital shift can improve the bargaining position of artists in the value chain, as they now have social media and online digital platforms at their disposal to show their performances to the outside world, without or with less support from intermediaries.⁷³ On the other hand, performing arts are "complex goods" that require high levels of coordination in the creation and production phase. Thus, producers and distributors still remain very important to stand out from the crowd as an artist. Alternatively, smaller companies or multiple artists can also choose to collaborate and jointly hire a business director who can organise tours or represent them towards receiving venues, thus increasing **their bargaining power and accumulated social capital.** ⁷⁴

Production

Production is relatively more concentrated than creation, and it can be defined at best as **monopolistic competition**. National markets are often excessively **segmented in many niche markets**, which are organized along **geographical as well as sub-sectoral lines**, which creates a situation whereby each and every producer occupies a monopolistic position in their local market (a local theatre producer from Maubeuge is unlikely to be in direct competition with opera producers in Paris) (Precepta, 2014).

This relative concentration is mainly the result of a number of **structural entry barriers in the production market**, that relate to Baumol's cost disease - the chronic market failure of the performing arts (see section 3.2.1):

- ▶ **High labour costs** without alternative public/private funding can constitute an entry barrier for new competitors at the production level as a rule of thumb on average 65-70% of a production budget is dedicated to labour costs and the production deficit is often financed by own accumulated capital (ONDA, 2014).
- Producers require significant **physical capital requirements** that need to be gathered upfront for the financing of the performance (artists, technical crew, promotion, etc.) as well as for its management and coordination.
- **Social capital** (e.g. network and knowledge of the local industry) is crucial in the performing arts, like in many other cultural sub-sectors and this might discourage new players.

The capital requirements combined together with high **level of risk in investment and generally low profit margins** (if any) are likely to give incumbents certain competitive advantages in the production market and prevent smaller producers from achieving a "**critical size**" and "**financial manoeuvre capacity**" (ONDA, 2014). The cyclical and uncertain demand creates a situation whereby producers are required to have quite large financial manoeuvre margins. If the producers achieve this "critical size" and a certain financial manoeuvre capacity, they might be able to institutionalize (e.g. hire a business director and/or an agent that will support them in selling or promoting their performances), which will enhance their bargaining power and spread the risk. If they fail to do so due to the costs and barriers explained above, they will have to sell or promote the performances themselves or

⁷¹ The demand for culture might also have been increasing since then due to the increase in the disposable income of households. Yet this does not explain the 300% increase in the number of artists. This exponential increase might be partly explained by the sensitivity differences between national statistics in the 1980s and today to capture cultural and creative actors, but different sources give increases in the same order. And if the intermittent artists are taken into account the range of increase is even higher at about 400 to 700% increase. See, http://bfmbusiness.bfmtv.com/entreprise/la-france-compte-de-plus-en-plus-d-artistes-plus-pauvres-que-jamais-922783.html

⁷² Interviews

⁷³ Interviews

⁷⁴ Interviews

with the support of a promoter or distributor, decreasing their bargaining power towards promoters and/or distributors.

Another crucial aspect of the production function concerns the determination of the sale price between the producer and distributor/venues. **The absence of an objective benchmark** on how to determine the value of a play is making room for subjective judgement and excessive reliance on the bargaining power of the actors involved. This situation is partly exacerbated by the intrinsic characteristics of a performance (e.g. uniqueness of the creation and production process, identity, track-record and financial health of the producer company, development strategies, etc.), which make it relatively difficult to define an objective price tag.

Dissemination/Trade

The dissemination function, which is defined as a combination of promotion/distribution and ticketing in the context of the performing arts sector, is one of the remarkably concentrated markets across Europe, from an **oligopoly structure** in France, UK and Germany with few players, to a quasi-monopoly in Belgium - with the Ticketmasters being the pan-European market giant⁷⁵. The ticketing market of live performances can be qualified as a "**natural monopoly**" (Haller, 2013), especially thanks to the dematerialization of ticketing. As with any online marketplace, structural entry barriers such as **network effects** are strong; having access to a larger number of events increases the value for consumers, and vice-versa a larger pool of ticket-buyers attracts more events to the platform. Another characteristic common to online marketplaces is the **undifferentiated nature of the ticket service itself** since there is little inherent value to the platform outside of the quality of the tickets it supports, a fact which limits room for competitors. All of this makes it difficult for event promoters to use multiple exchanges simultaneously to sell tickets, another characteristic of **winner-takes-all markets** (Haller, 2013) (see also the thematic paper on two-sided markets for further analysis).

On top of these structural entry barriers, strategic entry barriers such as **marketing advantages of the incumbents** constitute important impediments for newcomers to enter, if not crowding out existing players. Crosschannel marketing strategy is an effective way to raise entry barriers once a new entrant has "survived" or has been "established" in the market. We refer to the next section on vertical integration for a further discussion.

This concentration as we move forward along the value chain is quite problematic from a competition policy perspective especially in the dissemination function, as the actors become much more prone to **collusion** in the context of an oligopoly (e.g. in price levels, number of performances, or commissions to be extracted from "downstream" actors like producers). TicketNet (a subsidiary of TicketMasters) and FNAC Tickets (the French market leader in retail chain of cultural and electronic products) have been convicted by the French *Autorité de la Concurrence* in 2010 on explicit collusion to maximize their commission levels from the producers, which reflected in return **an increase in ticket prices** and overall decrease in the **consumer welfare** (Autorité de la Concurrence, 2012).

Exhibition

The market structure in the exhibition function has certain specificities with respect to other functions of the value chain due to the important place occupied by publicly owned and/or subsidized venues/stages. In general, barriers of entry are relatively high, due to high sunk/fixed costs of opening a new venue as well as high operating costs (i.e. rent, maintenance, security, staff, electricity, etc.)⁷⁶. At first sight, each venue seems to be in monopolistic competition in its own geographical perimeter, although when we look at the ownership structure of the venues, it can be observed that markets are increasingly being concentrated depending on countries and subsectors, such as e.g. the market of theatres in UK, performance halls in France and arenas in Belgium. For example, nearly all of the prominent theatres in London's West End are part of big chains (i.e. Delfont Mackintosh Ltd, The Really Useful Group Ltd, The Ambassador Theatre Group Ltd, Nimax Theaters) who own several of the famous theatres in London. Similarly, in France, there is an increasing practice of concentrating ownership of performance halls through vertical integration.

Vertical integration and ownership structures

When looking at ownership structures in the performing arts sector, two main trends can be observed: (1) increasing upward and downward vertical expansion of the actors active in the ticketing and (2) actors from the media/entertainment industry that vertically integrate into the performing arts value chain:

⁷⁵ Interviews

⁷⁶ For example, in France, the 40% of budget deficits are assumed by the "Fonds de Soutien".

- There is an **increasing level of vertical integration among established industry players**, whereby some major firms cover more than one "function" of the value chain so as to include for instance production, distribution and ticketing/marketing of a live performance under the same company's roof. This type of vertical integration, along with transaction costs' reduction and efficiency gains, contributes not only to raise entry barriers as it requires competitors belonging to different functions to enter the market at once. The vertically integrated firms enjoy considerable bargaining power along the value chain when negotiating arrangements and can exert excessive competitive pressure on downstream "suppliers" with a "bottleneck" effect. The merger of Live Nation/TicketMasters illustrates these advantages quite clearly: Live Nation Entertainment is active today in production (pan-European Live Nation events producer and promoter with subsidiaries in Finland, Denmark, Sweden, etc.), promotion and distribution (Ziggo Dome in Amsterdam, 3Arena in Dublin, Palais Nikaia in Nice) and ticketing (Ticketmasters), as well as digital media (strategic partnership with Yahoo on live streams of a live performance for every day for one year) (Live Nation, 2015).
- Entry barriers due to high levels of vertical integration are easily overcome by the new entrants from outside the performing arts sector, such as majors active in the mass media. Majors of mass media (e.g. the French multinational Vivendi) vertically integrate the performing arts market by means of mergers and acquisitions, participation in shares and commercial partnerships. This is an emerging trend because these new entrants have financial resources and respective bargaining power to vertically integrate the market, unlike traditional atomized structures in the performing arts sector of the pre-digital era (Precepta, 2011). This proves quite challenging for the incumbents, because these new companies often have media and merchandising sites at their disposal, which they can use for cross-channel marketing and creating an entertainment ecosystem with a locked-in effect.

As a result, the vertical integration allows dominant firms at the dissemination level to exert market power in the other functions of the value chain, whereby the market is not necessarily concentrated as in their original market (e.g. an oligopolist distributor/ticketing company such as Live Nation exerting market power in relatively more competitive production market⁷⁷). As the major vertically integrated firms in the market encounter the uncertainty and risk associated with the investment in a creative work, there is a higher chance that they will restrict themselves to the most promising productions to be shown in their own venues. This limits in return the likelihood for an independent performing arts producer to be picked by a major distributor. In other words, the vertical integration allows firms to control and optimize the utilisation of their venues/stages by relying on "famous" or reputable artists and/or productions so as to minimize the risks⁷⁸.

⁷⁷ Interviews

⁷⁸ Interviews

3.3.2.1 Terms of Contracts: Neighbouring Rights and Digitisation

Box 7: Author's and related rights in performing arts 79

The following rights are of importance to the Performing Arts' Value Chain:

- Concerning the primary uses of live performance: Authors of a play, libretto but also of a choreographic work (dance) or dramatic work (play) have an author's right to authorize the live performance of their work. In the "primary" use of their work, the payment of neighbouring rights will be negotiated with the individual performers or these rights will be compensated for through the payment of a salary to the performer.
- With respect to secondary uses of the live performance including broadcasting, live streaming towards "mass users":
 - Performers are provided the related or neighbouring rights to prevent recording, broadcasting and communication to the public of their live performances without their consent, and the right to prevent reproduction of recordings of their performances under certain circumstances. The rights of broadcasting and communication to the public may be in the form of equitable remuneration rather than a right to prevent;
 - Performers are granted a right of rental with respect to audiovisual works and some countries grant specific rights over cable transmissions.
 - Authors of choreographic works (dances) or dramatic works (plays) have an author's right to authorize the broadcasting and communication of their works to the public.

One of the main challenges that performing arts companies in the digital age face is to negotiate agreements with creatives and performers for the rights to film various types of content and use it for broadcasting, cinema transmissions, marketing and online uses. There are certain issues that are increasingly important in the context of digitisation (PEARLE, 2013):

- Current legal provisions applying to the digital market fail to provide a well-defined **licensing clearance process for the live streaming of performances**, which may become detrimental in the long run to the sustainability of these new practices, as they are still in the process of "emancipation" and becoming financially self-sufficient. Secondly, the increasing complexity of supply chains and the associated payment flows make it difficult for authors and performers (as well as others operating in the industry) to fully understand the source of and rights associated with the remuneration they receive. The major implication is that in case of infringement, performers have to seek contact with the person who posted the video on the online platform to enforce his/her rights, which is nearly impossible or laborious at best.
- Ancillary footages (e.g. interviews and behind-the scenes footages): Currently, performers' agreements do not have standardized terms for ancillary footages and the terms of the contract depend primarily upon the bargaining power among the artists and producers. This proves quite problematic in the context of digitisation as these new monetisation strategies are slowly but surely growing in importance (AMPAG, 2011). In addition, these digital formats will only grow in popularity, hence there is an increasing need to monetize these ancillary goods to remain competitive.
- Non-commercial uses of performances (e.g. education and/or preservation): Under the current European legal framework live performance organisations do not benefit from an exception allowing specific acts of reproduction for non-commercial purposes such as rehearsals, or scientific and educational purposes. Each individual case must therefore be negotiated with all the relevant rights holders.
- ▶ **Audience development and commercial uses:** The current performers' agreement is often limited to the specific uses of images for promotional activities during the life cycle of a production. At the moment, under the Rome Convention, only the use of short excerpts in connection with the reporting of current events is allowed however at European level, the live performance sector has not been included in the scope of relevant legislation⁸⁰ in order to benefit from this rule (IETM, 2016).

⁷⁹See, WIPO, "Understanding copyright and related rights", http://www.wipo.int/edocs/pubdocs/en/intproperty/909/wipo_pub_909.pdf

⁸⁰ DIRECTIVE 2006/115/EC on rental right and lending right and on certain rights related to copyright in the field of intellectual property

Due to digitisation, there is a legitimate concern on artists' and performers' side to control the use of their image and to be fairly remunerated for their effort. Producers and companies on the other hand, which bear the financial risk, are primarily concerned about the uncertainty related to the amount of revenue generated through online and cinema uses of performances. Moreover, access to metadata from online platforms about audiences/viewers' profiles for marketing purposes remains an important issue that needs further clarification (see Box 8).

Box 8: Big Data and Performing Arts

A natural by-product of the digitisation is the colossal amount of data it produces – 90% of data available today have been produced over the three last years (Proscenium, 2015). Against the backdrop of these enormous data, the performing arts industry is not spared from the new opportunities and pitfalls that come along with it, especially in online marketing and customer relations.

On the one hand, digital ticketing with extensive **qualitative information on consumers significantly broadened horizons for enhanced market targeting**, which was not always possible with physical tickets. This would allow for "**personalization of masses**" for individual-tailored programming and targeted marketing on condition that the companies internalize the analysis of big data and invest in these new digital skills (Bernstein, 2011). For instance, the geo-localization of the consumers could help producers to better target potential spectators in the area of the performance. Similarly, the track-record of consumers in social media (e.g. their past participation in the performances/events collected by Facebook) could help creators and producers to understand better their niche market and adapt their products/marketing to specific cultural habits.

On the other hand, **the issue of access to big data** still remains unresolved as most artists and producers do not have systematic access to usage data (i.e. anonymized demographics of consumers, consumer behaviours, sales location and timing, etc.). **Usage data are often monopolized by the consumer-facing intermediaries**⁸¹ (e.g. online ticketing, streaming and social media platforms) since most platforms do not have an open-access API policy concerning usage data for third-party developers. As such, creators/producers – who put a piece together – do not have sufficient knowledge about their end-consumer's behaviours and characteristics to create value out of this information. Thus, the core question is how to install the right framework for digital services to share these usage data with creators and producers⁸². In this context, artist-centric services are slowly appearing in the market. For example, online self-ticketing platforms such as "weezevent.com" or "Utick.be" allow producers and artists to manage ticketing, pre-sale, post-sale of their events themselves with mailing lists, invitations and consumer follow-ups.

Furthermore, access to big data is a necessary but not a sufficient condition for the value creation out of big data: its treatment and analysis for aforementioned uses are equally important (Proscenium, 2015) because there are important time, budget and knowledge constraints that come along with these new investments in data hosting and manipulating. As a result, creators and producers — of relatively small sizes — might become increasingly dependent on external actors. The example of "FanFactory"83, a London-based company is quite illustrative in that regard. The company uses consumer data stemming from online platforms such as Facebook or Google to analyse the fan base of an organisation/artist and to identify where the most promising market opportunities lay. Through this third-party service provider, an agent/promoter can easily determine which cities are most promising for a tour, a performance, etc. There have been also some initiatives to help cultural organisations and actors to make sense of new digital tools by internal means: NESTA in collaboration with Arts Council England and the Arts and Humanities Research Council as part of their work on the Digital R&D Fund for the Arts, has published a toolkit to help cultural actors and organisations on their revenue optimization, audience development and community management 84.

3.3.2.2 The problem of sub-monetisation

An important problem in the performing arts sector is that the sale price and negotiations of a play between producer and distributor/venue (e.g. "prix de cession" in France) are based mainly on the (labour) costs related to

⁸¹ Interviews

⁸² This question fits into the reflection that the European Commission has recently launched as part of the recently adopted initiative on "building a European data economy": see https://ec.europa.eu/digital-single-market/en/building-european-data-economy. In this context, different intermediate options to ensure the access to data are being explored.

⁸³ See, http://www.fanfactoryltd.com/

⁸⁴ See, http://artsdigitalrnd.org.uk/toolkit/

presentation of a play (only marginal costs or "coût plateau"; therefore excluding or only minimally covering the fixed costs related to the production itself). Consequently, the value-added created by performers is not fully monetised and assumed mainly by internal financing and public subsidies. **Therefore, the evolution of prices along the value chain is not representative of the value-added created by each actor**.

To illustrate how the value-added created by the performers in the production function is sub-monetised along the value chain and where the production deficit stems from, it is important to look at the cost structure of producers as well as "practiced" and "ideal" sale price of a play between a producer and distributor/venue. When the negotiations take place over the marginal costs related to a presentation (i.e. "coût plateau") and the price differentials between coût plateau and sale price are slim, it is often the case that the amortization charged to cover the fixed costs and the profit margin are squeezed. This implies that the production deficit either has to be financed by internal means or the play has to be shown more frequently to cover the same fixed production costs⁸⁵. Also, the financial health of a company is compromised when there is no/little profit margin to accumulate capital (ONDA, 2014).



Figure 8: Pricing and the problem of sub-monetisation in the performing arts sector

3.3.2.3 Revenue Sharing

The market structure, which becomes increasingly concentrated as we move up the value chain, suggests that the bargaining power increases towards the end of the value chain (distributors & venues/stages), and is lower for artists (and for producers to some extent). In general, the terms of revenue sharing are negotiated between producer and distributor/venue. Depending upon the sub-sector and country, it can take the form of either **flat-fee revenue sharing** (as illustrated by the French theatre example above) or **proportional revenue sharing** (as illustrated below).

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⁸⁵ As a rule of thumb, to cover the fixed costs of production, the sale price of a play (between producer and distributor/venue) should include the marginal costs (i.e. coût plateau), but also an amortization (the production deficit divided by the number of potential presentations, for example if 30 presentations are programmed, the production deficit will only be covered in the 31st presentation), the administrator salary, and profit margin. As such, the ideal price differential between the "coût plateau" and the sale price of a play should be around 45 to 55% of the "coût plateau", to cover all these costs. Nevertheless, a survey of French performing arts industry (ONDA, 2014) indicates that the price differential is often around 20% of the "coût plateau" which shows that production deficit is a chronic problem in industry practices. In this specific example, the amortization rate of 45% (EUR 1,117) of the coût plateau (EUR 2,457) necessary to cover fixed production costs is squeezed down to a mere 20% (EUR 493) of the coût plateau. See, French guide on production budgets, http://www.cgt.ca/formation/documentation/files/544/Budget production CnT.pdf for more information.

The way in which subsidies are allocated has an important influence on the price setting and revenue sharing of the different actors in the value chain:

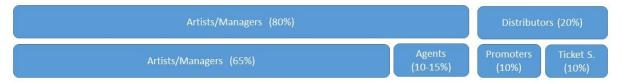
- If subsidies are allocated to the actors in the production stage of the value chain (i.e. a collective of artists, a theatre/dance company), they will demand a lower fee or lower percentage of box office revenues from the venues/stages for the presentation of the performance and will also be able to play for smaller audiences (the incentive for artists to attract large audiences decreases in this case):
- ▶ If subsidies are allocated to the actors in the exhibition stage of the value chain (i.e. a stage/venue or a producing/receiving house), these presentation actors will be able to offer higher fees or a higher percentage of box office revenues to the artists or companies (the incentive for the artists to attract larger audiences increases in this case.

There are large country differences across the EU in the way that actors in the performing arts sector are being subsidized (as well as in the volume of public funding for performing arts). These differences have an impact on the revenue streams and price setting strategies used in the different countries.

Distribution of revenues from primary sales of a live performance

Primary ticket agents sell tickets on behalf of promoters or venues (and occasionally directly on behalf of artists). These ticket agents often charge booking fees separately from the tickets per se that are typically between 10 and 15% of the ticket price. The latter is often composed of 20% VAT, 3-5% PRS attributable to the right owners of the cultural good and the net ticket price corresponding to 75% of the value of the ticket. It is also worth noting that the net profit (after deduction of fixed production, marketing and venue costs) is often shared in a way that producers (artists/managers/agents) get 80% of the net revenue (of which 10-15% goes to the producers/agents), with the remaining 20% of net profit being divided more or less equally between promoters and ticket sellers (Figure 9).

Figure 9: Proportional Revenue Sharing in performing arts (after deduction of costs)



Source: Adapted from UK Competition Commission (2011) and Precepta (2014)

When we apply the revenue sharing above and taking into consideration the cost structure of a live performance from creation to exhibition, the revenues of a ticket sale are shared as follows (Figure 10):

Figure 10: Ticket sales' revenue sharing in the performing arts sector



Source: Adapted from UK Competition Commission (2011) and Precepta (2014)

The figure above provides some insights into the proportional distribution of income from the primary sales of a live performance. At first sight, a 36% share for the artists seems contradictory to the market structure. There exists an abundant offer from artists, which can, in theory, be easily substituted. This relatively high share of 35% for artists/managers (in relative terms to the producers/distributors/venues) is mainly explained by **the labour-intensive structure of performing arts**. In reality, this share (36%) corresponds to the labour costs of a presentation of a performance rather than "profits" per se (whereas fixed labour costs of production are partially covered at about 8-10% of the ticket price). Moreover, as confirmed by the interviewees, these shares for artists are not necessarily distributed equally *among* the artists. For instance, in 2011, the bottom quartile of artists in the performing arts industry shared 1% of the overall artist revenues, while the top 10% claimed 32% of the overall artist revenues (Urrutiaguer, 2015). Indeed, the performing arts and especially the "creation/production" function is characterized by a "winner-takes-it-all" principle, which imposes that the artists with established reputations consolidate most of the revenue streams from the producers & distributors (Prendergast, 2014).

Impact of digitisation on revenue sharing in performing arts

Revenue sharing in the context of digitisation is closely related to making agreements on the neighbouring rights and the secondary use of live performances in live streaming, broadcasting and cinema retransmissions (see section 3.3.2.1). The revenue sharing of this incremental revenue from online and cinema transmissions has witnessed a shift from **high upfront flat-fee arrangements to lower flat-fees combined with proportional revenue**

⁸⁶ This is the average percentage that the artists get from the revenue sharing although the range of the percentage of the artists/performers' share is often situated between 70% and 90%.

sharing with artists (AMPAG, 2011; Interviews). Traditional contractual arrangements often bought out all the neighbouring rights of the performances for a certain period of time, which involved upfront flat fees as high as 110% of their actual performance rates of artists. This relatively high amount is not compatible with the uncertainty of revenues generated through online and cinema transmissions. As a result, the industry practices have moved towards relatively **lower upfront flat fees** (advance on royalties), combined with either a quaranteed minimum income independent of the success of the transmission or a proportional revenue sharing between venues, company and artists, the latter being the dominant practice. In the case of the National Theatre (NT) in London for example, all incremental revenue from cinema transmissions is distributed as follows: 50% to the cinema, 25% to the distributor and 25% to the company. The 25% going to the company is further distributed more or less equally between artists (33%), designers/ technical crew (33%) and producer/company (33%). Surprisingly, at first sight, one observes a completely reversed situation for artists, who see their revenue share drop from 35% for live performances to less than 10% for the cinema retransmissions of live performances. This discrepancy is partly explained by the fact that the cinema retransmissions, and by extension other types of live or online transmissions, have not yet become an integral part of the core business model (of the NT in that specific case). At the National Theatre, it is not considered as a new model for revenue generation but rather as **an extension** of their public mission to increase participation in cultural activities and as a justification for the public funds received⁸⁷. Consequently, negotiations between artists and the producer company are relatively smooth, which explains in return these low shares from the incremental revenues such as cinema and online broadcastings.

Cinema Retransmission Ticket Price (100%)

VAT (20%)

Author (3-5%)

Producer Company (25%)

Artists (8%)

Artists (8%)

Retransmission Ticket Price (100%)

Net Ticket Price (75%)

Booking Fees (10-15%)

Venue Costs (Cinemas) (40%)

Figure 11: Redistribution of Incremental Revenues from Cinema Broadcastings

Source: National Theatre London, 201188

3.4 Other exogenous changes and relations with other sectors

The "experience economy"

Beyond digitization, also the impact of the "experience economy"⁸⁹ on consumer behaviour is an important driver that contributes to the adoption of new practices in the performing arts industry. The emergence of an "experience economy" not only accelerates the adoption of digital practices in performing arts, as explained in this chapter, but also paves the way for cross-sectoral innovation and spillovers between performing arts and traditional industries:

From a micro perspective, with the rise of the "experience economy" there is a trend for more **site-specific and community-based** performances that are made to only fit one stage/venue. This implies for the site-specific performance that it does not need to take into account the fact that it should fit different stages/venues and in that regard the final product does not follow the whole economic cycle of the performing arts value chain. Also, community-based performances are often made with not artistically educated performers and are connected to a specific local community "outside" of the regular venue/stage circuit.

⁸⁷ Interview with the director of National Theatre as cited by AMPAG (2011).

 $^{^{\}rm 88}$ Interview with the director of National Theatre as cited by AMPAG (2011).

⁸⁹ The experience economy includes all those activities involved in the production of products and services that, in addition to a functional value, have experience value. This is linked to the benefit that consumers get from the perception of immaterial symbols, aesthetics and meanings embedded in products and services (KEA, 2013).

From a macro perspective, the "experience economy" dictates that **consumer expectations should be integrated into the value chain from the first stages, going beyond a mere audience involvement and interactivity**. Hence, there is a more democratic, inter-connected consumption
experience engaged by modern producers from the very beginning, through critics and audiences.

Public funding and budget cuts

The performing arts sector is Europe has suffered from **severe budget cuts** over the past years. Since public subsidies in general make up a significant part of the budgets of performing arts organisations (see the figure below for data on the live performance venues in France), a 20-30% decrease in public subsidies requires a complete overhaul of the underlying business model and pricing strategies to compensate such decreases – bearing in mind the fact that an increase in prices has its limits (namely, the ceiling price that the consumer is willing to pay). Therefore, the uptake of new business models (online and cinema retransmissions) and strategic collaborations (co-production, mass media) with unusual partners have become increasingly important in the performing arts.

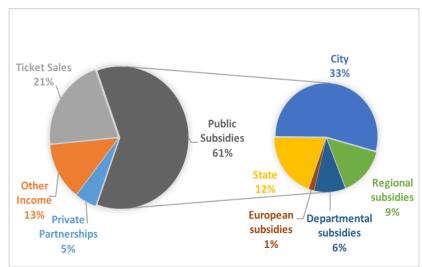


Figure 12: Role of Public Subsidies - Composition of income of live performance venues in France (2012)

Source: CVN (2013)

Links with other sectors

The performing arts sector has links to several other value chains, such as:

- Music: Music is often found as an integral part of most live performances as dance, theatre, circus, musical performances normally include music in the performance. The live music sector is a solid example of this high level of integration between music and performing arts, with the music sector showing increasing interest in live music performances in response to decreasing sales in the recorded music business (e.g. through 360° contracts with musicians) (see also the chapter on Music).
- Audiovisual sector (Film and Broadcasting): This sector intertwines with the performing arts value chain especially at the exhibition function and production function to a lesser extent, when performances are recorded/live-streamed for promotional or exploitation purposes. Increasingly, actors in the performing arts establish value-adding partnerships with public/private broadcasting channels to increase their audience (e.g. the Opera Platform in cooperation with French Arte). However, also at the production stage, audiovisual works can be included in live performances, as the boundaries between performing arts work and audiovisual work become fuzzy, especially in contemporary performing arts.
- Tourism: The performing arts sector can reinforce the attractiveness of a touristic destination. According to EY (2014), 9.2% of tourists visiting the UK went to the theatre, musical, opera or ballet. Performances in public/private spaces (e.g. parks, restaurants) are a key factor of Europe's touristic attractiveness. Performing arts play an important part of the holiday experience in many locations across Europe, with renowned venues and performing arts destinations such as Opera Garnier in Paris, the West End in London or La Scala in Milan.

Global sourcing

Global sourcing (i.e. the provision of goods and services from international markets beyond geopolitical boundaries) is not a common practice in the performing arts sector, as most productions are locally-oriented and there are linguistic, cultural, geographical and economic barriers to global sourcing. If we are to look at the inputs required for the production of a play for instance, the decorations and costumes are procured from geographically close markets due to high transportation costs. Some services required for production (such as rental of a practice hall, or local administrative bureau, maintenance) cannot be outsourced for obvious reasons, whereas other services such as publicity and promotion are often solicited at the local/national level for their knowledge/expertise in local/national cultural habits. The only input that can be globally outsourced to a limited extent is the labour, as long as the linguistic barriers are overcome and/or minimized. Cultural mobility, especially in the performing arts is often short-term (e.g. a contract for a few days work to present a production), yet it may also be for a longer period (e.g. an artist being invited to work for a season abroad)⁹⁰. As such, the global sourcing can take different forms (e.g. international co-productions, employment, residencies, etc.) depending upon the length, source of funding, expected final form of the cultural good. There are specific organisations in the performing arts sector, which promote international cultural mobility such as On-the-move⁹¹, IETM⁹², Theatre without borders⁹³, Labforculture⁹⁴, etc.

⁹⁰ See, http://www.rtlb.ru/file/mobilityFactsheets.en.pdf

⁹¹ See, http://www.on-the-move.org/

⁹² See, http://www.ietm.org/

⁹³ See, http://www.theatrewithoutborders.com/

⁹⁴ See, http://www.labforculture.org/

4.1 Introduction to the cultural heritage sector: definition and importance in the EU economy

Definition and scope

The subsector of cultural heritage is a peculiar one within the whole range of cultural and creative sectors covered by this study. It is often set apart from other cultural and creative subsectors, both in an analytical and policy perspective, because of a number of aspects.

First of all, the actual 'creation' or 'production' function in the value chain or value creation process of cultural heritage has either taken place already in the past or is the result of historical or ongoing development. Some cultural heritage has been created purely as art by composers, authors, painters, etc.; other parts were also destined to be functional objects (e.g. buildings, documents) at the time of their creation, which they may or not may have maintained over time (churches, temples, tombs, etc.). Furthermore, much cultural heritage is intangible, and thus generated or re-created by communities or groups over time⁹⁵. In any case, the outcome of any intentional creation or production process is not immediately considered cultural heritage at that moment, and therefore it is impossible to intentionally create or produce heritage. Although people and communities certainly may want to leave a legacy, whether it is artistic, socio-cultural, or otherwise, and intentionally try to build one, they cannot fathom the meaning that their work might acquire for communities in the future. Rather, something takes on meaning as cultural heritage over time, as it is considered as such by a community and/or formally recognized by a public institution.

Cultural heritage refers to particular (tangible and intangible) objects, assets, practices, etc. that over time take on an additional symbolic meaning and significance for communities at various levels (local, regional, national, European global, etc.).

Secondly, cultural heritage is a **public good** which benefits society as a whole and which has associated public costs of its necessary preservation and maintenance.

The definition and conceptualisation of cultural heritage has evolved substantially since the 70's. Over time, the concept of cultural heritage has become far more encompassing, referring to a wide and diversified array of past events, personalities, folk memory, mythology, literary associations, physical relics of the past, as well as places to which they can be symbolically linked (Ashworth, et al., 2007). Cultural heritage provides context and meaning to individual and collective pasts, and thereby co-determines and fuses collective identities at different geographical levels, while simultaneously inspiring and driving the further development of local communities. This leads to a dynamic understanding of cultural heritage, being constantly re-interpreted and changing depending on the passage of time, the change of context, and the public's experiences and expectations. Cultural heritage does not belong to any given group, but it is open - it belongs to all those who wish to identify with it. In that sense, cultural heritage is also increasingly seen and **deployed as important source of creativity and welfare**, and hugely contributes to the overall resilience and progress of cities and regions.

The most recent relevant policy definition is formulated in the Framework Convention on the Value of Cultural Heritage for Society of the Council of Europe (Faro Convention), opened for signature in 2005. This Convention defines cultural heritage as 'a group of resources inherited from the past which people identify, independently of ownership, as a dynamic reflection and expression of their constantly evolving values, beliefs, knowledge and traditions. It includes all forms and aspects of the environment resulting from the interaction between people and places through time (Council of Europe, 2005).

The EU Council Conclusions of May 2014⁹⁶, which are largely derived by the definition of the Faro Convention, specify that cultural heritage can be tangible, intangible and digital (born digital and digitised), including monuments, sites, landscapes, skills, practices, knowledge and expressions of human creativity as well as collections conserved and managed by public and private bodies such as museums, libraries and archives. This definition refers more directly to the current significance and value of cultural heritage as a resource for society from a cultural,

⁹⁵ Convention for the Safeguarding of the Intangible Cultural Heritage, Paris 2003 http://www.unesco.org/culture/ich/en/convention

⁹⁶ Council conclusions of 21 May 2014 on cultural heritage as a strategic resource for a sustainable Europe 2014/C 183/08 http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52014XG0614%2808%29

environmental, social and economic point of view, and thus also to the strategic political choices concerning its sustainable management in the 21st century.

Traditionally, three categories of cultural heritage have been distinguished by National legislators and International Organisations:

- Tangible movable cultural heritage, including cultural objects and sources such as artwork, artefacts, historic objects, but also books, archives, etc.
- Tangible immovable cultural heritage, including culturally or historically significant real estate, historic towns, archaeological sites, monuments, etc.
- Intangible cultural heritage, which according to UNESCO⁹⁷ means the practices, representations, expressions, knowledge, skills as well as the instruments, objects, artefacts and cultural spaces associated therewith that communities, groups and, in some cases, individuals recognize as part of their cultural heritage. It includes oral traditions, and expressions, including language as a vehicle of the intangible cultural heritage, performing arts, social practices, rituals and festive events, knowledge and practices concerning nature and the universe or the knowledge and skills to produce traditional crafts.

In line with the evolving definition and view of cultural heritage, the discourse often also focuses on:

- Living heritage or material culture, which emphasises ongoing daily functions with cultural-historic significance as well as current cultural customs, practices and competences (gastronomy, fashion, religion...) of a community or locality
- Cultural Landscape (UNESCO)⁹⁸, which emphasises the cultural properties or values of physical surroundings for a community or locality, whether they be natural, urban, industrial or a combination of these

The most recent view on cultural heritage conceives cultural heritage as a whole i.e. it does not differentiate the immovable from the movable and the tangible from the intangible. However, in analysing the process of value creation through cultural heritage we will maintain the distinction to grasp the different ways in which cultural heritage generates economic value, with a specific focus on tangible cultural heritage.

Economic and social importance of cultural heritage for Europe

The defining characteristics of cultural heritage make it very difficult to grasp it in a value chain analysis, in which economic value is internally generated, rather than measuring or calculating its overall economic impact. Many of the core actors concerned with cultural heritage are non-profit organisations that do not strive for corporate financial value, but instead work on very different objectives and value types (preservation for future generations, optimal socio-cultural valorisation and active participation/involvement of the local community, etc.).

On the other hand, although hard to quantify, cultural heritage represents a clear societal and economical value and contributes substantially to the performance and flourishing of various other sectors, including tourism. With the changing perception of cultural heritage and the growing recognition of its all-inclusive nature and role as ongoing asset and resource for any society, cultural heritage is increasingly presented and deployed as a driver for sustainable (economic) development. Cultural heritage is increasingly being appreciated as an essential part of Europe's underlying socio-economic, cultural, social and natural capital, and regarded as a positive contributor to or even driver of its GDP.

The economic benefits of cultural heritage have most commonly been seen in terms of tourism, but now also as an innovative stimulant for a wide range of traditional and new industries. Moreover, it is recognized as a major contributor to social cohesion for local communities and engagement of young people in their local environment. Many countries and regions are attempting to exploit these potential benefits in economic terms. The main actors benefitting from these efforts are:

- The tourism sector, which owes much of its attractiveness to the rich historic cultural heritage of Europe, be it in historic towns and cities or in the countryside.
- Europe's cultural sector, which owes a huge amount to its tangible and intangible cultural heritage. Museums, festivals, but also films, theatre, music as well as craftsmanship (e.g. fashion) and cuisine (gastronomy) all reap the benefits of cultural heritage, as an important driver of creativity and tourism inflows or for export of services, manufactured goods and produce.

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⁹⁷ UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage (Paris 2003) http://www.unesco.org/culture/ich/en/convention

⁹⁸ http://whc.unesco.org/en/culturallandscape/

- Property values of residences in historic districts out-perform comparable properties in modern areas. Moreover, businesses tend to locate in proximity of these areas as it is easier to attract specialists and expats to live and work in such places.
- Cultural heritage also has a decisive role to play in sustainable development, particularly in the regeneration of cities and landscapes. Urban and rural areas that re-use buildings in new socio-economic functions, benefit from economic improvement and a better quality of life.

The 'Cultural Heritage counts for Europe' project (2015), funded by the European Culture Programme and led by Europa Nostra (2015) is only one of the efforts that emphasizes the role of cultural heritage as a significant creator of jobs across Europe, covering a wide range of types of job and skill levels: from conservation-related construction, repair and maintenance through cultural tourism, to small and medium-sized enterprises (SMEs), creative hubs and start-ups linked to creative industries. The number of persons directly employed in the cultural heritage sector in Europe is estimated at over 300,000, and more importantly, the cultural heritage sector is estimated to produce up to 26.7 indirect jobs for each direct job, higher than, for instance, the car industry (Cultural Heritage counts for Europe, 2015).

Studies of specific cultural heritage sites in Norway and France indicate returns in terms of tax income far exceeding the investment, generated through both direct earnings from visitors (restaurants, parking, museum, souvenir shop, tickets) and indirect expenditure incurred by the visitors outside the heritage site. 'Cultural Heritage counts for Europe' describes a number of cases to demonstrate that cultural heritage has a track record of providing a good return on investment and is a significant generator of tax revenues for public authorities, both from the economic activities of heritage-related sectors and indirectly through spillover effects from heritage-oriented projects leading to further investment. An extensive English Heritage (UK) analysis of the costs and benefits of properties within or near to a conservation area show an increase in property value of circa 23%. Research conducted in Berlin reveals a positive external heritage effect embedded in property values amounting to as much as EUR 1.4 billion.

Although the role of cultural heritage as a resource in economic development is highly important, the subsequent sections of this paper will in the first instance focus on the value chain of cultural heritage activities itself and the role of heritage as a product in itself. These activities include conservation and restoration, integrated heritage management, arts and antiquities trade (auctions), the exhibition of cultural heritage in museums/heritage sites/festivals, etc.

Impact of the digital shift: an introduction

Thanks to the increasing digitisation of documents and images, cultural heritage is becoming more widely accessible to citizens being able to explore heritage through websites, digital archives or databases. Although much of the value of heritage is attributed to it through real-life experience, the digitisation of cultural content facilitates its promotion and dissemination towards the wider public. Moreover, digitisation has a huge impact on research and, enlarging the spectrum of analysis and studies, supports preservation.

On the one hand, the digital shift offers substantial opportunities for museums and other actors on the supply side of cultural heritage. By making their offer accessible online through, for instance, digital catalogues or virtual tours, heritage actors (museums, heritage sites, etc.) can better present and promote themselves in order to attract more visitors. Also, it allows them to provide additional information with their offer, combine it in new ways and show it from other perspectives. This leads to better and/or new understanding of the heritage, and potentially renewed interest for repeated visits.

For the moment, there is not much concern that in improving online accessibility potential visitors may stay at home, as the general view is still that this cannot substitute a real-life visit. Visitors prepare their visit with online information on museum practicalities and collections, and return to the website after the visit to find additional information on specific topics/items. Digitisation is thus until now used as a marketing or educational/ sensibilisation tool, to encourage people to actually visit and experience the site for themselves.

However, technology is rapidly advancing, and sophisticated 3D and virtual/augmented reality techniques (holograms etc.) are becoming available more widely. These techniques could in the longer term create an experience that could replace an actual visit, perhaps even enhancing the possibilities to observe and learn about the heritage.

Furthermore, increased digital availability of heritage content generates another huge effect, presenting a potential risk for traditional actors at the supply side of cultural heritage, related to the free distribution and reproduction of the content (documents, images, etc.). This raises important questions about the property rights of certain heritage products or content, and who is allowed to commercially use this in what precise way. The IPR provisions in this area are undergoing and have to undergo further adaptations to these changing circumstances.

While cultural heritage used to be generally considered a public good, access to tangible heritage was until recently under quite strict control of museums and other (semi-)public institutions, functioning as a sort of gatekeeper to

the cultural heritage. Digitisation creates a loss of this controlling and gatekeeping function for museums, at the potential benefit of a wide range of industries, such as e.g. publishing, PR, audiovisual, etc.

4.2 Value chain mapping and description

4.2.1 Economic characteristics of the cultural heritage business and impact on the global value chain structure

As explained before, the argument to consider or formally recognize something as cultural heritage is not in the first place economic, but rather the opposite. Something is considered and/or officially declared cultural heritage because it deserves protection from external socio-economic influences and market pressures. Such a decision may limit commercial exploitation (selling on the market, adaptation to current marketing needs). On the other hand, officially declaring something as cultural heritage or assigning a heritage significance to it can also increase its economic value.

Creation of economic value through cultural heritage is therefore always a balancing act with maintaining and preserving its heritage value. Many of the actors involved in cultural heritage and its valorisation do not have an economic function or interest at all, but are solely involved in conservation and preservation activities of cultural heritage for the local community and its future generations.

However, these functions are also necessary for cultural heritage to gain and generate economic value, and thus also contribute to the value creation process. It is through the careful conservation and maintenance of both tangible and intangible cultural heritage so that it can be deployed as a resource for regional and local sustainable development, and be an integral asset for communities all over Europe.

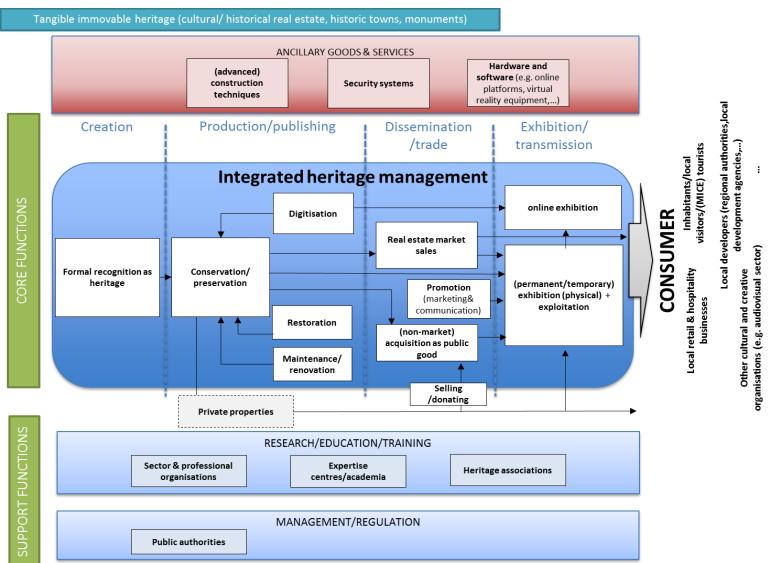
4.2.2 Stylised value chain mapping and description

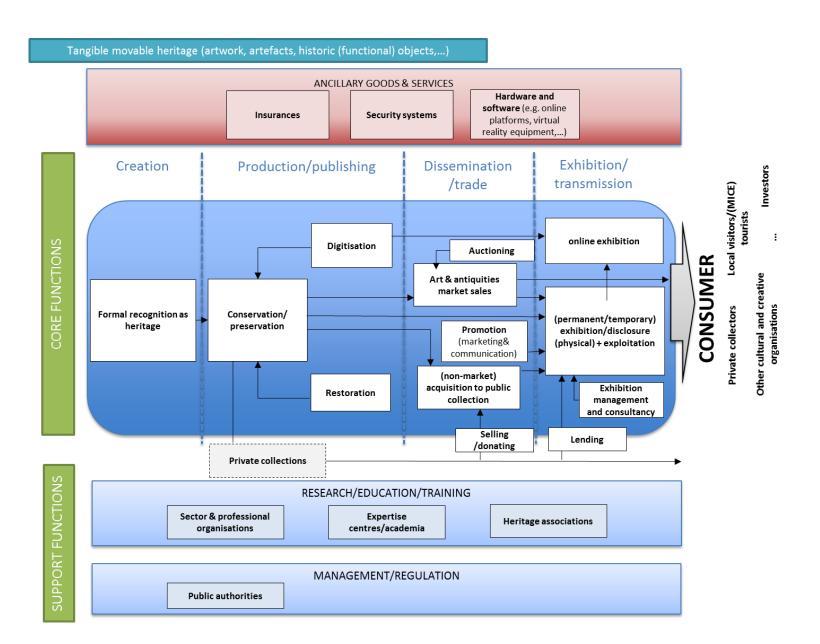
Figure 1 maps the value creation process for cultural heritage. Due to the large differences in types of cultural heritage (tangible/intangible, movable/immovable, landscapes,...) and the related industrial organisation of the value creation, we do not present one integrated value chain covering all types of cultural heritage. Rather we focus on specific types of cultural heritage and limit the presentation of the value chain specifically to a mapping of the value creation process for the following two types: tangible immovable cultural heritage on the one hand (a) and tangible movable cultural heritage on the other hand (b).

In the figure, the activities that contribute to value creation are presented along four main stages in the value chain: (1) Creation, (2) Production, (3) Dissemination/Trade and (4) Exhibition/Reception. It is important to note that this is a stylised value chain, which gives, for reasons of clarity, an abstract overview while the reality is more complex.

The following paragraphs describe the different activities, the main actors involved and the interrelations between those actors.

Figure 13: Stylised Value Chain for tangible immovable (a) and tangible movable (b) cultural heritage





Creation of cultural heritage: formal public recognition

The first component in the value creation process of cultural heritage is the formal recognition as heritage by a public authority, either on a local, national or international level. This often takes place through an institutionalized process of labelling or certification, supervised and controlled by public authorities in cooperation with local partners and/or interest groups representing the heritage subject. The most well-known example of such a label is the UNESCO World Heritage, and on all government levels analogous systems exist.

Such institutionalization puts the cultural heritage in a regulatory framework in terms of its protection and maintenance, which is also imposed on its owner or designated management authority. As the main interest of such institutionalization is that of (costly) conservation, and thus protection from external market pressures, this can have a negative effect on its economic value and hampers economic value creation. A heritage label limits the use of cultural heritage, and therefore the exploitation possibilities.

However, it is also due to these mechanisms that cultural heritage acquires (part of) its economic value at all. A formal recognition of its quality or importance adds symbolic value, to be used for the promotion and capitalisation of certain cultural products to attract visitors, stimulate export and support local development.

On the other hand, this institutionalisation mechanism does not cover all heritage. After all, the local communities themselves are the main representative of their own cultural heritage, especially the intangible, and are central in the informal determination of what this cultural heritage constitutes and how it could be deployed. Where traditionally central public authorities have a strong hold on cultural heritage, and have utilized it as an important instrument in nation-building, there is an increasing flexibility in the shaping and use of cultural heritage by different local actors and communities as part of their identity.

Production: conservation, restoration and maintenance

A second important group of actors in the value chain are the heritage conservators and conservation organisations. These actors are heavily involved in managing the protection/preservation and maintenance of cultural heritage, either in their ownership or in their formal custody. Depending on the type of cultural heritage, different organisations are involved:

- For tangible immovable cultural heritage, the responsibility for its conservation usually lies with the owner or exploiting proprietor, whether they are public institutions or private persons/companies. The management of monuments, archaeological sites or historic town centres requires different approaches, with different actors involved. With historic towns and real estate, the management revolves around maintaining the socio-cultural character and value of the cultural heritage while reconciling it with modern day security and comfort requirements for its continued use. On the other hand, an argument can be made that archaeological sites are actually best maintained and protected when they are not excavated.
 - Usually the artefacts found and corresponding archaeological report are transferred to specialised depots and sometimes museums where they are kept. Only a small part of immovable cultural heritage is publicly accessible (churches, monuments, museums and archaeological sites or public buildings).
- Movable tangible cultural heritage is collected, preserved, conserved, researched and disclosed to the public by organisations like archives, libraries and museums, with the management of heritage as one of their core tasks. However, also other public or private organisation are involved in this, such as local heritage associations, educational institutes (schools/universities), and companies and individuals with art collections. As heritage management is not the core task of these actors, they are commonly not considered as an integral part of the value chain, although it is widely recognised that they have a non-negligible role in the domain.

Apart from physical conservation, conservators have an important role in determining and shaping what cultural heritage is and managing public access to it, in a way that retains the integrity of the object, building or site, including its historical significance, context and aesthetic or visual aspects. Although their first interest is not economic and they are often considered as a public cost, conservators are central in assuring the continued valorisation and support of cultural heritage within ever-changing contexts and evolving public views and opinions. By presenting and re-interpreting cultural heritage in different contexts, it allows maximal accessibility and understanding by the public, and also its deployment as a resource for local development.

One step further along the same line of heritage management and valorisation are the actors that perform the physical work of maintaining and renovating tangible cultural heritage and/or restoring it to maintain its cultural value and/or function. Here there are also different subtypes within this group of actors:

- Restoration of movable artwork (or artistic components of immovable cultural heritage, in case of wall paintings and frescoes), is a specific niche within the artistic domain, with a large art history expert component to it. Specialised restoration experts are often directly employed by a museum or heritage institution.
- The physical renovation/maintenance of immovable cultural heritage is mostly done by specialized actors in the construction sector. Traditionally these actors have to be publicly certified to perform their work, according to strict rules and norms, creating a somewhat closed and non-evident niche within the construction sector. Nowadays, with the renewed dynamic in the cultural heritage sector, public actors also allow this niche to open up somewhat, generating increasing positive spill-overs to other parts of the construction sector, both economically and in terms of new competences and innovation.

Dissemination/trade and Exhibition/transmission

One of the domains where cultural heritage is economically exploited most evidently is the commercial market of arts and antiquities, where movable heritage objects or collections are traded. This is one of the mechanisms allowing certain heritage to be part of either personal collections or within companies/ organisations, next to family inheritance. Here auction houses play an important role as intermediary actor in the financial estimation and marketing of movable cultural heritage. Where immovable cultural heritage is concerned, the real estate market is the domain of trade, with realtors as intermediary function between the seller and the buyer. In most EU Member states, the selling of cultural heritage is subject to prior authorisation by the authority in charge of its protection and preservation. Export is also strictly regulated, including at EU level, in order to fight illicit trafficking⁹⁹.

The private commercial trade of cultural heritage exposes it directly to external market forces and pressures, and in this way, prioritises its economic value over its socio-cultural value. When in the hands of private organisations, collectors or traders, there might be less public assurance and control over its preservation for future generations. However, private owners of certified cultural heritage also have to comply with strict regulations when it comes to managing, handling and maintaining the heritage in question. Privately owned cultural heritage is often kept in custody of formal public heritage management organisations, which assure compliance with these regulations. Some private owners choose to make their collections publicly accessible as well, often in return for some tax advantages, either fully self-managed or outsourced to external parties.

Subsequently we come to arguably the most essential stage in the chain, namely making cultural heritage accessible to the general public. Here we discern three types of actors: museums or other exhibition facilities; heritage sites and monuments; and festivals and events. Museums and heritage sites present and provide information on tangible and intangible heritage content to the visiting public. Events and festivals can also be a good medium to present cultural heritage, including intangible cultural heritage. These events obviously inherently have a temporary character and often a large promotional function (heritage days, open monument days, museum night, etc.). They are often organized as outreach initiatives towards the public, outside the confines of the heritage institutions. Online collections, digital exhibitions, virtual tours of heritage sites and other are examples of digital means these actors use, increasingly, for making cultural heritage more widely accessible.

Although they are often not interested in profit maximisation, or do not even intend to make profit, these actors are obviously central in the value creation process for cultural heritage. Furthermore, they play a large role in the value chain of other, actually producing, creative sectors such as visual arts, and their position and relations to other actors are highly dynamic, certainly in light of digitalization (see further sections).

The **business model** of the different types is not fully the same, but there are important similarities. We briefly outline the revenue model of museums and similar organisations, partly based on a study of the economic impact of the Louvre (Greffe, 2009). This study considers, as many others, that museums constitute centres of activity, attracting revenue from outside its territory, which is then re-injected into the local economy, such as tourists' expenses, or expenses by companies who may make use of certain museum assets to procure products (art books) or services (museum spaces as backdrops for making films).

Ticketing and ancillary services (additional information on collections, audio-guides, etc.), which is the main part of their regular revenues. In some countries/regions, museums, or at least their regular collections, are free for the public, heavily relying on public subsidies, as they are considered to fulfil a public role and providing access to a public good. But they do provide additional paid services to complement and enhance the experience for the visitors.

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⁹⁹ http://ec.europa.eu/culture/policy/culture-policies/trafficking_en.htm

Temporary exhibitions are often charged to visitors in addition, this is logical as they entail extra costs. At the same time museums and others aim to and are able to attract substantial additional visitors through these temporary exhibitions, and use them to distinguish themselves from similar actors. Therefore, their competitive advantage/competitiveness is for a large part based on this offer, and the potential they have to gather significant temporary collections in one place.

The set-up and management of temporary exhibitions are increasingly outsourced to external freelance experts and consultancy and PR businesses. This is partly to obtain fresh insights and perspectives on the combination of their own collections with that of others, but often also opted as a resource-efficient way of organising and certainly promoting such exhibitions

Professional exhibition managers and consultants offer standardized packages and formats for this, suitable for different types of collections, museums and places. There is a limited number of large players specializing in this, with limited variety in their offer. This tends to limit the diversity and innovativeness of such exhibitions, at the costs of the independent role and position of the employed conservators and curators active within museums and on heritage sites on a daily basis. This latter group increasingly takes on a general management role, and is less directly involved in the actual content of exhibitions and their significance in terms of cultural heritage.

A third substantial branch of potential revenues for museum and others not to be underestimated is **merchandising and other exploitation** of their collections and infrastructure, including valorisation of the image rights of their collections through licensing. Museums often have their own shops, where they can sell reproductions of their own collections etc., but can also charge licensing fees for the re-production and (re-)use of their cultural assets by third actors, mostly in the publishing/PR and audiovisual sectors.

The study for the Louvre Museum mentions two clear strands. First of all, the collaboration with corporate partners, involving the co-publication of written works or the coproduction of audiovisual materials relating to its cultural assets, in partnership with publishing houses or production companies. The Louvre receives a financial compensation for the availability and utilization of the museum's cultural assets, as well as a share of the direct market revenues from the publication.

Secondly, the museum can make its infrastructure and specific spaces available for activities of third actors. This can mean renting out certain spaces/rooms for special events to companies or other organisations, or even award longer-term concessions or leasing agreements for certain museum infrastructure to organise commercial activities. For instance, catering concessions for on-site cafes and restaurants can be a quite lucrative line of income for a museum or heritage site (see section 3.2 for additional information).

Apart from this, the museum can gain additional revenue by granting permission to use the museum and its content as a location or scene for the production of films, videos and audiovisual materials. Both the filming on site itself and the presence of the museum and/or its content in the production can be charged.

Finally, we want to mention **alternative revenue streams** that museums are exploring to replace public subsidies, which are under pressure all over Europe. Private funding and/or sponsorship is an important part of this, where a certain brand or company connects its name to certain parts of the museum or its collection. Also crowdfunding can become a more structural source of income for museums. Again The Louvre has already set up 6 crowdfunding campaigns, the last one generating EUR 600,000 from more than 4,300 separate donations¹⁰⁰. Apart from the extra income, crowdfunding can stimulate public involvement and visibility of the museum, and even provide the opportunity for new artistic cooperative projects. In this way, crowdfunding can become an integrated instrument in museum fundraising strategies, also used as a leverage to attract additional larger scale private funding. However according to a recent EU study about crowdfunding for culture¹⁰¹, the use of crowdfunding in the cultural heritage sector in Europe is still very limited, despite the opportunities.

Finally, as previously described, the value creation process through the interaction of all these actors also results in a positive effect on tourism and hospitality, real estate prices and potentially on integrated sustainable development and/or economic regeneration of local communities, if it is used as a current socio-economic resource and asset.

Apart from using it as an educational remit and a means to attract visitors, which has always been viewed as a direct positive effect of heritage, cultural heritage is increasingly used to attract private investment and talent to stimulate growth and innovation in relevant sectors such as construction, cultural and creative industries and digital Cultural heritage is also often deployed in public and private initiatives to foster citizenship and democracy, to

 $^{{\}color{red}^{100}} \ \underline{\text{http://www.dkcrowdfunding.nl/\#!downloaden-rapport-musea-en-erfgoed/vk8ps}}$

¹⁰¹ IDEA Consult (2017), "Crowdfunding for culture", research report on behalf of the European Commission - DG EAC, forthcoming, www.crowdfunding4culture.eu

protect flora and fauna etc. However, we leave a further analysis of these types of impact of cultural heritage aside in this study, focusing rather on analysing the value creation process in the cultural heritage sector itself, through the interaction of different actors.

An integral role for public authorities

Public governance plays a central role in the cultural heritage sector. The public sector has an integral role throughout the whole value chain of cultural heritage. First and foremost, heritage in public hands has traditionally been seen as a **public good** and its preservation and management as a societal cost. Many of the actors involved in managing and exploiting cultural heritage are either full public sector organisations, or dependent on public funding and subsidies for their functioning.

Furthermore, the public sector also determines the general regulatory framework outlining the norms and obligations that heritage actors have to comply with, when something is formally declared as cultural heritage. Also, cultural heritage in private hands has to be managed in line with this framework. The development of cultural heritage as a sector and its economic valorisation is to a large extent dependent on public financial investment, as well as on the room and opportunities that the regulatory framework offers for this.

While general public regulation and governance of cultural heritage largely takes place on a national or even international level (UNESCO), local public actors are increasingly taking up a proactive role in the deployment of their cultural heritage as an asset and resource in sustainable economic local development. Many local authorities have a specific heritage policy/strategy, managed by a dedicated heritage cell or department to support local actors in valorising its cultural heritage assets to the benefit of local development.

Management and valorisation of cultural heritage is therefore a question of multi-level governance, in which different policy levels and approaches are confronted, carefully weighed, and together shape the playing field for the sector.

Facilitating or supporting actors

Besides the actors active in the core functions of the value chain and public authorities playing an integral role in the sector's development, there are a number of facilitating or supporting actors. These actors are not central in the value creation process, but play an important role in support, exploitation, professionalization, etc. As such, they facilitate and support the value creation process. We have identified the following "facilitators":

- Expertise and research centres: in assessing the actual cultural value of heritage, and placing it in the relevant historic context, research and academic experts have an important role.
- Sector and professional organisations: concerned with representing and improving the quality and professionalism of specific heritage subsectors.
- Heritage associations: often active on a local level, driven by volunteers, aiming to valorise specific local heritage and inform the local and wider public about it.
- Education and training: related is the development of this expertise and new competences of actors involved in the management of cultural heritage.
- Security: as cultural heritage is usually under a certain protection regime, the assurance of its physical security plays a role in this.
- Insurance: especially for movable tangible heritage, specialised insurances are important to cover the risks related to exhibitions, mobility of collections, etc.
- ICT: in light of digitisation of cultural heritage, ICT services (both software and hardware) are very important in making digitised heritage available and accessible in the right way (through 3DP tools, VR equipment, online platforms, etc.).

Last but not least, we should also include the public in the value chain. It is important to note here that cultural heritage is not a 'product' in the classic sense, which is bought and consumed passively by an audience. Local communities actually co-determine and co-develop their own cultural heritage, attributing meaning and value to is, and often actively engage in its preservation and further deployment. Digital and social media enable the direct involvement in these processes, and thus facilitate this engagement. As such, stronger community engagement is an important new trend in cultural heritage, which is partly re-enforced by the digital shift.

Towards an integrated heritage management model

The section above describes the actors that make up and shape the value creation process for cultural heritage, and also provide some insights into their interrelations. The value chain contains an important distinction between direct economic exploitation of cultural heritage through a direct revenue model, by actors such as museums and heritage sites (although they mainly have a public function in preserving and making cultural heritage accessible), and the deployment of cultural heritage as a resource for the tourism sector and moreover for overall local social and economic development. The final part of this distinction is indicative of the changing dynamic surrounding cultural heritage, and the way it is viewed as an integral economic asset for the whole of society instead of something from the past in need of protection and shelter from that society.

This evolution has significantly affected the way of coping with and managing cultural heritage, and has initiated a new integrated heritage management model. The role of heritage conservators and managers has changed enormously. Where it was traditionally a somewhat elitist function determining and maintaining cultural heritage in a top-down approach, they are now central in an ongoing long-term participatory process, involving the local community and other relevant economic actors in order to stimulate the right understanding and attain continuous meaning to the cultural heritage.

Instead of the pure protection of cultural heritage, and maintaining it into its original state, heritage management is currently much more focused on presenting it in such a way that it can be deployed as a resource for socio-economic development and improving quality of life. This means coordination with and between a variety of social and economic actors in a systematic and integrated approach (museums/heritage sites, construction, real estate, tourism, public and private local developers, etc.).

Obviously, these actors are working together on the management of cultural heritage within a certain tension field. Cultural heritage is subject to regulation and norms regarding their maintenance and use, and extending the use for more visitors will have implications on its monitoring and maintenance, and thus imply extra investment costs for the owner/proprietor.

Within this interplay between different actors, including the owner or proprietor, and within the public regulatory and normative framework, heritage managers and/or conservators work in dependence of or at least closely together with the heritage owner/proprietor. However, with the changing views on cultural heritage both roles are becoming increasingly intertwined. Conservators take on a steering role in the valorisation of cultural heritage, instead of focussing solely on its protection.

The changing interrelations and approaches in heritage management also contribute to new, much more open ways of presenting cultural heritage, involving the wider public more strongly. Museums or similar actors, for instance, make the restoration of certain objects accessible to the public, so they can themselves keep track of the process. This allows the objects to be presented from different perspectives, provides new information and involves the public in 'their' cultural heritage.

This is a trend in which there are a few frontrunners and many followers, and there are clearly still many heritage actors that have to get used to the changing views on their role and that of cultural heritage in general. However, the rise of new technologies and digitization, which are quickly gaining ground in the cultural heritage field, certainly push the new dynamics in the field further forward, facilitating the switch for these actors into their new roles.

Furthermore, the public regulatory framework regarding cultural heritage has to adapt to this, as it plays an important role in allowing new development and valorisation. The strict rules of what can and cannot be done with cultural heritage are under pressure, to allow more tailor-made management to create renewed socio-economic value, while at the same time respecting clear standards for its conservation/protection..

4.2.2.2 Impact of digitisation

Digitization of cultural heritage to support dissemination and preservation

As outlined in the introduction already, digitisation has a huge impact on the field of cultural heritage. All over Europe public and private structural or project-based initiatives are undertaken to digitize cultural heritage, increase its online availability, and/or study how it can be best presented through online digital platforms.

On a European level, the largely publicly funded Europeana project is the most well-known overarching initiative, a platform providing access to a huge number of heritage collections from European museums, libraries, archives, etc.¹⁰², and connecting the digital and the cultural heritage worlds. Numerous similar initiatives are taking place on local and national level, in the EU and internationally, in which a large number of heritage management institutions is involved, often supported by public authorities.

¹⁰² http://www.europeana.eu/portal/

The most well-known international initiative is the one by Google Arts and Culture Project¹⁰³ by the Google Cultural Institute. It provides an online environment for any internet user to discover and explore important heritage artefacts and collections from all over the world and is creating innovative links between technology and cultural heritage research.

Google's technicians and engineers closely cooperate with prestigious institutes such as the National Gallery in London, the Gemäldegalerie in Berlin, the Uffizi Gallery in Florence, the Palace of Versailles in this endeavour, also with the intent to develop a standard set of tools that institutions could use to digitize, manage and showcase their collections. By investing in open and high-quality accessibility of cultural heritage, Google contributes to its own business model, driven by availability of good online content.

Digitization represents a way of not only preserving cultural heritage in a 'real life' environment, but also in a virtual one. Documentary heritage can be stored digitally, so that it can easily and safely be maintained for future generations. This is particularly interesting for libraries and archives, as this is central to their role, and thus facilitates their functioning, apart from creating or saving more physical space. Moreover, online archives and libraries are available to anyone whenever he/she wants, thus hugely extending their potential reach and scope of functioning.

New services and forms of outreach towards the public

For tangible cultural heritage, digitisation in first the instance opens up new possibilities to increase access for a much wider audience, and presenting to it more in-depth context information. In this way, digitisation is substantially affecting the experience and also the public understanding of cultural heritage. Virtual tours, for instance, provide detailed insights into heritage sites without actually being onsite. However, it will still not substitute an actual visit.

The experience of an actual real-life visit to a heritage site can be enhanced by new digital techniques. Interactive tablets and personalised self-guided tours focusing on one subject or theme enable more user-centred solutions, moving away from the traditional one-visit-fits-all approach.

However, rapidly advancing technologies could change this vision. Virtual or augmented reality technologies (3D, holograms, etc.) could make digital/virtual experiences of cultural heritage very similar to physical visits, and thus enter into competition with physical visits to attract those visitors. On the other hand, these technologies open up a whole new field of new potentially commercial services for visitors to combine, complement and enhance their physical experience with a virtual one.

This 'virtual museum' also creates new possibilities for education and research purposes for heritage managers. Digitised cultural heritage allows for stronger involvement and direct interaction with both local communities and external visitors to create stronger connection to it. 3D visualisations of digital collections lend themselves especially well to communicating about cultural heritage in a more vivid way. It also helps conservators and researchers, as their work will require less physical handling of the artefact through this 3D technology.

Furthermore, heritage proprietors are also starting to use big data analysis to obtain insight in consumers' behaviour and preferences. They are thus able to adapt their offer and extend or complement their services based on these analyses. All this brings new demands for heritage professionals and managing organisations, to utilize and valorise this potential to the benefit of cultural heritage itself and its stakeholders.

Pressures on conservator's role

There is, however, a risk attached to the development of digitisation, putting pressure on the regular cultural heritage value chain, in particular on the position of conservators. Investments in digitisation by museums and similar institutions sometimes takes place at the cost of their regular conservation/preservation role of providing meaning to cultural heritage by presenting and explaining it within the right context.

There are studies that indicate that although substantial public and private investments are made in heritage management and digitisation, and added value of cultural heritage activities is increasing, employment in the sector is de-creasing. A study carried out by the French General Inspection of Cultural Affairs (L'apport de la culture à l'économie en France, 2013) shows that added value in the cultural heritage domain has risen by more than 16% between 1995 and 2011 in France, while the number of jobs in intermediate staff of cultural heritage institutions, in which conservators usually rank, dropped by about 10% between 2008-2010 alone. This is contrary to the overall trend in cultural sectors, where employment grew 2% over that period in France. So other cultural domains,

¹⁰³ https://www.google.com/culturalinstitute/beta/

specifically publishing, visual and performing arts, compensate for the development in cultural heritage with large employment increases.

This indicates that investment and progress in the cultural heritage sector, among others in digitisation, does not correspond to the human resources necessary for the valorisation of heritage both culturally and economically, which is ultimately at the detriment of the cultural heritage sector as a whole. If cultural heritage institutions solely focus on putting their collections on digital and online platforms, while neglecting the necessary contribution of conservators and curators, the (added) value of that heritage is substantially diminished. The added value of digitising cultural heritage content lays in the combination of ICT/digital competences and heritage expertise.

A study by the British Collections Trust (Striking the Balance, 2015) elaborates on this issue, making this distinction between the provision of search- and discovery-level access to very large datasets and the development of platforms which provide a highly 'curated' user experience. At the 'mass-access' end of this spectrum the study mentions platforms like Europeana, focusing on building up a critical mass of digital records to facilitate new research approaches such as text and data for humanities researchers to unlock connections across previously prohibitively large bodies of information. However, mounting evidence shows that the majority of public audiences are seeking specific, curated or 'thematic' experiences based on smaller quantities of higher-quality material, richly described and contextualised and presented through visually-attractive, mobile-optimised interfaces. Since the beginning of 2016, Europeana has reviewed its approach, placing more emphasis on high quality material and displaying curated cultural content on the Europeana Collections portal, in the form of thematic collections and exhibitions on shared pan-European cultural themes, to improve the user experience and engage both professionals and the public.¹⁰⁴

The Collections Trust uses the axis shown below to illustrate the difference between these approaches.

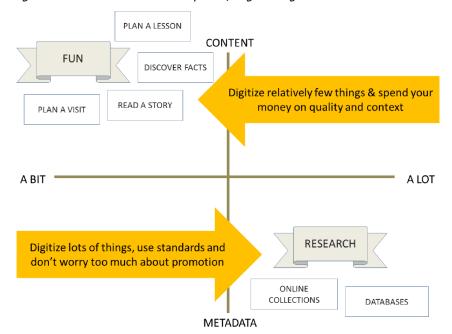


Figure 14: Distinction mass- and specific/targeted digitisation

Source: British Collections Trust, Striking the Balance (2015)

Management of distribution, reproduction and re-use increasingly complex

An even more important aspect to digitization is its impact on the distribution, reproduction and re-use of visual representations of cultural heritage. This firstly related to movable tangible cultural heritage (visual arts), but also other tangible cultural heritage types are affected by this. Its free online availability raises important issues regarding who has the commercial portrayal rights on cultural heritage, and their reproduction for commercial purposes. Complicating this issue is the fact that cultural heritage is traditionally considered a public good, also by a large part of the actors generating direct economic value from it such as museums. From that perspective its open accessibility should therefore not be considered commercially problematic.

¹⁰⁴ See Europeana's updated strategy http://strategy2020.europeana.eu/update/

These issues are not new to cultural heritage organisations, but are becoming increasingly complex, and also affect their position and functioning. This is most noticeable in the role of museums, which no longer operate in an exclusive position as before, and run the risk of losing control over their own collection to some extent. They therefore need to adapt their traditional function of exclusive gatekeeper to their cultural heritage, as other (commercial) actors step in to offer different types of experiences of their collections through new business models.

While digital availability of cultural heritage can be seen as a positive development from the 'public good' perspective, museums are still quite reluctant to digitize large parts of collections, due to a lack of financial and human resources to carry out digitization activities. A survey performed by the Network of European Museums (2015) shows that only 10% of them have digitized over 90% of their collections, and half of them have digitized less than a third of their collections.

The results of the study also indicate that this is often related to complicated copyright management issues, for which individual museums often do not have the expertise or the resources. The British Collections Trust study (2015) states there is a 'significant investment gap' between the aspiration either to promote open access or commercial reuse and the extent to which participating institutions are able to invest in capacity, infrastructure and promotion to realise these ambitions.

Museums are looking for the right balance between respecting the public character of cultural heritage and assuring its general accessibility, while optimally economically valorising their assets to survive in a context of public austerity. These rights do not only serve as a potential revenue stream, but also as a safeguard for the right to commercially reproduce and re-use museum collections both online and in printed versions. This can be considered as a new or strengthened component to the regulatory framework for the (mis)use and maintenance of the heritage in light of its protection from external pressures. Thus, it seems that in the digital age, the strict application of copyright laws can also be used to hide art work and cultural heritage instead of making them more widely available.

The increasing awareness and deployment of these rights by museums and other heritage proprietors is also one of the impeding factors for the advancement of the Google Art Project. Many museums accommodating and conserving the art works included in the project, refuse to grant permission to Google to freely include this art in its project, and demand that the parts of their collection within the Google project are blurred, even though Google is contractually barred from making profit from the project.

New business models for museums

Museum are increasingly aware that the digital age allows them to make a stronger link to the audiovisual and publishing/PR/advertising sectors and extend their revenue model through licensing. Digitization is costly and hard to manage for cultural heritage organisations, and often needs involvement and investment of private players. Museums and galleries are increasingly engaging in specific deals with such players, laying down the rights to use digital images and content against which monetary compensation is given.

In certain cases, museums also outsource the management of the commercialisation of their collections and related rights to private legal consultancy type firms, such as Bridgeman Images in the UK¹⁰⁵. Such firms are specialized in the distribution of cultural heritage images and make them accessible for reproduction within the correct framework of copyrights, turning this into a sustainable model of licensing revenues.

The British Collections Trust study (2015) delves deeper in such models used by museums, and found that in the specific case of image licensing, museums have tended to adopt one or more of 3 potential approaches:

- To develop specific picture licensing platforms or services within an individual museum's overall enterprise activity;
- To form a consortium or museum group and create jointly-owned picture licensing platforms or services;
- To work in partnership with an established commercial (online) picture library.

Based on this, the study makes a broad distinction between commercial activities where the institute delivers directly to the consumer, and those which are essentially predicated on business-to-business partnerships. The former involves the use of material by the institution itself to support the development of new products, merchandise, income-generating activities and services, while the latter concerns collaborative partnership with third parties in the publishing or manufacturing sector, who can generate added value along a commercial value chain.

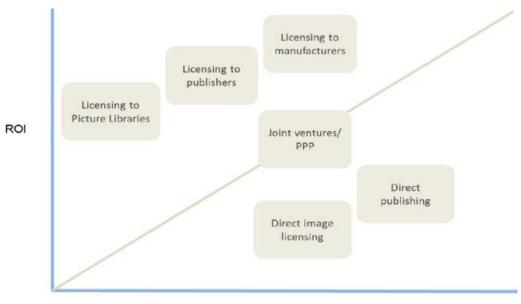
The figure below relates this distinction to costs and return on investment for the cultural heritage institutions. In the case of direct licensing and/or publishing, the upfront costs to the organisation are relatively high, since they not only need to furnish the content, but also invest in infrastructure, marketing, distribution and customer support.

¹⁰⁵ https://www.bridgemanimages.com/en-GB/about-bridgeman/uk

In the case of licensing digital content to third parties, the upfront costs of developing the content are still significant, but the institution is absolved of much of the associated costs.

In general terms, there appears an inversely proportional relationship between the degree of control over picture licensing activity (and therefore the costs of provision) and the overall ROI on the activity, as third parties have more commercial expertise and experience. However, it is likely that the net return to the institution will be significantly lower since they receive a lower share of the proceeds.

Figure 15: Cost-ROI balance for different types of commercial activities



COST TO THE ORGANISATION

Source: British Collections Trust, Striking the Balance (2015)

Furthermore, the study attempts to identify detailed information about the exact commercial return that museums realise from the publishing, licensing and distribution of their digital assets, but this has proven very difficult for the following reasons:

- Costs are commonly integrated into other museum budgets, such as staffing, IT and marketing, whereas commercial returns are generally assimilated into the overall returns of enterprise activity;
- Except in some highly specific cases, the financial return is generally quite low in relation to the costs;
- There is a reluctance to report these relatively low direct revenues, often attributable to a fear that management will perceive the activity as not worth the efforts;
- The financial return is highly variable and particularly sensitive to fluctuations in the external market.

Therefore, the study cannot make any general 'average' statements on anticipated financial return on licensing or other digital content-based activity, as these are dependent on highly variable and object-specific factors such as:

- The rarity, uniqueness or culturally 'iconic' status of the material depicted;
- The relevance of the material to specific vertical markets, themes or trends;
- The quality of the images themselves;
- ▶ The value of the brand associated with the material.

One commercial picture library included in the study quotes an indicative net return to a medium-sized museum with a collection of some 500-2000 'high-value' images in the region of EUR 2,000 to EUR 4,500 per year, while smaller scale museums can only anticipate maximum annual returns of EUR 1,250, depending on external market factors. On the other hand, the study includes an example of a museum's (self-run) image licensing activity generating a return of almost EUR 19,000 in one financial year, but with a cost of provision (salaries, associated running costs) of more than EUR 25,000.

There are a few examples of very successful image licensing models, indicating that there is a huge potential in this. The chart below from the report 'Democratising the Rijksmuseum Amsterdam' (2013) shows that in 2012

image licensing revenues at the museum increased significantly. However, the British Collections Trust study stresses that the generation of profit is often not the primary objective for the activity. In many cases, digitization is primarily intended to support optimal public access to the collections, and any revenues generated are used for re-investment in the museum's core activities. The argument throughout the study is that the return on investment from open access in terms of increased revenues through existing business channels, is greater than that from image licensing.

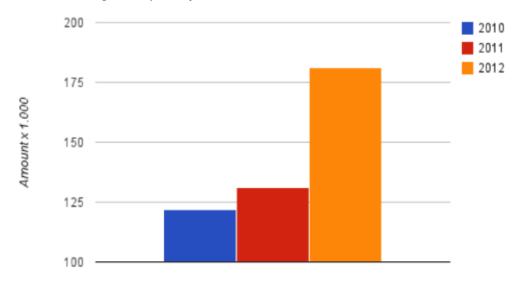


Figure 16: Revenues of image sale by the Rijksmuseum Amsterdam

Source: British Collections Trust, Striking the Balance (2015)

4.3 In-depth analysis of interrelations between actors

4.3.1 Market structure and bargaining power

When considering the market structure in cultural heritage, it is first of all important to understand the dominant role of public actors in this sector. Firstly, a substantial part of the market is shaped through public funding of actors throughout the value chain. According to the French General Inspection of Cultural Affairs study (2015), French public spending in the domain encompasses subsidies for restoration and maintenance work on historic buildings, various tax provisions and exemptions (built heritage, acquisitions of national treasures ...), funding of large national institutions operators (national museums, Grand Palais) and direct expenditures on state-owned monuments. The study estimates that this funding accounts for around 15% of the value added generated in cultural heritage in France.

Furthermore, as previously explained, the management, maintenance and exploitation of cultural heritage is heavily regulated. Also, actors often need to be formally approved or certified in their role by public authorities. These strict regulations in combination with the fact that many organisations in the cultural heritage value chain rely upon public support to be a recognized actor, creates relatively high entry barriers to the sector.

Moreover, cultural heritage 'suppliers' (museums etc.) often have an exclusive position to exploit the heritage in their possession. Each piece of cultural heritage is unique, only physically accessible through a visit at its location, and reproductions are considered less valuable. Even though that end of the cultural heritage value chain contains many different 'supplying' actors, one could argue that they all have a monopoly over specific pieces or aspects of cultural heritage (e.g. the Mona Lisa in the Louvre). This obviously affects - reduces - the relative competition among such actors, and the structure and depth of the market.

Museums distinguish themselves through their temporary exhibitions, but this remains within the regular framework of presenting and showcasing the permanent collection. Although there is a large amount of organisations active in managing and/or exploiting cultural heritage with diverse scales and thematic focus, with museums as prime example, they all more or less deploy the same model, and are generally of uniform nature and functioning. The choice for the consumer to experience all kinds of cultural heritage in various institutes, museums, etc. is thus high, but the variety in types of experiences is rather limited.

Public funding that museums and similar organisations receive allows them to artificially keep the prices for their services low, and adopt a certain price discrimination for certain categories of visitors (youth, students, elderly, etc.). UK museums are even able to perform in a free-of-charge situation for the public model. These are advantages that potential private players in the cultural heritage sector cannot rely upon.

New, innovative business models in cultural heritage are being developed. The digital revolution opens the door towards new types of distinctive services in museums and new forms of cultural heritage exploitation outside the physical realms of the museum, thus allowing new types of actors to enter the market, as described in previous sections.

4.3.2 Ownership structure of cultural heritage institutions

Most cultural heritage institutions in Europe are publicly owned, but a plethora of different definitions and levels of public/private ownership among different Member States exists. Public ownership ranges anywhere between state-owned institutions and local-, regional- federal-owned institutions including all establishments under their jurisdictions (e.g. public foundations, universities, churches, etc.). Private ownership on the other hand generally involves private associations or foundations, private companies, cooperative societies, and in some cases private persons/collectors/families.

For the museum sub-sector for instance, 65% of all European museums are publicly owned while the remaining 35% are privately owned (European Group on Museum Statistics, 2015¹⁰⁶). Certain countries such as Germany, the Netherlands, the UK and Denmark exhibit particularly high levels of private ownership of museums, ranging between 45% for Germany and going as high as 92% for the Netherlands. However, for the sake of financial sustainability of these institutions given their public, cultural and touristic value, many of these private museums continue to receive public funding via a system of promotions and/or subsidies.

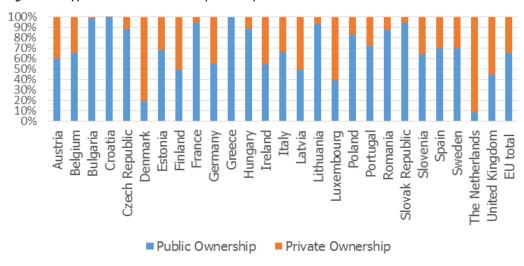


Figure 17: Type of Museum Ownership in Europe

Sources: EGMUS and NE-MO, 2015

Most publicly-owned establishments are commonly also publicly managed and operated. Yet, in the context of cuts in public funding as well as in the interests of overall efficiency gains, the ownership and management of cultural heritage institutions are increasingly being "privatized". In such cases, the management and operations are outsourced to private entities (which can take the form of a non-profit or for-profit organisation, community interest company, etc.), while the public institutions retain the ownership of the collections and/or the building. Early examples include the Dutch "privatization" wave of national museums from 1994 onwards to overcome bureaucratic deadlocks in museums (Engelsman, 2006)¹⁰⁷, while more recent examples are in line with funding cuts like in the

¹⁰⁶ The data come mainly from European Group on Museum Statistics and has been completed/updated with Network of European Museum Organisations data, especially when the EGMUS data were unavailable and/or outdated.

¹⁰⁷ Engelsman, S. (2006). Privatization of the museums in the Netherlands: Twelve years later, Museum International, 232 (58:4)

UK. For instance, the National Gallery in London has recently privatized some in-house visitor services using the private company "Securitas", which is mainly active in the security services 108.

As pressure on cultural heritage institutions to generate their own income sources is growing, cultural heritage institutions are increasingly hosting both non-profit and for-profit entities within their single structure in order to reconcile their public mission with revenue diversification, especially in countries with higher levels of private ownership like the UK and the Netherlands. The rationale behind this dual structure is to generate some additional revenues from commercial ancillary services such as merchandising, retailing, publishing and restauration within the for-profit legal entity and channel these annual profits to the non-profit core museum entity. The commercial activities of Tate Group are operated in the same logic by Tate Enterprises Ltd., a wholly owned subsidiary of Tate¹⁰⁹.

The risk of this practice is the for-profit logic becoming dominant over the non-profit logic. For instance, new employees could be hired on different and often less beneficial terms by the for-profit division of the cultural operator than their non-profit counterparts to cut back on costs, as is the case with V&A Enterprises of the Victoria and Albert Museum in London. Another consequence is the rise in the private (collector) museums filling a gap in a region's art and cultural offerings, compensating for the decrease in public funding, particularly in countries with limited institutional infrastructures (Larry's List's Private Museum Report, 2016)¹¹⁰. The international museum network of the Guggenheim Foundation (Venice, Bilbao, Berlin), owned by the Guggenheim family is one of the earliest and most established private institutes.

4.3.3 Revenue sharing

The study carried out by the French General Inspection of Cultural Affairs (2015) provides interesting insights into the revenue distribution within the value chain of cultural heritage, also compared to other cultural sectors. Throughout the whole cultural sector, it makes a general distinction between added value generated by specific and indirect cultural activities. For cultural heritage, the direct activities refer to the management, conservation and exploitation of heritage sites and museums; the indirect activities mainly to the physical restoration and maintenance of cultural heritage.

The graph below shows that cultural heritage (patrimoine) is one of the cultural subsectors with the highest created added value, a total of EUR 8.1 billion. It also reveals that the largest share of this added value can be attributed to those indirect cultural activities (EUR 5.6 billion). The direct cultural heritage activities only account for EUR 2.5 billion, among the lowest of all cultural sectors. Although it is a rather crude distinction, this shows that a substantial part of the revenues in cultural heritage is not captured by the actors on the conservation and exploitation side of the cultural heritage value chain (conservation institutes, museum, heritage sites, etc.), but rather in other sectors.

 $[\]frac{108}{\text{https://www.nationalgallery.org.uk/about-us/press-and-media/press-releases/the-national-gallery-announces-partnership-with-securitas}$

http://www.tate.org.uk/about/who-we-are/tate-structure-and-staff/tate-enterprises

http://artradarjournal.com/2016/02/17/the-rise-of-the-private-art-museum-larrys-list-report/

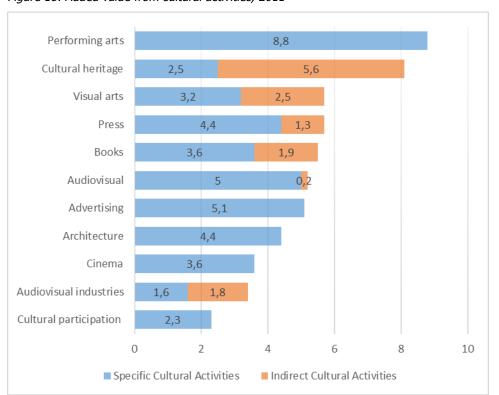


Figure 18: Added value from cultural activities, 2011

Source : Inspection Générale des Affaires Culturelles (2013), L'apport de la culture à l'économie en France

Previous sections already show that a growing share of the revenues is coming from the management of copyrights and implementation of licensing models for digital content. This is further indicative of the changing character and functioning of heritage management and conservation organisations such as museums. Such organisations have a role in bringing the heritage product to the wider audience as a customer, but are not acting as regular economic players in their own nature. In the context of austerity, museums will certainly adapt their business models, assisted by the opportunities provided by digitization, but a certain rate of public support will remain necessary to sustain their functioning as supply side actor in the economic value chain for cultural heritage.

5.1 Introduction to the Artistic crafts sector: definition and importance in the EU economy

Definition and scope

According to the definition adopted by UNESCO, *Artisanal products are those produced by artisans, either completely by hand, or with the help of hand-tools or even mechanical means, as long as the direct manual contribution of the artisan remains the most substantial component of the finished product. These are produced without restriction in terms of quantity and using raw materials from sustainable resources. The special nature of artisanal products (...) can be: utilitarian, aesthetic, artistic, creative, culturally attached, decorative, functional, traditional, religiously and socially symbolic and significant.*¹¹¹ Crafts and visual arts have a mutually supportive and interdependent relationship, though a distinction can be made on the function of the products ("useful art" and "decorative art"). Artisanal products are classified under broad divisions, primarily based on the materials used. The six main categories of this classification are: basket/wicker/vegetable fibre-work, leather, metal, pottery, textiles and wood. Complementary categories could correspond to various additional animal/mineral/vegetable materials embracing those other materials in craft production that are either specific to a given country, region or area, or rare, or difficult to work, such as: stone, glass, ivory, bone, horn, shell, sea shells, mother-of-pearl, etc. Local anchorage strongly contributes to the value of crafts. Heritage (intangible and tangible) as well as natural environments influence the materials, processes and values attached to the production of crafts.

Importance for the EU economy

Craft is a recognised sector of the cultural and creative industries composed chiefly by micro and small enterprises; yet, national administrations such as the British Department for Culture, Media and Sport argue that craft businesses are too small to be identified in business survey data and thus it is difficult to account for their relevance on the national Gross Value Added. As a result, artistic crafts are always blended in the larger sector of visual arts in official statistics. Providing detailed data on the sector and make comparison with other creative sectors or other countries is therefore highly challenging. In the EY study "Creating Growth. Measuring Cultural and Creative Markets in the EU" (2014) crafts fall under the category of 'visual arts', being defined as "applied arts", with a turnover of EUR 46,337 million in 2011¹¹³ and 793,288 people employed. As outlined in other recent studies, there is no reliable solution to single out artistic crafts at EU (and many other countries) level yet.¹¹⁴

More detailed information can be retrieved from some sector-specific national studies. According to Molina et al. (2014), in Spain crafts represents around 2.6% of industrial gross domestic product (GDP) and 0.4% of national GDP ¹¹⁵, equal to EUR 4,000 million; while in the UK it is estimated that the craft industries turnover amounts to EUR 3,398 million annually. ¹¹⁶ In Germany, in 2011, there were around 21,531 craft enterprises for a total turnover of EUR 4,799 million ¹¹⁷. To make a direct comparison with non-EU markets, another study by Ernst and Young (2015) uses the same methodology; the study shows that in the US the visual arts and crafts sector in 2013 has a turnover equal to USD 391,000 million with 6,732,000 people employed ¹¹⁸ and USD 191,500 million with 3,284,000

¹¹¹ UNESCO. (1997). *Final Report of the International Symposium* on "Crafts and the international market: trade and customs codification" (Manila, Philippines - 6-8 October 1997)

¹¹² ITC-International Trade Centre and WIPO-World Intellectual Property Organisation. (2003), *Marketing crafts and visual arts: the role of intellectual property. A practical guide.* Geneva: ITC and WIPO

 $^{^{113}}$ Ernst&Young. (2014). Creating growth. Measuring cultural and creative markets in the EU. Paris: EY

¹¹⁴ KEA European Affairs (2015) Feasibility study on data collection and analysis in the cultural and creative sectors in the EU. Study for the European Commission, DG Education and Culture. Brussels, 2015.

Molina, A., Aranda, E., Martín, V., Santos, J. 2014. Opportunities for craft consumption: an analysis of the quality perceived by consumers in International Journal of Globalisation and small Business, Vol; 6, No. 1

¹¹⁶ Crafts Council, Creative Scotland Arts Council of Wales and Craft Northern Ireland. (2012). *Craft in an Age of Change.* London: BOP Consulting

¹¹⁷ Institute for Small Business Economics, University of Göttingen, 2011. "The Craft and Trade Sector in the Culture and Creative Industries"

¹¹⁸ Ernst&Young (2014), Creating Growth. Measuring Cultural and Creative Markets in the EU. A report prepared for GESAC, 2014.

employees in Asia. 119 Another issue when defining and searching for data about the sector is that artisans often work for other industries, such as fashion, jewellery or design; hence, even though their skills and the actual tasks they perform are those of independent artisans, they do not appear in the statistics for crafts and are rather included as employees of other industries.

Beyond the general economic characteristics of the sector and the challenges to find accurate data, it should also be noted that the craft value chain is a particularly short one, where a single individual or MSME (Micro, Small or Medium Enterprise) may be involved throughout all steps of the value chain - from creation to the actual sale of goods.

5.1 Creative value chain mapping and description

5.1.1 Economic characteristics of the artistic crafts business and impact on the global value chain structure

For the purpose of this study it is important to make a clear distinction between two possible scenarios.

The first is the one-off production, in which the production is closely linked to the creation and the artisan plays both roles: that of creator and of producer (and sometimes also of distributor). The second scenario is that of industrial craft, or mass production; in this case it is likely that the person introducing the object into the market (the trader) is not the same person who made it (the producer). In this study, the scope of analysis is limited to original artistic and cultural products. In this case the **value chain starts, finishes and revolves around the artisan**, who is the protagonist and often the only player of the sector; industrial crafts therefore will not be included.

UNESCO attempted to adopt a standard definition based on the transformation of raw materials by hand, but each country has its own understanding of "crafts"; this is often linked to the role that the sector has played throughout the history of the country. For example in the UK, Ireland and Scandinavian countries, craft is synonym for folklore; thus these are objects with a high cultural, social or religious value, which - if taken out of context- lose their meaning. On the other hand in Germany, Italy, Austria, Denmark, France, Luxemburg, Belgium, Spain and Portugal, crafts have a strong tradition of recognition and crafters are divided into artisan and Master of Arts (maestro d'arte, maître d'art)¹²⁰. The main difference between the two lies in the degree of "excellence", thus the reputation they obtain thanks to their skills, which also influences the selling price of their products.

In most of the abovementioned countries, there is also a structural difference that affects the perception of the two profiles: their training. An artisan is, de facto, considered a maker; he/she can either produce objects of cultural and social values or very luxury goods, but he/she does not design them; the crafter often learns the crafting techniques as an apprentice in another artisan's atelier or by attending courses. While the artisan is considered a maker, whose strength lays in the technical skills, the Master of Arts is believed to be an artist with both technical skills and creative flairs; he/she is trained in specialist schools often pursuing a degree.

Artistic crafts are unique products and there is a relatively low "degree of substitutability" between the original art work and digitised copies or industrially-produced replicates. Consumers' utility and willingness to pay will therefore widely differ between those two "versions" of the good. This implies that the overall structure of the value chain has not yet been as affected by the digital shift as some other cultural and creative sectors (where the degree of substitutability between the "original" and the "digitised copy" is much higher). The uniqueness of artistic crafts and the importance of the handcrafting process also entail that industrialised mass-production of artistic crafts remains limited.

¹¹⁹ Ernst&Young (2015). Cultural Times. The First Global Map of Cultural and Creative Industries. Paris: EY

¹²⁰ Molina, A., Aranda, E., Martín, V., Santos, J. 2014. Opportunities for craft consumption: an analysis of the quality perceived by consumers in International Journal of Globalisation and small Business, Vol; 6, No. 1

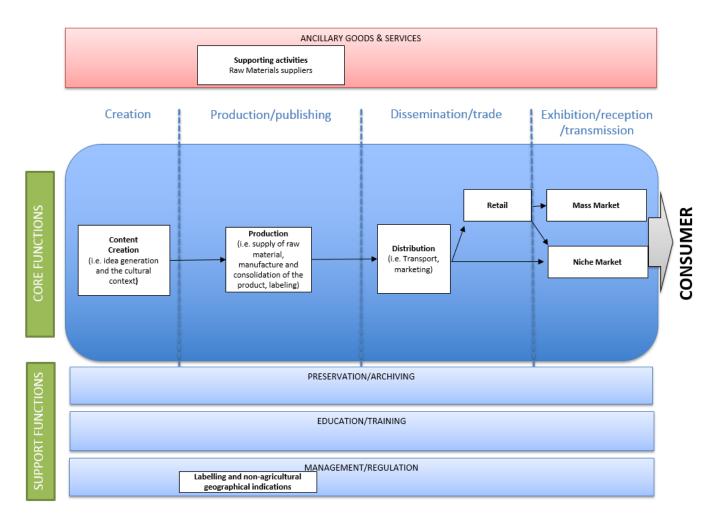
5.1.2 Stylised value chain mapping and description

Both traditional and artistic crafts undoubtedly have their roots in the cultural and environmental surrounding context. In 2009, UNESCO officially recognised craft as bearing cultural significance: "for preserving diversity of traditions and know-how, for encouraging creation, for local economies, trade and tourism".¹²¹ The craft value chain is linear and it is composed of the following phases: **creation**, **production**, **dissemination** and **transmission**.

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¹²¹ UNESCO. (1997). *Final Report of the International Symposium* on "Crafts and the international market: trade and customs codification" (Manila, Philippines - 6-8 October 1997)

Figure 19: Stylised Value Chain for Artistic Crafts



5.1.2.1 Description of the actors in the value chain and their role in value creation

The main actor, and frequently sole protagonist, is the artisan, who takes care of each phase of the chain; however - even though crafters tend to create and produce by themselves in their own atelier, they often gather in guild-type organisations or associations. Even if these organisations do not intervene directly in the value chain, they provide fundamental support at each phase; their role mainly consists in supporting very micro industries against a market predominantly controlled by large corporations.

Creation

As mentioned above, the raison d'être of craft is the passing on of specific cultural expressions pertaining to the people or to the territory from which the craft product originates; de facto, there wouldn't be any creation without the transmission of certain technical skills and cultural values. The **cultural context** is the input for the process of idea generation, the place where the skills needed to start the production and also the forum of creativity can be found. Certainly, the true value of artisanal products is their constant reference to creative expression and to the culture and heritage of an individual craftsperson or group of craftspeople who have unique skills.

The creation phase is not necessarily implicit in the work of a crafter; in many situations, in fact, the artisan is simply the person that makes products manually without being in charge of the design. This is the case when crafters work under commission or are employed by other industries for their skills.

Crafters/artisans are the main actors involved in the creation process. Artisans generally perceive themselves as business people because their income stems from the number of objects they sell. Their social status varies and it mainly depends on the regional cultural background: in Japan, artisans can be awarded the title of 'National Living Treasure' as a mark of respect for their skills. Nevertheless, even though many industrialised countries are rehabilitating the social status of craftspeople, there is an overall image deficit of the profession as it can be too closely associated to 'activities of the past', 23 despite its actual contemporary dimensions. In this phase associations, universities and schools also have a fundamental role as they are responsible for the transmission of craft skills by providing dedicated training.

Production

Craft production is the phase where the object is actually being produced; it usually occurs either by hand or with tools allowing strong customisation by the creator, one article at the time. This process is important for artistic crafts as skills are generally focused on specific styles or mediums such as wood, stone or leather, depending on the geographical context. The **production** is also closely intertwined with the **context** as the technical skills employed and materials used for production are the reflection of the surrounding scenario. According to Alberto Cavalli, the General Director of Fondazione Cologni, this is the phase where value is created, as it is the phase in which the artisan can express his/herself by making. Overall, the production phase is composed of 3 main moments: **the supply of raw material, the manufacture** and **the consolidation of the product** just before the distribution. The artisan is again the only actor involved at this stage; he/she is the one to possess the skills to creatively transform the raw material into the final product.

In the process of production the crafter often becomes anonymous since the focus is not on "authorship" but on the product itself; yet, if the product reaches a high degree of excellence, the name of the artisan will function as an instrument of brand positioning. With the exception of rural and underdeveloped areas, artisans no longer procure themselves **raw material** from natural sources, but rather buy from specialised shops/general do-it-yourself (DIY) retails. Once artisans have acquired the raw materials, the proper **manufacture** begins, which will

¹²² Friel M. e W, Santagata (2008) Material Cultural Heritage: From Traditional Handicrafts to Soft Industrial Design in The cultural economy: Cultures and Globalisation Series Eds H Anheier, Y R Isar (Sage, London)

¹²³ A. Klamer, (2013) Herwaardering Ambachtscultuur Hoofdzaak, [Main Cause: Revalidation of Crafts Cultures]. Stichting Economie en Cultuur. Erasmus Rotterdam.

¹²⁴ ITC-International Trade Centre and WIPO-World Intellectual Property Organisation. (2003), Marketing crafts and visual arts: the role of intellectual property. A practical guide. Geneva: ITC and WIPO

¹²⁵ USAID-United States Agency for International Development. (2006). *Haitian handicraft value chain analysis.* Washington: USAID

lead to the production of the object; as said earlier, this phase is generally accomplished by the artisan individually and by hand.

The last part of the production stage ("consolidation") includes the actions taken by the artisan just before presenting the product on the market; in general the product is considered finalised after it has been **labelled and packaged**, sometimes with a specific certification so as to be recognised as an original craft product.¹²⁶

Dissemination/trade

The **dissemination** function refers to the process of **marketing** and **distribution** of the product on different market places. Craft products are regarded as cultural goods, but at the same time artisans produce them to make a living. The market penetration is the most challenging phase of the value chain, because the market is dominated by cheaper mass-products and artistic crafts are not basic needs for consumers.

Crafts can be found in street markets, retails of different kinds, tourism-related venues, fairs and galleries. ¹²⁷ Unless products are sold by artisans in their own ateliers (and in this case the value chain would be constituted by only one actor that takes care of each phase of the chain), the market access is managed by intermediaries such as fairs, markets, venues, retailers and galleries; normally it is up to the crafter to propose his/her works to fairs or to retailers being directly involved with the sale.

Galleries typically provide a space for exhibiting art works and operate direct sales on site (sometimes as well in art fairs). Most galleries, however, do not deal with crafts and focus on other types of artistic works. They may sell exclusively specific types of artworks (style, period, local crafts, and process). Contrary to the visual arts sector (see chapter on visual arts), promotion galleries are not active in the crafts sector.

In the case of renowned products or more artistic crafts, the sale is brokered by specialised agents. There are two types of intermediaries active at this stage: the sales representative and the agent:

- The sales representative works for artisans that make multiple articles and want to sell in shops; he/she normally gets a share on the sales according to the number of objects sold.
- The agent represents the maker and often becomes a mentor helping the artist in making market decisions; he/she practically decides which goods make their way to the market, becoming also responsible for shaping the market through his/her selection, in a similar role to a curator for other sectors. The role of the agent varies greatly among the cultural sectors; there are not many agents representing crafters as there are a very limited number of galleries that accept or are devoted to applied arts (compared to promotion galleries for visual arts); this certainly represents a big obstacle in the development of the sector and its recognition within the visual art sector.

Another very important intermediary that supports artisans in accessing the market is associations and NGOs. By gathering together many small entrepreneurs, they manage to be a stronger voice in the market; they operate as support for strategic marketing decisions, as legal aid and also as shop windows for ateliers both in fairs, through their magazines and online.

At the international symposium on "crafts and the international market: trade and custom codification" (1997), UNESCO also highlighted the role of museums and cultural institutions as fundamental tools for promoting the knowledge and consumption of artistic crafts: giving visibility to certain styles of arts and craft products, which are often relegated to small towns or ethnographic museums, can certainly facilitate their sale. Beyond the promotional aspect, they often operate a small retail space selling crafts directly. Some museums may also offer tools, training/apprenticeships or incubation programmes to support artisans and safeguard local know-how¹²⁹.

Online retail and e-commerce is a key channel for dissemination. New specialised platforms have emerged (such as Etsy or Folksy) with a focus on crafts, as well as fashion and design goods. Many artisans are active on these platforms and/or also have their own website. However, artisans point out that these require a significant workload

¹²⁶ USAID-United States Agency for International Development. (2006). *Haitian handicraft value chain analysis.* Washington: USAID

¹²⁷ Commonwealth Secretariat, ITC-International Trade Centre and UNESCO. (2001). *International Craft Trade Fair. A Practical Guide*. London: Commonwealth Secretariat, Geneva: ITC and Paris: UNESCO

¹²⁸ UNESCO. (1997). *Final Report of the International Symposium* on "Crafts and the international market: trade and customs codification" (Manila, Philippines - 6-8 October 1997)

¹²⁹ See for example the museum-led developments of contemporary applications of heritage crafts in the Limousin region around tapestry and woven art: http://www.cultureforcitiesandregions.eu/culture/resources/Case-study-Limousin-International-hub-for-tapestry-and-woven-art-WSWE-A3CKDJ

to promote and advertise their work efficiently. ¹³⁰ As observed in other cultural and creative sectors, the role and involvement of creators in promotional and marketing activities is growing very fast, whereas they cannot afford dedicated staff to take care of such activities.

Transmission/reception

The delivery phase refers to the process by which the audience accesses the production; the consumer is the end user of the manufactured product and the one that has the power to affect the production with his/her behaviour. As mentioned above, there are different end market channels, each of which attract specific consumer categories. The social and economic indicators of consumers' categories include: age, gender, race, religion, income, profession, interests, lifestyle, political and geographical location. As craft production is a customer-centred business, knowing whom the product targets is instrumental to achieve better business performances.

Craft market places can be divided into two main categories:

- the mass market, where crafts are bought without much regard for authorship and are valued by price and utility
- the niche market, a market sought by consumers that have a structured knowledge of the product and are willing to spend more on the basis of this knowledge. 132 The niche market is not only represented by artisans' ateliers, but also by luxury shops, which sell certain artisanal products such as food, fashion, jewellery and design.

In most cases the direct sale seems to be the most favoured option for consumers; however, the ways of accessing goods are different and they reflect the specificity of the craft products themselves. In the case of heritage craft, the relation established between the artisan and the consumer is both cultural and social. In the case of traditional craft, the consumer buys the object to be identified with a specific social group or to be connected to a place, as in the case of tourist; this means that artisan is not just selling the object but also its legacy. It is very important that the artisan fulfils this last passage of ownership by instructing the customer about the biography, the technicalities and the values of the objects to allow him/her to consume the object creatively. To more expensive pieces of crafts and artistic creations, consumers are less interested in the cultural values associated to them and rather seek the uniqueness of the piece. This kind of consumption is emerging more prominently in complex societies, where there is a growing need for singularisation. 134

5.1.2.2 The impact of digitisation

At the core of the craft sector lies the relationship between the artisan and the material that she/he shapes through refined (and often highly time-consuming) work processes; this might be the reason why the digital shift has only partially affected this industry so far. Nevertheless, it has already driven a readjustment of a very traditional and localised sector towards new channels of dissemination and production, which are the two most influenced functions of the value chain.

De facto, the implementation of digital technology across artistic crafts raises questions as it puts at risk the humanobject relationship and its strong customisation dimension, which is a core aspect of the creation and production phase: the value of artistic crafts partly lie in the uniqueness of the product created. In a way, the digital revolution can be understood as a creative opportunity, as a new source from which artisans can extract raw materials and use them according to their individual judgment. In the creation phase, technology gives the possibility to explore unlimited combinations. However, according to the Craft Council, only 30% of the artisans use digital tools to design an object or to make a preparatory study for the final product in the UK; this encompasses the use of design

¹³¹ Commonwealth Secretariat, ITC-International Trade Centre and UNESCO. (2001). *International Craft Trade Fair. A Practical Guide*. London: Commonwealth Secretariat, Geneva: ITC and Paris: UNESCO

¹³⁰ Interviews

¹³² Howkins, J., 2001. The creative economy. How people make money from ideas. Penguin

¹³³ Commonwealth Secretariat, ITC-International Trade Centre and UNESCO. (2001). International Craft Trade Fair. A Practical Guide. London: Commonwealth Secretariat, Geneva: ITC and Paris: UNESCO

¹³⁴ Kopytoff, I. (1986) 'The Cultural Biography of Things: Commoditization as Process', in A. Appadurai (ed.) The Social Life of Things: Commodities in Cultural Perspective

software, blueprints to create patterns to apply to the final object and also experiments made with 3D printing. ¹³⁵ The combined use of digital tools and artistic crafts has not fully taken off, despite the above-mentioned opportunities.

According to the same study, only 19% of the artisans in the study use digital tools for production; even though this percentage only illustrates the situation of the UK, it highlights that even if digital tools are widely available in the country, many makers do not embrace them. The Craft Council argues that the hesitation of adopting digital machineries lays in the necessity of having a direct contact with the materiality of the product. Alberto Cavalli, the director of Fondazione Cologni supported this statement by saying "if it does not erode the manual skills, the introduction of digital tools in the production can bring new perspectives". A more practical reason explaining why digital tools have not found a way into artisans' production is also related to a generational issue. Most crafters are currently self-taught mid-career operators and non-digital natives; this can suggest that digital tools may be more widely used with the next generation of artisans, together with a higher rate of digital literacy¹³⁶. This trend may lead to a gradual shift in the definitions of crafts, as 'materiality' (the direct interaction between the creator and the materials used) and the handmade process are key elements of the UNESCO definition. ¹³⁷ Some crafters embrace the incorporation of digital tools such as computer solid modelling or layer manufacturing techniques and call for a redefinition of crafts based on skills and know-how rather than the materials and tools used. Such forms of craftsmanship are closely linked to the makers' movement due to a similar focus on (digitally-enhanced) processes and skills. ¹³⁸

In the dissemination function of the value chain, the digital shift has been supporting the development of the sector without facing any controversies. The use of digital tools in that stage enables to develop crafters' business, attract new customers and bring to the light certain skills and stories that often remain hidden. This can happen through:

- digital media and especially social media, which are becoming fundamental tools in the promotion and marketing of products;
- artisans' personal web pages to communicate with potential customers (as well as catalogues and brochures); in these pages they tell the story of the objects, they narrate how they are made and what their cultural background is through promotional videos as well as mobile technologies (QR codes and dedicated apps). 139

In terms of distribution and sales, websites are the digital revolution for the craft industry. A study prepared by the Craft Council shows that across 2,000 craftsmen interviewed in 2013, 35.9% directly sell from their own studios, 17.6% through other retailers, 30.3% through their own website and around 13% through third party websites. ¹⁴⁰ Commissioning and studio-selling are still perceived as the most important market places; only 7% of the respondents consider the web as the most important sales channel.

5.1.3 Value monetisation and evolution of prices

There are two different scenarios in which value is created in the craft sector: the first is through buying a craft product either sold in the artisan's atelier or by other retailers, and the second is when the cultural assets and the technical skills are made visible and comprehensible to the final consumer.

The first market scenario is represented by a linear (and very short) value chain, composed of 4 phases: creation, production, dissemination and delivery. The artisan is the main actor of each phase and as such he/she is the real added value to the final product through the performance of certain skills. He/she sets the price of the product according to 1) the time spent and 2) the cost of the raw material used. Nevertheless, the consumers' response, appreciation and the overall market demand contribute to the price setting of craft objects. Although in recent years

¹³⁷ RICHES (2016) Towards a Craft Revival: Recalibrating Social, Cultural, Economic and Technological Dynamics. European Policy Brief prepared by the FP7 project "Renewal, Innovation & Change: Heritage and European Society". April 2016.

¹³⁵ Crafts Council, Creative Scotland Arts Council of Wales and Craft Northern Ireland. (2012). Craft in an Age of Change. London: BOP Consulting

¹³⁶ Ibid

¹³⁸ See for example Marti Woolley and Amalia Sabiescu (2015) Digital Craft, traditional and new skills. RICHES project, 14 May 2015. They distinguish between the enhancing of digital technologies that contribute to 1) the creative process (e.g. redesign of historical, culturally familiar objects using digital manufacturing and materials) and 2) the making process (through fab labs tools such as laser-cutting).

¹³⁹ University of Falmouth. (2013) "In the frame project". http://intheframe.falmouth.ac.uk/about/

¹⁴⁰ Crafts Council, Creative Scotland Arts Council of Wales and Craft Northern Ireland. (2012). *Craft in an Age of Change.* London: BOP Consulting

there has been an increased appreciation of the artisanal skills value, this does not necessarily have a resonance on the crafts market prices. There is, in fact, a great diversity in the price of craft products, which is often polarised as either very cheap or very expensive; it also depends on the type of material used (especially in jewellery). The two opposite ends are mainly represented by two kinds of crafts products, as discussed above: heritage craft and creative craft.

Heritage craft is cheaper than creative craft pieces; and it is generally bought by locals and by tourists as souvenirs. As a real cultural object, the heritage craft is quite difficult to monetise as its value depends on the cultural significance attached to it; this limited and very localised demand also does not favour any price leverage. They are often little objects made of affordable materials, like rings, bracelets, pendants, dolls, small decorative objects, paper and textile works. Their prices range between a couple of euros and a few hundred euros. In creative crafts, artisans employ their skills to make totally unique objects. They can have a very low market price at entry level, but as their reputation increases, so does the price of their products. When they reach the status of "excellence", they actually enter the price range of other luxury products.

In a second market scenario, crafters are either commissioned or employed by other industries to make products with certain qualities (e.g. famous fashion brands such as Louis Vuitton hiring artisans – in-house or as freelancers). In this case, the added value is generated by the work of the artisan, and the price of the object is exponential due to the value of the brand itself. This is further detailed in section 4/ "Other exogenous changes and relations with other sectors" below.

Additional players also contribute to establishing prices and bring value to the product: the agents, the retailers, the associations and the museum. In the craft industry, the role of agents and sellers is very limited as the distribution-sale is often the responsibility of the artisan himself/herself; thus, they do not affect strongly the price. As crafters typically give a set price for their objects to retailers, prices will evolve depending on the margin set by retailers (usually between 30 and 50%, see also section 5.2.2 below). A greater role is instead played by the sector's associations and museums. They have the power to directly influence the selling price by providing visibility to craft products through events, fairs or exhibition.

5.2 In-depth analysis of interrelations between actors

5.2.1 Market structure and bargaining power

There are three different ways through which craft finds its way to the market:

- Artisans can be employed as part of an in-house production team in another industry;
- Artisans can be freelancers and work for other industries under commissions;
- Artisans can work independently as one-person-companies or a micro-business that produces crafts.

In the first two cases, they bring their skills to other sectors, and as such add value to products from the fashion, design and jewellery industries. The **bargaining power** of artisans in this case is fluctuant and depends on their reputation or third-party recognition, but it is generally weak as the supply of artisans' skills is overall higher (due to a strong training ecosystem)¹⁴¹ than the demand from other industries.

The third case, which is the one most directly dealt with in this paper, is characterised by a linear value chain in which the artisan is at the core of each function of the value chain. It is a very simple business model made of creation-production-delivery, in which the main protagonists are context-artisan-consumers; they establish a circular relation of trust¹⁴².

In all three cases, on the "supply side" of the market, artisans are numerous and **entry** (as well as exit) **barriers** usually are **low**.

Due to low entry barriers, competition is quite high due to the relative image deficit of craftsmanship. This third case thus presents key features of a **monopolistic competition** (freedom of entry and exit, but artisans have differentiated products).

¹⁴¹ RICHES (2016) Towards a Craft Revival: Recalibrating Social, Cultural, Economic and Technological Dynamics. European Policy Brief prepared by the FP7 project "Renewal, Innovation & Change: Heritage And European Society". April 2016.

 $^{^{142}}$ This applies mostly to niche markets (as described in the above section 2.2.1 – Dissemination/trade), whereas if crafts are sold on mass markets or retail, this relation of trust is absent.

In other cultural and creative sectors, commercial agents play a fundamental role in linking the creative talents with the market by building their reputation; however, in crafts, this professional profile is not well established, possibly due to the much more limited revenues.

In the sector, the most important market intermediaries are associations that, by bringing individual crafters together on the basis of their skills and regardless of the final products, partly address the lack of **bargaining power for artisans** in a mass-market; also, by promoting them on their websites, catalogues, fairs and online shops, they support artisans to build their reputation. The digital revolution has given artisans the tools to gain more visibility even if competition with mass-products platforms might hamper this positive impact.

Ownership and equity ties are quite simple in the artistic crafts value chain as the sector is chiefly composed of MSMEs. In most cases artisans are owners of their company or are sole traders. They may group into small craft associations or guilds to 1) organise promotional events and fairs, 2) pool resources to develop an online shop and 3) facilitate commissioning of works. These associations are usually organised through a simple membership structure and do not entail any equity tie. 143

In case artisans are employed by or are freelancing for larger companies, IPR is retained by those companies (unless specified otherwise in work contracts, but this only applies to very few renowned artisans).

5.2.2 Contractual arrangements and revenue sharing

As in many other creative sectors, there is not an extensive jurisdiction on craft ownership and intellectual property, and the protection of their work depends on the legal parameters of the country of production.¹⁴⁴ Compared to other visual arts, intellectual property issues are overall less relevant (e.g. resale rights do not cover crafts). Nevertheless, artisans should be aware that the recognition of the intellectual property over the work produced can only add value to the business cycle. There are **different types of IP protection systems**: brand or trademark, copyright, industrial design, geographical indication, appellation of origin patent, trade secrets or confidential business information and utility models.¹⁴⁵ According to the specificity of these protection systems, artisans can have exclusivity over their production. This is however decided on a country-per-country basis, and in most of the European member states, copyright law does not apply to crafts.¹⁴⁶

Another very useful protection mechanism is the **Geographical Indication of origin**, a "name used on goods that have a specific geographical origin and possess qualities, characteristics or a reputation essentially attributable to that place of origin"¹⁴⁷. The Geographical Indication is a fundamental instrument for craft, as it emphasises the relationship between human activity, culture, land and resources, protecting intangible assets and the consumers acting as a quality label. Nevertheless, a unitary Geographical Indication in the European Union exists only for agricultural products; this results in varying levels of legal protection across member states. Currently, the European Commission is exploring the possibility of extending GI protection to non-agricultural products at EU-level to harmonise the patchwork of laws that exist at national level. ¹⁴⁸

Increased access to information on the web and the growing number of associations' websites, which provide support to legal issues through their pages, are supporting crafters in negotiating contractual arrangements. This availability of information has also raised awareness and opened the debate on the necessity for specific legal arrangements on the protection of the intellectual property and sales rights of crafters.

In this context, revenue sharing is highly dependent on the following factors:

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National	regulations	and	level	ΟŤ	protection	tor	crafts;

¹⁴³ Interviews

¹⁴⁷ European Commission (2013) Final Report: Study on geographical indications protection for non-agricultural products in the internal market, Brussels 18.02; 2013 http://ec.europa.eu/internal market/indprop/docs/geo-indications/130322_geo-indications-non-agri-study_en.pdf

¹⁴⁸ European Commission (2014) Green Paper on the protection of geographical indications for non-agricultural products. Brussels 15. 07. 2014. http://ec.europa.eu/growth/industry/intellectual-property/geographical-indications/non-agricultural-products/index_en.htm

- Perceptions of crafts and their value which has a direct impact on artisans' bargaining power in negotiating contracts;
- Individual reputation of artisans and their connection to other actors of the value chains;
- Type of intermediaries involved: retailers, gallery, museum, online sales.

As a result, there is no one-size-fits-all approach to revenue sharing in crafts. The following examples only give a general idea of the situation 149:

- Online retailers (e.g.: Etsy, Folksy) often take a small cut on sales (between 2% and 5%), as well as a small fixed fee per item (around 0.2 EUR);
- For wholesale retail price, artisans usually set their price at twice the labour costs and materials costs.
- Retailers usually take between 30 and 50% of the final price (around twice the wholesale retail price).
- ▶ Galleries though only few deal with crafts typically take a 30% cut on each sale.

Most artisans also have their own websites enabling direct sales. While the revenue share is much higher, this sales channel is highly time-consuming in terms of promotion (mostly through social media).

5.3 Other exogenous changes and relations with other sectors

Links with other sectors

In previous sections, we briefly touched upon the role of crafters in other value chains. This section further fleshes out how crafting skills can contribute to other (often high-end) products and services, and adds value across other sectors.

As explained, there is a difference between the Master of Arts and the artisan; the first is a crafter and a creator, while the second is a technician with a set of skills that stem from the cultural context. Whereas the maître d'art is autonomous and capable of taking care of the entire business cycle, a crafter needs a creative idea to best express his talent; when a crafter is given the possibility to perform the skills he/she possesses, he/she brings significant added value to the final creative product. Artisans can work as either part of a productive internal team or on commission as freelancers.

The fashion industry, especially the luxury brands, has a long history of collaboration with artisans from both local areas and other countries.

Craft not only adds value, both cultural and commercial, to certain products, but can also act as a catalyst for bringing different creative industries together. The sector occupies a strategic position, being at the crossroad between creativity, business and innovation, as outlined in DG Grow's staff working document on the competitiveness of high-end industries¹⁵⁰. Craft can be a tool for cultural preservation, for liaising creative artists and business, and for economic growth, business innovation and competitiveness. The distinctive features of the craft sector enabling those synergies are:

- Unique skillsets adding value to other products/services (akin to designers for example);
- Structure of the sector with micro-businesses and freelancers, offering flexibility to engage in cross-sectoral work:
- Importance of natural environment/heritage enables customisation and adaptation of products to local demand.

Initiatives such as the WORTH pilot project¹⁵¹ have incentivised such cross-sectoral collaborations and facilitated access to markets of innovative goods involving different sectors such as crafts, fashion, design, manufacture or technology.

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¹⁴⁹ Based on interviews

¹⁵⁰ European Commission (2012) Staff Working Document on the Competitiveness of high-end industries. Brussels, 26.9.2012. SWD(2012) 286 final

¹⁵¹ Project funded under the Competitiveness and Innovation Progamme of the European Commission (CIP). http://www.worth-project.eu/ Additional funding has been allocated for a second phase of the WORTH project under the COSME programme.

Local anchorage of the craft sector, especially through its interlinkages with (intangible and tangible) heritage and natural environments (raw materials used for crafts are often sourced locally), creates strong links with the tourism economy. In practice, tourism represents additional demand for crafts, whilst crafts contribute to the local cultural/heritage. Several cities and regions are already working in this area to generate additional growth locally. ¹⁵² The link between crafts and tourism was also flagged in DG Grow's staff working document "where manufacturing meets creativity", where fashion and craft trails are promoted as one of the potential actions to stimulate economic spillovers stemming from those sectors. ¹⁵³

Global sourcing

As discussed above, the artistic crafts value chain is strongly rooted in a local situation, and global sourcing remains limited. While industrial crafts are not discussed in-depth in this paper, they do introduce competition with local heritage crafts with low pricing (global sourcing drives down the costs of production).

This is also where Geographical Indications (as discussed above in this chapter) could help customers to differentiate products more easily. This would also enable the European Commission to negotiate specific provisions to promote European crafts as part of trade negotiations with third countries.

Conversely, e-commerce enables artisans to benefit from a global market, and online retailers offer worldwide shipping options. International sales are often facilitated by trade associations as international marketing and promotion is highly challenging for artisans¹⁵⁴.

 $^{^{152}}$ See for example <u>www.loulecriativo.pt/</u>, at the crossroads between tourism, crafts and creative industries.

European Commission (2012) Policy Options for the Competitiveness of the European Fashion Industries — 'Where Manufacturing Meets Creativity'. Brussels, 5.10.2012. SWD(2012) 284 final/2

¹⁵⁴ Interviews

6/ Book publishing – a value chain analysis

6.1 Introduction to the book publishing sector: definition and importance in the EU economy

Definition and scope

The analysis of the book publishing value chain focuses on the book industry (therefore excluding press) with a **primary focus on literature** and encompasses the creation (including illustration), dissemination, production, distribution and preservation of books.¹⁵⁵

Digitisation

Digitisation transformed the market structure of the book publishing industry decisively, although, according to one interviewee, the book publishing industry's traditional stakeholders consider the deployment of digital technologies with some suspicion. Two disruptive innovations opened the book publishing market for technology platforms such as Apple and Amazon, namely the introduction of online retail and the advent of e-books. 157

The new players chose the distribution i.e. (online) retail market as the point of market entry, but challenge not only distributors (i.e. big retailer chains), but also the upstream players i.e. creators (authors), producers (book publishers and printers) due to new business models (self-publishing) and new revenue models (agent-model).

Importance for the EU economy

In the media and entertainment markets, the traditional book market is the only one where EU companies are forerunners, with big players such as Bertelsmann, Hachette, Pearson, Wolters and Kluwer.¹⁵⁸ Indeed, out of the top ten largest book publishers world-wide, seven are European.¹⁵⁹

According to the FEP (2015), the total annual sales revenue of book publishers of the EU and the EEA was approximately EUR 22 billion in 2014. Out of these, 19.2% were generated by educational books, ¹⁶⁰ 19.5% by professional books, 49.2% by consumer (trade) books and 12.2% through children books. The largest publishers' turnover was achieved in Germany, followed by the UK, France, Spain and Italy with a total market value of around EUR 36-38 billion (thus including publishers from outside the EU and the EEA). ¹⁶¹ Also, around 16,900,000 print titles were published in 2014. While the numbers show a slight decrease, according to the FEP, recovery is already visible.

For digital book publishing markets, the situation is quite different. First, the **online distribution of physical books** is dominated in most countries by Amazon. Even in France, the platform represents around 2/3 of online sales (vs. 1/3 for French retail chain Fnac). Similarly, the market for **e-books** is dominated by a few large international digital retail platforms. Amazon is clearly dominating the market for e-books, followed by Apple, although not in terms of profitability for publishers.

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¹⁵⁵ Professional/educational book publishing is dealt with in the course of the chapter, with differences with literature highlighted.

¹⁵⁶ Interviews

¹⁵⁷ Maccormack, A., Kimball Dunn, B., & Kemerer, C. F. (2013). Barnes & Noble: Managing the e-book revolution. Harvard Business School Working Paper, (613-073). Retrieved from http://hbr.org/product/Barnes---Noble--Managing-/an/613073-PDF-ENG

¹⁵⁸ Media and entertainment includes Internet access fees, Internet advertising, TV fees, TV advertising, recorded music, filmed entertainment, video games, consumer magazine publishing, newspaper publishing, radio, book publishing and B2B publishing, Simon, J. P., & de Prato, G. (2012). Statistical, ecosystems and competitiveness analysis of the media and content industries: The book publishing industry. JRC technical reports. Luxembourg: Publications Office of the European Union.

¹⁵⁹ FEP (2016). Books in Europe: Facts and Figures. Brochure.

¹⁶⁰ A great deal of books sold in the publishing sector stems from the publishing industry's close relation to the education sector.

¹⁶¹ FEP (2015). European book publishing statistics.

¹⁶² Martel. F. (2015). L'écrivain « social ». La condition de l'écrivain à l'âge numérique. Rapport au président du Centre National du Livre (CNL)

In 2014, e-books captured an average of 5% of the total book market in Europe, increasing from 4-5% in 2013 and 3% in 2012. ¹⁶³ Hence the e-book's market share has increased by 2/3 between 2012 and 2014. In Germany, e-books were estimated to only account for about 4% of the book market in 2014, followed by France and Spain with 3% and Italy with 2%. ¹⁶⁴ In the rest of the EU, figures were below 1%. The UK was an outlier, with a market share of 15%, ¹⁶⁵ making it the second largest market for e-books. ¹⁶⁶ However, figures from a recent publication prepared for the 2016 Frankfurt Book Fair show a much higher share of e-books: ¹⁶⁷ in Flanders and the Netherlands e-books represent 4.7% of the market; in Poland by 2015, e-books made up about 5% of overall sales (with e-book sales growing by a margin of 16.5% from 2013 to 2014); in Spain, the sales of e-books increased by 37.1% in 2014, representing 5% of Spain's overall book sales. In France, e-book sales represented 6.5% of publishers' revenues in 2015. ¹⁶⁸ In general, the market is reported to be most successful with e-books for teenagers and children. ¹⁶⁹ Although the e-book market is growing, this growth is relatively limited. In 2015, the e-book market generated a turnover of EUR 22-24 billion. ¹⁷⁰

While in most countries e-book revenues are still considerably growing, it is already possible to observe a slow-down in more developed markets such as the UK or US. At the same time, print revenues decrease as well. This could be due to substitution, yet, one interviewee stated that digital and physical books are often bought in bundles. 171

According to consulting agency IDATE, the following three elements can explain the differences in market share for e-books in different European countries (the high market share in the UK, and to some extent also in Germany): Firstly, the different penetration rates of devices by country (e-readers or tablets). Secondly, book publishers' strategies seem to be passive when the device installed base is low, and aggressive when the market enters a period of sustained growth. And thirdly, the influence of e-commerce in printed book distribution: the greater the role played by e-commerce platforms, the easier it is to migrate paper books to e-books.¹⁷²

6.2 Creative value chain mapping and description

6.2.1 Economic characteristics of the Book publishing business and impact on the global value chain structure

As outlined in the introduction, the book sector still heavily relies on traditional books and e-books are rather slow to increase. With 9 million titles available in Europe, only 2 million are e-books. Yet 4 out of 5 publishers produce e-books.

The economic characteristics of books depend on how they are distributed, i.e. on the carrier of content. Traditionally, books are physical goods which are distributed physically via retail stores. Their content is related to the medium i.e. the book. With dematerialization, **content got disconnected from its carrier** in the industry. Content is now distributed in the form of e-books on digital distribution platforms i.e. e-book shops. Indeed, they are the third most likely product purchased online in Europe.¹⁷³ E-books can be simple .pdfs or enhanced e-books

¹⁶³ FEP (2015a). European book publishing statistics, 30 November. FEP (2015b). European book publishing statistics, 12 January. FEP (2013). European book publishing statistics, 13 December. IDATE (2014) assessed in 2013 the "rate of dematerialisation" at 4% in Europe (vs 18% in the USA).

¹⁶⁴ FEP (2016). Books in Europe: Facts and Figures. Brochure.

¹⁶⁵ FEP (2016). However, according to findings from Nielsen Book Research, e-book share was 29% in the first quarter of 2015 (http://www.thebookseller.com/news/e-book-market-share-down-slightly-2015).

¹⁶⁶ Author Earnings (2015), November 2015 – the UK report: Author, available at: http://authorearnings.com/report/november-2015-the-uk-report-author-earnings-on-amazon-co-uk/ (last consultation: 21/09/16).

¹⁶⁷ Johnson, H., Cox, E.L. (2016), 7 Dynamic Book Publishing Markets in 2016, Publishing Perspectives for the Frankfurt Book Fair's 2016 THE MARKETS: GLOBAL PUBLISHING SUMMIT.

¹⁶⁸ http://www.sne.fr/enjeux/chiffres-cles/#sne-h-6-la-production-editoriale-les-tirages-moyens-et-les-ventes

¹⁶⁹ Interviews

¹⁷⁰ FEP (2015). Report of activities (May 2014-May 2015). Booklet.

¹⁷¹ Interviews

¹⁷² IDATE (2013) DigiWorld Yearbook.

¹⁷³ FEP (2016)

with a new, digital value proposition e.g. additional features, search option and/or multi-media content. Yet, only one third of e-book publishers produces such enhanced versions.¹⁷⁴ The carriers i.e. e-book readers, but also tablets, smartphones, or PCs are distributed separately.

The production of content per se (both digital and physical) is subject to **high up-front costs and high risks**, because a book' success – similar to a prototype – is hard to predict. Like other cultural goods (visual arts, performing arts, etc.), it is an **experience good** that can only be fully appreciated/valued by consumers at the moment of consumption. Usually, out of 10 books only one makes a profit, two break even and the rest is losing money.¹⁷⁵ Thus, best-sellers subsidize the investments for new books.¹⁷⁶

Yet, the precondition of reproduction differs in the physical and digital world. In the case of physical distribution, reproduction means still considerable marginal costs. Indeed, publishers send books to retailers and have to expect a sum of them to return unsold. In the digital sphere, however, additional copies can be produced at negligible costs and storage problems are not existent. Yet, e-books are only 15-20% cheaper to produce than physical books, according to FEP. 178

Three factors in particular reduce the cost advantage of e-books:

- ▶ High up-front costs remain.
- ▶ Book publishers currently need to have a dual offer, since e-books are not widely accepted yet. Only a few small book publishers go purely digital.
- ▶ Book publishers have to publish in several formats: Apple, Amazon, .pdf, ePub etc. Indeed, the lack of interoperability is problematic for publishers and for users.¹⁷⁹

Thus, the main advantage of e-books for book publishers lies in the fact that books do not have to be piled in shops with a risk of being unsold and returned. In the print business, publishers usually deliver a certain number of books to all relevant retailers. If these books are not sold, retailers are allowed to return the books to the publisher. In case the book publisher might not be able to sell those books otherwise, this results in a huge sunk cost for the publishers. Only if distribution reaches a certain scale, book publishers can benefit from economies of scale i.e. of savings in digital distribution.

Opinions diverge regarding how book publishers deal with e-books. One interviewee asserted that most publishers regard the investment in e-books nowadays as an investment in the future, connected with current losses. Publishers classify the costs of going digital as development costs. ¹⁸⁰ In this view, many publishers consider it vital to invest in this technology which they regard as the future. ¹⁸¹ However, another interviewee thinks that book publishers do not make enough efforts, especially in terms of pricing, thus limiting the adoption of e-books by readers. ¹⁸²

6.2.2 Stylized value chain mapping and description

The book publishing value chain consists of three core functions. The actors in the different stages of the value chain carry out the book publishing industries' specialised activities, namely creation, production/publishing, and dissemination/trade. The fourth common function of exhibition/reception/transmission is not represented here, because in general there is neither live nor unmediated experiences provided to consumers¹⁸³.

¹⁷⁴ FEP (2015)

¹⁷⁵ Interviews, FEP (2016)

¹⁷⁶ Interviews

¹⁷⁷ Interviews

¹⁷⁸ Interviews, FEP (2015)

¹⁷⁹ Interviews

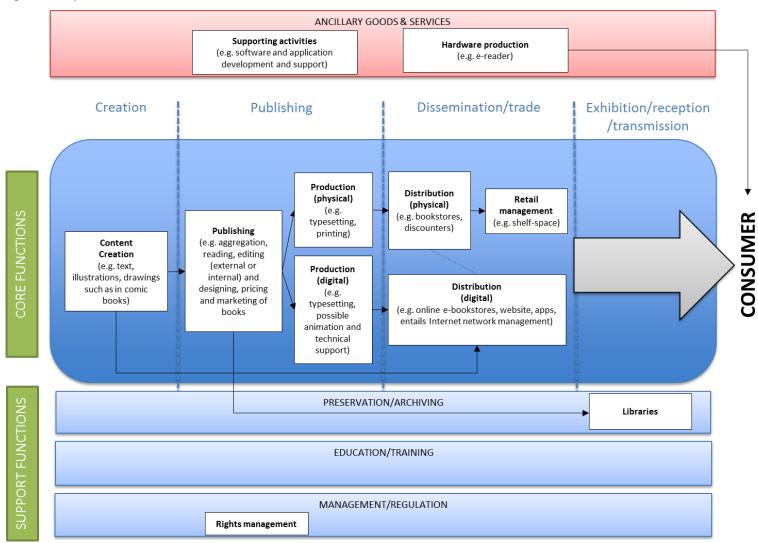
¹⁸⁰ Interviews

¹⁸¹ Interviews

¹⁸² Interviews

¹⁸³ It happens only very occasionally during e.g. specific literature festivals, but not in a systematic way

Figure 20: Stylized Value Chain for Books



Creation

The first function consists of content creation. Different types of actors are involved in content creation, for instance: authors, who write content (e.g. novels, scientific content, etc.), or illustrators (e.g. in the case of children books or comic books). Illustrators are usually directly employed by book publishers, which means that book covers are produced in-house for mid-size and large publishers (e.g. French publisher Gallimard). In some cases, authors may already have created content (or part of it). It is also possible that the book is commissioned or that the topic and focus of some educational and professional books is set by the publisher, who then attempts to find a relevant writer, illustrator and graphics.¹⁸⁴

Digitisation introduces new possibilities for authors thanks to disintermediation. Through digitisation, authors may bypass the step of "publishing" and "production" altogether, via direct book publishing as offered by Amazon or Apple (see also section 6.3.1 on market structure and bargaining power). Ryu Murakami was the first author announcing that he would publish his book *A Singing Whale* exclusively in digital version. In addition, new digital vanity presses or self-publishing companies like Lulu, JePublie and BiblioCrunch are sprouting. Yet strikingly, self-publishing authors tend to sign with publishers once they are successful e.g. E.L. James ("50 shades of Grey") self-published 2,500,000 copies and then signed a deal with Random House and published over 100 million more. Refore interviewee argued that authors could find themselves in a better situation if they resorted to agents (who still hold a marginal position in Europe), instead of relying only on their book publisher.

An interesting initiative, financed by the Creative Europe Programme of the European Commission, is the European Union Prize for Literature. Its aim is to put the spotlight on the creativity and diverse wealth of Europe's contemporary literature in the field of fiction (through the yearly granting of prizes), to promote the circulation of literature within Europe and encourage greater interest in non-national literary works. The European and International Booksellers Federation (EIBF), the European Writers' Council (EWC) and the Federation of European Publishers (FEP) are jointly responsible for the setting up of the national juries and the practical organisation of the award ceremony.

Publishing

The second function consists of publishing the book. The book publisher's role includes different tasks. First, the editorial tasks include commission and acquisition, copy-editing, proof reading, index making and rights management (primary and secondary rights, i.e. rights connected to initial publishing and distribution). This encompasses financial aspects such as author's royalties and pre-payments. Publishers may have recourse to specialised workforce, either in-house or outsourced (the latter e.g. for proofreading).

Second, publishers also deal with the downstream activity of physical or digital production. This includes typesetting, layout and design, printing and binding, insurance and shipping (Simon & de Prato, 2012; Doyle, 2013). As such, publishers are in charge of the "quality" of the edited product, 189 in terms of content (e.g. accuracy of a handbook) as well as from a technical point of view (e.g. quality of the paper and the ink). Printers are then responsible for printing the physical books.

With digitisation, many of the traditional activities (printing, binding) within the function of production/publishing are replaced through digital production activities or even almost omitted through simplified procedures (as in the case of self-publishing). Decisive tasks include to make sure that the text is stable e.g. when changing the font on e-readers, especially when graphs are implemented in the text. Tasks such as indexing, remain equally very

¹⁸⁴ Interviews

¹⁸⁵ Simon, J. P., & de Prato, G. (2012)

¹⁸⁶ FEP (2016)

¹⁸⁷ http://www.euprizeliterature.eu/what-eupl

¹⁸⁸ Interviews

¹⁸⁹ Interviews

important, especially for players dealing with long-tail content such as Amazon. ¹⁹⁰ Yet, many smaller book publishers cannot afford going digital. ¹⁹¹

Collective rights management societies manage copyrights or related rights on behalf of for their members (right-holders). Thus, in France the SACD collects royalties and authorises performances, its focus being dramatic authors and composers. This is different from authors' associations, which aim at promoting their members' rights, and may also provide support activities to their members. For example, the British Association of Illustrators (AOI)¹⁹³ aims at advancing and protecting illustrators' rights. It also provides support and education to illustrators, as well as produces an international illustration competition.

Dissemination/trade

The third function consists of distributing and selling the book. It may be performed by the publisher or by a distributor. For example, the French distributor Sodis is specialised in book distribution and is part of the French publisher Gallimard.¹⁹⁴ Distribution includes sales and marketing tasks such as representation and managing the generations of orders, marketing and promotions and the management of publicity. This also includes bringing books to physical or online stores. Tasks such as logistics e.g. packaging and transport, but also order processing and servicing, and the management of IT system and warehouse are in this step of value creation decisive to ensure an optimal distribution and display of the book.¹⁹⁵ Importantly, book sellers can return books to the publisher if they are not sold.¹⁹⁶ Libraries usually do not buy books directly from publishers, but use large distributors as intermediaries.

Finally, the product reaches the customer. Physical books can be bought in physical bookshops or on online platforms selling books. E-books are sold on online e-book platforms.

The market of e-readers – an important ancillary good in the book sector, is largely dominated by US companies. European companies seemingly have no real interest to work with the book sector to produce technological solutions, one interviewee stated. 197

Libraries are catching up on digitisation as well. Retail giants like Tesco are implementing their own solutions. ¹⁹⁸ While libraries still offer physical books, they are heavily investing in e-books. Indeed, figures show how e-loans may cannibalize e-book sales, especially in Denmark or Sweden. ¹⁹⁹

Preservation/archiving

Preservation/archiving is an important task in book publishing which is performed by libraries. Libraries have multiple roles. They can be seen as a place for citizens to access books, but some libraries such as national libraries have a duty of preservation – in many countries there is an obligation each time a book or other printed material is published, to send a free copy to a national library (legal deposit).

¹⁹⁰ Interviews

¹⁹¹ Interviews

¹⁹² http://www.sacd.fr/

¹⁹³ http://www.theaoi.com/about.php

¹⁹⁴ http://www.sodis.fr/Pages/Qui%20sommes-nous%20-es-1-1-37--

¹⁹⁵ See also Abadie, F., Maghiros, I. & Pascu C. (2008). The future evolution of the creative industries: Three discussion papers. JRC Scientific and Technical Reports.

¹⁹⁶ Interviews

¹⁹⁷ Interviews

¹⁹⁸ IDATE (2013).

¹⁹⁹ FEP (2016)

6.2.2.2 The impact of digitisation

Digitisation has changed the actors' tasks and new players have entered the scene. First, digitisation has brought about cheaper distribution channels, which threatens traditional intermediaries' position. Simultaneously, new aggregators/distributors entered the scene. As pointed out by Simon and de Prato, "this process of disintermediation/re-intermediation is common to other subsectors and has a strong impact on the structure of the market". ²⁰⁰ Yet, unlike music, most of the books are still sold in printed version, even when they have a digital equivalent.

New business models

Digitisation has made it possible to unlock new customer segments. In the educational sector, there are now products that ensure adaptive learning within digital learning solutions.²⁰¹

Also, digitisation has contributed to the dissemination of knowledge and of scientific information. Especially in countries where books were not available and had to be sent or acquired while travelling, books have now become easily accessible.²⁰²

One can now find e-books produced for the visually impaired as new technologies make it possible to pair the e-book with audio. Customers can switch to audio and listen to the content, even in a non-singular way. For instance, in Italy before the e-book, a few hundred books were available in braille, through a foundation, while now more than 10,000 braille books are digitally available.

Moreover, a lot of experimentation is currently ongoing mixing audio, video and sound to improve the customers' reading experience.²⁰⁵

E-Book subscription services have appeared in Europe, like in France (e.g. Youboox) and in Spain (e.g. 24symbols), after the USA (e.g. Amazon Kindle Unlimited, Scribd).

Country differences

The value chain is similar in most countries. Yet, some differences can be observed.

The demand for e-books in the trade book market still differs a lot along countries. The UK has a special position with respect to e-books, currently being the world's second largest market for digital books. ²⁰⁶ As previously remarked, within the EU, in terms of e-books' market share, the UK leads with 15%, other countries such as Germany, France, Spain and Italy account for between 2-4% each, and the rest of the EU Member States for even less than 1% each. The higher penetration rate of e-books in the Anglo-Saxon market can be explained by various specific factors. ²⁰⁷ First, a bigger offer from the US, the pioneer in e-books. Another factor that contributed to the higher penetration rate of e-books in the UK is the fact that nowadays, there are fewer bookshops in the UK than in other countries, for example in France. ²⁰⁸ Many customers had to buy books in supermarkets, so they experienced the possibility to buy via Amazon and to have a greater choice as a bliss. ²⁰⁹

Additionally, the investment in educational publishing differs by country. 100% of French and about 95% of Italian school books exist in digital format, and the Danish government officially supports the purchasing of digital learning

²⁰⁰ Simon and de Prato (2012, p. 15)

²⁰¹ Hoelck et al (2014)

²⁰² Interviews

²⁰³ Interviews

²⁰⁴ Interviews

²⁰⁵ Interviews

²⁰⁶ Author Earnings (2015), November 2015 – the UK report: Author, available at: http://authorearnings.com/report/november-2015-the-uk-report-author-earnings-on-amazon-co-uk/ (last consultation: 21/09/16).

²⁰⁷ Interviews

²⁰⁸ Interviews

²⁰⁹ Interviews

materials.²¹⁰ The educational publishers in Hungary or Poland have recently been nationalized, so students no longer pay for textbooks.²¹¹ Yet, on the downside, many bookshops in those countries used to survive thanks to the resale of educational books, their situation therefore remains precarious.²¹²

The penetration of digital platforms also differs by country. While over 90% of the UK market for e-books belongs to Amazon, in the Nordic countries Apple is rather the forerunner. Yet, neither Apple nor Amazon provide official figures. In Germany, the industry's own e-book reader Tolino has a dominant share of the market for e-book devices, with 45% market share (against 39% for Amazon's Kindle).²¹³

Global sourcing

While publishing is a rather localised activity from content creation to publishing, the question arises whether there is international sourcing for the production of the book, i.e. its printing, or of the e-book (regarding consumption, see last section). To our knowledge, no exhaustive study exists, which would give an overall view. Globally, publishing represents only a minor (around 17%, and declining) share of the printing industry's activities. However, although the structure of the print market varies greatly from one country to another, a constant is that printing is largely done locally, at least in Western Europe. In 2011, imports of printed copies within the EU was only 14%, the sign of the printing is largely done locally, at least in Western Europe.

6.2.3 Value Monetisation and evolution of prices

Book publishing is being monetized through the management of rights. Creators are generally paid in advance by the publishers with a lump sum. Revenues transit from consumers to (online) retailers to distributors to publishers. Collective rights management societies complete the picture, for revenues derived from performances of theatrical works.

Pricing of physical books differs among EU countries.

Fixed book pricing exists in ten Member States (Germany, Greece, Spain, France, Croatia, Italy, Netherlands, Austria, Slovenia and Portugal) and fixed prices have already been extended to e-books in six of them (Germany, Greece, Spain, France, Slovenia and Austria).²¹⁷ Other countries, however, like the UK do not have fixed prices. These countries follow a "winner takes all" principle and retailers can even sell books below costs or engage in promotions ("Buy 2 get 3").²¹⁸

E-books

In the case of e-books, Simon and de Prato already highlighted the following changes in the legacy cost structure due to digitisation: "some costs have disappeared (printing, physical transportation, storage), some have remained unaffected (creation, authors' advances, editorial process, marketing and sales), some have been shifted (e.g. promotion, with the coming of blogs and other tools) and some new ones have also appeared — mostly on the software side of the equation (computer programmes, file conversion, cataloguing and permitting search of text

²¹⁰ FEP (2016)

²¹¹ Jaroslaw Adamowski (2014), « Can Textbook Nationalization Curb "Profiteering Publishers"? », Publishing perspectives, available on: http://publishingperspectives.com/2014/02/can-textbook-nationalization-curb-profiteering-publishers/

²¹² Interviews

²¹³ http://www.publishersweekly.com/pw/by-topic/international/Frankfurt-Book-Fair/article/68477-how-german-publishers-deal-with-amazon.html

²¹⁴ Engelbert Stranegger (2014) "Market Trends and Dynamics in the Printing Industry". What are the Key Drivers for Change?, presentation, 20.02.2014 available at: http://docplayer.net/8902262-Market-trends-and-dynamics-in-the-printing-industry-what-are-the-key-drivers-for-change.html

²¹⁵ Miller, J. (2011), Evolution of general commercial print: Implications for the future (2011), PRIMIR.

²¹⁶ Miller, J. (2011), Evolution of general commercial print: Implications for the future (2011), PRIMIR.

²¹⁷ Poort, J., van Eijk, N. (2015), "Digital fixation: the law and economics of a fixed e-book price," *International Journal of Cultural Policy*, available at: http://dx.doi.org/10.1080/10286632.2015.1061516.

²¹⁸ Interviews

and metadata, storing, security, rights management, etc.)".²¹⁹ A 2015 study by Kurt Salmon confirms that the costs incurred are half the amount for e-books compared to hard-copy books.²²⁰

Due to the unknown amount of new costs, a proper assessment of the cost differential between print and digital publishing is extremely difficult, if not impossible, to assess. Simon and de Prato stated that consumers' willingness to pay is linked to this reduction in price (between 2 and 15 %, depending on the kind of books).²²¹ In this respect, Kurt Salmon estimates the average price of a printed book at EUR 11 vs. EUR 7.7 for an e-book.²²² This can be compared to a previous assessment that in 2012 European publishers were charging 20 % to 30 % less for e-books than print books.²²³ One interviewee however argued that e-books remain too expensive, which prevents the market from growing.²²⁴

From the publishers' viewpoint, the lack of price flexibility of a player such as Amazon or generally, the expectation of lower e-book prices, is problematic for titles with high production costs. If these low prices would persist, they could hoard out more qualitative content for which higher production costs used to be justified because there used to be a business case for these products in the paper format. Also, the industry fears that pricing e-books at low rates will negatively impact the public perception of the value of physical books. These low prices could lead to a qualitative race to the bottom: publishers would focus on producing books that have a business case at a certain price point, instead of producing content for which a suitable price point is sought. Prices would dictate the content portfolio. ²²⁶

6.3 In-depth analysis of interrelations between actors

6.3.1 Market structure and bargaining power

In the traditional publishing industry, the market structure in the different functions of the value chain, namely creation, production/publishing and dissemination/trade (distribution and retail), used to be mature and settled. Digitisation has led to a redistribution of power.

Creation

The market for creators can be qualified as a **monopolistic competition**. A crucial feature of monopolistic competition is the great number of market players. According to a recent study by Ernst & Young, there were 150,000 authors in Europe in 2012.²²⁷ Another approximation of the great number of creators lies in the number of books that are published: for example, in France more than 60,000 new books were published in 2014.²²⁸ Another important feature of monopolistic competition is the market power owned by each market player, here each creator. Market power is distributed in an uneven way: while there are many authors, only a few of them produce bestsellers. Furthermore, the market is highly unpredictable with digitisation. But have authors gained a stronger position thanks to digitisation?

Digitisation made it easier for potential authors to **enter the market**, which in this case may increase their bargaining power. Authors are no longer exclusively reliable either on traditional publishers and production processes, nor traditional retailers, as they can attempt to self-publish. **Self-publishing** is actively supported by major digital platforms (in particular Amazon). Amazon's Kindle Direct Publishing (KDP service) allows users to

²¹⁹ Simon, J. P., & de Prato, G. (2012)

 $^{^{220}}$ Kurt Salmon. Have the cultural and creative sectors found the formula for development in the digital age? A report prepared for the Forum d'Avignon, December 2015.

²²¹ Simon, J. P., & de Prato, G. (2012)

²²² Kurt Salmon. Have the cultural and creative sectors found the formula for development in the digital age? A report prepared for the Forum d'Avignon, December 2015.

²²³ Mattich, A. (2011), « European Book Market Holds Back E-Readers », *The Wall Street Journal*, November 21.

²²⁴ Interviews

²²⁵ Interviews

²²⁶ Hoelck et al. (2015)

²²⁷ Ernst & Young, *Creating growth - Measuring cultural and creative markets in the EU*, December 2014.

²²⁸ Economie du livre, le secteur du livre : chiffres-clés 2013-2014, Mars 2015. This figure includes new editions of previously published books.

publish their own digital books via the Amazon Kindle Store free of charge. Users who publish books this way obtain up till 70 % of the royalties received from the sale of their e-books, a considerably higher percentage compared to traditional revenue sharing models in the sector (see section 6.3.2).²²⁹ As a further incentive, Amazon allows the author to decide upon the retail price of the e-books.¹⁴ Thus, Amazon actively encourages this bypassing. On its side, Apple is following the same approach.

On the other hand, this has led to a fiercer competition and authors increasingly lose control over what is done with their work digitally.²³⁰ From their point of view, it is very difficult to negotiate digital aspects of their contracts with publishers, due to the great uncertainty regarding where the market is heading to. In that respect, writers may not find more bargaining power in self-publishing (in particular when conditions are anyway unilaterally decided by online platforms). Yet, the longer-term impact of the development of self-publishing is difficult to assess at this stage.

Publishing

The book publishing market used to be dominated by a handful of large publishers and many smaller ones. It could therefore be qualified as an **oligopoly with a competitive fringe**. The various tasks of a publisher as described before and the ability to take risks when investing in books require a certain market stand. Publishers seem to remain the most central and powerful actors. In the new as well as traditional book publishing process, they carry major responsibility for the final product by managing the business, legal and financial aspects of the value chain. One of the main strengths of book publishers remains their brand, which may act as their seal of quality.²³¹ The publishers' central role may lead to problems of disadvantageous contracts for authors. According to interview feedback, book publishers favour deals in which the rights of an author can be bought out by one lump sum in one contract (if national law allows it). As such, the book publisher acquires one license for the whole duration of author rights, for all uses worldwide. The smaller the country, the bigger the bargaining power of the publisher in this respect.²³²

The book publishing market remains highly concentrated, notably at global level (see ownership section). Concentration also takes place at national level. In many markets a small number of publishers publish most books.²³³ For example, there are more than 600 companies that publish books in Poland, but 75% of all books published come from just 35 publishers.²³⁴ In Flanders and the Netherlands (taken as one market) 100 publishers are responsible for producing around 95% of all titles.²³⁵

Yet, the book publishers' position is being challenged. First, but only to a minor extent, by self-publishing. Actually, only a tiny fraction of self-publications are successful. It seems that self-publishing has mainly become a way to find new talents for publishers, rather than a disruption for their business model²³⁶, as also illustrated by the example of E.L. James' "50 shades of Grey" in section 6.2.2.

Second and more importantly, book publishers increasingly have to interact with online retail platforms - with huge bargaining power, as important distribution channels. They have tried to respond to these challenges with their own digital solutions, in order to maintain their market position.

²²⁹ https://www.millcitypress.net/author-learning-center/how-to-price-your-ebook

²³⁰ Interviews

²³¹ Interviews

²³² Interviews

^{233 7} Dynamic Book Publishing Markets in 2016 By Hannah Johnson and Erin L. Cox, Publishing Perspectives for the Frankfurt Book Fair's 2016 THE MARKETS: GLOBAL PUBLISHING SUMMIT

²³⁴ 7 Dynamic Book Publishing Markets in 2016 By Hannah Johnson and Erin L. Cox, Publishing Perspectives for the Frankfurt Book Fair's 2016 THE MARKETS: GLOBAL PUBLISHING SUMMIT

^{235 7} Dynamic Book Publishing Markets in 2016 By Hannah Johnson and Erin L. Cox, Publishing Perspectives for the Frankfurt Book Fair's 2016 THE MARKETS: GLOBAL PUBLISHING SUMMIT

²³⁶ Interviews

Dissemination/trade

Compared to the traditional book industry, the position of traditional distributors and retailers has been weakened due to digitisation, while the importance of actors from the IT industry (hardware and software) is increasing.

The market structure of physical book retail has changed significantly. It could be considered as **monopolistic competition**, where each bookshop notably benefitted from market power related to its location. Digital technologies made a second, digital distribution channel available. Contrary to physical distribution, digital distribution/retail of physical books is a **very concentrated market**. With digitisation, new players have entered the function of dissemination/trade. Technology platforms such as Amazon (Kindle) and Apple (iBook) started to dominate the digital distribution of e-books, constituting oligopolies (see below). Especially in countries such as the UK, where there were fewer bookshops, Amazon has become a dominant firm.²³⁷

Yet, **players from within the industry started to counter the ICT platforms.** Incumbent retailers adapted to the competitive situation by introducing digital e-book online platforms as well. On a country-base level, several digital platforms were launched in 2010 to compete with Apple and Amazon in the e-book market, e.g. in Italy (Edigita), in France (Eden) and in Spain (Libranda). The top e-book stores in Poland are eBookpoint.pl, Legimi.pl, Virtualo.pl, and Publico.pl.²³⁸

The global market for e-reader devices turned from a **monopoly** (when Amazon introduced its Kindle e-reader in 2007) to a **duopoly** where Amazon dominates, followed (at a far distance) by Kobo.²³⁹ There is however competition for e-readers by tablets.

There are also a handful of key regional players in the e-reader industry.²⁴⁰ Thus, in 2013, four large German retailers (Thalia, WeltBild, Hugendubel, and Bertelsmann) launched the Tolino Shine e-reader, a cooperative e-bookstore platform in cooperation with the network operator Deutsche Telekom. Contrary to the proprietary solution of Amazon and Apple, the e-reader unites different bookshops with the same interface and is thus more open.²⁴¹ Netherlands based Icarus was one of the first to develop open Android based e-readers, that allow you to install apps just like you would on a smartphone and tablet; and Pocketbook tends to dominate Eastern Europe and Russia markets.²⁴²

Although Amazon is still the market leader in e-reader devices, the market structure is far less dense than a few years ago, and the competition is fiercer. In that sense, market options have increased for publishers willing to have their books readable on e-readers.

It is in the "digital strand" of the distribution stage where most imbalances around positioning and power can be observed. Huge (digital) distribution platforms are perceived as the most powerful stakeholders, with **market dominance**. They have the ability to collect tremendous amounts of data. As such, they have knowledge about the readership, and thus they can more easily target the audience. While publishers had full control about the sale statistics in physical retail since they are aware how many books are returned, in the digital age they have to rely on the information given by digital platforms. Yet, those platforms collect of course way more data than pure sales numbers, regarding for instance the behaviour of readers (When during the day, or the week do they read? Where do they stop in a book? etc.)

Digital distributors are now able to dictate terms of contracts with book publishers. An example of where this imbalance played out was the Amazon vs. Hachette case. Amazon changed its functionalities, which made it necessary to click several times until buying a book by Hachette editions. In addition, Amazon deactivated advanced buying until Hachette agreed to its terms.²⁴⁴ In more general terms, digital distributors have become the industry's bottleneck. This becomes thereupon problematic, since the platforms can use their dominant market position to

²³⁷ Author Earnings (2015), November 2015 – the UK report: Author, available at: http://authorearnings.com/report/november-2015-the-uk-report-author-earnings-on-amazon-co-uk/ (last consultation: 21/09/16). Penguin Random House is owned in majority by German publisher Bertelsmann, Hachette is French, HarperCollins is partly British, MacMillan belongs to German publisher Holtzbrinck Publishing Group. See also the introduction.

²³⁸ 7 Dynamic Book Publishing Markets in 2016 By Hannah Johnson and Erin L. Cox, Publishing Perspectives for the Frankfurt Book Fair's 2016 THE MARKETS: GLOBAL PUBLISHING SUMMIT

²³⁹ http://goodereader.com/blog/electronic-readers/the-state-of-e-reader-industry-in-2015

²⁴⁰ http://goodereader.com/blog/electronic-readers/the-state-of-e-reader-industry-in-2015

²⁴¹ Interviews

²⁴² http://goodereader.com/blog/electronic-readers/the-state-of-e-reader-industry-in-2015

²⁴³ Interviews

²⁴⁴ Interviews

influence the content that they provide. The strict policy of Apple for example, led to the pulling out of 1,500 comic strips from a French digital comics publisher because of the representation of nudity.²⁴⁵ In other cases, Apple refused selling books about teenage sexuality and especially homosexuality. Thus, the actor's economic bargaining power translates in these cases in moral bargaining power.²⁴⁶

Interoperability

With the development of e-books, it is important to consider e-book platforms, in particular their interoperability. ²⁴⁷

Concretely, the openness of the proprietary e-book store and of the device can differ. Currently, the e-books bought on Amazon's Kindle Store can only be directly read on a Kindle e-reader. On some devices²⁴⁸ it is only possible to read the format via a Kindle application, while on other devices such as the Sony or Kobo e-readers compatibility is totally prohibited²⁴⁹. On the other hand, the Kindle device itself is able to read a few other formats next to its own proprietary format.²⁵⁰ As a result, neither Amazon's e-reader nor its e-book store is entirely open. This creates high switching costs between devices and formats, in turn fostering user lock-in to a specific device and format. A user who would like to switch from a Kindle to a Sony reader for example, would lose all of his/her purchased books, while a user switching to an iPad would have to rely on an application in the future.

Apple's strategy concerning operability is even more drastic. Similar to Amazon's Kindle, besides its own format, Apple's iPad is able to read a few other formats. However, the Apple ePub format is exclusively available for the Apple's own iOS devices iPad, iPod and iPhone and recently Apple's new OS Mavericks for MacBooks. In February 2013, Apple even refused Sony's e-reader app from inclusion in the App Store, because the Sony app enabled users to purchase books through the Internet for use with the application – as such being in direct competition with Apple's iBookstore. Bookstore.

Consequently, while the iPad as a device is fairly open, the iBookstore is entirely closed and exclusive, creating strong lock-in effects due to high switching costs. From a publisher perspective, the requirement to serve all the mentioned formats is connected with enormous costs.

Ownership

At the global level, five book publishers ("the Big Five") are dominating the market: Penguin Random House, Hachette, HarperCollins, Macmillan, and Simon & Schuster, most of which are EU companies or belong to EU companies. They are all part of media conglomerates. In large publishing groups, it is possible to have a myriad of small publishing companies who all report to the same directorates, but work independently.

²⁴⁷ See also Hoelck et al. (2015)

²⁴⁵ http://www.bleedingcool.com/2013/04/08/apple-censors-1500-french-comics-from-app-store/

²⁴⁶ Interviews

²⁴⁸ Apple devices (iPad, iPhone, iPod, Mac), Nook, Windows phones, PC and tablets, Android tablets and phones and BlackBerry.

²⁴⁹ http://www.amazon.com/gp/feature.html?docId=1000493771

²⁵⁰ The proprietary Barnes & Noble ePub, the non-proprietary Adobe ADEPT ePub, and some unprotected formats such as Mobipocket books (mobi, .prc. and txt files). The following files can additionally be sent to Amazon via a Kindle e-mail account for conversion into the Kindle format: Microsoft Word (DOC), PDF, HTML, TXT, RTF, JPEG, GIF, PNG, BMP, PRC and MOBI. For an overview of format compatibility see also Hidalgo, J. (2009). The eBook File Compatibility Chart. Retrieved from http://portables.about.com/b/2009/10/10/the-ebook-file-compatibility-chart.htm.

²⁵¹ Barnes & Noble ePub, Adobe ADEPT ePub and the Amazon Kindle format via application, as well as other open formats such as PDF and ePub.

²⁵² https://itunes.apple.com/de/app/ibooks/id364709193?mt=8>; Costello, S. (2013). What eBook Formats Does iPad Support? Retrieved from http://ipod.about.com/od/ipad/qt/ipad-ebook-compatibility.htm

²⁵³ Apple responded by stating that any app that facilitated sales through the Web interface also had to facilitate sales through the App Store (where, of course, Apple would receive its commission). As a result of Apple's shift, Barnes & Noble and Amazon were both forced to reconfigure their iPad apps so as not to facilitate book purchases. Source: Moon, B. (2013). Sony E-Reader App Rejected by Apple App Store. Retrieved from http://portables.about.com/od/ebookreasers/a/Sony-App-Rejection.htm.

²⁵⁴ Author Earnings (2015), November 2015 – the UK report: Author, available at: http://authorearnings.com/report/november-2015-the-uk-report-author-earnings-on-amazon-co-uk/ (last consultation: 21/09/16). Penguin Random House is owned in

Ownership ties in the sector between book publishers and retail stores is by now not common anymore. There may be exception in some smaller counties, though. For example, in Lithuania, publishers still own shops in which they only sell their own books and exclude books published by competitors.

The main players in the online distribution of books and e-books originally come from outside the publishing industry, and even outside media (online retailer Amazon with its Kindle e-book store and Kindle e-reader, Kobo or technology company Apple). However, many traditional players from the book publishing industry have entered this stage of the value chain as well (see above).

6.3.2 Contractual arrangements and revenue sharing

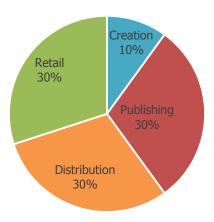
Revenue sharing in the digital age

Box 10 provides an example of revenue sharing in the publishing industry.

majority by German publisher Bertelsmann, Hachette is French, HarperCollins is partly British, MacMillan belongs to German publisher Holtzbrinck Publishing Group. See also the introduction.

Revenue sharing – Example

This box provides an example of revenue sharing provided by interviewees for a physical book (does not take VAT into account).



The figures are roughly comparable to the ones provided by Kurt Salmon (2015) in the French case. For hard copies, Salmon finds that, out of an average pre-tax price of EUR 10,4:

- ▶ The author gets between 6 and 11%
- ► The publisher gets between 16 and 20%
- ► The distributor gets between 33 and 35%
- ▶ The retailer gets between 36 and 39%

For digital books, out of an average pre-tax price of EUR 7,3:

- The author gets between 15 and 25%
- ▶ The publisher gets between 25 and 30%
- ▶ The distributor gets between 15 and 25%
- ▶ The retailer gets between 30 and 35%

The print run of a book differs by country. While in large countries such as France, print runs of 7,000 are normal, or 3,000 in Spain, books in smaller language communities such as Bulgaria have runs of about 600 prints. Thus, revenues also depend on the country. This has an impact on the capacity of authors to make a living. In smaller countries and language communities, making a living as an author is difficult. But even in bigger countries, authors face huge issues to make a living, even when successful. Thus, successful journalism students often take jobs in the PR or Marketing sectors, while authors (even successful ones) often write only part-time.

²⁵⁶ Interviews

²⁵⁵ FEP (2016)

²⁵⁷ Martel. F. (2015). L'écrivain « social ». La condition de l'écrivain à l'âge numérique. Rapport au président du Centre National du Livre (CNL)

²⁵⁸ Interviews

Libraries make up only at best 4% (this is the case in Sweden) of a book publisher's turnover. Usually, almost 100% of a book publisher's turnover is collected through retail.²⁵⁹

In the digital realm, revenue sharing is a controversial issue with different sources providing different figures. According to one interviewee, authors are getting higher shares of royalties because production costs are smaller, and also because otherwise their total royalties would decline due to the lower prices of e-books. 260 Another interviewee states that the percentage is not calculated on the same basis. According to this interviewee, for physical books, a writer would get 10% of the retail price, and 15% of the publisher's share for e-book. For example, if a physical book costs EUR 20, the writer would get EUR 2; if the corresponding e-book costs EUR 9.90, and the publisher would receive 30% of this price, then the writer would get 15% of these 30%, hence around EUR 45 cents. These figures however contrast with the ones provided by Kurt Salmon in their 2015 report. According to them, out of an average price of EUR 11, for each sale of a physical book, the writer gets 60.83. Whereas for each sale of an e-book, out of an average price of EUR 7.7, the writer gets EUR 60.83.

Contractual arrangements with digital distributors

For book publishers, the two major digital distributors (Apple and Amazon) have quite different approaches when it comes to revenue sharing. Amazon aims for favourable prices for its customers. By applying its sell-through model, Amazon decides upon the retail price to end-users. Although nearly non-existing unit costs for digital products, Amazon tends to buy e-books at the same wholesale price as physical books. ²⁶² Amazon in turn determines the retail price of the e-book to consumers. It has been observed that Amazon offers a lot of titles at a similar price (thus incurring a loss), in order to create interest for its Kindle devices among retail consumers. Amazon argues that a uniform, low pricing can stimulate the growth of the e-book market and is therefore good for the industry as a whole. Yet, publishers fear that the value perception of books might decline due to this pricing strategy. ²⁶³ Finally, Amazon gets a higher share when a sale is made based on a recommendation done by Amazon.

Apple's strategy towards publishers is different. It is following the same agency model that the company was already using for the iTunes and App Store, whereby book publishers can set their own e-book prices and receive a 70% commission, with Apple functioning as the publisher's agent and keeping 30% of the retail price. As a result, most books are priced higher than on Amazon. This way, Apple became an attractive alternative to Amazon for book publishers.

Apple even aimed to go a step further and tried to gain more control over the supply-side of the vertical value chain, via **exclusive deals** with several major book publishers. However, the European Commission opened the anti-trust investigation against Apple at the beginning of December 2011, and the US Department of Justice (DOJ) in March 2012. At the core of the investigation was the collusion to fix e-book prices between Apple and the international book publishers Hachette Livre (Lagardère Publishing, France), Harper Collins (News Corp., USA), Simon & Schuster (CBS Corp., USA), Penguin (Pearson Group, United Kingdom) and Verlagsgruppe Georg von Holzbrinck (Macmillan, Germany). The book publishers switched altogether from a wholesale to an agency model with the same conditions. The agency commitments with Apple enabled the book publishers to increase prices (especially above those of Amazon), and prevented them from selling books to other retailers at a cheaper rate. Indeed, the publishers planned to establish the agency model on a global scale (also for contracts with Amazon). Later, publisher Penguin became subject to the same investigations. The Commission closed the investigations with the announcement of legally binding commitments to terminate any agency contracts with the investigated or any other publisher or retailer in December 2012 (for Penguin in July 2013). The settlement of this price fixing suit resulted in lower e-book prices in a matter of days (Aptara, 2013).

²⁵⁹ FEP (2016)

²⁶⁰ Interviews

²⁶¹ Kurt Salmon. Have the cultural and creative sectors found the formula for development in the digital age? A report prepared for the Forum d'Avignon, December 2015.

²⁶² Maher, R., & Blodget, H. (Nov. 20, 2009). Kindle Fantasies Are Running Wild -But, For Now, Amazon Is Losing Its Shirt, Business Insider. It has not been possible to confirm whether this practice holds.

²⁶³ Interviews

²⁶⁴ Maccormack, A., Kimball Dunn, B., & Kemerer, C. F. (2013). Barnes & Noble: Managing the e-book revolution. Harvard Business School Working Paper, (613-073). Retrieved from http://hbr.org/product/Barnes---Noble--Managing-/an/613073-PDF-ENG

²⁶⁵ Maccormack, A., Kimball Dunn, B., & Kemerer, C. F. (2013). Barnes & Noble: Managing the e-book revolution. Harvard Business School Working Paper, (613-073). Retrieved from http://hbr.org/product/Barnes---Noble--Managing-/an/613073-PDF-ENG

National differences²⁶⁶

National differences come especially in the national implementations of copyright/author's rights, while the law is more or less the same in all EU Member States. Exclusive economic rights (and their terms of protection) of creators protected by copyright law are, to a large extent, harmonised at EU level, but the harmonisation achieved for the exceptions to copyright is limited: most of the exceptions are optional (Member States may decide to implement them or not), and broadly formulated, leaving Member States a relatively wide leeway when implementing them.

Depending on the country, authors receive no (e.g. Greece, Bulgaria), insignificant or very small amounts per loan from a library. The differences can stem from differences regarding whether in the country there is a remuneration for a lending right, or a compensation under relevant copyright exceptions. Similarly, according to the industry's data school books are also extremely widely copied (e.g. in Germany) which has an impact on authors' remuneration. ²⁶⁷

6.4 Other exogenous changes and relations with other sectors

Changes in user behaviour

A few trends related to user behaviour may affect the book publishing industry.²⁶⁸ People can more easily find books in original **language**, but bestselling titles are usually still bought in the national language of the reader's home country. Using the example of Harry Potter, only a small fraction was bought by customers in English. At the same time, Anglo-Saxons are reported to be translating less, since they already have a huge market.²⁶⁹ Still, translated books represent an estimated 75% of the books produced in the Netherlands, with English being the most important source language, followed by Scandinavian languages.²⁷⁰ Another example is Poland, a significant rights market for international book publishers with translated titles making up almost 20% of books published in Poland.²⁷¹

Secondly, the way consumers hear about, and choose books has changed. With an increasing number of books available, it is crucial at each book or author level to be identifiable, i.e. it is not enough to be available, it is important that potential consumers hear about your work and want to read it. Consequently, **new forms of prescription** have emerged.²⁷² While traditionally, professional critics played a crucial role, this seems to be less and less the case. Two reasons for this have been reported in interviews. First, professional critics do not have time to read all books (only for niche markets). Second, there is competition from other forms of recommendation for example via social media or by platforms such as Amazon, which heavily rely on algorithms.²⁷³

Further challenges

One further challenge in the context of digitisation is the **adoption of e-books**. Technology used to play a more limited role for the publishing sector compared to other sectors. While consumers always needed technology to access broadcasting or music, using and relying on technology while reading books is still new for many customers. Traditional books have simply the advantage that they work without electricity, never fail technology, and can be resold. E-books' advantages (e.g. lightness to carry, additional functions, etc.) seem to co-exist with traditional books.

²⁶⁶ See also section 6.2.2 for differences between countries regarding the impact of digitisation on the book publishing value chain.

²⁶⁷ FEP (2015)

²⁶⁸ Interviews

²⁶⁹ Interviews

²⁷⁰ 7 Dynamic Book Publishing Markets in 2016 By Hannah Johnson and Erin L. Cox, Publishing Perspectives for the Frankfurt Book Fair's 2016 THE MARKETS: GLOBAL PUBLISHING SUMMIT

²⁷¹ 7 Dynamic Book Publishing Markets in 2016 By Hannah Johnson and Erin L. Cox, Publishing Perspectives for the Frankfurt Book Fair's 2016 THE MARKETS: GLOBAL PUBLISHING SUMMIT

²⁷² Interviews

²⁷³ Interviews

Compared to other sectors, less **subsidies** are available for the book sector. It receives subsidies for translation²⁷⁴ or book fairs, but not for the creation of content per se. Since publishers do not want to implement advertisement based models, the sector relies primarily on sales to individual customers.²⁷⁵

Smaller language communities often suffer from bad translations due to a lack of financial means and English books are often more available and affordable. As a result, younger people often buy English books. On the one hand, this may endanger local culture.²⁷⁶ Thus English-language exports represent 10% of all trade books sold in the Netherlands, which presents huge competition for the Dutch translations of those same titles.²⁷⁷ On the other hand it may also open up new opportunities, for readers as well as stakeholders in the book publishing value chain.

Links with other sectors

The most important relations with other sectors that can be identified from an economic point of view are related to how books as content can be reused in other creative sectors. This is particularly the case when a book is adapted, e.g. to make an audiovisual work (film or TV fiction for example). Very famous audiovisual works rely on books (e.g. the Lord of the Ring films, the Game of Thrones series). While the initial notoriety of the book can help the audiovisual works achieve success, conversely the success of audiovisual can boost the interest for books on which they are based. According to industry' estimates, 20 to 35% of box office hits are adaptations from a book.

Interaction with other sectors is undergoing further developments in the context of media convergence. For instance, there is an increasing interaction with the game industry where books provide narratives to games. There are also examples of trans-media story telling where the traditional book content (narration) is dispersed over different delivery channels. In some sub-sectors like the educational market, publishers are developing applications and other multimedia products out of books. Enhanced books (i.e. books with additional features such as video and audio links) provide further cases of interaction with other sectors like audiovisual and music.

²⁷⁴ See for example the EU Prize for Literature mentioned before.

²⁷⁵ Interviews

²⁷⁶ Interviews

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7/ Music – a value chain analysis

7.1 Introduction to the music sector: definition and importance in the EU economy

Among the cultural and creative sectors (CCS), the music sector is the third largest employer (after performing arts and visual arts), with 1,168,000 employees. The music industry generates revenues of more than EUR 25 billion²⁷⁸. The music industry (and related statistics) often deals with the recorded music business. Due to the growing importance of live performances in terms of value creation, this chapter partly deals with the live music circuit. While it does not analyse the live music industry in-depth, it discusses its main impacts on the recorded music value chain and opportunities for creators and includes key data and information related to live performances²⁷⁹.

The music industry is driven by technology changes. Of all CCS industry sectors, it has suffered most from the digital revolution, being hit by digital piracy, the reduction of physical sales (away from highly profitable retail stores), the development of new distribution channels with different monetisation logics (Apple - iTunes setting the precedent by setting prices of downloads independently of the industry). This industry disruption is driven by new powerful digital players, the development of new business models and new consumption patterns with the instant availability of music on mobile devices and, most specifically, the rise of music streaming.

Radical restructuring as well as further consolidation helped the industry get its cost structure under control and return to profitability. For a long time, the industry was confronted with the inability to monetise access to music as so much was accessible for free with peer-to-peer systems (Napster) and pirate sites. The industry was slow to react to technological changes and initially adopted an attitude that was too defensive (the industry spent a lot of energy defending its rights though litigation and Digital Rights Management Systems (DRM)). The industry feared a situation where its main customers (young people) would lose willingness to pay to access music ("the lost generation")²⁸⁰.

The impact of digitisation on music translates in the decrease of revenues for recorded music by more than 2% annually since 2003, according to a PwC²⁸¹ study. In particular, the revenues from the sale of physical music were subject to a rapid drop, they reached just 40% of their 2000 level in 2015, according to this same study.

On the other hand, revenues from concerts and in particular digital music sales is growing: digital music revenues have increased by an average of 28% annually since 2007, offsetting the decline in overall revenues until 2010 and driving modest overall revenue growth between 2011 and 2014.

The global music market achieved a key milestone in 2015, as digital became the primary revenue stream for recorded music, overtaking sales of physical format. Digital revenues now account for 45% of total revenues compared to 39% for physical sales. Performance rights revenues to producers and artists represent the remaining of 14%.²⁸³

The music publishing sector has been affected by the decline in income from mechanical rights (rights paid to authors for the reproduction of their works on a physical format) thus forcing some radical restructuring amongst rights management organisations (collecting societies).

Artists have suffered from the industry's painful restructuring and have been forced to adapt to a new landscape. They are playing a greater role in fighting for consumers' attention by making use of new online tools notably social media to develop a fan base and attract the attention of concert venues, festivals and music businesses. However, user-generated content has not replaced artist-generated content, since consumption of music remains talent driven. Artists are confronted, on the other hand, with the fact that the new generation of music fans are less loyal to given bands or music genres switching more easily than former generations.

The sub-sector most strongly hit by the digital shift has been the "brick and mortar" retail business with the demise of physical sales and the arrival of new players in the online retail business, notably Amazon.

²⁷⁸ Ernst & Young, Creating Growth. Measuring cultural and creative markets in the EU, December 2014, based on 2013 figures.

²⁷⁹ The live music circuit is not analysed in-depth in the performing arts sector due to the specific structure of the live industry.

²⁸⁰ Interviews

²⁸¹ PwC, The Digital Future of Creative Europe. The Impact of digitization and the Internet on the Creative Industries in Europe, published originally in 2013 and thoroughly reviewed and updated for 2015.

²⁸² idem

²⁸³ IFPI Globall Music Report 2016

Taken as a whole the revenue of the music industry has severely declined over the last 16 years, essentially due to the decline in sales of packaged music (recorded music in the form of CDs) - the turnover of the recorded music industry significantly dwindled since 2000 (from EUR 32 billion in 2001 to EUR 13 billion in 2014 – worldwide data) 284 . The recent 3.2% increase in recording revenues (in 2015) should however be noted. The boom of live music and digital sales has not yet compensated the lost sales: digital sales represented EUR 1.3 billion for EU markets in 2014. 285

The global music sector market – key statistics for 2014²⁸⁶:

Downloads - 52% of the digital revenues, but declined by 8% in 2014

Single track downloads - declined by 10.9% in 2014

Download sales declined in every established market but continue to grow in some emerging Markets

Physical formats – 46% of revenues globally. Market diversity: still a robust physical market in Austria (65%), France (57%), Germany (70%), Poland (71%)

Vinyls - niche market - 2% of global revenues. But the format revives: sales increased by 54.7% in 2014

Performance rights revenue – income from the use of recorded music by broadcasters and public venues increased by 8.3% -> it represents 6% of the total industry revenues (USD 948 million)

Synchronisation revenues – income from the use of music in advertising, film, games and TV programmers increased by 8.4% in 2014 with big gains in markets like France (+46.6%), Germany (+30.4%)

Subscription (streaming) – the recorded music industry fastest growing revenue – increased by 39% in 2014. It accounts for 23% of digital revenues globally.

The global music sector market – key statistics for 2015²⁸⁷

Download revenues – 41,5% of the digital revenues; declined with 10,5% in 2015

Digital revenues – 45% of global revenues; increased with 10,2% in 2015

Physical formats – 39% of global revenues

Performance rights revenues – 14% of the global revenues

Synchronisation revenues – 0.4% of the global revenues

Streaming – the recorded music industry fastest growing revenue – increased by 45.2% in 2015. It now accounts for 43% of digital sales globally.

7.2 Creative value chain mapping and description

7.2.1 Economic characteristics of music value creation and impact on global value chain structure

The music sector is composed of many players along the value chain, such as artists, musicians, authors and composers, record companies, music publishers, live sector, collecting societies to manage copyrights in works and performances. It relies on a number of operators for distribution: broadcasters (radio, TV), digital service providers, retailers, public places such as restaurants, clubs and hotels. While this will not be covered in this study, it should

²⁸⁴ IFPI, Recording Industry in Numbers, 2015

²⁸⁵ IFPI, *The Evolution of Music in Europe*, November 2015

²⁸⁶ IFPI, *The Evolution of Music in Europe*, November 2015

²⁸⁷ IFPI, Global Music Report 2016

also be noted that ancillary goods & services represent a non-negligible economic contribution. The manufacture of musical instrument in Europe represents 6,000 companies and EUR 1.3 billion in $2014.^{288}$

The configuration and structure of the industry has changed over time, with **high market concentration in the recorded music business**: there are now three majors (Universal, Sony and Warner) controlling 80 % of recorded music sales and most of the catalogue available online (against six majors in the 1990s). A multitude of smaller labels accounts for the remaining 20% of the market.

Record companies and aggregators invest in both international (Anglo-Saxon) and local repertoire, but the Anglo-American repertoire remains the easier repertoire to acquire a multi-territorial license from right holders and their representatives. Local repertoire will often be subject to tailored deals.

Nowadays artists have to make more efforts to emerge by developing a fan base, thus forcing extensive touring, which contributes to a thriving life music scene (concerts, festivals). Artists have to develop a fan base if they hope to achieve a record deal or to be able to feature in music festivals. Social media are important tools enabling artists to develop such a fan base. The direct monetisation with fans remains relatively limited and artists still have to rely on distribution specialists (the record companies) for most of their revenues.

The music industry has been and still is **largely hit driven**, with blockbuster sales covering for productions that do not find a market. Like other cultural and entertainment businesses, the music industry is dependent on its capacity to generate revenues whilst facing multiple challenges: managing short lived products, coping with volatility of demand and business cycles, dealing with multiple local cultural markets.

7.2.2 Stylised value chain mapping and description

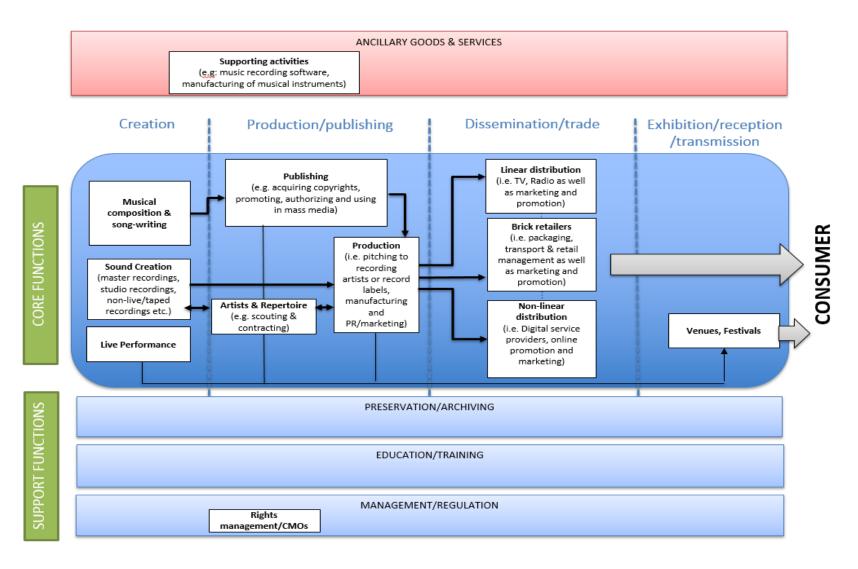
The diagram below aims at representing the interrelation between the different players across the value chain, and the changes entailed by the digital shift. This simplified representation is by no means exhaustive, and the complexities of the different parts of the value chain are further fleshed out in the next sections.

Mapping the creative value chains – a study on the economy of culture in the digital age

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²⁸⁸ Source: Eurostat database. Annual detailed enterprise statistics for industry (NACE Rev. 2, B-E) [sbs_na_ind_r2]. Last update: 07-06-2016. More detailed information is also available for some markets here: http://www.somm.eu/en/somm-markt-aktuelles-einzelansicht/news/332/hash/3b8c9c9c30d15234e3fc3898abb7968d/

Figure 21: Stylized Value Chain for Music



Creation

Creation in the music sector is essentially carried out by the composer/songwriter or musician. Sound creation, f.ex. in live concerts, is the function of the musician. The core of the artwork is already created at this stage.

Content creation and the ability to support creative expression are at the heart of culture/entertainment businesses.

The core product in the music value chain is the musical work which entails the **musical composition** (songwriter and music composer) and the **sound creation** (the performance of the musical composition). The artist is not necessarily responsible for both of the components: there are artists who perform their own works and there are others who perform someone else's composition.

Production/ publishing

A music producer oversees and manages the recording and production of a band or performer's music which includes the recording of the song. This is usually done through record labels or small independent studio facilities, but is increasingly done by the creator since recording studio technologies have become much more affordable in the digital age.

The rights that are owned for the composition are different from the ones for the sound recording. The two components can be controlled by different actors in the value chain. As such, the musical work is represented by the music publisher and associated collective rights management bodies, acting on behalf of songwriters and music composers, while the sound recording is represented by the record label and associated collective rights management bodies representing artists/musicians and/or producers.

Collective rights management bodies (or collecting societies) are organisations mandated to license copyrighted works and collect royalties as part of compulsory licensing or individual licences negotiated on behalf of their members. Collecting societies collect royalty payments from users of copyrighted works and distribute royalties to copyright owners.

The publisher represents the written song by creating opportunities and revenue streams for the authors and composers, e.g. by facilitating releases on labels, getting radio play, synchronisation to media etc. The publisher is incentivised to exploit the songs because he receives a share of the copyright for the compositions²⁸⁹.

Once a composition is created, the publisher pitches it to recording artists, or directly to record labels (if the songwriter performs his own composition).

A key step in the monetisation process in the music business is often called "A&R (Artist & Repertoire)" by the record label, which means the discovery and signing of the artists²⁹⁰. The record companies try to promote the music with an audience in order to maximise returns on investments. It encompasses talent scouting, identifying artists with a good social media presence but who aren't signed with another record company, and negotiating with artists to sign a deal.

Record companies pay an advance to artists to fund the recording costs (production), which is then deducted from royalties, collected from subsequent sales. The advance is the production investment made by the record company, who believes in the market potential of the signed artists. Usually an artist signs for a given number of albums to grant a record label exclusivity for a certain period of time.

The record company is responsible for the production of the music recording, the manufacturing of copies (in case of physical music production), the distribution to retailers and the marketing of the product. The company owns the sound recording copyright.

The digital shift has not fundamentally affected the relationship between creatives and the recording industry. Record companies collect main revenues on behalf of artists and musicians. Disputes may arise in case of accounting problems and lack of transparent reporting.

The digital revolution has certainly influenced the production stage as the technology favours self-production. Today, many songwriters are also recording artists, having access to shared knowledge via the internet and to powerful digital and technological tools. For example, electronic music artists can compose a song via dedicated

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²⁸⁹ Hull, Geoffrey & Hutchinson, Thomas, The Music Business and Recording Industry: Delivering Music in the 21st Century, New York: Routledge, 2012

²⁹⁰ Case No COMP/M.6458 - Universal Music Group/EMI Music, The European Commission's Decision, 21.09.2012

music sequencers and digital audio workstations (DAW), such as the Ableton hard/software, they can perform it with samples and synthesisers and generate a master by exporting.

Dissemination/trade

Dissemination and trade is about ensuring that talents get access to proper distribution channels and can reach out to the market place.

Packaging implies copying the recordings onto CDs or pressing vinyls, creating the artwork for the records (which can be both in a digital and physical format) and having sleeves and cases made (for physical only). This is usually done either in-house by labels or by specialised music packaging companies, but this component of the value chain is clearly on the decline in a context of dwindling physical sales. However, the resurgence of vinyl is leading to capacity shortage as manufacturing plants are facing technical issues linked to material obsolescence. Consumers are rediscovering the beauty of sound quality and artistic quality of the packaged music. In this context, it should be said that vinyl sales represented in the US a larger turnover than ad-funded revenues (Spotify, YouTube, Soundcloud), with respectively USD 416 million and USD 385 million in 2015²⁹¹.

The record companies are generally in charge of distributing their production to the various **distribution** channels. Major labels are vertically integrated, controlling both production and distribution. Independent labels generally contract distribution to major labels or large independent labels with a distribution infrastructure. Distribution deals are required to sell on third markets.

Digital records are supplied to digital service providers (DSPs) such as iTunes, Spotify, Amazon, etc. The major labels have direct deals with the largest DSPs. Independents in Europe have set up a special vehicle (Merlin) to negotiate and contract with DSPs. The smaller labels can also use automated digital distribution companies (e.g: TuneCore, CD Baby, RouteNote), which act as aggregators of music repertoires to reach the DSPs. ²⁹² Artists are in a position to do the same, if they have a well-equipped management company. In practice, only popular artists can afford to manage licensing on their own and they usually contract a label to manage this for them.

DSPs, as the new ventures in the music industry, claim to innovate and to **create value** on **use** (by proposing new ways of experience music at only clicks away) and/or **supply** (by offering an instant and richer supply to listeners)²⁹³.

DSPs follow different types of business models:

- Free: music content is made available free of charge to users who are in return being subject to advertising (YouTube, Spotify free or Deezer Discovery).
- **Subscription:** Users pay a monthly fee and have access to the catalogue of the DSP without being subject to advertising (Spotify premium, Deezer Elite, Deezer Premium +, iMusic)
 - Music right holders get a share of revenues, which is collected by record companies on behalf of artists²⁹⁴; music publishers have separate deals, usually via their collecting societies.
- **Pay per use:** users pay for the download of a single track or an album (iTunes)

Large online platforms and video portals like YouTube have taken a special role in the distribution of music. With 1.3 billion unique users every month, YouTube is the world's largest and most popular online video streaming service.

Apart from packaging and distribution, dissemination is also about generating ways to get exposure for authors and artists and the recordings (radio or music blogs and magazines coverage, feature placement on iTunes or Spotify etc.). **Promotion and marketing** is the main function of record companies and music publishers, who mediate between artists and the market place.

Marketing departments target campaigns on relevant media channels (radio, TV, social media, advertising), to raise maximum publicity and attract consumers' attraction. This is an additional investment for the industry, aimed at

²⁹¹ www.musicbusinesworlwide.com

²⁹² Case No COMP/M.6458 – Universal Music Group/EMI Music, The European Commission's Decision, 21.09.2012

²⁹³ Allegra Hadida, Thomas Paris, *Managerial Cognition and The Value Chain in The Digital Music Industry*, University of Cambridge, 2010, https://www.repository.cam.ac.uk/bitstream/handle/1810/245828/OA-1534-Hadida-Paris-MC---VC-TFSC-final-Feb-2014.pdf?sequence=1

²⁹⁴ IFPI digital music report 2016

recouping initial investments in production to generate revenues and establish the notoriety of an artist in the eyes of the public.

Nowadays, many artists are also active in dissemination and have gained recognition through social media, independently of record deals. A number of artists are developing into enterprises with a view to create, develop and manage a fan base.

Exhibition/reception/transmission

Live performances represent a very important promotional means, as well as another distribution channel. Although they can be considered a separate industry because of their complexity (cfr. the chapter on performing arts, where a more detailed analysis of live performances is available²⁹⁵), live performances can also be integrated in this specific stage of the recorded music value chain, due to the added value generated and to the labels' implication in live performances. More specifically, record labels invest significant amounts of money in the promotion of their artists' concerts, working closely with the concert promoters and with the artists' agents. The amount invested depends on the type of music that the artists play and on artists' popularity.²⁹⁶

Artists' promotion for live performances is increasingly managed by artists themselves, to ensure their place on the market.

Sometimes, large event promoting companies can also get involved in music production, acting like a record label. Such deals involve financing both live shows and albums recording. It is the case for Live Nation, a live-events company based in Beverly Hills, California, focused on concert promotions. Live Nation signs artists, similar to record labels, but predominantly takes the role of a promoter. For example, the 2007 deal it signed with Jay-Z included funding his concerts, tours and future recordings, but the artist did retain full ownership of his music through the contract²⁹⁷. This can also be problematic as there are certain platforms whose business model is to make profits from live recordings, without having to pay the collecting societies for these live recordings.

7.2.2.2 The digital shift – key trends affecting the value chain

Digital music distribution is continuously shifting from models based on **ownership** to models based on **access**²⁹⁸. The sector is increasingly relying on rights management and licensing agreements with service providers, as more direct channels such as packaged sales are declining. Rights management, which originally was left to collective licensing, is increasingly subject to individual negotiations between music companies and digital service providers (see also in the next section on value monetisation).

Consumer behaviour is moving towards instant, **real-time, anytime-anywhere access** facilitated by the integration of services across different platforms and cloud storage. Smartphones, tablets and phablets allow instant sharing of music and also payment and subscription. These features all combine to create a new culture of immediacy, very visible in music consumption. Monetisation of digital access remains an issue for the industry, as some advertising based business models raise problems for the actors of the music sector.

On the other hand, digital delivery enables the sector to better understand consumers and be more accurate in its marketing and advertising campaigns (digital services provide numerous data on consumer usage and profile to right holders as part of commercial agreements). Viral marketing on the web plays an essential role in marketing campaigns. Subscription music services have to offer attractive services that will retain acquired customers so they continue to consume music. They have an important responsibility in packaging an adequate musical offering. This capacity benefits the music industry.

The digital shift has had a significant impact on classical music, with investment dropping significantly. Concert houses, opera and classical orchestra are developing their own channels of sale independently of music companies. Sales of classical music are now less than 7% of total sales in Europe²⁹⁹. Classical music fans, like vinyl aficionados,

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²⁹⁵ The report does not cover specifically live music but provides a detailed account of the types of actors involved and its market structure.

²⁹⁶ IFPI, 'How record labels invest', 2015 online: http://www.ifpi.org/how-record-labels-invest.php

Peter Kafka, 'Jay-Z gets \$150 Million. What does Live Nation Get?' in *Business Insider*, 02.04.2008, http://www.businessinsider.com/2008/4/jay-z-gets-150-million-what-does-live-nation-get-lyv-?IR=T

²⁹⁸ PwC, *The Digital Future of Creative Europe. The Impact of digitization and the Internet on the Creative Industries in Europe*, published originally in 2013 and thoroughly reviewed and updated for 2015.

²⁹⁹ IFPI Digital Music Report 2015

require better audio quality than the traditional MP3. Increasingly, digital services are offering such improved sound rendering.

On the other hand, revenues from live concerts and, particularly, digital music sales are growing: digital music revenues have increased by an average of 28% annually since 2007, offsetting the decline in overall revenues since 2010 and driving modest overall revenue growth between 2011 and 2014. Digital sales represented EUR 1.3 billion for EU markets in 2014 while performance rights netted EUR 850 million in revenues.³⁰⁰

As outlined in the introductory section, in 2015, digital revenues overtook physical revenues for the first time in the recorded music history, with digital accounting for 45% of total revenues compared to 39% for physical. The rise of digital revenues leads to the industry's first measurable year-on-year growth in 20 years. Total industry revenues grew by 3.2% to USD 15 billion.³⁰¹

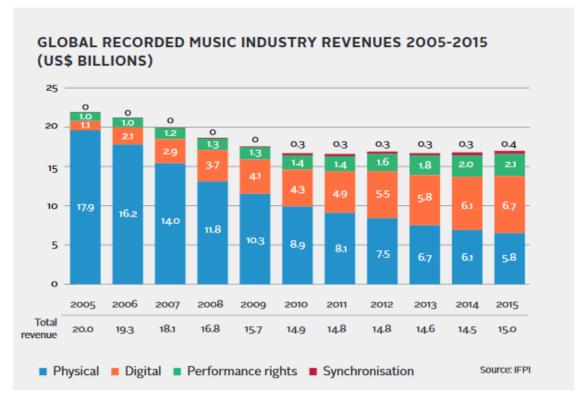


Figure 22: Global recorded music industry revenues from 2005 to 2015

Source: IPFI

This increase was particularly driven by a rise in streaming revenues, which offset declining downloads and physical formats. Streaming currently represent 43% of digital revenues and is close to overtaking downloads (45%) in order to become the primary digital revenue stream.³⁰²

The music industry continues to grow into a global digital business, as it has been leading in testing new digital business models³⁰³, forecasting that new streaming services will make their way into the market.

³⁰⁰ ibid

³⁰¹ IFPI Global Music Report 2016

³⁰² idem

³⁰³ EY, op.cit.

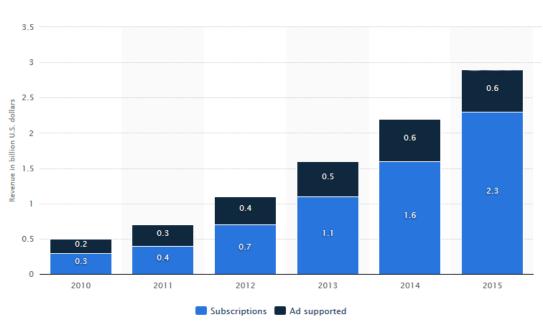


Figure 23: Music streaming revenue worldwide from 2010 to 2015

© Statista 2016

7.2.3 Value monetisation and evolution of prices

Main revenue streams in the music industry

The music industry has 3 main revenue streams: composition/**songwriting, sound recording and live performances**³⁰⁴. Examining these revenue streams would allow a better understanding about how the stages in the value chain are connected, how certain actors are working together and how the value monetisation works.

The composition/song writing revenue stream starts with music publishers who sign songwriters and license their songs, an action which creates the performing rights. That leads to the performance and the distribution of songs, which finally leads to the public listening (broadcasters, social venues), watching (television) and buying.

Often, selling licences for the use of compositions to other actors is intermediated by the so-called **collecting societies**, because of the amount of administration this action involves. They work on behalf of the authors by:

- enforcing their rights,
- selling licences to use their music,
- collecting the royalties and distribute them,
- arrange for other collecting societies (e.g. in other countries) to collect the royalties.
- The sound recording revenue stream starts with artists performing recordings, for which they received the performing rights. Next, labels sign artists to record, an activity in which a team of producers, engineers and artists are involved. Manufacturers reproduce copies of the recording (in physical or digital format) which are then distributed and sold via different channels (physical retail) or online. Finally, the public buys the recordings online or offline.

The collecting societies can license the right to perform sound recording, and therefore collect royalties for the labels and performers on recordings.

³⁰⁴ Andra Leurdijk & Ottilie Nieuwenhuis, Media & Content Industry: Music case study, Study for IPTS, 2011

Live performances are one of the main revenue streams for the music sector. This revenue stream is of course centred on the artist, but there are many other actors involved in supporting an act: the artist manager, agent and promoters, as well as venue operators, ticketing companies and several suppliers and contractors³⁰⁵. Overall the share of revenues from live performances is much more beneficial for artists compared to other revenue streams (80% of revenues go to artists in some live venues).

Example – importance of performances in artist revenues (US-based)³⁰⁶

The 'future of music' project analyses how artists are deriving revenues. It is based on direct surveys and looks into different profiles of artists. For example, an Indie Rock Composer-Performer:

- earned 30.5% of his income coming from performance fees for solo shows (for 2008-2011); plus
- an additional 29.7% of revenues came from salaries paid by bands for which he played.

His other revenues included:

- 21.2% from compositions (15.0% for publishing-related income both advances and royalties; and 6.2% in public performance royalties)
- 12.1% in CD sales
- 3.5% from record royalties
- 2.9% in miscellaneous technical works.

Key changes have taken place in rights licensing and management as this has become a central point of revenue collection for the music business (as opposed to securing deals with 'brick and mortar' retailers) with the development of digital sales and subscription/streaming models:

- Major record companies are negotiating deals individually with platform operators and digital distributors, thus withdrawing their catalogues for such rights management (right of making available) from collecting societies representing producers.
- Independent companies either negotiate individually, mandate local collecting societies or use the MERLIN vehicle (a collecting society set up by independent labels specifically to negotiate digital rights), thus improving the bargaining position of smaller labels.
- Collecting societies representing authors, composers and music publishers are regrouping to ease the licensing process (which is now a key market driver). The streamlining of this process is progressing slowly around 2 structures Harmonia (SACEM/SGAE) and ICE Copyright Enterprises (STIM- PRS and GEMA).
- Service providers are still complaining about the licensing infrastructure that is composed of numerous intermediaries (aggregators, different repertoires), which makes the licensing process costly and time consuming.³⁰⁷

 $^{^{305}\,}Source: ILMC\,(the\,International\,Live\,Music\,Conference): http://www.ilmc.com/index.php/about/about-the-live-music-industry$

³⁰⁶ Information retrieved from the 'future of music' project, analysing how musicians earn money and the evolution of their revenue streams: http://money.futureofmusic.org/case-study-a/3/

³⁰⁷ KEA, Licensing Music works and transaction costs in Europe, 2012.

In the context of this changing environment, creators have flagged concerns over information asymmetries and fair remuneration. Authors and performers call for stronger contractual protection of creators and reporting obligations. Some artists are challenging the fact that the making available right is being exercised by record producers on their behalf as part of recording contracts.³⁰⁸ Others are arguing that the making available right should be equitably remunerated through an unwaivable remuneration right for digital uses, collected from the users who make the performances available and subject to mandatory collective management³⁰⁹. Overall, the indication emerging from the different interviews (with representatives of different players in the value chain, not only creators) is that artists would get the same percentage of overall revenue as in the past in some instances. Because of digital automation, they get revenues much faster than in the past, where collecting societies could take months before accounting to individual right holders.

In terms of value monetisation and evolution of prices and markets, a couple of key trends can be observed:

- Prices have been driven down over years with the transition from physical sales (CD prices amounted to EUR 15 to EUR 20 per unit) to digital sales (EUR 1 per track) and now streaming.³¹⁰ In relation to online sales, pricing is no longer decided by the music industry but by digital service providers.
- The value monetisation of music works through streaming services is subject to criticism and complaints from the industry. According to Spotify, the average pay-out for a stream to labels and publishers ranges between USD 0.006 and USD 0.0084³¹¹. Artists complain that revenue per usage is around USD 0.001128 (after deduction of the producers' share).³¹² In a recent report of Adami, the French collecting societies representing performers, reported that out of a monthly subscription to Spotify with a value of EUR 9.99 per month, artists would share only 46 cents.³¹³
- The live music business is a significant multinational industry, employing hundreds of thousands of people worldwide and estimated to be worth more than EUR 25 billion annually³¹⁴. As such, it has become increasingly important in terms of value monetisation for artists because of the global downturn in the sales of recorded music. That means that many artists have come to rely more on the revenues they make through their live performances.
- Margins are driven down in physical retails (around 15% of net revenues), as logistic costs have risen (as the size of the market declined).
- It seems that music publishers receive slightly less income from digital platforms than when they negotiated with record companies as a percentage of the revenue pie.³¹⁵

There is a challenging inverse correlation in the perceived value of music nowadays: while the music sector has never been more consumed and important to online businesses than today, the billions of ad-supported streams generated less revenue in 2014 than the sale of vinyl records, a lost physical format experiencing a revival amongst music fans. 316

³⁰⁸ Interviews

³⁰⁹ KEA (2014) Contractual Arrangements applicable to creators: law and practice of selected Member States, European Parliament, Legal Affairs Committee. Brussels, 2014.

³¹⁰ Idem

³¹¹ http://www.spotifyartists.com/spotify-explained/

³¹² David McCandless, 'How much do artists earn online?' on *Information is Beautiful*, http://www.informationisbeautiful.net/2010/how-much-do-music-artists-earn-online/

³¹³ ADAMI Activity Report 2015, preliminary information here: https://www.adami.fr/defendre-les-droits-des-artistes/loi-liberte-de-creation.html

³¹⁴ IFPI Global Music Report 2016

³¹⁵ Interviews

Hugh McIntyre, 'The Music Industry Has a Huge Problem With Perceived Value', in Forbes, 30.08.2015: http://www.rollingstone.com/music/news/leaked-sony-spotify-contract-reveals-inner-workings-of-streaming-music-20150521

7.3 In-depth analysis of interrelations between actors

7.3.1 Market structure and bargaining power

Creation

At the level of creation, music production has remained vibrant and strong, both at international and local levels, despite of the decline of overall turnover of the main investors in recorded music. With less revenue from recorded music, a number of artists have developed into entrepreneurs, marketing and promoting their own music. Creation is under a **monopolistic competition** situation, with differentiated products and overall **low entry barriers.**

In terms of **bargaining power**, most artists are weak when facing major labels such as Warner, Sony or Universal. This is exacerbated by an **asymmetry of information** (little visibility on the deals proposed to other creators) and the **oligopsony** situation, with a mismatch between the diversity of creators and few large labels. Top-selling artists can avoid this intermediation by entering into self-production and licensing a record label to provide marketing and distribution services, thereby reversing the market situation as explained above. Mega stars have the privilege of concluding advertising deals with famous brands that foster their international reach. However, these cases represent a very small percentage of the overall artists' population.

Production

In music production, the configuration and structure of the industry show increased **market concentration** in the recorded business, as well as in music publishing. There are now only 3 majors (Universal, Sony and Warner), which are **vertically integrated** (active across different functions of the value chain: mostly production and dissemination), controlling 80% of recorded music sales globally and in Europe, and the majority of music catalogues available online. A multitude of smaller labels accounts for the remaining 20% of the market. These majors have the best financial means and distribution infrastructure to bring an artist to the market locally and worldwide.

Dissemination

The major shift in dissemination (or distribution) comes from the fact that the music industry has lost the ability to dictate pricing. Before the digital shift, distribution tended towards an **oligopolistic market structure**, where vertical concentration of the main labels enabled them to maintain high entry barriers (securing exclusive deals with artists, by investing in A&R over the long term, requires heavy investment). Downloads and subscription/streaming prices are now set by the new digital distributors. Prices were driven down by download-to-own, then streaming companies to encourage consumers to pay-for-access to music and substitute for unlicensed consumption. As a result, music companies are taking stakes/shares in some DSPs (such as Spotify) in an attempt to regain power in the distribution segment.

At the retail level, large music stores such as HMV, Virgin, Tower Records have vanished from the high streets. Traditional broadcasters are also affected by lower advertising revenues, thus affecting performance rights income for authors, artists as well as record companies.

The industry is placing hopes in music services launched by digital operators such as Spotify, Deezer, Soundcloud, Apple Music or Google Play, as key drivers for growth.

The music industry alleges it is not in the strongest position in negotiations. It claims that some players on the market which benefit from music's popularity to drive traffic and related advertising revenues, hide behind the legal ambiguity surrounding the possibility of relying on regulatory provisions that limit online intermediaries' liability for illegal content stored (including copyright infringement). Online intermediaries are shielded from liability if they remove illegal or infringing content as soon as they gain knowledge of the infringement.³¹⁷ The role of certain online services however has evolved over time. Online content platforms make available a large quantity of diverse audio and video content (music, films, games, etc.) and argue that the constant upload from users is very difficult to monitor. YouTube has developed a rights management mechanism (ID Content) to identify content present on the website. The mechanism also aims to facilitate "notice and take down" processes (as well as monetisation), but this is often a lengthy process and soon after, the content reappears.

³¹⁷ A.Renda, F.Simonelli, G. Mazziotti, A. Bolognini, G. Luchetta'The Implementation, Application and Effects of the EU Directive on Copyright in the Information Society', in CEPS Special Report No.120, November 2015

Research from Hadopi³¹⁸ in France shows that the most popular content (and therefore the most valuable to attract advertising) on YouTube is music, in the form of usage of music video made by artists (authors, writers, performers, musicians) under contract with record companies and music publishers or affiliated to collecting societies representing authors' rights.

The industry is pushing music services that currently have a mixed model (free and paid tier) to encourage their consumer base to switch (more rapidly) to paid models and abandon free advertising based models. Ad-supported streaming makes up to 75% of Spotify's monthly users, but only 10% of its revenue.

Industry analysts say that there has never been so much music on offer, but revenue does not seem proportionate to usage. IFPI estimates there are 140 million users of streaming services in the world (and 41 million paying subscribers). Spotify - still the largest digital music service provider - has over 75 million active users, over 20 million subscribers with 30 million songs and 1.5 billion playlists in 56 countries. YouTube would account for around 40% of the music consumption in 2014, while contributing to global music revenues for only 4%³¹⁹. Spotify paid USD 3 billion in 2015 to right holders³²⁰. In comparison, YouTube paid USD 2 billion in 2016 to right holders since the launch of the content ID service in 2007³²¹. Also, Spotify estimates that Spotify paid record companies USD 18 per user in 2014, the last available data; by contrast it is estimated that YouTube delivered less than USD 1 per user to rights holders in 2015.³²² The existing subscription platforms are now challenged by Apple's iMusic digital music streaming service (launched in summer 2015 with already 12 million subscribers since launch).

In order to address the artists' payment issues, Tidal emerged in 2015 as an alternative streaming service set up by famous US artists, with a business approach centred on the artist.³²³

With regard to the global live music market, there is also concentration in this sector with Ticketmaster/Live Nation Entertainment (USD 7.6 billion turnover in 2015 up 11% from 2014) controlling a large share of the festival and event ticket sales market worldwide.

The position of new digital actors in the monetisation of music

The sound recording industry has moved away from technical protection measures and regulations aimed at coercing unauthorised access at consumer level. Piracy remains an issue, but the music model for the online world is increasingly based on licensing music content to streaming services and negotiating deals with digital platforms.

The acquisition and consumption of music is rapidly becoming an almost entirely digital proposition. Networking, file-sharing and now streaming have changed the way people view the consumption of music since the launch of Napster in 1999. Although iTunes launched a few years later and began selling singles with the symbolic sum of USD 99 cents, as a paid alternative, it worked alongside the free download model (generally unlicensed by rights holders), to which the listeners had quickly become accustomed³²⁴. This drove a massive hole into the recorded music's revenue model and accounted for the steady annual decrease of the global recorded music revenue until 2014 (see Figure 4).

The MUSO's Global Piracy Insights Report 2016 reveals a troubling massive shift towards direct free downloads for music content - growing by 31% in 2015. 2015 also saw a 25% rise in the use of YouTube Ripper websites, used primarily for converting and downloading MP3s from YouTube music videos.³²⁵

320 www.spotifyartists.com/spotify-explained/

³¹⁸ Hadopi report 2012, http://www.hadopi.fr/sites/default/files/page/pdf/note17 en.pdf

See also Roland Berger Strategy Consultants. Cultural content in the online environment: Analyzing the value transfer in Europe. A report prepared for the GESAC. Paris, November 2015.

³¹⁹ IFPI Global Music Report 2015

³²¹ https://www.youtube.com/yt/press/statistics.html

³²² IFPI Global Music Report 2016

³²³ https://www.theguardian.com/music/2015/apr/05/tidal-10-things-you-need-to-know-jay-z-madonna-music-streaming

³²⁴ Berklee Institute of Creative Entrepreneurship BICE, Fair Music: Transparency and Payment Flows in the Music Industry, 2015

³²⁵ MUSO Global Piracy Insights Report 2016, https://www.muso.com/market-analytics-global-music-insight-report-2016/

While music is being consumed at record levels across the world through streaming (see figures in previous part), this volume is not returning a fair remuneration to artists and producers, according to IFPI. There are similar disparities recorded in the UK and France.³²⁶

DSPs share between 50 to 70% of their advertising revenues with rights holders. This 70% share is also the rate applied in relation to revenues from iTunes downloads. However, there has been a wave of negative feedback about low pay-outs from ad-based and subscription services. Companies like Spotify or Deezer have been criticised for their freemium service: for instance, in November 2014 Taylor Swift withdrew all her music from Spotify after the company declined to limit her music to paid subscribers³²⁷.

Today, streaming services continue to grow. In comparison, according to BICE³²⁸, in 2015 sales of downloads were falling faster than the sales of the physical product. Digital streaming means the return of disposable music (the one hit single). Markets in Scandinavia are now in majority digital streams. Southern Europe is slowly catching up.

Monetisation and new business models are also developing as part of bundled offers. For example, Deezer has yet to garner a critical mass of subscribers towards its premium offer but has secured strong deals with telecom operators (free premium service as part of a mobile phone subscription plan – see also section 4).

The overarching structure of the value chain has, however, not evolved as significantly as expected and the value chain creation-production has remained the same – artists are still signed to record companies which market and sell their music to consumers via a host of different distribution channels.³²⁹ Of course distribution channels have changed with the dematerialisation of music, thus affecting not only sales channels but also marketing and promotion strategies.

Ownership and equity ties

The music industry is dominated by three major record labels since the Universal/EMI merger in 2011-2013, coexisting with a myriad of independent labels of various sizes (mostly MSMEs). These majors control around 80% of the market³³⁰:

The 'big three'	Headquarters	Owners
Universal Music Group, which absorbed most of EMI's recorded music in 2013.	United States	Vivendi, France (since 2006)
Sony Music Entertainment (including EMI Music Publishing since 2013)	United States/Japan	Sony Corporation of America, US (since 2008)
Warner Music Group (which integrated EMI's Parlophone and EMI/Virgin Classics labels in July 2013)	United States	Access Industries, US (since 2011)

The majors own numerous subsidiary labels and are highly vertically integrated. They have affiliated music publishing companies (Warner Chappell Music for WMG, Universal Music Group also owns Universal Music Publishing Group, and Sony owns BMG Rights management). The majors are also part of larger media conglomerates active in other cultural and creative sectors (video games, press and audiovisual content). There are strong relations between majors and independents, and many independent labels have distribution deals with

³²⁹ Interviews and Kurt Salmon. Have the cultural and creative sectors found the formula for development in the digital age? A report prepared for the Forum d'Avignon, December 2015.

³²⁶ IFPI Global Music Report 2016

³²⁷ IFPI, Digital Music Report 2015

³²⁸ idem

³³⁰ Sourced from companies corporate websites.

one of the major music companies. The major record companies often take over contracts, buy labels or even whole record companies once artists with whom they have deals become successful³³¹.

Often independent labels bought by the major record companies continue to work under their own label and are granted a degree of independence in finding, selecting and promoting talents in their markets, due to their specific expertise in the area. As a result, it is difficult to distinguish between independent labels and subsidiaries owned by majors. Some (European) examples of independent labels include Domino Records, Postcard Records, Creation Records, Edel Group, PIAS Group, Wagram Music, Beggars Group.

Digital service providers have to negotiate with both record labels and music publishers. Leaked contracts between Spotify and record labels revealed that the deal included a number of clauses, including equity stakes in Spotify. As a result, all of the three majors have partial ownership of the company.³³³

7.3.2 Contractual arrangements and revenue sharing

Contractual arrangements between creators - producers

Contractual arrangements are a key aspect in the music value chain, as they set out the remuneration terms for the creators (authors, performers) and producers/investors. They define the scope, conditions and modalities of the transfer of copyright and set out the agreement between the parties. Creators (composers/musicians) will generally assign their copyright to music publishers, who then own copyright over the musical works, and record producers or labels will own the related right in the master recording.

Contracts' terms between artists and record companies have not fundamentally changed with the digital shift, only in so far as producers are entrusted with the management of artists' making available rights. Some artists would prefer streaming to be treated as a performance income, thus enabling direct control on rights management³³⁴.

They also request more transparency in business deals between record companies and digital service providers (see further) and regret that packaging deductions are still the norm of artists' contracts, whilst music is essentially distributed in dematerialised formats³³⁵.

Contractual arrangements between record companies – streaming services and fair remuneration of creators

Negotiations between streaming services and major labels for direct licences are always consumed within the conditions of non-disclosure agreements (NDAs) that leave artists out of the conversation entirely, which prevents any transparency. NDAs are used because companies don't want to reveal their business models to competitors or to the public. Artists call for more transparency across the value chain and a more judicious application of NDAs³³⁶ to ensure that they are fairly compensated for their work.

The leaked 2011 contract between the major label Sony and the streaming company Spotify has been reckoned as a concrete example in artists' argument for the need of transparency. From this perspective, the contract can be seen as a case revealing the inner workings of the streaming music business which directs the big money towards the label, not the artist, taking advantage of the confidentiality provisions: Sony received USD 25 million in advance payments from Spotify in the first two years of the contract, then another USD 17.5 million in the third year. The contract doesn't stipulate what Sony Music can or will do with the advance money and one could infer that Sony kept it for itself.

³³¹ KEA (2006) the economy of culture in Europe. A report prepared for the European Commission, DG EAC.

³³² Andra Leurdijk and Ottilie Nieuwenhuis (2012), Statistical, Ecosystems and Competitiveness Analysis of the Media and Content Industries: the music industry. JRC Technical Reports, Brussels.

³³³ Steve Knopper, 'Leaked Sony-Spotify Contract Reveals Inner Workings of Streaming Music', in *The Rolling Stone*, 21.05.2015, http://www.rollingstone.com/music/news/leaked-sony-spotify-contract-reveals-inner-workings-of-streaming-music-20150521

³³⁴ Interviews

³³⁵ EY, Create, share and protect: The agility of intellectual property facing the challenges of the Digital Single Market. A report prepared for the Forum d'Avignon, 2016.

³³⁶ Future of Music Coalition (FMC): https://www.futureofmusic.org/blog/2013/11/05/non-disclosure-agreements-what-they-are-and-why-theyre-annoying

"I have worked at the major labels and I've worked at the indies, so I've seen both sides of the business. A lot of the time, money that is paid outside of the direct usage doesn't end up getting shared", Rich Bengloff, president of the American Association of Independent Music, says.³³⁷

"The whole streaming business has been a ridiculous system of not paying independent labels and artists", Allen Kovac, manager of Motley Crue, Blondie and others, says.³³⁸

Another controversial element in the above-mentioned contract is the "Most Favorite Nation" clause (MFN), which turns out to be standard in the music-streaming contracts.³³⁹ It essentially means that if any competing label gets a better yearly advance rate from the streaming company, then the contracted label can insist on being paid the difference in cash. Sony Music used a MFN clause in its contract with Spotify to automatically increase its yearly advances if another music label negotiated a bigger advance from the streaming company.

It is still difficult to tell how much artists are getting paid. Sony Music is getting considerable pay out from Spotify, through the contract, but what the label does with the money is still unknown. Some artists have clauses in their contracts to get a larger share of revenues, some other still have deals representing the CD-era that only ensure them 15 to 20% of the revenues³⁴⁰ (which is very little given that, as opposed to CDs, in the streaming world production and retail sales costs have almost disappeared).

Kobalt Music Group is one company that attempts to resolve these transparency issues through the supply chain. Kobalt offers artists, songwriters and publishers access to copyright administration and usage tracking of their work on streaming, broadcasting and even on piracy platforms³⁴¹, in an attempt to bring them closer to their products throughout the value chain.

Artists welcomed the unilateral move from the international association representing independent labels (WIN) to establish the principle of revenue sharing with artists and more transparency in contracts with digital platforms. The move was triggered by the litigation opposing Sony Music to artists' management company "19 recording", based on the leak of the above-mentioned contract. Warner Music also announced in February 2016 that in case any equity invested in Spotify by Warner Music is sold, the profits yielded would be shared with artists. 343

Contractual arrangements between record companies – UGC platforms and fair remuneration of creators

Right holders allege that, on the back of their huge music catalogue available, online platforms have achieved great market power resulting in powerful bargaining positions in their relations to right holders (see also detailed figures in section 7.3.1 above).

Online platforms like YouTube have actually signed deals with 3 majors (UMG, Sony and Warner) and a large number of independent labels (including Merlin) as well as with a number of collecting societies representing authors and composers/ publishers notably PRS for 130 territories for the Anglo-American repertoire (but excluding GEMA). However, stakeholders in the music sector stress the need to clarify the requirements for copyright licensing for online protected content distribution in order to ensure a level playing field and the negotiation of deals fairly remunerating the value of content in the online market. In fact, they complain that the value gap is not only a result of online services' unwillingness to negotiate licences but also the fact that the legal ambiguity of the existing framework may have facilitated deals based on unfair terms (below the actual value of music rights).

³³⁷ Micah Singleton, 'This is Sony Music's contract with Spotify', in *The Verge*, 19.05.2015, http://www.theverge.com/2015/5/19/8621581/sony-music-spotify-contract

³³⁸ Steve Knopper, 'Leaked Sony-Spotify Contract Reveals Inner Workings of Streaming Music', in *The Rolling Stone*, 21.05.2015, http://www.rollingstone.com/music/news/leaked-sony-spotify-contract-reveals-inner-workings-of-streaming-music-20150521

³³⁹ Micah Singleton, op.cit.

³⁴⁰ Interviews

³⁴¹ Tomo Hosoi, Joseph Kim, Dennis Stainken, Felip Caro, 'Disintermediation in the Recorded Music Supply Chain', on UCLA Anderson Global Supply Chain Blog, 31.08.2015, http://blogs.anderson.ucla.edu/global-supply-chain.html

³⁴² http://winformusic.org/declarationhomepage/

³⁴³ Glenn Peoples (2016) Warner Music Group CEO: 'We Will Share' With Artists Any Proceeds from Sale of Our Stake in a Streaming Service. Billboard, 4 February 2016. Available at: http://www.billboard.com/articles/business/6866856/warner-music-group-ceo-stephen-cooper-spotify-equity-breakage

Revenue sharing

The recorded music market has changed a lot with the digital shift: new players have entered the value chain and the overall recorded music revenues registered the first growth (from 2014 to 2015) since 1999 (see figure 4 above). Nevertheless, according to Kurt Salmon, the overall split of revenues across the sector's value chain does not seem to have radically been affected by the digital shift. This view was also confirmed through interviews.

A couple of other key trends can be observed in terms of the evolution of revenues across the value chain:

- ▶ Digital revenues now represent 45% of total revenue of the recorded music industry worldwide³⁴⁴.
- Vinyl record sales increased by more than 50% last year in the USA, and represent more than 7% of the physical recording industry income.
- Publishers have not benefitted from the digital shift and lost part of their share of global revenues in the digital environment (from 5% to 3%).
- The overall share of revenues between producers and artists for digital sales is overall the same as in the physical economy (around 40/45%)

7.4 Other exogenous changes and relations with other sectors

The music sector is a rapidly-changing environment and exogenous changes are often partly intertwined with the fast evolution of business models within the music sector.

Global sourcing

Globalisation certainly has an impact on the music sector, as the Anglo-American repertoire is dealt with individually by majors in the digital age (whereas this was dealt with by collecting societies in the physical market), which effectively control an important share of the repertoire. Independent music labels have set up Merlin (a licensing entity), in order to strike deals with digital service providers.

Physical distribution remains decentralised across countries (and linguistic areas), whereas digital service providers do not have an editorial team for smaller markets. In this context, fine-tuning playlists to local audiences is taken care of by offices located in larger markets (for example Spotify does not have a team dedicated to the Belgian market). Local and national repertoires have however remained very important in Europe, and territorial deals are made to best cater to the specificities of local markets.

In addition, some European countries have set up regulatory and financial support schemes (tax credits, quota for music diffusion, support to music production) to encourage investment in local production. As a result, there is still a wide diversity of music production across Europe. The question of the circulation of local repertoire across European markets is an issue in music as well as it is in cinema. The other challenge is to ensure the presence of local language music on international platforms. The monitoring of cultural diversity on the Internet beyond local and international English language music is increasingly a policy consideration.

Relations with other cultural and creative sectors

Music content fuels other value chains and contributes to the added value of other cultural goods, including in particular video games and audiovisual works (especially film, TV programmes). This is mostly done through:

- Commissioning of original music work (mostly for premium content). It should be noted that some artists/companies are specialised in this niche market and create bespoke works for this specific purpose. Such commissioning is sometimes incentivised/required as part of public support to audiovisual works.³⁴⁵
- Use of a specific composition in a film, television or a video games soundtrack. In this case, synchronisation royalties are perceived usually by a music publisher or a collecting society and are then redistributed to the composer.

³⁴⁴ IFPI Global Music Report 2016

³⁴⁵ KEA (2014) Strategic diagnostic of creative industries in Lille Métropole. See in particular the benchmark analysis of the competitiveness of the local audiovisual sector.

Overall synchronisation royalties (royalties due when music is used in another work – mostly films and video games) represent a relatively small share of revenues (0.4% of the global music revenues). However, it increased by 8.4% in 2014 with significant growth in markets like France (+46.6%) and Germany (+30.4%).

Bundling and consumption patterns

Music is increasingly used for the promotion of other services, such as broadband services and telephony. There are strong incentives to offer preferential access to music content as music consumption is typically following the 'ATAWAD' model of consumption³⁴⁶. This includes hardware and software solutions – one of the key selling points of the first iPhone was its link with iTunes and the music catalogue available. Now all smartphones operating systems offer built-in solutions for both streaming and download-to-own solutions.

Music offerings are often part of commercial bundles proposed by telecom and cable operators. For example, Deezer has struck a deal with Orange (Telecom Company) to develop a bundled offer including a monthly subscription to mobile services and to Deezer premium content. While this drove revenue growth for some years, this led to a significant share of 'passive' consumers (4 million -3 million from this bundle offer - out of the 6.9 million premium consumers Deezer had in 2015).³⁴⁷ The sustainability of such partnerships is strongly questioned by licensing deals which include minimum guaranteed payments partly based on the number of subscribers to the streaming service.³⁴⁸ In this context, driving down subscription prices through such bundles is challenging at best, although it enables digital service providers to develop its user base quickly.

³⁴⁶ "Anytime, anywhere and on any device" – and especially in music, where the development of mobile consumption is nothing new.

³⁴⁷ http://www.journaldunet.com/media/publishers/1164321-les-5-obstacles-que-devra-franchir-deezer-pour-reussir-son-pari/

³⁴⁸ In 2014, Deezer was spending 80% of its turnover on licensing and royalties payment. See Deezer's prospectus for investors p.30 here: http://www.info-deezer.com/downloads/?f=Deezer Securities Note Visa n15-528.pdf

8/ Film – a value chain analysis

8.1 Introduction to the film sector: definition and importance in the EU economy

Definition and scope

The European audiovisual sector produced approximately EUR 134.929 billion of added value in 2012, compared to EUR 123.664 billion in 2008³⁴⁹. 1,551 feature films were produced in 2013, box office receipts were EUR 6.28 billion and no less than 8,828 television channels and more than 3,000 on-demand platforms were offering access to audiovisual programme³⁵⁰.

As "Audiovisual" encompasses a variety of works that is too wide to make a meaningful value chain analysis, we have split "Audiovisual" into three distinct sub-sectors each with its own distinct value chain: Film; Television and Radio; Video Games and Multimedia. This grouping mainly follows the **2009 FCS of the UNESCO** that divides the Audiovisual and Interactive Media in the following three groups:

- Radio and Television broadcasting;
- Film and Video;
- Interactive Media. Interactive Media covers video games and new forms of cultural expressions that mainly occur through the Web or with a computer. In our framework, this last category is video games and multimedia (see definition below).

This chapter will focus specifically on the film value chain.

Importance for the EU economy

European films, and in particular cinema and fiction films, are recognised worldwide for their artistic quality. The European film landscape is characterised by the production of diverse, high quality arthouse works that often do not attract massive audiences. It is also characterised by a high level of diversity, as cultural and linguistic features of different European countries largely shape audiovisual storytelling and content creation.

Only a small minority of European films are released in cinemas outside of Europe (8 % in 2010) where they reach a non-negligible albeit modest audience in terms of market share at the box office³⁵¹. In fact, over 19 % of total admissions (and 16 % of box office takings) of European productions were generated outside Europe in 2010³⁵².

The average production budget varies considerably from Member State to Member State. In the UK it stands at EUR 10.9 million³⁵³, in Germany and France around EUR 5 million and in Sweden EUR 2.6 million. In contrast, in Hungary or Estonia films are produced with an average budget of EUR 300,000³⁵⁴. As regards US films, the latest figures available indicate that the average production budget reached around EUR 62.5 million in 2013, with strong discrepancies between large-scale productions and smaller ones.

³⁴⁹ European Audiovisual Observatory Yearbook 2014.

³⁵⁰ European Audiovisual Observatory Yearbook 2014.

³⁵¹ European Audiovisual Observatory, database Focus, 2013.

³⁵² European Audiovisual Observatory — study on 'Theatrical export of European films in 2010', covering the following countries: Argentina, Australia, Brazil, Chile, Colombia, South Korea, Mexico, New Zealand, United States & Canada, Venezuela. Over the same period, US productions generated 66 % of their box office abroad.

³⁵³ Though this higher average is mostly driven by a few very large productions, such as James Bond or Harry Potter films

³⁵⁴ EAO 2015 datasets.

The film sector: key data and statistics³⁵⁵

Cinema Admissions in the EU - Market shares by origin of films	2004	2014
EU films	28,29%	33,20%
US films	66,86%	63,24%
Other European films	2,62%	0,33%
Other countries	2,23%	3,23%
Market share of European films in non- national EU markets	7,04%	9,18%
Market share of European films in the US market	7,10%	2,42%

	US 2004	US 2014	EU 2004	EU 2014
Number of feature films produced	611	455*	761	1542*
Number of cinema screens	35786	40158	28672	29943
Cinema admissions (in millions)	1536	1.270	950	911,22

^{*}data from 2013 (2014 data not yet available). The MPAA stopped calculating the average production budget of US films in 2007. Data for year 2013 comes from another study providing general figures on production and analysing production budget sample of 108 US films produced in 2013.

https://www.hollywoodreporter.com/sites/default/files/custom/Embeds/2013%20Feature%20Study%20Corrected%20no%20Watermark%5B2%5D.pdf

Average production budget (in € million)	2004	2014
US (MPAA members)	48,2	62.5*
US (MPAA subsidiaries and affiliates)	22,4	02.3
United Kingdom (domestic production budget)	10,3	0,5
UK (inward investment film production budget) ³⁵⁶	10,5	21,5
France	5,1	5,6
Italy	2,2	1,4
Spain	2,4	1,3
Germany	2,8	5,6
* Same as above		

-

³⁵⁵ Sources: European Audiovisual Observatory (2015 datasets) for 2014 and European Audiovisual Observatory Yearbook 2016 for older data.

³⁵⁶ Includes co-productions where most of the production budget actually comes from US-based companies.

8.2 Creative value chain mapping and description

8.2.1 Economic characteristics of the film business and impact on the global value chain structure

Film is a **highly capital-intensive** industry as well as a **highly risky** business: it is one of the most expensive types of creative works produced with the highest uncertainty in terms of market outcome.³⁵⁷

The traditional business plan for US films is based on an 'all in house'-model. This means that one company or organisation is responsible for most of the elements in the value chain: creation (called 'development' in this sector), production and dissemination (including marketing and distribution) are being taken care of by roughly the same team (high level of vertical integration). In contrast, the EU film market is characterised by a wide diversity of smaller players working at different levels of the value chain. In 2014, the European Parliament identified this could be considered as a (structural) weak points preventing the EU film industry from flourishing in a digital environment³⁵⁸. Independent film production is also more fragmented.

The independent film industry is a **supply-led market** and it is very uncommon for a film to be produced and delivered through a single company. Several companies contribute throughout the process to produce and distribute a film successfully. This means that the value chain in itself is **fragmented**, and competition does not only come from Hollywood dominance, but also from an overcrowded market in terms of production – especially when including alternative content online & high-end TV drama.

The traditional business model for film distribution is anchored around the **"exploitation windows"** – exclusive periods of time within market regions (territories) to enable repeated commercial exploitation of a film's intellectual property rights in order to maximise revenue³⁵⁹ on a territorial basis. The initial release is not necessarily the most significant revenue stream as investments in marketing and other costs are very high. Still, a successful cinema release can generate revenues later on in the distribution cycle. A longer showing in cinemas, was more common before the changes in the business model – now, operators focus on the opening weekend and take it from there. The diagram below gives an overview of the different release windows:

³⁵⁷ Vogel H., Entertainment Industry Economics – A Guide for Financial Analysis (7th Edition), Cambridge University Press, Cambridge, 2007.

European Parliament. Report on European film in the digital era. 1st of April 2015 (http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+REPORT+A8-2015-0123+0+DOC+XML+V0//EN)

³⁵⁹ Ulin, J. (2010). The business of media distribution: Monetizing film, TV, and video content in an online world. Burlinton, MA: Focal Press.

Domestic exploitation DVD/VHS/bluray Broadcast TV On-demand Potential of Potential of day-and-date with theatre release Exhibition VOD Video rental/ day-and-date with DVD Video sell-through PPV VOD Premium pay-TV Free-to-air TV VOD (archive and / or catch-up TV) windows henceforth remain open in perpetuity

Figure 24: Exploitation windows in the Film sector

Source: Adapted from KEA. Multi territory licensing in Audiovisual Works in Europe. Study prepared for the European Commission, DG Connect. Brussels, 2010 – page 57.

The combination of decline of home video and the changing economics of cinema releasing changed the business environment and model of the film industry. The digital shift is transforming – albeit rather slowly - the market from the supply side to the demand side. The delivery costs of films and promotional materials are gradually driven down thanks to digital solutions for certain productions, but marketing and promotion costs remain stable. Advertising is also more targeted and is strengthening the marketing of films. The challenge generated by new technologies available is enabling the traditional business models to change.

However, the digital shift has yet to affect the overall structure of the film value chain. There are several technical and structural reasons increasing costs and diminishing potential return on investment:

- Need to be connected to the internet/ cost factor if using data on mobile devices
- Quality of broadband connections is key to access films online;
- Level of hardware equipment penetration;
- Difficulty to stream a long feature film;
- Acquisition of content across territories is costly;
- Sequencing of release windows.

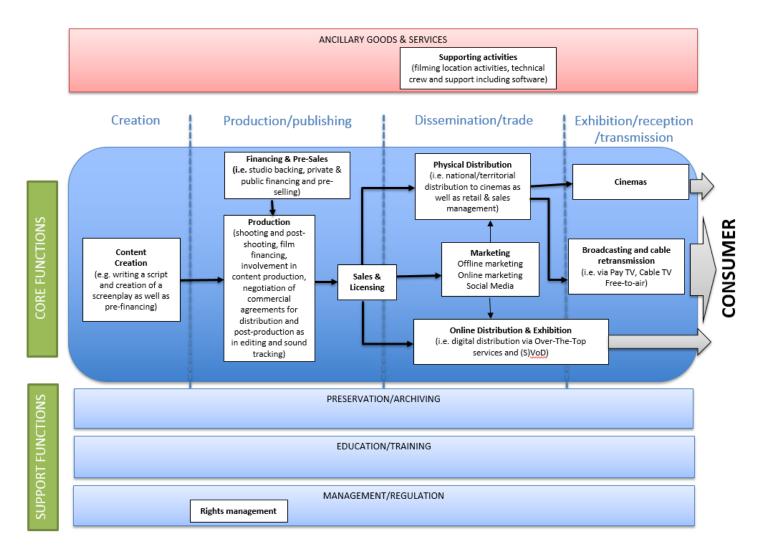
As a result, no global digital companies (Netflix, Amazon, Apple) have yet invested in attractive film content that is both global and local. The above-mentioned specificities partly explain why those players are rather investing in other types of audiovisual content.³⁶⁰

8.2.2 Stylised value chain mapping and description

The diagram below aims at representing the interrelation between the different players across the value chain, and the changes entailed by the digital shift. This simplified representation is by no means exhaustive, and the complexities of the different parts of the value chain are further fleshed out in the next sections.

³⁶⁰ These developments are further discussed in the value chain analysis of the broadcasting sector.

Figure 25: Stylised Value Chain for Film



8.2.2.1 Description of the actors in the value chain and their role in value creation

The film value chain comprises a chain of connected companies and individuals, all of them working on different elements of the film production and distribution processes. The interlinked horizontal elements of the value chain follow the stages of development, financing and pre-sales, production, sales and licensing, distribution, and eventually consumption. Each of these elements also has its vertical components.

Creation

In this first stage – called "development" in this specific sector - the idea for a film is validated by the producer(s) and the screenplay is created by the creative team (script writer, and director, supervised by the producer). The first financial steps are also taken: the development funding is secured and production financing process is initiated. Development financing often comes from a different source than the production funds (i.e. own resources or public funding³⁶¹) - especially when it concerns independent film production³⁶².

As film making is highly capital intensive, **securing the film budget** has to be partly dealt with in advance.³⁶³ Pre-sales refers to the process where the film is sold in advance of being made. The film is sold to specific territories (national distributors such as broadcasters or specialised distribution company which then commercialise the film through different channels of exploitation) in the world, based on the strength and assumed quality of both director and cast.

Financing a film, especially when it comes to independent films, is a complex matter with sources from different investors. The industry still relies on pre-financing provided by traditional players too³⁶⁴. The digital shift has yet to affect this step of the value chain as new players are not yet investing significantly in pre-sales, which condition the financing of films.³⁶⁵ Additionally, existing players have an interest in safeguarding the existing model (and the release windows), as additional competition from digital actors would reduce their bargaining power and potentially raise the prices of pre-sales³⁶⁶. From the producer's side, new potential investors would be welcome, as long as the release window mechanism is maintained.

New technologies have led to the development of new narratives more adapted to shorter formats that can more easily be viewed on mobile players or be uploaded on social media. Digital cameras and editing software are democratising film making. Virtual Reality equipment is also bound to change creative processes in the audiovisual sector. Finally, new consumption patterns (notably viewing time and speed) are having an impact on creative expressions.

Production

This function entails the shooting and the post-shooting process – the actual making of the film. This function involves a broad staff to take care of the different steps of the process, including inter alia directors, cast, technical crew (lighting, sound, special effects, etc.) and editors.

Producers have a pivotal role here to maintain a good relationship with their creative co-workers like the writers, directors and actors to be able to maintain the talent in their value chain, as they can use this as an argument against the high investment risks. Establishing long term relationships with other stakeholders and investors is also instrumental for the producer to limit the risks of the fragmentation of the value chain.

The definition of independent producer varies across Europe, but it generally includes 1) a statutory aspect, in which the independent producer (mostly SMEs) is considered as not controlled, de facto or de jure, by a broadcaster

³⁶¹ See for example BFI scheme: http://www.bfi.org.uk/supporting-uk-film/production-development-funding or the Polish film institute one www.filmcommissionpoland.pl/funding/polish-film-institute/

Vogel H., Entertainment Industry Economics – A Guide for Financial Analysis (7th Edition), Cambridge University Press, Cambridge, 2007.

³⁶³ Baujard, T. et al., Peaceful fish (2009) 'Study on the Role of Banks in the European Film Industry' (http://www.media-italia.eu/files/doc/1139 12May-Banks Final Report.pdf).

³⁶⁴ By traditional players we mean distributors acquiring exclusive rights such as broadcasters, public funding, but also equity financiers, tax break financiers, sponsors (e.g. banks etc.)

³⁶⁵ To some extent crowdfunding is an exception here. However crowdfunding usually takes place after the development phase to have enough material to communicate about.

³⁶⁶ Societé of Audiovisual Authors: `European Film in the Digital Era – Bridging Cultural diversity & Competitiveness', European Commission Communication, 2014, Brussels.

and has managerial independence and freedom to dispose of its production³⁶⁷ and 2) its role in the film value chain, which includes:

- Development of the film project;
- Source financing for the project, calculate the budget and ensure it is not exceeded;
- Select and/or approve scripts as well as possible directors, co-producers, casting directors and other artistic employees;
- Negotiate contracts and ensure remuneration for all who contribute to the production;
- Supervise shooting and cutting.

In comparison, the dominant Hollywood model has established a business model that is still at work today, although new business models and changes are emerging. The Hollywood value chain model is an integrated one, where a film studio is often responsible for developing, producing and globally marketing the end product: the film. Because of the integration of their business model, the bargaining power of the producer is a lot higher and the risk for investors is lowered.³⁶⁸ The main Hollywood film studios control around 65% of the European market and around 80% of the northern American market:

- NBC Universal (Comcast);
- Walt Disney Studios (The Walt Disney Company);
- Warner Bros. Entertainment (Time Warner);
- Fox Entertainment Group (21st Century Fox);
- Sony Pictures Motion Picture Group (Sony);
- Paramount Motion Pictures Group (Viacom).

Dissemination/trade and exhibition

In both the EU and Hollywood models, after the director, financiers and producers have approved the final edit, the completed film is licensed internationally – producers mandate sales agents to negotiate with national distributors in every group of countries (territories), which get access to the content after paying to receive the film and acquiring its exploitation rights for a limited period of time.³⁶⁹

Within the independent film industry, it is very rare that a film is disseminated by one and the same company, but rather by a diversity of distributors operating nationally. This disintegrated function of the value chain can only work with the help of numerous companies and players to successfully produce and distribute a film. An independent distributor is competing with several other players to distribute its films, be it Hollywood productions or other independent films.

Distributors are responsible for marketing and promotion of films. The digital shift has transformed marketing campaigns, with teams actively working with social media to target appropriate customers in the identified market segment. Advertising has now moved to digital because it is more targeted and thus contributes to eliminate advertising waste. Distributors do not have exactly the same activities in all European countries. In some Member States, such as Czech Republic, Slovakia or the UK, distributors also act as exhibitors, which enable them to experiment with film releases, etc. In such countries, distributors have a brand known by the general public while in other countries distributors rather have a B2B activity.

European film distributors do not have the financial means and human resources to compete with the advertising strategies of Hollywood blockbusters. Marketing and promotion weaknesses are often cited as a major bottleneck

http://www.cepi.tv/attachments/article/112/CEPI%20statutes%20approved%20at%20GA%20Oslo%202014.pdf

³⁶⁷ Adapted from AVMS Directive and CEPI statutes, available at:

³⁶⁸ The European film sector developed in a different way due to a number of key factors such as 1) cultural and linguistic fragmentation 2) National structuration of the markets and of the main players (few EU companies are active on different markets) and 3) Strong public support to production but few incentives to scale up companies beyond production. This is further outlined in section 8.1.1 of this report.

³⁶⁹ Recoupment is a film industry expression meaning "repayment", usually applying to income from the sales and exploitation of the film which is used to pay off investors in the production budget of the film. (Source: Davies and Wistreich, (2007) pgs 99-101)

to the growth of the European film industry.³⁷⁰ It should be noted here that the MEDIA programme is seeking to address this through targeted support measures for marketing, promotion and online distribution³⁷¹. Marketing campaigns are adapted to each local market. International marketing campaigns are rare in relation to European films

As discussed in the previous section, the traditional business model, which is still used by most companies, both in the US and in Europe, is built up around a lifecycle of exploitation windows³⁷² (see figure in section 8.2.1). These windows are also affected by the digital shift enabling the maximisation of revenues. They can best be described as time-sensitive opportunities of different types of exploitation.

Before, cinemas were probably the most important distribution platform for any new film coming out, followed by the DVD sales and broadcasters. The digital shift has changed this set up and supplements the distribution segment of the value chain with additional actors.

Cinema

This window is not necessarily the most significant revenue stream: marketing printing and other costs are very high, but a successful cinema release is instrumental in generating revenues later on in the distribution cycle. A longer showing in cinemas, was more common before the changes in the business model – now, operators focus on the opening weekend and often adjust the time-lapse during which the film will be shown based on these initial box office results. A cinema release doesn't necessarily bring more revenue, but adds to the value of a film if the cinema release generates a good buzz.³⁷³ Recent changes include:

- Easier and cheaper possibilities to play films in cinemas thanks to new technologies, and more films can be screened³⁷⁴;
- The increase of independent/EU films produced and US large productions are competing for screening time in cinemas³⁷⁵. This is also why new release models are becoming more common and accepted (see also new consumption models below). Direct e-distribution release is also being tested on a number of films.³⁷⁶

DVD/VHS sales and rentals, pay per view or the home video window

DVD was a high margin business for the film industry. It is gradually disappearing. DVD/VHS sales have been decreasing since 2008 – revenues have dropped from EUR 8 billion in 2010 to EUR 5.3 billion in 2014 in the EU, with a strong impact of piracy³⁷⁷ as well as an increasing switch to legal streaming models.

The film industry is looking for a transaction business on a pay per usage basis (as opposed to a subscription model), but it is slow to take off due to different reasons linked to pricing and window of exploitation.

Broadcasters and pay TV operators

The television industry (pay TV and free-to-air) is a key partner in the value chain as it is an important buyer of films. In some countries, TV companies have an obligation to invest in local production and to programme local films (quota requirements). Broadcasters are also creating attractive Video-on-Demand (VOD) offers to compete with new entrants (such as the BBC player - a successful catch-up service which also provides links to other broadcasters).³⁷⁸

Pay TV subscribers are expected to grow by 8.38 million until 2020 in Western Europe to reach 104.81 million (representing an 8.7% increase), but revenues will not increase due to competition from both over the top (OTT)³⁷⁹

³⁷⁰ European Commission, Impact Assessment on the Creative Europe Framework Programme, Commission Staff Working Paper, SEC(2011) 1399 final, Brussels.

³⁷¹ https://ec.europa.eu/programmes/creative-europe/media_en

³⁷² Finney, A. (2015) The international film business: A market guide beyond Hollywood (2nd ed.). New York, NY: Routledge.

³⁷³ IHS Technology (2015) Cinema: how cinema is evolving within the value chain. UNIC Cinema Days: October 2015

³⁷⁴ Finney, A. (2015) The international film business: A market guide beyond Hollywood (2nd ed.). New York, NY: Routledge.

³⁷⁵ BFI statistical yearbook of 2014 notes that in 2013, 13 films were released on average per week, as opposed to 8 in 2008

³⁷⁶ See for example Wild Bunch and TF1 attempts at direct VoD releases: http://www.lemonde.fr/cinema/article/2015/03/27/wild-bunch-poursuit-ses-experiences-en-vod/4602897/3476.html

³⁷⁷ European Audiovisual Observatory (2015 datasets).

³⁷⁸ http://www.inf.kcl.ac.uk/staff/nrs/pubs/www2013.pdf

³⁷⁹ "over-the-top content (OTT) refers to delivery of audio, video, and other media over the Internet without the involvement of a [network] operator in the control or distribution of the content." From European Parliament (2015) Over-the-Top (OTTs) players: Market dynamics and policy challenges. Policy Department A: Economic and Scientific Policy, Brussels.

video service providers, and especially Subscription Video-on-Demand (SVoD) service providers, as well as online pay TV platforms (IPTV) challenging established pay TV players in the cable and satellite markets.³⁸⁰

Focus: film financing obligation of pay TV in France

The Canal + Group is the leading pay television operator in France and an important one in Europe³⁸¹ (along with Sky, Liberty Global or Telefonica to name a few). Developments in the cinema film production and distribution sector have turned it into one of the major audiovisual players in France and in the provision of French-language films abroad. The channel was authorised to air films earlier after their cinema release in return for an undertaking to finance the film industry by devoting a portion of its turnover to the industry, which has altered the business model of film-making in France, enabling a record number of works produced and distributed in France to be kept going year after year, while creating competition in the industry (TPS formerly, Orange nowadays).

But many new challenges lie ahead for the group. Since the emergence of terrestrial digital television (TNT) in France and the rising influence of digital service providers, Canal+ has had to adapt to fresh competition on a market that has undergone a real revolution. More and more viewers are switching from expensive pay TV subscriptions to subscription video on demand (SVOD) services like Netflix, Hulu, and Amazon Video, as well as premium services from HBO³⁸² and Showtime.

(Subscribed) Video-on-demand (SVOD) and over-the-top (OTT) players

VOD is perceived as a tool capable of remedying Europe's problem in distribution. There is now a considerable offer of VOD services proposed by media organizations, telecom operators and digital service providers. According to the EAO, there are over 3,000 platforms in Europe alone. These offers are proposed at national level to respect rights licensing (managed on a territorial basis). The sector is evolving towards a subscription-based business model. However, revenues remain marginal and the industry has yet to find ways to make the most of this new window of exploitation.

Netflix, which entered the European market in 2015, is the first operator to propose a substantial digital service. With a sizeable catalogue of essentially US TV series, Netflix is now involved in investing in local TV series. Subscription VOD (Netflix, Amazon) does not generate sufficient revenues for the European film industry (and effectively perceives around 5 times less revenues per user in Europe compared to the US). However, it introduces competition with entrenched Pay TV services in Europe (Sky, Canal plus).

Most digital service providers do not invest in the production of audiovisual content, and they probably won't until they are sure that their return on investment is large enough. They do not provide minimum guarantees neither do they buy exclusive rights to exploit new works via their VOD platform. But even by only buying older films, VOD platforms generate income and influence the market. On the other hand, in the US, Google has built a film studio and Netflix is also looking into new ways of investing in audiovisual content.

The recent announcement by Netflix and Amazon to invest in films³⁸⁴, with different release strategies shows the importance of having recent content and the appetite of larger SVoD services to enter the film business.

To summarise, digital technology affects the audiovisual industry on several levels³⁸⁵:

Digital TV Research. Digital TV Western Europe Forecasts. April 2015. Available at: https://www.digitaltyresearch.com/products/product?id=117

³⁸¹ Finance-Madureira, for InaNova: 'The Canal + Group: the undisputed leader of pay TV in France', 2010. Or European Audiovisual Observatory Yearbook 2014.

³⁸² Although also being a pay-TV channel, HBO offer OTT content and is rapidly gaining popularity on the internet. See for example NScreenMedia (2015) SVOD growth strong, HBO Now hits 5% penetration. Available at http://www.nscreenmedia.com/svod-growth-strong-hbo-now-hits-5-penetration/

³⁸³ Roland Berger Strategy Consultants. Cultural content in the online environment: Analyzing the value transfer in Europe. A report prepared for the GESAC. Paris, November 2015.

http://www.theverge.com/2015/7/7/8907313/netflix-original-movie-release-date-calendar-adam-sandler-fukunaga http://variety.com/2015/digital/news/amazon-studios-to-produce-movies-for-theatrical-digital-release-in-2015-1201408688/

³⁸⁵ KEA European Affairs. Multi-Territory Licensing for the online distribution of audiovisual works in the European Union. A report prepared for the European Commission, DG CONNECT. Brussels, 2010.

- Audiovisual content is increasingly created with the use of digital equipment and therefore exists in immaterial, electronic form. It can be transferred to digital hard drives for post-production and editing and saved on several physical storage devices. Storage costs are generally declining.
- At the distribution level, audiovisual content can be disseminated electronically via different digital transmission networks. Distribution has become more efficient and less costly, making it possible to distribute several digital content versions to different end-devices (internet-enabled television, computer, handheld, etc.) and to distribute content digitally across borders at lower costs. The main effect of this on markets is the increase of individuated consumption.
- The proliferation of diverse broadband services and a growing variety of electronic end devices is appealing to many consumers, and creates new markets for the audiovisual industry.
- Marketing and communication is increasingly done online and it is becoming more interactive across industries through the use of digital media. Social networking, micro-blogging and virtual communities in general the uptake of social media and digital communications can provide detailed information about final users, and even impact on how products and services are being developed.
- Finally, the global nature of the internet and the ability of users to easily copy and share content pose challenges to copyright enforcement, and specifically undermine the rewards for creative talent and rights holders.

Digital technology has fuelled the development of different VOD models that can be roughly categorised according to their terms of distribution: Open internet; ADSL (IPTV); Cable; Digital Terrestrial Television; Satellite or mobile networks. The success of VOD services depends to a great extent on the dominance of certain networks (such as IPTV in France) as well as on users' purchasing power in each country and on their acquaintance with pay TV models among others. VOD can also be categorised according to the terms of use. It can allow permanent use (in the case of Electronic Sell Through/download-to-own), but can also be based on payment per viewing, subscription fees (SVOD) or advertising-based models (known as AVOD or FreeVOD).

Although in all EU countries, the VOD market is rapidly developing, the market is not yet mature enough to allow all services to be profitable everywhere. Italy and Spain, for example, are behind on these trends, because of stricter legislation on release windows and the low broadband infrastructure³⁸⁶.

Western Europe on the other hand, shows an increase in OTT and SVOD. According to a study from Digital TV Research covering 15 European countries³⁸⁷, OTT and SVOD brought in revenues amounting to EUR 5.6 billion in 2014 – while in 2010, revenues did not exceed EUR 801 million. By 2020, revenues will have increased by 116%, to reach EUR 12.3 billion. The UK is leading on the adoption of SVOD subscription. While in 2014, 9% of all households have subscribed to some sort of SVOD package in the country, it is estimated that by 2020, this figure will reach 32% of all UK households³⁸⁸. This increase in revenue is expected thanks to the development of the distribution platforms and the expansion of their catalogues.

VOD contracts with platforms are mainly based on non-exclusive conditions (as opposed to pay TV contracts). This makes it less interesting for distributors and broadcasters to enter the VOD market, as the revenues are smaller than in cinema distribution, broadcasting and DVD³⁸⁹.

8.2.2.2 New Consumption trends and resilience of the cinema experience

Growing populations of not only young people, influenced by the many technological changes, are transforming the demand for cinematic experiences. The 'active audience,' as coined by Gubbins³⁹⁰, prefers to consume content via the internet. They look for 'personalised' content and want to feel free in when and where to consume this

³⁸⁶ Screen Reporters, Europe VOD: Popularity contests, 2013 (http://m.screendaily.com/5053564.article). More recent data (2015) on broadband infrastructures is also available on: http://ec.europa.eu/priorities/publications/country-factsheets-digital-single-market_en

³⁸⁷ Including the UK, Switzerland, Sweden, Spain, Portugal, Norway, Netherlands, Italy, Ireland, Germany, France, Finland, Denmark, Belgium, and Austria

³⁸⁸ Digital TV Research (2015) Digital TV Western Europe Forecasts

³⁸⁹ Boland, Margaret, The Business Insider, 'How subscription video on-demand services like Netflix are contributing to the demise of pay-TV', 2016

Gubbins, M. (2012). Digital revolution: The active audience. Cine-Regio. (http://film-junction.co.uk/wp-content/uploads/DigitalRevolution2012 Final.pdf)

content³⁹¹. Peter Bloore defines the consumer as the last segment of the film value chain and gives them a dual role related to value. The consumer purchases (customer consumption) the product, allowing value to return to the chain but also contributes to the 'library value'³⁹², directly connected with the reputation of the film. Thanks to the digital shift, consumers are enabled to give direct feedback that reaches far more people than the traditional word-of-mouth. Film bloggers help to make (or break) a film. This makes their voice as important as the voice of other, formally approved media critics³⁹³.

With the numbers of films distributed in a given week increasing, films get shorter exploitation windows in cinemas. The first week will be decisive. The shorter exploitation window in cinema makes it more difficult for word-of-mouth to play a role in the success of a film, and now effective social media campaigns at the marketing stage are playing a more prominent role.

The experience economy is taking a more prominent role in film consumption – where and how experiences are sold more than the actual product. Consumers are more willing to pay extra for this kind of experience. These experiences are evolving rapidly because of technological progress (like 3D and now 4D cinema³⁹⁴, IMAX systems, Dolby Atmos Sound). 93% of screening rooms in Europe were equipped with digital projectors in 2015³⁹⁵. Producers and distributors are becoming increasingly resourceful when it comes to adding value to the experience in different ways³⁹⁶.

Independent distributors have looked for other ways than costly technological upgrading to increase the sense of exclusivity without necessarily spending more money on marketing, promotion and distribution. In the UK, hybrid events such as secret cinema³⁹⁷ are very successful at attracting (new) audiences. The costs these kinds of initiatives bring are relatively low, both at the level of distribution and exhibition. Films are marketed through a month of activities leading up to the actual premiere. These activities are advertised via Secret Cinema's website, but also through social media like Facebook and Twitter.

Tickets for the national release and the activities leading up to it cost up to 8 times as much as a standard ticket, but the promise of a unique experience made the audience willing to pay the higher price – the event sold out 29 screenings.³⁹⁸

These kinds of releases also mean that the cinema market remains relevant and coexists with the multiplatform releases and by the availability of films on VOD platforms.

Two types of consumer experience already exist alongside: to enjoy the social side of going to the cinema with friends or in order to enjoy the cinematic experience (bigger screen, better sound and vision quality), and the every-day experience of watching films anytime anywhere. This coexistence between two types of consumption patterns can also be seen through bundled offers between cinema tickets and vouchers allowing access to the same film when it is released on demand.³⁹⁹ For alternative or independent films, the multiplatform releases or pure e-

396 Gubbins, M. (2012). Digital revolution: content/uploads/DigitalRevolution2012 Final.pdf)

olution: The active audience. *Cine-Regio*. (http://film-junction.co.uk/wp-nal.pdf)

³⁹¹ Heidsiek, B. (2014, May 18). Divisive discussion on day-and-date releases. *Cineuropa*. (http://cineuropa.org/nw.aspx?t=newsdetail&l=en&did=257577)

Jibrary rights represent the possibility to re-exploit a film once the distribution licence expires (i.e.: second DVD or cinema release, additional releases on pay-per-view services, etc.). Such re-exploitations are arguably heavily reliant on a sustained reputation and interest for the film. See for example Bloore, P. (2009). Re-defining the independent film value chain. UK Film Council.

³⁹³ Vickery, Graham and Hawkins, Richard (2008) Remaking the Movies: Digital Content and the Evolution of the Film and Video Industries (ISBN 9264043292) in The Organisation For Economic Co-operation and Development (OECD), Science &Information Technology Journal 2008, vol. 2008, no. 1, pp. 1 - 135, OECD Publishing, France.

Representing a 15% market share in the US and Canadian market in 2014 (http://www.mpaa.org/wp-content/uploads/2016/04/MPAA-Theatrical-Market-Statistics-2015 Final.pdf). In Europe the roll-out of 3D cinema is progressing steadily (UNIC Annual report 2015. Brussels, April 2016).

³⁹⁵ UNIC Annual Report 2015

³⁹⁷ The secret cinema company produces activities around the actual showing of the film, where entire buildings are transformed into the world of a film with audiences taking part in the story. The experience fuses film, music, theater, and replicate set installations. Originating from the UK, the company has launched similar activities in the US https://www.secretcinema.org

³⁹⁸ Bathe, S. (2014, April 15). The London List Review: Secret Cinema 21 is their best and most immersive production yet. The London List. (http://thelondonli.st/london-list/the-london-list-review-secret-cinema-21/)

The 'super ticket' mechanism in the US and the UK is an example of such bundled offers: http://www.engadget.com/2015/03/25/uk-cinema-superticket/

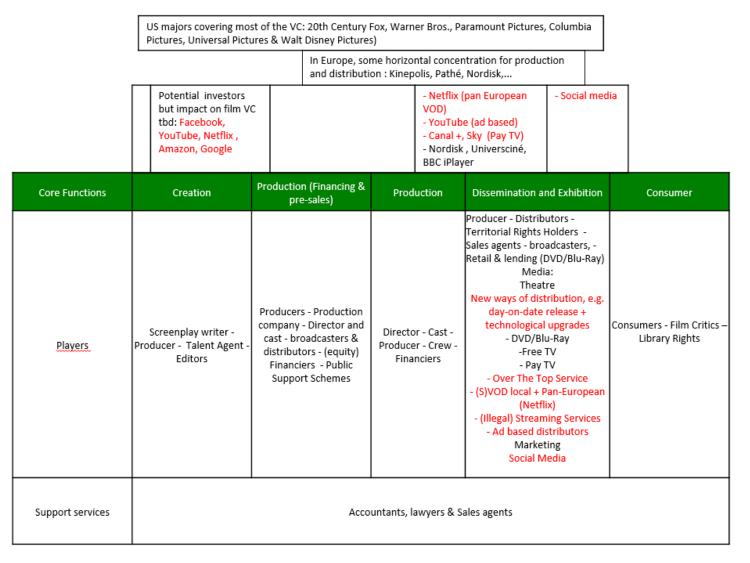
distribution with a real and effective marketing campaign⁴⁰⁰ can provide a better medium since their box office visibility tends to be lower and their cinema release spans for a shorter time.

In an increasingly networked economy, innovation and economic growth are dependent on integrating diverse stakeholders, including consumers, into product development and marketing and communications processes. ICT enable more collaborative ways of 'ideation' and creation, e.g. working jointly on developing ideas for film scripts, or nurturing the computing power of several servers to work on heavy resource-dependent animation projects. ⁴⁰¹ As end-consumers become more ICT literate, some believe that it is becoming possible to involve a greater diversity of professional and non-professional users in audiovisual development, creation, distribution and exploitation.

⁴⁰⁰ Recent examples of such releases include a partnership between TF1 and Wild Bunch (France) or A field in England (UK)

⁴⁰¹ KEA European Affairs. Multi-Territory Licensing for the online distribution of audiovisual works in the European Union. A report prepared for the European Commission, DG CONNECT. Brussels, 2010.

Figure 26: The film value chain – new (digital) players



8.2.3 Value monetisation and evolution of prices

The value chain of the film sector is sequential and the monetisation of films relies on a set of different modes of exploitation outlined above: from the initial cinema release to DVD sales, online distribution on VOD platforms and broadcasting on television channels⁴⁰². The value of the film is based on the licensing deals secured by the right holders with these different buyers, and is incremental over time⁴⁰³. The monetisation of the film then depends on the different buyers that will effectively distribute the film. In this regard, the film industry remains a broadcast-led sector, with the main driver of growth being Pay TV subscription (and the main buyer of films). Telecom platforms and cable provide ancillary revenues to the industry. The table below provides an overview of where revenues come from.⁴⁰⁴

Table 2: Revenues in the audiovisual market in the EU, 2010-2014

The audiovisual market in the EU (revenues in million euros)	2010	2014
Audiovisual services	87.559	94.123
Public funding	25.733	25.571
Advertising TV	29.196	29.416
Advertising Radio	4.813	4.828
Pay TV revenues	26.898	31.807
On-demand pay-revenues	919	2.501
Cinema gross box-office	6.377	6.324
Physical video (incl. taxes)	8.032	5.343
Retail	6975	4796
Rental	1057	547
_		
TOTAL	101.968	105.790

Several main principles and changes related to the monetisation of value creation throughout the value chain can be highlighted:

- Average cinema admission prices in the EU grew from EUR 5.68 in 2004 to EUR 6.94 in 2014, generating revenues of EUR 6.3 billion in 2014.⁴⁰⁵
- Cinema remains the main vehicle for the exploitation and marketing of films, and the cinema business is still growing strongly (+7% in Europe in 2015). As such, it contributes to generating considerable value for subsequent exploitation windows.⁴⁰⁶

⁴⁰² Bloore, P. (2009). Re-defining the independent film value chain. UK Film Council or iMinds (2014) Analysis of the legal rules for exploitation windows. A report prepared for the European Commission, DG Connect.

⁴⁰³ Blume, Steven (2006) The Revenue Streams: an overview in Squire, Jason E. (Ed.) (2006) The Movie Business Book, 3rd Edition, Simon and Schuster; and Enders, A. (2013), 'The value of territorial licensing to the EU' (https://www.letsgoconnected.eu/fileadmin/Studies/Alice Enders - The value of territorial licensing - FINAL 11 OCT 2013.pdf).

⁴⁰⁴ Source: European Audiovisual Observatory (2015 datasets). Data for the film sector only will be provided and discussed whenever possible (data on audiovisual includes television and radio content for the 'audiovisual services' category here).

⁴⁰⁵ European Audiovisual Observatory, 2015 datasets

⁴⁰⁶ UNIC. Update on Cinema-Going in 2015. Press Release. Brussels: 9 February 2016.

- DVD sales still represent the most profitable (highest margin) way of selling a film, but sales are plummeting (from EUR 8 billion in 2010 to EUR 5.3 billion in 2014)⁴⁰⁷.
- The impact of digital has led to a strong reduction of the DVD/Blue Ray which has yet to be replaced by a "transactional model to own". However, no Digital Service Provider (DSPs) or online platform have taken over the distribution power of the US industry (like Apple did for music) or is investing significantly in production to own worldwide rights content, as market entry is costly and highly broadband-intensive.
- The new actors (licensed services such as SVOD, but also user-uploaded video hosting services such as YouTube or Vimeo) which are entering the value chain do not play a key role in terms of monetisation of films yet, due to the low potential remuneration for film right holders per view. Digital distribution still represents less than 5% of the industry revenue, but is expected to grow. 408
- Subscription VOD operators (Netflix, Amazon) do not drive growth in the film industry due to insufficient revenues compared to its catalogue, but they helped to introduce competition with existing Pay TV services in Europe (Sky, Canal plus), which are broadening their offers.
- On marketing and promotion, consumers play a much more active role in raising awareness and sparking interest in films, especially for films with smaller audiences (word-to-mouth marketing has been greatly facilitated by internet)⁴⁰⁹.

Digital technologies drove down advertising costs and have enabled more targeted advertising and contributed to eliminate advertising waste. Crowdfunding, social media (viral marketing) and online video hosting mean that large audiences and communities can be reached at limited costs, but so far have not had a wide-spread impact on reaching significant amounts of new audiences for independent films.

8.3 In-depth analysis of interrelations between actors

8.3.1 Market structure and bargaining power

As discussed in previous sections, the different components of the value chain of the film sector are strongly intertwined and the bargaining power of the different actors thus depends on specific parameters for each deal, as every production is a prototype (amount of financing secured, existing agreements, genre, cast and potential for multi-territorial distribution).

Changes in the economies of film financing and distribution are affecting existing business models (e.g. technological convergence, the decline of DVD sales and the projected rise of digital downloads and streaming). Although on a global level the film industry has seen its revenues growing in the last couple of years (as opposed to the music industry, where revenues have declined), markets are affected by technology changes thus forcing the industry to adapt. Digitisation and new consumption trends (including piracy) are affecting physical sales as in music, but the industry has been able to control the various windows of exploitation to maximise revenues.

Creation level

At creation level, the market structure is highly **heterogeneous** and features creative individuals (film directors, scriptwriters, cinematographers, music directors ...) whose **bargaining power** will depend on their track record and past successes at the box office or in the film festival circuits. Most creative individuals face **monopolistic competition**, as large numbers of creative individuals are in competition with each other to get their film ideas picked up by producers and entry barriers in this stage are rather low. However, as in the visual arts sector or music sector, reputation makes that some stand out from the crowd much more than most others (e.g. well-known directors). Conversely, producers are relatively few compared to the number of film creators, and the situation is rather one of oligopsony from this perspective. Together with their investment at an early stage of the process, this situation gives producers a strong bargaining power over creatives. Moreover, public funding is relatively scarce at this stage and rather focuses on production.

⁴⁰⁷ European Audiovisual Observatory, 2015 datasets

⁴⁰⁸ IHS Technology (2015) Cinema: how cinema is evolving within the value chain. UNIC Cinema Days: October 2015

⁴⁰⁹ Christian Peukert, Jorg Claussen, and Tobias Kretschmer. Piracy and Movie Revenues: Evidence from Megaupload. A Tale of the Long Tail? 22 June 2015. Available at SSRN: http://ssrn.com/abstract=2176246

Creatives are paid as part of the production budget. A few creatives are offered the possibility to take part in the revenue derived from the commercial exploitation of films, by taking a percentage of net revenues and share the risks with the producer/distributor.

Creatives are organized in collective management structures to increase bargaining power or with a view to collect fees with respect to certain uses (usually performance of a film on broadcast channels)⁴¹⁰.

The producer often plays a significant role in the creative process, as he is instrumental in putting creative teams together to achieve certain objectives. He will control casting to make the creative ambition match the commercial expectations.

Actors play a key role in the value chain as they are a key element of the commercial potential of a film. The casting is an important element of **product differentiation**, commanding the bankability of a film and its capacity to attract funding.

Production level

In Europe, the production infrastructure is characterised by a high level of fragmentation across a large number of SMEs. The situation is somewhat similar to the creation level with strong **monopolistic competition**, although with some elements of **vertical integration**. While some producers indeed operate completely independently, others are structurally linked with broadcast media as supplier of programmes (TV fiction, feature films or documentaries). Production companies cater for linguistic markets. Most ambitious productions which aim at international distribution will be in English.

The production infrastructure is characterised by a lack of large film catalogues (that enables to weather the years without box office successes), heavy reliance on state aid to fund production and limited development funds to manage slates.

Production companies are responsible for the commercial exploitation of films and concentrate all the rights to enable such exploitation. Market share of local film productions is quite important in the UK (44.5%), France (35.2%), Denmark (29.3%), and Germany $(27.5\%)^{411}$.

Production infrastructures that also control distribution are rare. Few European companies are integrated (Pathé, Nordisk are examples of integrated companies) and such integration is often limited to very few territories.

Producers are keen to maintain the current system of territorial licensing as it preserves their ability to raise prefinancing. Indeed, revenues from VOD are not an alternative to pre-financing from distributors and broadcasters. Online platforms such as YouTube or DSPs (Netflix, Amazon) have yet to show strong commitment in contributing to finance film production against exclusive exploitation rights (at least in Europe⁴¹²). Within the EU, video on demand services are also subject to different rules than those applying to broadcasters under the Audio-visual Media Services Directive. The recent proposal for a revision of this Directive may lead to additional financing obligations for these actors.⁴¹³

Dissemination/trade and exhibition level

This is the weak point in the European film value chain, as Europe has very few film distribution companies that operate internationally (with some exceptions such as Pathé Distribution, UGC, Kinepolis Film Distribution). Those larger companies also have some elements of **vertical integration** and are also active at production level. Most of the European distributors are however small and independent ones, operating on a national basis and lacking the financial and organisational backbone to secure exclusive deals in more than one market⁴¹⁴. **Entry barriers**

⁴¹⁰ See for example in Spain: http://www.eqeda.es/EGE_Servicio6.asp Other European exmapels are also available in Europe Economics (2015) Remuneration of authors and performers for the use of their works and the fixations of their performances. A study prepared for the European Commission, DG CONNECT.

⁴¹¹ UNIC Annual Report 2016, available at: http://www.unic-cinemas.org/2016/04/cinemacon-2016-unic-report-highlights-continuing-importance-of-european-cinema-sector-to-global-film-industry/

⁴¹² In the USA, Netflix is increasingly investing in film production (around 10 new releases are foreseen for 2016): http://www.theverge.com/2015/7/7/8907313/netflix-original-movie-release-date-calendar-adam-sandler-fukunaga

⁴¹³ European Commission (2016) Proposal for an updated Audiovisual Media Services Directive. COM/2016/0287 final - 2016/0151 (COD) https://ec.europa.eu/digital-single-market/en/news/proposal-updated-audiovisual-media-services-directive

⁴¹⁴ European Commission Joint Research Center, Simon, Bogdanowicz, "The Digital Shift in the Media and Content Industries", 2012

are **relatively high** here as distributors recoup their investment along the different windows of exploitation, and profits on films are far from guaranteed. To a large extent this explains the difficulty of European films to export and conquer new markets. Exportation is dealt with by international sales agents whose role will be to sell films to national distributors. Distributors cater for national markets and buy film rights for the market they operate in.

The market structure is however affected here, as Hollywood is better equipped for international distribution. Taking into account this international competition, the distribution market follows an **oligopsonic structure**, with a few large buyers controlling the distribution segment (a few large distributors in comparison of the number of films produced per year)⁴¹⁵. This is reflected in the market share of the Big Six' (20th Century Fox, Warner Bros., Paramount Pictures, Columbia Pictures, Universal Pictures & Walt Disney Pictures), which dominate the international Box Office thanks to blockbuster movies but also thanks to their international distribution infrastructure. According to the European Audiovisual Observatory the Hollywood majors had a 63% market share across Europe (in percentage of admissions) and they are able to make the most of the European market.⁴¹⁶

Cinema Exploitation

The digital shift has unexpectedly reinforced the position of cinemas in the value chain. Cinema attendance continues to grow, driven by increased sound and image quality (3D), more flexible programming (enabled by the introduction of digital projectors) as well as investment in rewarding experiences⁴¹⁷. This suggests that there is a low degree of substitutability between cinema exploitation and other dissemination and exhibition channels, and cinema still remains the best window for a producer to release a film, thus giving the cinemas bargaining power over distributors (producers).

The film industry is testing earlier release dates for films that fail to reach cinemas or whose career is short lived. The cinema sector however is exercising pressure on distributors to keep and maintain the current system of release windows to avoid cannibalisation of revenues.

This makes it more difficult to fight piracy, as consumers are tempted to access films on their release date. Hollywood distributors are increasingly releasing blockbusters on the same date across the world to limit the impact of piracy.

Equity/ownership structure

The film industry is quite specific in terms of ownership and equity structure as different levels of vertical integration can be observed along the value chain.

The largest companies are mostly US-based (6 major film studios), which integrated vertically the main functions of the value chain. They notably aggregate the creation, production and distribution functions. These companies are usually active across the whole spectrum of audiovisual content. For example, The Walt Disney Company (DIS) owns film studios and is an aggregator of television and radio content. Time Warner Cable (TWX) owns media networks such as HBO and produces movies as well (not to mention that HBO also has its own over-the-top VOD platform). They also own smaller subsidiary film studios (either developed internally or acquired), which compete with independent studios⁴¹⁸.

In Europe, the sector is chiefly composed of independent producers. Independent producers are defined by two main criteria:

- 1) Ownership as set out in national implementing measures of the Audiovisual Media Services Directive, many EU countries define independent producers as companies which are not owned by broadcasters;
- 2) Role in the value chain, as the producer plays a key role in the creation of a film from beginning to end and negotiates its commercialisation.

Broadcasters develop their own audiovisual content (including film) through in-house studios or subsidiaries. Commercial broadcasters have recently invested in audiovisual production companies and some degree of

⁴¹⁵ However, many smaller distributors are active in their own national markets.

⁴¹⁶ European Audiovisual Observatory (2015 datasets).

⁴¹⁷ Box office revenues increased by 0.6% in 2014 and admission by 1.7% (UNIC Annual Report 2015)

⁴¹⁸ European Commission Joint Research Center, Simon, Bogdanowicz, "The Digital Shift in the Media and Content Industries", 2012

consolidation can be observed in the value chain (e.g: Canal+ Purchase of Red Production or Sky Purchase of Love production in 2014).

Establishing long term relationships with other stakeholders and investors is a key role of the producer in the film value chain. As producers also aggregate the rights at an early stage in the value chain, it facilitates vertical or horizontal integration by reducing the number of intermediaries, and therefore lowers transaction costs across the value chain. Few players show a vertical integration in multiple EU countries (i.e. have more than a 5% market share in production, distribution and/or exhibition). Such examples include Pathé, Nordisk film, UGC or Kinépolis, which are all active in the functions of production (especially Pathé), distribution and exhibition (especially UGC)⁴²⁰. These companies manage different functions in the value chain and are able to make money at different points. However, such vertical and horizontal integration is rare for the independent film sector in Europe.⁴²¹

Focus on a few key European actors:

Nordisk Film⁴²² (Dk) develops, produces and markets films and TV series across the Nordic region as well as provides production and post-production facilities for film producers. The company is the main cinema chain in Denmark and Norway. It developed the digital film services MinBio and Dansk Filmskat. In 2015, Nordisk Film had a turnover of EUR 497 million and employed 1,900 people. Nordisk Film is part of the Egmont Group - Denmark's largest media group.

Pathé⁴²³ is one of the main film companies in Europe active in different functions of the value chain in different European markets. It covers development and production (France, the UK), distribution (France, the UK, Switzerland) and exhibition (France, Netherlands, Switzerland) through its subsidiary Gaumont Pathé. In 2014, Pathé had a turnover of EUR 863 million and employed 3,724 people.

8.3.2 Contractual arrangements and revenue sharing

Producers at the centre of contractual arrangements in the film value chain

Contractual arrangements are at the core of the film value chain. In the audiovisual sector, film producers control all the rights necessary for commercial exploitation. ⁴²⁴ This is usually done through payments to various right holders and **creators** (in the form of a salary or a lump-sum), to complete all stages leading to the final production. Additional revenues for the exploitation of authors' works or performances will depend on authors'/performers' agreement with the producer, which specifies which rights are transferred to the producer as well as the remuneration in return for this transfer. It should be noted that the track record and popularity of the authors and performers will determine their (usually weak) bargaining power in this negotiation ⁴²⁵.

The producer is responsible for raising finance to fund production. In exchange for financing he will usually presale the distribution rights to **film distributors and TV broadcasters** on the basis of a script and the casting.

Larger territories command larger revenues. Between producers and distributors, a wide range of deals is possible and vary from one film to another. Usually the producer grants power to sales agents to find local distributors. The digital shift has not altered this process.

(Lack of) contractual arrangements with online platforms for user uploaded content

⁴²⁴ SAA, "Audiovisual Authors' rights and remuneration in Europe", *SAA Wither Paper*, 2011, p. 13. Although buy-outs are particularly common in the audiovisual sector, other modalities to pay for the rights do also exist. Thus, screen writers and film directors may also be entitled to participate in the exploitation of the film through a fixed royalty percentage after recoupment of the financing. In some countries, such as the UK, a collective licensing scheme has been put in place in virtue of which directors receive a royalty for the secondary use of their work in television. However this system is not in place for feature films (movies or motion pictures). According to Director UK, directors of British independent films are extremely vulnerable to negotiating tactics and are often pressured to defer their fees to keep projects on course.

⁴¹⁹ European Audiovisual Observatory (2016) Yearbook 2015 – Key trends. EAO, Strasbourg.

⁴²⁰ European Commission Joint Research Center, Simon, Bogdanowicz, "The Digital Shift in the Media and Content Industries", 2012

⁴²¹ Lynch (2006) Corporate Strategy, 4th Edition, Financial Times/ Prentice Hall, London.

⁴²² http://www.nordiskfilm.com/int/

^{423 &}lt;u>www.pathe.com</u>

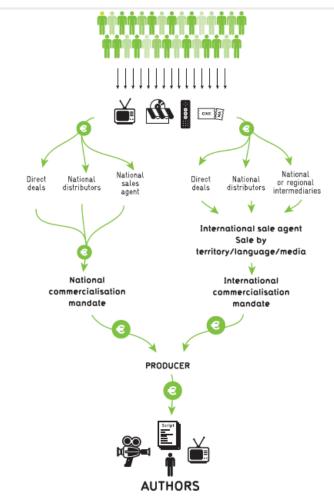
⁴²⁵ Europe Economics (2015) Remuneration of authors and performers for the use of their works and the fixations of their performances. A study prepared for the European Commission, DG CONNECT.

With regard to **online platforms making available films uploaded by third parties** (i.e YouTube, Vimeo or Dailymotion), the priority of the film sector remains to remove unlawful content rather than trying to enter into commercial agreements and derive some kind of revenues from such platforms⁴²⁶. Producers which manage the AV rights (apart from a few ancillary rights) would not license such rights as they have no economic interest.⁴²⁷ The emphasis is rather on the modalities to facilitate removal of such unlicensed content – from "notice to take down" to "notice and stay down" (seeking better enforcement from online operators).

Main revenue streams in the film/audiovisual industry and recoupment process

The overall structure of revenues in the film sector can be described as follows:

Figure 27: Revenue structure in the film sector



Source: SAA (2015) White Paper on Audiovisual Author's rights and remuneration in Europe

Revenues depend on the different deals for each distribution channel (and on a territorial basis) and involve several intermediaries, and hence many contractual arrangements that will depend on the content, quality, language and financing of the film. Each film has its own economic model and there is no rule-of-thumb, it is difficult to generalise the value of respective deals⁴²⁸. However, some general information can be highlighted at this stage:

⁴²⁷ KEA European Affairs. Contractual Arrangements applicable to creators: law and practice of selected Member States, European Parliament, Legal Affairs Committee. Brussels, 2014.

⁴²⁶ Interviews.

⁴²⁸ Some attempts are available, for example here: http://members.filmspecific.com/public/Distribution-Economics-How-Does-Revenue-Flow-From-Distributor-to-Producer.cfm As explained by the author, this should not be considered as representative of the diversity of contractual arrangements and revenue sharing in the industry.

Digital revenues account for only 5% of the industry revenue⁴²⁹. A study carried out by HIS Screen direct calculated an augmentation of 60% in revenue from video-on-demand platforms online. The U.K., France and Germany represent 67% of the total revenues gathered via VOD. Pay TV revenues increased by 20%. In 2012, IHS Screen Digest forecasted an online movie growth up to 60 or even 70%. VOD revenues have been growing significantly, but still don't make up for the decline in sales of DVDs or Blu-Ray disks. Their sales are expected to decline by 60% in 2016.

The main funding will come from broadcasters and especially pay TV that acquire films at pre-sale stages. Pay TV operators however tend to favour larger, more commercial productions.⁴³⁰

Evolution of the value chain and revenue sharing: the VOD deployment

Cinema operators have long benefited from their exclusive exploitation window at the top of the release schedule (which they of course pay for in licensing fees). They risk reduced revenues should day-and-date releases become more common, or should their windows continue to be shortened due to an increased popularity of VOD and a resulting earlier scheduling of VOD exploitation. Cinema operators are therefore seldom outspoken proponents of digital distribution (or, for that matter, other exploitation windows). However, cinemas can to some extent also benefit from VOD. For example, some small outfits experiment with 'reverse windowing' – making available a work on VOD shortly before it is released in cinemas – to build a fan base before the title is shown in cinemas⁴³¹.

Similarly, national distributors are interested in maintaining their overall revenues from cinemas, broadcasting and DVD/BluRay, and thus also seem reluctant to support a new version (VOD) that could cannibalise existing revenues while creating few returns. An important drawback for them is that once committed to a VOD premiere, the opportunity to schedule a wide cinema release will be curtailed. Moreover, distributors generally receive smaller revenue shares from VOD (5-10%) than from DVD (25-30%).⁴³² They are also threatened with the prospect that producers may manage their own VOD rights in the future. As a result, they may eventually be significantly less prepared to finance audiovisual works. The issue remains the pricing of on demand services (download-to-own or pay per view) whilst subscription services are not attractive.

Sales agents' current business models are dependent on minimum guarantees from distributors, but these are so far uncommon in the digital market place. Some have dramatically changed their business models to adapt to VOD. Like producers, sales agents may attempt to retain VOD rights and partner with VOD providers or undertake promotion and distribution roles themselves, while distributors seek to retain exclusive rights to secure their return on investment.

Another interesting role is played by European broadcasters (public and private), which primarily operate at national level (even those that run multiple television stations across the EU). They are interested in protecting the value of broadcasting windows (pay TV and free-to-air television). However, they are also keen to promote their brands via catch-up services, and do not want to miss out on the future opportunities of digital distribution. VOD rights are therefore often bundled with broadcasting rights to show programmes (or parts of them) on catch-up services immediately after their broadcasts, or to withhold them for a certain period of time to protect the broadcasting window. In other cases, broadcasters may negotiate freezing the VOD window for a certain period of time during and after a specific broadcast.

There are several market entrants who only have interests in the VOD market and have no stakes in other exploitation windows, such as equipment manufacturers (Apple, Microsoft Xbox, etc.), infrastructure providers (telecommunications and cable operators) and web based streaming services (Google, Amazon, Apple). These new entrants often have an additional commercial interest – the roll-out of their technological products and services. Content services are therefore also used to increase the usage of specific distribution systems or end-devices. Moreover, most of these new players have so far not participated in financing audiovisual creation and therefore do not share all of the risks associated with content creation. Netflix is a market entrant (DSP - video streaming

⁴²⁹ IHS Technology (2015) Cinema: how cinema is evolving within the value chain. UNIC Cinema Days: October 2015

⁴³⁰ This is also affected by a stricter legislative framework as broadcasters have to comply with stricter requirements to support local and independent productions, so this investment in film is in any case required. The ongoing review of the AVMS directive https://ec.europa.eu/digital-single-market/en/audiovisual-media-services-directive-avmsd) should be monitored as it opens up possibilities to extend these requirements to VOD services.

⁴³¹ Charles Rivers Associates. Economic Analysis of the Territoriality of the Making Available Right in the EU. A report prepared for the European Commission, DG MARKT. Brussels, March 2014.

⁴³² KEA European Affairs. Multi-Territory Licensing for the online distribution of audiovisual works in the European Union. A report prepared for the European Commission, DG CONNECT. Brussels, 2010. Also confirmed through the interviews carried out.

⁴³³ EY, Create, share and protect: The agility of intellectual property facing the challenges of the Digital Single Market. A report prepared for the Forum d'Avignon, 2016.

service) which is pioneering on original content creation as a content distribution pure-player (ex: House of cards), but this is mostly limited to series and most of the content is produced in the US. However, new developments are expected as the company spends a significant share of its revenues on content acquisition (around 73%).⁴³⁴

Licensing practices and digitisation

The following licensing trends currently characterise the European audiovisual sector:

- Territorial licensing prevails but international licensing may be requested by some if few VOD platforms in the future⁴³⁵;
- For older titles or titles that have not yet been exploited on VOD, right holders primarily sell distribution rights on a non-exclusive basis or bundled with other exclusive distribution rights;
- Short licensing terms (two to three years) prevail to enable rights holders to review their exploitation strategy in the future;
- Both VOD platforms as well as European rights holders of original content would potentially benefit from more efficient audiovisual rights licensing practices⁴³⁶ nationally and internationally; rights fragmentation indeed requires considerable clearing and negotiation efforts which lead to high transaction costs. Obstacles to the establishment of international services include: legal uncertainties regarding the licensing of VOD rights and the complexity of licensing processes;
- Individual as well as collective solutions to facilitate easier rights identification and acquisition across borders are emerging.

The ability of the sector to flexibly and efficiently answer different licensing requirements is therefore important if it is to extract value from emerging digital content markets. In this context, rights management becomes increasingly important to enable the sector to successfully exploit creative content. The industry is adapting its business practices to new market requirements. However, the practice of territorial licensing has a lot to do with commercial decisions based on the structure of a European market that is characterised by linguistic and cultural differences, as well as by high transaction costs in distributing local content across borders. These factors also explain the lack of international services and the comparably low demand for non-national European audiovisual products. In short, licensing practices reflect a commercial and a structural reality 138.

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⁴³⁴ Roland Berger Strategy Consultants. Cultural content in the online environment: Analyzing the value transfer in Europe. A report prepared for the GESAC. Paris, November 2015.

⁴³⁵ Interviews – this is especially the case for pan-European services such as Netflix.

⁴³⁶ Such as greater transparency of rights catalogues, or for the establishment of centralised rights databanks to ease the identification of rights holders and streamline rights clearing and remuneration processes.

⁴³⁷ KEA European Affairs. Contractual Arrangements applicable to creators: law and practice of selected Member States, European Parliament, Legal Affairs Committee. Brussels, 2014.

⁴³⁸ Ibid

8.4 Other exogenous changes and relations with other sectors

Several factors inhibit the fast development of digital shift VOD (especially for new audiovisual works), namely that:

- Distributors and broadcasters, traditionally important pre-financiers of audiovisual production, have little incentive to enter the VOD market given that the returns in VOD are far smaller than in theatrical distribution, broadcasting and DVD sales. If VOD remains a small market and if these players remain the key financiers of production, they will continue to place little value on VOD rights.
- Independent production companies and talent require pre-finance from distributors and broadcasters to create audiovisual products. This dependency makes it difficult for them to retain VOD rights if their financiers wish to acquire them (if only to withhold them for a period).
- New operators of digital distribution platforms (VOD) have not yet significantly entered into production finance and rights acquisition. Such new operators do not provide minimum guarantees and do not buy exclusive rights to exploit new works on video streaming.
- For older films (or "back catalogue"), the issue of cost vs potential returns is preventing a more widespread availability on VOD platforms;
- More specifically for the European industry, the fragmentation and the lack of close collaboration between the different actors (small production and distribution companies) along the value chain and across borders, which means that in countries where the films are not theatrically released (or sold to broadcasters), they are not made available on VOD.

These last two points are further explored later on in the study (see chapter 6/ on cultural diversity of the Thematic Papers section).

There are also other conditions for digital distribution to take off as a significant revenue stream for right holders:

- The level of High broadband penetration
- ▶ The density of tablets and smartphones
- Consumers' willingness to pay
- Awareness of content availability

Other challenges include:

1. Public support schemes and fiscal incentives, as they tend to support existing business models

The film industry plays an important economic and cultural role in Europe as expression of local identity and culture. The sector is dependent on State aid at the level of approximately EUR 2.1 billion/ year across Europe. 439

State Aid in the form of direct financial support is essentially directed at supporting local production. Financial guarantee mechanism aims at directing bank financing in cinema. Tax relief schemes also play an important role in attracting investment in film making⁴⁴⁰. The European landscape is dominated by 3 main schemes: Tax shelters, tax credits and tax rebates⁴⁴¹.

In addition to national support schemes the industry also benefits from European support via the Council of Europe and the European Union, through respectively Eurimages (to support co-production and distribution) as well as the Creative Europe programme (with EUR 755 million available for 2014-2020 to MEDIA supporting inter alia activities

 $^{^{439}}$ Excluding tax incentives and interventions by publicly funded banks or credit institutions - with a total spend of EUR 581 million, France leads the way, followed by Germany (EUR 303 million), Italy (EUR 146 million), UK (EUR 128 million), and Spain (EUR 124 million).

Oxford Economics. (2012). The economic impact of the UK film industry. Retrieved from http://www.bfi.org.uk/sites/bfi.org.uk/files/downloads/bfi- economic-impact-of-the-uk-film-industry-2012-09-17.pdf

⁴⁴¹ Tax shelter gives high net worth individuals the opportunity to offset investments, decreasing an investor's taxable income and thus their tax liability. Tax credits can be offset against the producer's tax liabilities when the corporate annual return is filed. Rebates are similar to tax credits, but are being paid out and relate more to production spend than to investment. Tax rebates are 'safer' in the sense that fraud is more difficult. Tax shelters however, remain Europe's most widely used support scheme – for example in Hungary, Cyprus, Belgium and the UK. For a more detailed overview see Olsberg SPI (2014) Impact analysis of fiscal incentive schemes supporting film and audiovisual production in Europe. A report prepared for the European Audiovisual Observatory.

of development, TV programming, training, pan-European distribution of non-national films, networks of cinemas showing European films as well as audience development and several activities related to online distribution)⁴⁴².

Public support at EU level is encouraging the digital shift⁴⁴³ and experimentation. Support policy – whether at European or national/regional level – remains essentially geared towards traditional forms of distribution. National schemes also essentially focus on production. The European Film Forum (EFF), proposed by the Commission in its 2014 Communication on European Film in the digital era,⁴⁴⁴ and effectively launched in 2015 should be highlighted here, as one of its objectives is to optimise complementarities between regional, national and European support to the film industry, with a particular focus on challenging the digital shift and the opportunities offered by it.

2. Global sourcing

Global sourcing is relatively limited in the film value chain as demand is high for local productions, and is mostly related to film production and filming location. There are various factors affecting the attractiveness of a given territory for film production, including:

- Financial incentives (including, but not limited to tax incentive schemes);
- Economic conditions and social environment;
- Natural, patrimonial frames and infrastructures (structural factors of competitiveness).

The main drivers appear to include local production costs, desired locations, and talents (technical crew). Co-production agreements, tax incentive schemes, as well as available public support (regional or national support to production) play an important role as well.⁴⁴⁵

As a typical example: a local French film costs on average over EUR 5,000,000 to produce, while a local Romanian film costs on average under EUR 1,000,000; taking into account the costs of actors, a French film shooting in Romania or co-producing with Romania saves more money than any tax incentive could bring to the production.

Co-productions between European countries bring at least 20% of a film budget to a majority producer (thanks to public support scheme), but can go as high as 49% of total production budget, which represents a stronger financial incentive than any tax incentive benefit. The tax incentives in another State are rather considered as additional support for the co-production but are not sufficient to cause "production flight" by themselves. 446

3. New consumption patterns, willingness to pay and content search

Search and selection of audiovisual content – whatever the content version may be – is increasingly influenced by the internet. If content repositories offer more digitised non-national content, or if different national content repositories become interconnected with the help of the internet, users will be able to conduct place-sensitive as well as global search enquiries in ever-growing databases of audiovisual works.

This, together with personalised recommendation technologies and more sophisticated international metadata standards, may make it easier to search for appealing content, and could increase choice as well as cultural diversity. The need to capture audience interest and work with the consumer's willingness to pay is potentially the most important (and difficult) challenge that VOD digital service providers face.

Rights holders will increasingly need to take recommendation models into account and make sure that their works are well promoted on internet-based VOD portals or on the search panels that 'closed' VOD services offer to consumers to search and select content.⁴⁴⁷

Over time, search patterns for audiovisual content in digital repositories may therefore resemble today's search on the internet. In fact, YouTube already constitutes the second-largest search engine on the internet and it is

⁴⁴² MEDIA Impact factsheet (2012) http://www.mediadesk.cfwb.be/db/articlefiles/1098-MEDIA_Impact_Factsheet.pdf

⁴⁴³ Some recent initiatives should however be noted, such as Flimmit (https://www.flimmit.com/), the Austrian VOD platform (also supported by the MEDIA programme), has now been incorporated into the State TV ORF

⁴⁴⁴ European Commission (2014) Communication on European Film in the digital era. Brussels, 15.5.2014, COM(2014) 272 final. http://ec.europa.eu/culture/library/reports/com272 en.pdf

⁴⁴⁵ German Avocats (2008), Study on the economic and cultural impact, notably on co-productions, of territorialisation clauses of State aid schemes for films and audio-visual productions for the European Commission, Directorate-General Information Society and Media.

⁴⁴⁶ Linda Beath (2012), Identification of financing tools for film and audiovisual production and their practical use in the South Mediterranean region. Euromed Audiovisual programme, May 2012.

⁴⁴⁷ Kurt Salmon. Have the cultural and creative sectors found the formula for development in the digital age? A report prepared for the Forum d'Avignon, December 2015.

estimated that cultural content represents 66% of the videos available (though only 7% are related to film) and directly or indirectly account for 92% of the platform's revenues⁴⁴⁸. Film fans are able to conduct territory/language-sensitive search enquiries or enquiries covering multiple territories and content repositories. Should European consumers desire to watch more diverse non-national European content, these technological developments could eventually encourage consumption of non-national European films, as it may be easier to search specific genres across borders.

However, the increasingly important role played by search engines does not imply that marketing audiovisual content to target audiences becomes redundant. In an increasingly competitive and crowded entertainment industry, marketing campaigns remain essential to capturing the consumers' interest. Nowadays, the bulk of marketing spending is dedicated to promoting the theatrical release of a film, which in turn stimulates consumers' interest in other content versions.

Peer-recommendation mechanisms and social media

Audiovisual consumption is also influenced by peer recommendations ('word of mouth') that occur in an increasingly international sphere of social media (social networks, video-sharing sites, micro-blogs, etc.) which could further accelerate international demand for audiovisual content. Because individuals are today more connected than ever through social media, companies need to be aware that consumption trends can be stimulated or slowed down through social media.

The rise of social networking and micro blogging applications such as Facebook or Twitter has transformed the way we communicate, maintain relationships and obtain or promote information and creative content that is available on the internet and elsewhere. The ability of social networks to make or break a release is therefore very important to film companies (the "digital" equivalent to "word of mouth"). To reiterate, the tendency of social media users to maintain personal relationships across borders may eventually contribute to an increase in users' interest in non-national audiovisual content.

It remains questionable whether social media currently benefit the audiovisual industry by increasing legitimate viewing figures, or whether it harms the sector by encouraging illegal consumption. What is clear, however, is that consumers value new types of digital networking and collaborative applications. The challenge for rights holders lies in transforming this value into returns on investment. Content producers should know their audience, collaborate with those end-consumers who wish to engage beyond merely watching a film, and ideally create viable business models on the basis of this new kind of engagement. This calls for a complete rethink of business models (and government support systems) to engage with an increasingly 'active' audience⁴⁴⁹.

Mapping the creative value chains – a study on the economy of culture in the digital age

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⁴⁴⁸ Roland Berger Strategy Consultants. Cultural content in the online environment: Analyzing the value transfer in Europe. A report prepared for the GESAC. Paris, November 2015.

Gubbins, M. (2012). Digital revolution: The active audience. *Cine-Regio*. (http://film-junction.co.uk/wp-content/uploads/DigitalRevolution2012 Final.pdf)

Definition and scope

9.1 Introduction to the television and radio broadcasting sector: definition and importance in the EU economy

The "Audiovisual" sector has been split into three distinct subsectors with each its own distinct value chain: Film; Television and Radio; Video Games and Multimedia. This grouping follows mainly the **2009 FCS of the UNESCO** that divides the Audiovisual and Interactive Media in three groups. According to UNESO 2009, the core elements of this domain are:

- Radio and Television broadcasting;
- Film and Video:
- Interactive Media. Interactive Media covers video games and new forms of cultural expressions that mainly occur through the Web or with a computer. In our framework, this last category is video games and multimedia (see definition below).

"Broadcasting" refers to "Radio and Television broadcasting". It encompasses the creation, production, dissemination, exhibition/reception and preservation of content.

Broadcasting is a mature market. While radio penetration lies at $99\%^{450}$ in Europe, TV penetration varies depending on the country between 86 and $99\%.^{451}$

Radio and TV activities are often combined in the same corporate group, public (e.g. BBC) or private (e.g. RTL), a trend that has further developed with digitisation and the convergence of media.

Importance for the EU economy

The audiovisual sector is responsible for about half of the creative industries' total revenue. In 2012, television had a turnover of 90 billion euro, radio of 10.4 billion euro. Both sectors employed respectively 603.5 and 97 thousand people. In 2012, television euro, radio of 10.4 billion euro. Both sectors employed respectively 603.5 and 97 thousand people. In 2012, television euro, radio of 10.4 billion euro. Both sectors employed respectively 603.5 and 97 thousand people.

Public Service Broadcasters (PSB, aka PSM for Public Service Media) remain important players in the EU. In 2011, the revenues of the EU-27 PSMs represented around EUR 30 billion, i.e. 23% of the total EU audiovisual market and 16% of the employment of the EU audiovisual market.

Digitisation

In the EU, the switch between analogue terrestrial and digital television was completed between 2006 and 2015. Digital audio broadcasting (DAB) is available since the 1990s. Yet, it continues to coexist in Europe with analogue FM and AM radio. Klassik Radio in Germany was in 2015 the first radio station to switch completely to digital transmission. Norway will be the first country to complete a national switch off in 2017.

In general, digitisation has led to a shift in the production, dissemination and exhibition/reception of broadcasting content, and the basic structure of the industry changed and became increasingly complex. Especially the availability of new distribution platforms (set-up boxes e.g. from Apple or Google) and new content aggregators and producers

⁴⁵⁰ Deiss, R. (2002). Radio broadcasting market. Retrieved from http://ec.europa.eu/eurostat/documents/3433488/5480463/KS-NP-02-034-EN.PDF/b992553f-5208-4ce1-99fc-34bcb8b1ff72?version=1.0

⁴⁵¹ http://www.statista.com/statistics/307031/pay-tv-penetration-europe-country/

⁴⁵² Gröne, F., & Acker, O. (2015)

⁴⁵³ Ernst Young (2014)

⁴⁵⁴ EBU (2013), Vision 2020 Annex 3. Media markets, media distribution & production technologies.

⁴⁵⁵ EBU (2016) Market Insights. Digital radio 2016. Retrieved from https://www3.ebu.ch/files/live/sites/ebu/files/Publications/EBU-MIS%20-%20Digital%20Radio%20Report%202016.pdf

(e.g. Netflix and Amazon) challenge incumbent distributors and broadcasters. In the TV industry, Internet Protocol TV (IPTV), TV everywhere and "over-the-top" (OTT) i.e. online streaming, changed the sector decisively.

Content-wise, digitisation and the move of content online has led to an explosion of the number of (often thematic) channels, and made a range of interactive and on-demand services and new revenue streams for existing players possible. 456

9.2 Creative value chain mapping and description

9.2.1 Economic characteristics of the broadcasting business and impact on global value chain structure

Broadcasting services are essentially radio and television services. Television services are a mixture of audiovisual content, which is produced and edited and may consist of e.g. entertainment, news, sports, documentaries, (talk) shows and films. Radio services typically entails talk, stories, entertainment, news, and music. 457

Traditionally, broadcasting content is disseminated via wired connection or wireless. Traditional distribution channels include cable, satellite and terrestrial. 458 Yet, in the digital age, content is now also increasingly provided online. In the case of TV programmes, online distribution is either carried out via IPTV and TV everywhere, or via OTT distribution. While IPTV and TV everywhere is usually carried out by broadcasters e.g. to offer VOD, OTT distribution is mainly carried out by new entrants, and to a limited extent by broadcasters (e.g. for catch-up TV). 459 In the case of radio, according to interviewees, online distribution is usually done for catch-up, i.e. radio broadcasters use it to promote the channel. However, more and more radios give access to live streams. Additionally, aggregation platforms (online players) exist, which are either set up by the industry players themselves (e.g. BBC iPlayer) or set up by new entrants (e.g. Radionomy by Vivendi, or Tunein). 460

The economic characteristics of content services depend on the way they are distributed. Except for physical carriers for video e.g. Blue Ray or DVD, which are excluded here, content in the broadcasting sector was traditionally distributed linear via distribution networks in a one-to-many fashion. As such, initial production costs are high, but marginal costs rather low for the broadcaster. With digitisation, the economic characteristics of broadcasting services only change in so far as they are also distributed to a large extent in a non-linear fashion, i.e. in the form of catch-up services or on-demand services.⁴⁶¹

In general, broadcasting is a **mixed economy**, in which companies finance their activities either through advertising (private broadcasters), public subsidies (public broadcasters) or subscription contracts (e.g. Pay TV, TV VOD or OTT VOD services). 462

Private broadcasters that finance their services with advertisements are hereby a special case. They typically operate as a **two-sided market**. Private broadcasters act indeed as the intermediate between advertisers and consumers. The specificity of the private broadcasting market is that advertisers derive a positive utility from the participation of as many customers as possible to the broadcaster, while for customers mostly negative effects are associated with being exposed to advertising messages. This is one of the reasons why broadcasters usually let one side of the market (i.e. advertisers) cross-subsidize the participation of the other side of the market (i.e. customers). This persistent **cross-subsidization**, combined with the cross-sided network effects, leads to the fact that broadcasters cannot maximize profits in each single market, but need to carefully consider the effect of pricing decisions on the other side. This effect can explain why slower growth in advertising revenues leads to pressure to increase income from customers. Also, it implies that broadcasters need to treat complementary businesses (such

⁴⁵⁶ Interviews

⁴⁵⁷ Interviews

⁴⁵⁸ AER (2016). Digital Single Market – Radio and Copyright. Position paper.

⁴⁵⁹ Hoelck, K., Ballon, P. (upcoming). Broadcasting in the Internet Age: Survival of the Fittest?. In Proceedings of the 12th World Media Economics and Management Conference (WMEMC) New York, USA, ->2016 & remove proceedings

⁴⁶⁰ Interviews

⁴⁶¹ Interviews

⁴⁶² http://www.wipo.int/edocs/mdocs/copyright/en/sccr_30/sccr_30_5.pdf

as advertisers) as clients rather than as merchant supply chain partners, and are thus incentivised to ensure healthy margins and sustainable ecosystems for these businesses. 463

In the analogue world, there was a direct relationship between broadcasters and consumers, and distributors were merely "transporters" of electronic signals. Yet, with digitisation, distributors also built VOD services, began relationships with advertisers, and therefore act as two-sided market players as well. 464

See the thematic paper on two-sided markets for a more detailed analysis of its impact on value chain dynamics.

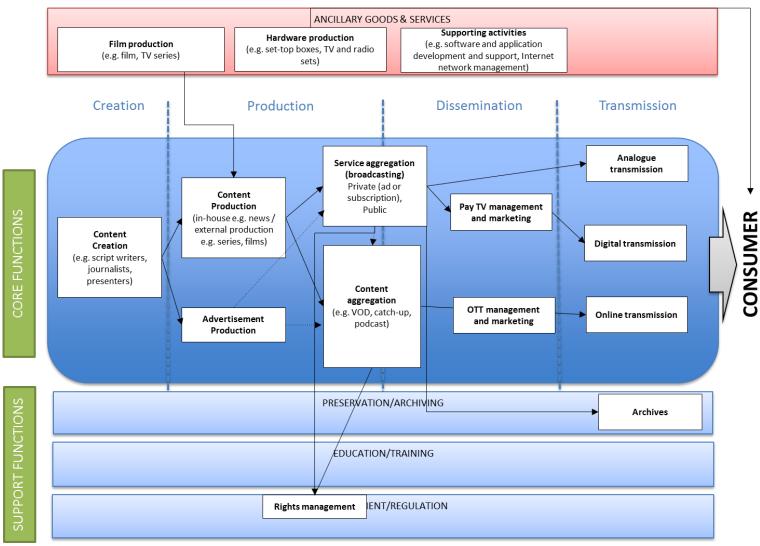
9.2.2 Stylized value chain mapping and description

The broadcasting value chain consists of four core functions. The actors in the different stages of the value chain carry out the broadcasting industries' specialised activities, namely creation, production/publishing, dissemination and exhibition/reception/transmission. The transmission of the analogue or digital signal includes the distribution of the content. Marketing activities are performed by broadcasters or content aggregators.

⁴⁶³ Hoelck, K. & Ballon, P. (upcoming).

⁴⁶⁴ Pauwels, C. & Donders, K. (2011). From Television without Frontiers to the Digital Big Bang: The EU's Continuous Efforts to Create a Future Proof Internal Media Market. In R. Mansell & M. Raboy (Eds.), Handbook on Global Media and Communication Policy. New York: Blackwell-Wiley.

Figure 28: Stylized Value Chain for TV & Radio Broadcasting



Creation

The first function consists of creating content. Three broad categories of creators are involved: authors (e.g. directors, screenwriters, composers of music for film or television); performers (e.g. actors) and technicians (e.g. responsible for sound, light, etc.).

Europe Economics et al⁴⁶⁵ provide a thorough analysis of the first two categories in the audiovisual and music industries, with a focus on their remunerations. Considering the diversity of the EU audiovisual landscape, it is difficult to provide an average profile. However, they find that, among authors, screenwriters are usually freelance professionals, and directors can work freelance or as employees of production companies. ⁴⁶⁶ Technicians are often employees, of production companies or broadcasters.

Authors and performers in the audiovisual industry often organise themselves into unions (wherever permitted) or freelance associations.⁴⁶⁷ Many of these unions and associations negotiate model exploitation contracts with representatives of the industry. Again, there are various organisational frameworks, depending on the country. Actually, trade unions and associations of authors and performers have not been set up in all Member States. Where they have, the type and the extent of collective action vary, both as regards the unions' and associations' role in the negotiation and in the enforcement of contracts.⁴⁶⁸ In the same way, the role of collective rights management organisations (CRMOs) differs by right holder, sector and Member State.⁴⁶⁹

Production

The second function consists of producing content, including advertisement. A distinction is to be made between content that is produced externally or internally. Content produced externally can be commissioned (ex-ante funding) or acquired (ex-post purchase).⁴⁷⁰ Other content is produced in-house. Content produced externally is often based on a mix of ex-ante and ex-post. For example, one or a few broadcasters will invest in the production of a series (ex-ante), and rights to broadcast the series may be sold to other broadcasters or VOD platforms (expost).

Europe Economics et al remind that for authors and performers, the central player in the remuneration process is the producer who acts as a focal point both in the film and the TV industries.⁴⁷¹

The aggregation of content is also included in this second stage. It involves the bundling of the content produced in-house or externally acquired under a media brand name.⁴⁷² For broadcasters (television as well as radio), it takes the form of setting up their programmes (which are sometimes labelled as 'linear', as opposed to non-linear ondemand offers). Private and public broadcasters may also engage with advertisement agencies, to include advertisement spots into their aggregated services.⁴⁷³ For services providing non-linear audiovisual offers (e.g. VOD

⁴⁶⁷ ibid.

468 ibid

⁴⁶⁹ ibid.

470 Interviews

⁴⁶⁵ Europe Economics, Lucie Guibault, Olivia Salamanca and Stef van Gompel (2015), Remuneration of authors and performers for the use of their works and the fixations of their performances. Final Report, A study prepared for the European Commission DG Communications Networks, Content & Technology, SMART 2015/0093.

⁴⁶⁶ ibid.

⁴⁷¹ ibid. As stated in the report, the producer is usually the initial owner of the rights of authors and performers in the audiovisual work. Depending on the contractual agreement between the producer and the authors and performers, upfront payments in the form of salary or lump-sum payment are made as a form of compensation for their work in the production. In addition to receiving advanced payments for the actual work accomplished during the production time, there may be arrangements for the payment of royalties flowing from the exploitation.

⁴⁷² Pierson, J., & Bauwens, J. R. (2015). *Digital Broadcasting: An Introduction to New Media*. New York: Bloomsbury Academic.

⁴⁷³ Interviews

services), aggregating content means building catalogues of content. Legal issues such as rights clearance come hereby into play.⁴⁷⁴ VOD services also provide supporting activities, ensuring the maintenance of their services.

Finally, producers, when they are the key right holders of for example a TV programme, are in charge of granting the licences for the use of the content, by broadcasters for instance (it also happens that broadcasters are producers, see previous section) or in other countries. CRMOs play a role in granting licences and distributing the royalties collected from the cable retransmission rights.⁴⁷⁵

Dissemination

The third function consists of marketing and managing services related to broadcasters' linear services and/or to on-demand services. This includes subscription management, for pay TV as well as VOD services relying on subscriptions.

This also includes supporting activities for the distribution of content, which then also relates to **the management** and maintenance of the Internet network.

In this dissemination stage, two main trends can be observed:

Firstly, broadcasters are increasingly providing their **services online**. In the case of TV, these are usually in the form of "**catch-up" TV or TV live streams**. In the case of radio, these are often live streams or **podcasts** i.e. radio episodes that can be streamed or downloaded. Yet, for radio, the online presence mainly serves to improve radio stations' visibility, according to interviewees. For example, podcasts represent around one tenth of listening figures of the French public radio *France Culture*.⁴⁷⁶

Additionally, these services are often aggregated again online for both TV and Radio. These aggregation offers are either initiated by broadcasters themselves or by new players. ⁴⁷⁷ An example of such services for television is the German "7TV", a platform initiated by the ProSiebenSat.1 media group bundling its channels.

Besides, third-party OTT players entered the aggregation business as well. These third-party players often make revenues with additional advertising on these aggregation pages, and often have a struggle with broadcasters due to rights issues. They usually just share ad revenues, but never pay copyright. An example of such a third-party aggregator in the television sector is "Schöner Fernsehen", a popular third-party aggregator bundling all German speaking TV channel streams. In the case of radio, typical examples of third party aggregators are "tunein" in Germany or "direct-radio" in France, bundling the streams of all radio stations. ⁴⁷⁸ These services usually come as apps, websites or desktop applications.

⁴⁷⁴ Interviews

⁴⁷⁵ Europe Economics, Lucie Guibault, Olivia Salamanca and Stef van Gompel (2015), Remuneration of authors and performers for the use of their works and the fixations of their performances. Final Report, A study prepared for the European Commission DG Communications Networks, Content & Technology, SMART 2015/0093.

⁴⁷⁶ Interviews

⁴⁷⁷ Interviews

⁴⁷⁸ Interviews

Secondly, OTT players and broadcasters alike started to offer on-demand services. In the TV sector, these are VOD services, which are offered by broadcasters such as BBC in the UK, distributors such as Telenet in Belgium, or complete OTT players such as Netflix, Apple iTunes, Amazon Instant Video, Maxdome, Watchever, and Sky Snap. The offers can also be **bundled** with set-up boxes/sticks, as in the case of Amazon Fire TV or with the set-up boxes of other players. For example, Netflix can equally be found in bundles of OTT players like Apple (Apple TV), Google (Android TV) or Amazon (Amazon Fire TV) or within a broadcaster's/distributor's offers or set-up box, and be accessed via IPTV as an application. While the sticks and set-up boxes are usually sold for a certain fee, the offer of the players usually requires a subscription.⁴⁷⁹ As proof of Netflix's importance, even in European countries in which OTT services are more established such as the Anglo-Saxon regions, effects become visible: for example in these countries, Netflix has become the second largest source of online traffic in peak hours. 480 However, as discussed in the chapter on the film value chain, stakeholders in the film industry are reluctant to take position with respect to VOD as they are unsure of the impact of VOD on their traditional "exploitation of windows" model. As a consequence, VOD players have difficulties getting early access to new/recent films, as the film industry still prefers to first release in cinema and then on TV (pay and free-to-air). Still according to the film chapter, this situation will remain as long as VOD actors do not significantly contribute in the financing of films.

As far as radio is concerned, the importance of OTT players varies according to the profile of the radio station. OTT services such as Jukebox online, Spotify, Deezer or YouTube are competitors for musical radio stations mainly. They are not close competitors for other genres of radio format since their value proposition differs. Radio incorporates not only music but also talk, news, surprise content, and is always placed in a local context that cannot be imitated by global players. This local context is reflected in local news, local ads and dialects. As such, radio stations seek cooperation with OTT players rather than competition. Apple was the first OTT player who attempted to look into radio and hired radio staff to offer its service Beats. Yet, although resembling radio, its global context prevents it from achieving the local character of radio channels.⁴⁸¹

The impact of these trends on consumers and their habits remains to be seen. On average, a young viewer watches about half less television than the average viewer. 482 At the same time, according to IHS, in 2014 TV content (linear and time shifted viewing) equated to 96% of all video consumption in FR, ES, DE, IT, UK and US – which would indicate that traditional TV remains relevant.

Transmission

The fourth function consists of delivering the service and its content, using various channels. The way of delivering is currently changing. Traditionally, distribution is done either terrestrial, by cable, or by satellite. While radio's transmission remains mainly analogue, terrestrial distribution of television has become mainly digital. In parallel, online distribution (using an open Internet connexion) allows. to transmit VOD services as well as OTT services. Online transmission constitutes **a new, additional channel of delivery** that has so far not replaced the others. Television and radio content reaches the audience respectively mainly via television and radio sets, although more and more television and radio programmes are available online.

Regarding television, delivery was not a relevant matter10 years ago, since it was settled over the air or cable. Now, television companies start to engage in deals with actors such as Microsoft for placing their content on its game console. Also, they have to deal with players such as YouTube, Apple TV or Google TV. In the case of YouTube, players are still unsure whether it provides a good way to promote niche content or is rather a ground for copyright issues, e.g. through the unauthorized upload of copyrighted content.⁴⁸⁵

In relation to radio interviews carried out with professionals of the sector pointed out that traditional radio sets (fixed or car) seem to remain the preferred option for listeners. According to Eurostat, in 2014, 31% of individuals

⁴⁷⁹ Interviews

⁴⁸⁰ Gröne, F., & Acker, O. (2015), see also www.cbronline.com/news/enterprise-it/it-network/netflix-drives- maximum-traffic-in-north-america-report-150514-4268405.

⁴⁸¹ Interviews

⁴⁸² Fontaine, G. & Grece, C. (2015), *On-demand Audiovisual Markets In The European Union - Developments 2014 and 2015*, European Audiovisual Observatory, November.

⁴⁸³ Interviews

⁴⁸⁴ Interviews

⁴⁸⁵ GESAC (2016). Use of cultural content online. Brochure.

in the EU who used the internet in the last three months used it for listening to web radio, which is significantly less than other uses (e.g. reading newspapers or watching films). According to interviewees, radio broadcasters use the online sphere mainly as a complementary offer, which should promote their "offline" service. The fact that cars become more and more connected to the Internet may change this situation as digital radio is becoming a standard in cars. In three markets, namely Norway, Switzerland and the UK digital radio is already standard and other markets are expected to follow this trend. Shared online radio players are also expanding, e.g. in Germany in April 2015, public and commercial stations joined to launch a shared digital platform. Similar efforts can be observed in other Member States such as Austria, Ireland or the UK and also non-industry players try to bundle programs online. Indexing services have developed for more than 10 years, e.g. tunein (since 2002) or iHeartRadio (since 2008). Thus, with over 100,000 real radio stations and 4 million on-demand programmes and podcasts available in around 230 countries, Tunein has become the leading radio hub for customers.

In general, it is observable that old barriers between TV, cinema and Internet, as well as public and private broadcasters are breaking down. **Content has become "platform-agnostic"** – meaning that consumers want to watch content everywhere on every device.⁴⁹¹

9.2.2.2 The impact of digitisation

New Business Models

The main trend in terms of business models, in the AV broadcasting industry is the increasing amount of subscriptions to VOD services. Consumer spending on digital video and VOD increased by EUR 2.7 billion in 2014.⁴⁹² The **introduction of OTT distribution** - via dedicated online platforms such as Netflix, the Internet or consoles - was very disruptive for the industry. If priced properly and rights accordingly managed, industry players regard these developments as a big opportunity.⁴⁹³ The increased popularity of tablets finally solved the sectors' discussion about watching TV on 3G handsets.⁴⁹⁴

One can observe a clear shift from video-on-demand (VOD) provided by broadcasters to VOD provided by new industry entrants such as Amazon Prime, Apple TV, Dailymotion, iTunes, Netflix, Maxdome, Watchever, or YouView. While broadcasters provide their services via IPTV, cable or satellite, or on the open Internet, the new entrants provide services "over-the-top" i.e. solely online. Until 2011, TV VOD was clearly exceeding TV from OTT providers, with EUR 553.9 vs. EUR 362.5 million spending. Yet, from 2012 onwards the situation completely reversed. By 2014, VOD OTT spending in the EU climbed to EUR 1,851.2, with a 58% increase alone in the last year (compared to EUR 866.7 million spending for TV VOD). Apply a result, **bundling** becomes a new business opportunity. Players in the sector start to acquire roles in several parts of the value chain. This enables them to make attractive offers to customers, such as a cable subscription combined with an Internet subscription and access to Sports programmes.

In the radio industry, new business models are also being developed. Some stations started to offer access to premium content e.g. with less advertisement, more interviews, or with favourite artists via **subscription**.

http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Use_of_internet_for_cultural_purposes,_by_age,_2014.png

⁴⁸⁶ http://ec.europa.eu/eurostat/statistics-explained/index.php/Culture_statistics - use of ICT for cultural_purposes, table 1

⁴⁸⁷ Interviews

⁴⁸⁸ EBU (2016) Market Insights. Digital radio 2016. Retrieved from https://www3.ebu.ch/files/live/sites/ebu/files/Publications/EBU-MIS%20-%20Digital%20Radio%20Report%202016.pdf

⁴⁸⁹ EBU (2016) Market Insights. Digital radio 2016. Retrieved from https://www3.ebu.ch/files/live/sites/ebu/files/Publications/EBU-MIS%20-%20Digital%20Radio%20Report%202016.pdf

A report prepared for the GESAC", available at http://www.rolandberger.com/gallery/pdf/Report_for_GESAC_Online_Intermediaries_2015_Nov_EUR.pdf

⁴⁹¹ Interviews

⁴⁹² http://www.ivf-video.org/new/public/media/Europe2015.pdf

⁴⁹³ Interviews

⁴⁹⁴ Interviews

⁴⁹⁵ http://www.ivf-video.org/new/public/media/Europe2015.pdf

⁴⁹⁶ Interviews

Additionally, online radio players, either offered by the radio stations or by third party players became increasingly popular. Hybrid radio gained in popularity as well. Hybrid radio uses broadcast to send content, and the Internet to fetch further information (e.g. the logo of the radio station or the name of a song). Furthermore, industry players work on the development of **tagging** i.e. the bookmarking of songs, which enables listeners to come back to songs they have listened previously. Developed through Radio DNS (radio domain system), this technology could also be used for advertisement or to take part into games. ⁴⁹⁷ **Streaming radio programmes** (rather than downloading them like for podcasts) is seen as the next most important trend. ⁴⁹⁸ It is not clear however, how radio broadcasters can monetize these innovations. ⁴⁹⁹ According to interviewees working in the radio sector, radio stations regard hereby the online presence of their channels mainly as a way of promotion. ⁵⁰⁰

Both "traditional" broadcasters and radio stations build their own services i.e. TV VOD services and radio players, to compete with the OTT services of new industry players. This phenomenon relates to the "platformization" of creative sectors, in which online platforms appear, which are not only provided by new players, but also by incumbent players (see the thematic paper on two-sided markets).

Global sourcing

Exports of TV content are an important part of the activity of TV producers, and where a few EU stakeholders perform very well, in particular British public broadcaster the BBC, who remains the world's most prolific producer of new content, and Dutch-based Endemol Shine, who is at second place, according to data provided by Eurodata TV Worldwide. ⁵⁰¹ However, an interviewee stressed that there does not seem to be a situation where creation or production are outsourced in another country.

Due to the globalisation of content, consumers have access to more content, including content from other countries (e.g. HBO content on Sky) which digitisation made easier to access. One interviewee, however, expressed the concern that globalisation is resulting in a standardisation of content and that this tendency should be counterbalanced by strong local markets. 502

In contrast, radio largely remains created, produced, distributed and consumed at a local level.

Country differences

There are some national differences in the broadcasting sector which depends on the countries' investment in infrastructure – in the countries that invested more such as the Scandinavian countries, online distribution is more important in both TV and digital radio.⁵⁰³ Investment in new technologies such as data analytics varies by country as well as the public policy responses.⁵⁰⁴

Differences among European countries as regards the importance of public broadcasting companies in comparison to private ones can be explained by the various historical approaches and government attitudes towards education of the public. The UK is an interesting case in this respect because despite different waves of privatisation, the public role in the broadcasting sector has remained very important and the BBC plays an important part in public's information and education. In contrast, television has been partially privatised more recently, albeit sometimes more radically, in Eastern and Central European countries.

⁴⁹⁷ Interviews

⁴⁹⁸ Interviews

⁴⁹⁹ Interviews

⁵⁰⁰ Interviews

⁵⁰¹ http://variety.com/2016/tv/global/u-s-u-k-tv-exporters-australia-1201713741/

⁵⁰² Interviews

⁵⁰³ EBU (2016) Market Insights. Digital radio 2016. Retrieved from https://www3.ebu.ch/files/live/sites/ebu/files/Publications/EBU-MIS%20-%20Digital%20Radio%20Report%202016.pdf

⁵⁰⁴ Interviews

9.2.3 Evolution of Prices

Digitisation has not significantly lowered production costs. Predictions of falling prices overstated the degree of technology among the costs, as the main cost of production lies in the creative work. In the case of television this includes the remuneration of authors (in particular script writers), performers, and location-related costs.⁵⁰⁵

Actually, prices for certain kinds of content are even rising on the television market. In the last few years, the great enthusiasm for high-end TV series has led to a content budget explosion. Examples include Games of Thrones in the US, with budgets of around EUR $10 \text{ million per episode.}^{506}$

As regards news, it is by now marginally cheaper to send out local reporters on the field. In addition, purely local newsrooms are able to make some savings, because content can be recorded and edited on several devices. Yet, the cost of newsrooms with full coverage or big production has not declined. Due to the availability of new technologies, reporters are required to be physically onsite to compete with videos which are quickly uploaded for example on YouTube, and distributed via the Internet.⁵⁰⁷ Furthermore, the investment in content depends on the prevailing distribution platform. High distribution quality comes with a cost per platform. With rising traffic, more investments in the quality of content and service are necessary and broadcasters need to find the right balance between costs and the quality of service and content. Besides, prices for sports rights are rising. Sports is indeed one of the few programmes that broadcasters need to have as live content in their programmes.⁵⁰⁸

Feedback from the interviews suggest that prices and costs in general are expected to continue to increase. Programmes in the future will be likely to favour "peak content", with which broadcasters make most money. A challenge is in this respect is to bring advertisers on board, and to convince them to accept the new broadcasting realities. 509

On the other hand, much more content is available for the average consumer than before, with more channels available for free or via subscriptions. One reason may be the fact that broadcasters have the possibility to broadcast again the same content, thus amortising the initial cost of content. Another reason may be that for some types of content (e.g. entertainment show) costs may be lower than before.

9.3 In-depth analysis of interrelations between stakeholders

9.3.1 Market structure and bargaining power

Creation

The market for content creation can be qualified as **monopolistic competition**, with a great number of competitors (72,000 creators are working in the TV industry, according to Ernst Young),⁵¹⁰ each of whom has a certain market power.

The impact of digitisation on the level of competition is ambiguous. On the one hand content creators have access to new opportunities as OTT platforms such as Netflix and Amazon Instant Video have started to produce their own content, e.g. Netflix's popular series 'House of Cards', which can lead to new employment opportunities for them. Investment in content can be crucial for these platforms to attract consumers. Entry barriers have been alleviated for audiovisual content creators in particular on YouTube, where it is possible to observe the emergence of channels with great popularity, mainly among the younger generations.

⁵⁰⁵ Interviews

For season 6. See https://www.forbes.com/sites/hayleycuccinello/2016/04/22/game-of-thrones-season-6-costs-10-million-per-episode-has-biggest-battle-scene-ever/#4edeb28411bb

⁵⁰⁷ Interviews

⁵⁰⁸ Interviews

⁵⁰⁹ Interviews

⁵¹⁰ Ernst Young (2014), *Creating growth. Measuring cultural and creative markets in the EU.* December. Figures are for 2013. For radio, only total employment is provided (97,000 employees in 2012) with no distinct figures for creators).

⁵¹¹ Ranaivoson H., De Vinck S., Van Rompuy B. (2014), Analysis of the legal rules for exploitation windows and commercial practices in MS and of the importance of exploitation windows for new business practices. Final report, A study prepared for the European Commission DG Communications Networks, Content & Technology, European Union.

On the other hand, the entrance of new market players has increased the competition among content creators. In addition, investments by on-demand platforms in content creation remain limited. According to the EAO, the investment of on-demand services in original content represented less than 1% of total VOD revenues, and just under 3% of the SVOD revenues in 2013.⁵¹²

Production/publishing

A distinction must be made between television and radio when defining the market structure at the level of production.

Before the digital shift, **television** broadcasting was an **oligopoly** (i.e. with a small number of competitors) in most European countries. Actually, in early 1990s only a handful of TV stations were available for free and a larger number of television channels were available with a subscription (e.g. via satellite).

With the transition to digital distribution and the development of online distribution, a few players have kept a significant local market power, but the landscape is more one of a **monopolistic competition**. More precisely, many channels are competing in each MS, but the main groups always account for a higher share of the audience (on average, the 4 main groups represent more than 70% of the audience)⁵¹³. This is due to the advent of many competing TV stations or online video platforms. TV sector broadcasters and distributors alike have started their own content services, which has led to blurring sectoral roles.⁵¹⁴ These services themselves are challenged by OTT players and their services, such as Apple and Apple TV. They enter in direct competition, by offering VOD and streaming services. As a result, content is now distributed over a variety of platforms.⁵¹⁵ Furthermore, those OTT players, including services provided by traditional TV broadcasters (see also the paper on two-sided markets), do not limit themselves to one step of the value chain and are about to become dominant players in several Member States, notably for production and dissemination of content. Yet, the market structure remains highly concentrated.⁵¹⁶

Television broadcasters especially monitor Netflix, the highest-profile new entrant. On the one hand, traditional stakeholders hope to learn from Netflix in order to build or improve their own OTT service, like in the Nordic countries. On the other hand, many players sell content they have produced on Netflix since it seems more profitable. The landscape is evolving quickly in this area and traditional cable TV providers, in addition to TV programmes have also started to offer Netflix to consumers as part of their package - Netflix is thus increasingly becoming part of the Pay-TV landscape⁵¹⁷.

In contrast, before the digital shift, the **radio** aggregation landscape was already characterised by a structure of **monopolistic competition**, with a large number of SMEs each having little market power owing to their differentiation. This market power relates to the importance of **locality** because content production is still a local undertaking; with the importance of dialect and local information for instance.⁵¹⁸ To some extent, monopolistic competition remains the best way to describe radio's market structure. Yet, one can increasingly observe the consolidation of media groups, the development of multi-country groups and **vertical integration**.⁵¹⁹

Radio broadcasters monitor especially third party aggregators with a critical view. They consider that those players do not produce content themselves, but rather earn revenues from the aggregation of existing services. Broadcasters are therefore especially worried about copyright and fair revenue sharing as industry players are establishing their own platforms by. 520

⁵¹² Deirdre, K. (2015), *Investments in original content by audiovisual services*, European Audiovisual Observatory, November.

⁵¹³ Fontaine, G, Kevin, D. (2016), *MAVISE EXTRA. Media ownership: towards Pan-European groups?*, European Audiovisual Observatory, June.

⁵¹⁴ Interviews

⁵¹⁵ Interviews

⁵¹⁶ Europe Economics, Guibault, L., Salamanca, O., van Gompel, S. (2015), Remuneration of authors and performers for the use of their works and the fixations of their performances, FINAL REPORT, a study prepared for the European Commission DG Communications Networks, Content & Technology, SMART 2015/0093.

http://informitv.com/2016/09/16/netflix-comes-to-cable/ or http://www.proximus.be/en/id_cr_netflix/personal/products/television/series-and-movies/proximus-and-netflix.html

⁵¹⁸ Interviews

⁵¹⁹ Interviews

⁵²⁰ Interviews

Finally, although often overlooked, there has been a massive concentration in the advertisement agency market. Four companies control about 70% of the advertising budget in several media markets. 521

Dissemination and transmission

Distribution is often an **oligopoly** for broadcasting, in particular in smaller countries.⁵²² In Belgium for example, in the television distribution market, Telenet and Belgacom are the two main players with a respective market share of 80 % and 15 %. Indeed, Telenet can be regarded as the monopolistic owner of the cable infrastructure without any serious competitive pressure. Access to Telenet's cable network can virtually not be forgone by broadcasters.⁵²³

However, this had no significant impact on broadcasters, as long as distributors did not interfere with the broadcasters' position. This was notably the case as long as distributors simply provided the infrastructure to transmit the content. In this setting, TV broadcasters had a prominent position. Being the central player in the value chain, they negotiated with content creators - and in the case of private broadcasters, also with advertisement agencies, and decided about which content was presented to the consumers.

However, with digitisation, this distribution of bargaining power has changed, especially in the TV sector. Digitisation provided the digital TV distributors with a direct customer interface in the form of the Electronic Program Guide (EPG). This has enabled TV distributors, whose business models up to that point had resembled that of utility providers, to start playing **a two-sided platform** role themselves, i.e. intermediating between two types of users (third party service providers (broadcasters) and viewers) (see also paper on two-sided markets). This has allowed them to regain market power. The balance is shifting towards the distributor, even though content is central in the value chain. While in the analogue world broadcasters had a relationship with consumers, in the digital world customers rather have a relationship with distributors.

Vertical integration (i.e. acquisition of stakeholders in down- or upstream stages of the value chain) is a strategy followed by distributors, which also provides them more market power. Thus, distributors, broadcasters and new players (e.g. OTT players) engage in content provision, and roles are starting to merge. In line with this tendency, it is possible to observe vertical integration, especially in smaller markets.

In contrast, for the radio sector, radio stations remain the central players and distributors pure providers of infrastructure. 524

In the case of broadcasting again, the technological features of the new digital content platforms can prove to be decisive. Concretely, the **openness** of the service can differ in terms of availability and connectivity, impacting competition in a market. For example, the Apple TV ecosystem is closed, similar to Apple's iPhone or e-book system. Apple TV works with AirPlay, which is preinstalled on all iOS devices. Content from other manufacturers cannot be "mirrored" i.e. streamed on Apple TV. Thus, the company is creating strong lock-in effects to its products and high switching costs. Google pursues with its Android TV (and Chromecast as alluded above) another, more open strategy. Google chose to allow the cast of content from any Android or iOS device, MacBooks, Chromebooks or even Windows computers on its Android TV.

Many national incumbents, such as Orange in the French TV industry, chose a completely open approach, enabling operability with the major OSs (iOS, Android and Windows), as well as with all kinds of laptops and computers. However, unlike Apple and Google they do not necessarily own an IT ecosystem and lack therefore the opportunity and incentive to build a closed ecosystem.

Ownership ties along the value chain

Content creation and production remain characterized by a great number of actors, as discussed before. At later stages, public services media (which sometimes include television and radio) are mainly national players, although digital technologies allow them to make their programmes available beyond national boundaries. It is however not possible to identify main private actors in dissemination and transmission stages at the EU level. Furthermore, as a recent study by the European Audiovisual Observatory notices, for private TV channels, that the origin of TV

523 Evens, Van Rompuy, & Donders (2014)

⁵²¹ Interviews. The "Big Four" are Interpublic, Omnicom, Publicis and WPP.

⁵²² Interviews

⁵²⁴ Ibid, Interviews

channels is not necessarily based in the respective countries where they are consumed.⁵²⁵ Conversely, private radio channels remain rather localised (i.e. they are consumed where they are produced), but they can also belong to international radio groups.

Another recent study by the European Audiovisual Observatory identifies (and for some of them details) the most important pan-European distribution and broadcasting groups. The most important distribution groups are often active in telecommunications (e.g. Orange, Deutsche Telekom or Vodafone). The most important broadcasting groups are often part of global media conglomerates (e.g. Sony, NBC Universal or Viacom). Finally, some of these groups are also strongly present in the radio sector (e.g. RTL Group or Time Warner via Central European Media Enterprises).

While ownership quarrels (as a result of the impact of digitisation) are less common in radio, the TV sector is utterly affected by them.

Since the value chain in the TV industry is often concentrated, companies have higher incentives to attempt vertical expansion or to use the platform strategy of vertical commoditization to strengthen their position (see the paper on two-sided markets).

A distributor gaining access to the stage of "aggregation" attains several advantages. It gains control over an important part of the value chain and can engage in practices such as favouring programmes and services, or charging more distribution fees to competitors. Besides, the distributor can gain sensitive information by sitting on both sides during carriage negotiations⁵²⁷, since they act as distributors as well as aggregators (e.g. they own VOD services or broadcasters).

New entrants in the dissemination stage (e.g. Apple and Google) engage in vertical strategic actions as well. Both ensured their access to content in the value chain by cooperating with content providers such as Netflix.

At present, the impact of Apple and Google seems far more disruptive in the music and publishing markets than in the broadcasting market (see the respective chapters on those sectors), since they cannot offer national broadcasting content through missing cooperation. In the US however, Apple recently announced the future launch of a dedicated streaming service, which will include content from major broadcasters such as ABC, CBS and Fox. Apple attracted broadcasters with detailed viewer statistics – a strategy that the company might pursue in Europe as well and that Google might follow.⁵²⁸

9.3.2 Contractual arrangements and revenue sharing

Revenue sharing

While public broadcasting is usually mainly financed by public money via licence fees or public grants and complemented by advertisement, revenues in the commercial broadcasting sector are either derived from subscriptions or advertisement.

⁵²⁵ Schneeberger, A., Fontaine, G. (2016), *MAVISE EXTRA: Linear and on-demand audiovisual media services in Europe 2015*, European Audiovisual Observatory, June.

Fontaine, G, Kevin, D. (2016), MAVISE EXTRA. Media ownership: towards Pan-European groups?, European Audiovisual Observatory, June. According to that report, the 15 most important pan-European distribution groups would include Altice, Deutsche Telekom AG, Liberty Global Group, M7 Group, Orange (France Telecom), RCS/RDS, Sky Plc, Telefonica, Telekom Austria Group, Telenor, Teliasonera, United Media Group,8 VIASAT/ Modern Times Group, Vivendi, Vodafone Group plc. The most important broadcasting groups belong to the following media groups, with significant subsidiaries in brackets: 21st Century Fox (Sky Plc, Fox International channels), AMC Networks, Bonnier (C-More entertainment), Discovery Communications (Eurosport), Modern Times Group (Viasat), NBC Universal, RTL Group, Sanoma, Scripps Networks, Sony Corporation (SPTI), Time Warner Inc. (Turner Broadcasting, Central European Media Enterprises, HBO), Viacom Inc. (MTV Networks), Vivendi (Canal+), and Walt Disney Inc. (AETN, Disney ABC).

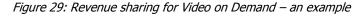
⁵²⁷ Evens, T., Van Rompuy, B., & Donders, K. (2014, September 9). Merger mania in distribution and content markets: Need for European action. LSE Media Policy Project Blog [Web blog post]. Retrieved from http://blogs.lse.ac.uk/mediapolicyproject/2014/09/09/merger-mania-in-distributionand-content-markets-need-for-europeanaction/#comments

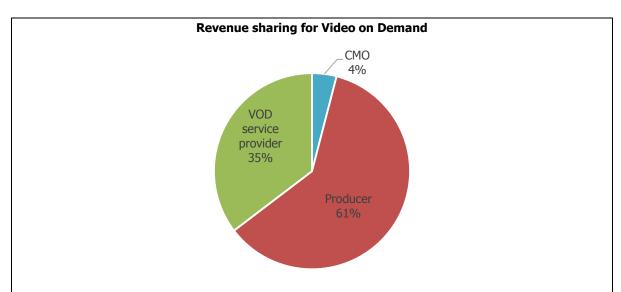
⁵²⁸ Etherington, D. (2015, March 17). Apple web television service would awaken a sleeping Apple TV giant. TechCrunch [Web bog post]. Retrieved from http://techcrunch.com/2015/03/17/apple-web-television-service-would-awaken-a- sleeping-apple-tv-giant/

Regarding television, subscription fees are the main driver, next to advertisements which almost doubled since 2003,⁵²⁹ which include subscriptions to premium cable, IPTV, and OTT platform services such as Amazon Prime, Apple TV, Dailymotion, iTunes, Netflix, Maxdome, Watchever, and YouView, as well as from (digital) TV subscriptions and broadcaster's and distributor's VOD services. Attractive offers such as HD channels, premium channels, and VOD resulted in an increase in paid subscriptions (see also bundling as new business opportunity, cf. section 2.2.2) ⁵³⁰

As regards radio, advertising is particularly expected to drive future growth.⁵³¹ Most revenues are still made offline whilst online services either make no profit, generate losses or are at best break even. Yet, radio broadcasters still see the online sphere as worthwhile to use as a promotion channel for their station.⁵³² However, their earning in copyright is endangered through third-party aggregators from outside the industry, who aggregate their content without investing in its production or in its rights.⁵³³

The availability of enhanced data analytics changes the advertisement landscape. While private broadcasters always regionalized advertisement (e.g. by showing different advertisement in rural and urban areas), digitisation made more targeted advertisement possible. To what extent this can be exploited is still a matter of debate. Already now, pay TV providers monitor subscription patterns and accordingly offer targeted advertisement e.g. a household subscribing to a kids' channel might see a targeted advertisement for a family car from Volkswagen or a Disneyland ad. ⁵³⁴





This example of revenue sharing is based on French figures, for the rental of an audiovisual work (VAT excluded). While "only" 4% of revenues go to creators (via collective management organisations), arguably a part of the amount that goes to producers also reaches creators (e.g. they received a lump-sum payment before entering the production process). Figures on the Flemish (Belgium) situation indicate that the ratio is 50-60 for the distributor, and 40-50 for the broadcaster (excluding VAT and creators' share).

Sources: Lescure, P. (2013), Mission « Acte II de l'exception culturelle ». Contribution aux politiques culturelles à l'ère numérique; Bleyen, V.-A., Ballon, P. (2012), Value network analysis of the audiovisual media industry in Flanders, research report for VRT Medialab, March 2012

⁵²⁹ Gröne, F., & Acker, O. (2015)

⁵³⁰ ibid.

 $^{^{531}\} http://www.pwc.com/gx/en/industries/entertainment-media/outlook/segment-insights/radio.html$

⁵³² Interviews

⁵³³ Interviews

⁵³⁴ Interviews

Conflicts in the digital world: between ISPs and OTT platforms

The relationship between ISPs and OTT platforms bears potential for conflict. In the US, Netflix signed a deal with Comcast to ensure a direct and fast Internet access to its customers, reportedly after the average speed for the Netflix-stream dropped from 2.07 Mbit/s to 1.51 Mbit/s at the beginning of 2014 in the Comcast network. These deals are not uncommon in the US: several big companies including Google, Microsoft and Facebook are already paying for a faster access. Sa6

In Australia and New Zealand, Netflix entered in a process of signing "un-metering agreements" with ISPs, which ensure that Netflix's traffic does not count as part of consumers Internet traffic bundle. ⁵³⁷ So far, these practices which are accused of violating net neutrality are not common in Europe for radio and TV broadcasting, however they might spread.

With digitisation and distributors introducing their own platforms, broadcasters and distributors as well as new entrants offering VOD services such as Apple, Netflix and Amazon try to reach the same actors in the vertical value chain. On the one hand, both try to reach the same viewers; on the other hand, at least broadcasters and distributors struggle to reach advertisers.

The conflict about reaching the viewers is centred on the distributor's offer of non-linear viewing. Broadcasters argue that it is interesting for them to offer films for which they have acquired linear rights in a non-linear way as well, but are bound by the exclusive offerings of the operators.

The revenue split is also under debate. After deduction of VAT and the provision for author rights, the remainder of VOD income is split between the distributor and the broadcaster. The ratio is usually 60% for the distributor and 40% for the broadcaster, or 50% - 50%, and varies per broadcaster.

The second conflict evolves around advertising revenues. VOD services enable viewers to skip advertising, thus posing a threat to broadcasters' current business models that mainly rely on revenues from advertisement. All in all, if advertisers feel that they can no longer reach the audience they are paying for, it seems inevitable that advertising revenues will drop. Calculations of broadcasters indeed indicate that delayed viewing considerably jeopardizes their advertising revenues. Whereas 80 % of private broadcasters' income still comes from advertising, this percentage is decreasing year-on-year, and consumer-based income is becoming more important (in particular in the form of subscription fees). Hence, broadcasters ask for remuneration for the exploitation of broadcasters' content which the distributors decline. As a result of the conflicts, many broadcasters were also launching a service for live streaming and non-linear catch-up TV.

Exclusivity, resale rights

In distribution, the management of rights becomes more complex. Due to the development of new distribution channels, commercial agreements with an increasing number of players have to be negotiated.⁵³⁸

In content creation, the rising popularity and therefore increasing production of high-end series in the television industry also leads to contractual changes. The need for more financial resources made it increasingly necessary to co-produce. Examples include "The Tunnel", an Anglo-French adaption of the Danish/Swedish series "The Bridge". 539

http://www.spiegel.de/netzwelt/web/videostreaming-netflix-investiert-in-verbindung-zu- comcast-a-955267.html

⁵³⁵ Böhm, M. (2014, February 24). Debatte über Netzneutralität: Netflix bezahlt für Verbindung zu Comcast [Debate about net neutrality: Nefliy pays for connection to Comcast. Spegel online [Web blog post]. Retrieved from

⁵³⁶ Ramachandran, S., & Fitzgerald, D. (2013, June 20). For Web Firms, Faster Access Comes at a Price. The Wall Street Journal [Web blog post]. Retrieved from http://www.wsj.com/news/articles/SB1000142412788732383650457855317016799 2666.

⁵³⁷ Orlowski, A. (2015, March 6). Netflix: Look folks, it's net neutrality... HA, fooled you: OTT video giant cheerily dons unicorn-slaying gloves. The Register [Web blog post]. Retrieved from http://www.theregister.co.uk/2015/03/06/netflix_net_neutrality_only_joking/?mt=1427135460545

⁵³⁸ Interviews

⁵³⁹ Interviews

High-end series are connected with higher financial risk - similar to cinema productions, and remakes become more common. ⁵⁴⁰Additionally, the practice of pre-sales of rights plays an important role for broadcasters' productions. To give an example, German, Australian and US stakeholders participated in the financing of Downtown Abbey. ⁵⁴¹

As for radio, broadcasters use a lot of copyright protected material i.e. music. Therefore, radios have to acquire the necessary rights usually through rights collecting societies to clear authors' rights and related (neighbouring) rights. This is similar for all European countries. With digitisation, some music publishers withdrew their rights for digital use from collecting societies. This is in particular the case for music publishers holding rights for the Anglo-American repertoire. These are powerful players because of the control they have over valuable repertoire. Since the radio sector (mainly constituted of SMEs) often lacks the necessary resources to negotiate with those powerful players, radios often produce podcasts without music.⁵⁴² This is not related to the cost of the licence, but rather a matter of **transaction cost**, i.e. costs that would be incurred by the radio station in order to negotiate the access to content's rights.⁵⁴³

National differences

The respective bargaining powers of broadcasters and distributors vary from country to country. In the UK for example, various distribution channels such as satellite, cable, and IPTV are available. Thus, creators and producers compete on content rather than on price.⁵⁴⁴

In some countries, television broadcasters joined into contractual agreements with Netflix. As a result, Netflix could distribute national content that had already been aired. Yet, so far these partnerships are purely complementary.

9.4 Other exogenous changes and relations with other sectors

Risks in terms of cultural diversity

Current developments in the broadcasting sector (increasing importance of distributors and OTT players) raise concerns, notably regarding their impact on cultural diversity.

A fear is that audiovisual content could become a plain commodity for the broadcasting sector.⁵⁴⁵ As a result, the industry would compete on the ground of prices instead of on their content offers. This could harm cultural diversity and pluralism and be especially harmful for European content.⁵⁴⁶

Public service broadcasters in particular fear to lose relevance and not to be able to offer enough variety in terms of content in a multi-platform environment.⁵⁴⁷ While public service broadcasters come under pressure from vertically integrated OTT players, they monitor with concern the fact that those players do not necessarily reinvest the outcome of successful programmes, especially not in European content.⁵⁴⁸ Furthermore, Public Service Media face budget pressures.⁵⁴⁹

Relations with other sectors

There are strong links between **the radio and the music value chains** (in particular for broadcasters that are specialised in music), as it has been developed previously.

In the same way, strong links exist between **the TV and the film value chains**. In particular, in both cases, broadcasters are important for the exploitation of content produced by the music and film sectors. Furthermore,

541 Interviews

545 Interviews

547 Interviews

548 Interviews

⁵⁴⁰ Interviews

⁵⁴² Interviews

⁵⁴³ KEA (2012), "Licensing music works and transaction costs in Europe", Final study, September

⁵⁴⁴ Interviews

⁵⁴⁶ See the thematic paper on 'Cultural Diversity'.

⁵⁴⁹ EBU (2013), Vision 2020 Annex 3. Media markets, media distribution & production technologies.

some TV productions become increasingly similar to cinema productions. This leads to an adaptation of knowledge in the cinema sector for instance the reproduction of successful series and shows. Alike cinema productions, highend series are no longer produced for a national but rather for an international audience and market. Accordingly, practices such as co-productions and the support of state aid become common practice. ⁵⁵⁰

Finally, links to big data analytics are growing. Big data can be used for both advertisement as well as targeted content creation. Questions currently arise in this respect on how to responsibly deal with audiences' data. ⁵⁵¹ In this context links to cloud computing become important. Content is expected to reach the audience in good quality this is why, with the growing importance of Internet delivery, there is a greater interest in traffic optimization. ⁵⁵²

550 Interviews

⁵⁵¹ Interviews

⁵⁵² Interviews

10.1 Introduction to the multimedia sector: definition and importance in the EU economy

Definition and scope

With the rise of digital media, the term "multimedia" gained increased prominence. Multimedia describes works which consist of a combination of several digital media such as text, graphic, photography, audio and video, to create an entertainment or learning experience that stimulates several perception channels (e.g. seeing, listening, but also feeling or smelling). Often, but not necessarily, multimedia allows for interactivity. Yet, there is no common ground on what combinations of digital media can be regarded as "multimedia" and which cannot. In general, it is possible to distinguish between a broad and a narrower view. The broad view generally regards as "multimedia" works which make common use of several media channels, i.e. also a simple combination of text and pictures. A more restrictive definition narrows the term down to independent computer-based systems (e.g. no video-recorders) that combine different types of information. Multimedia includes hereby at least one type of audiovisual, time-dependent information (e.g. sound and video) and one abstracted, time-independent information (e.g. text, pictures). The combination with smelled or tactile information is also theoretically possible.

In our framework, we will refer to the more restrictive definition, which emphasizes rather the qualitative than quantitative nature of multimedia. After excluding multimedia that is already analysed within the value chain of another industry (e.g. interactive e-books), we will therefore focus on "video games and multimedia", i.e. on applied and entertaining video games and computer software. These can be PC-, console, handheld-based or mobile.

Entertaining games/software are either so called "core games" i.e. the classical, rather complex games that are usually PC- and console based, and take a considerable amount of dedication and "casual games", which are less complex and easily available for a wider audience e.g. online. "Applied games" or "serious games" however, usually have other purposes beyond entertaining users, 556 e.g. educational purposes for educational games. Other uses not directly linked to the cultural and creative sector such as applied games for the medical sector, military training, or government awareness raising actions are excluded in the following. We refer to the thematic paper on intertwining, for a further analysis of intertwining of the gaming sector with healthcare.

Importance for the EU economy

The multimedia sector is an exceptional case within the cultural and creative sector when it comes to digitisation, since its products have always been digital per se. According to PWC, video games are the largest growth pocket in the creative industries online, driven mostly by consumer pay revenues.⁵⁵⁷

The multimedia sector was the main beneficiary of the digital developments of the cultural and creative sector. ⁵⁵⁸ The revenues of the sector increased over a decade (2003 to 2013) from EUR 4.95 billion to EUR 14.96 billion in the EU-27 (not including console sales). ⁵⁵⁹ Thus, the sector in fact is the fastest growing market of all creative sectors. While the video games and software account for over EUR 10 billion of this revenue, "digital" i.e. online gaming revenues already account for EUR 4 billion, ⁵⁶⁰ which include among others subscriptions to online games,

⁵⁵³ Mayer, R. E. (2009). Multi-media learning (2nd Ed.). Cambridge, New York, Melbourne: Cambridge University Press

⁵⁵⁴ Steinmetz, R. & Nahrstedt, K. (2014). Multimedia systems. Berlin, Heidelberg: Springer.

⁵⁵⁵ Ohm, J. R. (2004). Multi-media communication technology: Representation, transmission and identification of multimedia signals. Berlin, Heidelberg: Springer.

⁵⁵⁶ De Prato, G., Feijóo, C., Nepelski, D., Bogdanowicz, M., & Somon, J. P. (2010). Born digital / Grown digital: Assessing the future competitiveness of the EU video games software industry. JRC Scientific and Technical Reports

⁵⁵⁷ Compared to music, film, broadcasting and book publishing. Gröne, F., & Acker, O. (2015).

⁵⁵⁸ Statistics includes PC and console games, online games, and mobile games, but do not include equipment. Gröne, F., & Acker, O. (2015).

⁵⁵⁹ Gröne, F., & Acker, O. (2015). The digital future of creative Europe: The impact of digitisation and the Internet on the creative industries in Europe. Berlin, New York, Frankfurt: pwc.

⁵⁶⁰ Gröne, F., & Acker, O. (2015).

and sales from downloaded games. In 2012, 108,000 people were employed in the European video games industry. 561

The different segments of the multimedia industry evolve differently. The sector quickly embraced new digital (online) business models. ⁵⁶² Currently, the growth is mainly driven by mobile games. Thus, while the video game industry has expanded from EUR 40 billion in 2011 to EUR 66.66 billion in 2013, the mobile gaming sector has nearly tripled over the same period. ⁵⁶³ Data on the UK games industry also show a strong increase in the number of operating video game companies, which is mainly driven by iOS developers. ⁵⁶⁴ The revenues derived from selling consoles (devices and games) have been affected by the economic crisis. ⁵⁶⁵

The performance of European players within the multimedia industry are mixed. Most of the major game publishers are not European, French publisher Ubisoft being an exception. On the other hand, many developers are active in Europe, especially in Central and Northern Europe. According to one interviewee, there is a strong supply of middleware (e.g. game engines) by European players. Finally, 4 of the 15 largest developers-publishers in the mobile gaming sector are European companies.

It becomes apparent that the industry penetrates the whole society with games becoming increasingly interesting for older generations as well.⁵⁶⁹ This may correspond to the fact that children who have grown up playing video games, are now getting older. In general though, the video games industry has widened its demographics.⁵⁷⁰

10.2 Creative value chain mapping and description

10.2.1 Economic characteristics of the multimedia business and impact on the global value chain structure

In technical terms, multimedia goods i.e. software and video games, are essentially computer programmes which process the data entered by users.⁵⁷¹ The economic **characteristics of the goods of the multimedia industry depend on the carrier** on which the content is distributed. Traditionally, games for consoles, handheld and PC were distributed via physical data carriers. Online, dematerialised distribution is increasingly important for the industry. While mobile games relied on digital - i.e. App store distribution from the beginning, PC games and software nowadays are dominantly distributed via digital platforms. The console and especially the handheld market are lagging behind and still rely largely on physical carriers.⁵⁷² For example in France, in 2014, 90% of PC revenues are based on dematerialised distribution (downloads and subscriptions) against 27% for home video game consoles and 25% for handheld consoles.⁵⁷³

The production of multimedia goods - both digital and physical - is subject to **high up-front costs**. Since multimedia goods are **experience goods** like most goods from the creative sector, their success is hard to predict. The initial high investment costs are therefore combined with a **high risk**. As a result, the market is usually opting

⁵⁶¹ Ernst Young (2014).

⁵⁶² Gröne, F., & Acker, O. (2015). The digital future of creative Europe: The impact of digitisation and the Internet on the creative industries in Europe. Berlin, New York, Frankfurt: pwc.

⁵⁶³ Lescop, D., & Lescop E. (2014).

⁵⁶⁴ Mateos-Garcia, J et al (2014).

⁵⁶⁵ Gröne, F., & Acker, O. (2015).

https://newzoo.com/insights/rankings/top-25-companies-game-revenues/. Hussain, Tamoor (15 October 2015). "Former Activision Owner Vivendi Buys Stakes in Ubisoft and Gameloft". GameSpot. CBS Interactive.

⁵⁶⁷ Interviews

⁵⁶⁸ Lescop, D., & Lescop E. (2014). Data are for 2013. The largest, King (developer of a.o. *Candy Crush*) is Swedish. However it was acquired by the US company Activision Blizzard in February 2016.

⁵⁶⁹ Interviews

⁵⁷⁰ De Prato, G. et al. (2014).

⁵⁷¹ De Prato, G., Feijóo, C., Nepelski, D., Bogdanowicz, M., & Somon, J. P. (2010)

⁵⁷² Interviews

⁵⁷³ Hadopi DREV (2014), Etude sur le jeu vidéo dématérialisé. Rapport de l'étude économique de cadrage, Décembre.

for mainstream products or portfolio strategies to mitigate risk of investment.⁵⁷⁴ Investments were traditionally carried by the publisher, who pre-financed the good.

There are a couple of very large game companies but in recent years, new and upcoming companies have been very successful. *Minecraft* for example, was created by a small Swedish company, Mojang, without a big publisher. Other examples include Swedish developer King's very successful *Candy Crush*, or Finnish companies Supercell and Rovio's respective hits *Clash of Clans* and *Angry Birds*. One interviewee stated that the success of online or mobile games is harder to predict. As regards traditional physical games, big companies (publishers or console manufacturers) have recourse to physical retail space to promote their games.⁵⁷⁵

In the case of physical distribution, reproduction still entails considerable marginal costs. In the digital sphere however, additional copies can be produced at negligible costs. ⁵⁷⁶

10.2.2 Stylized value chain mapping and description

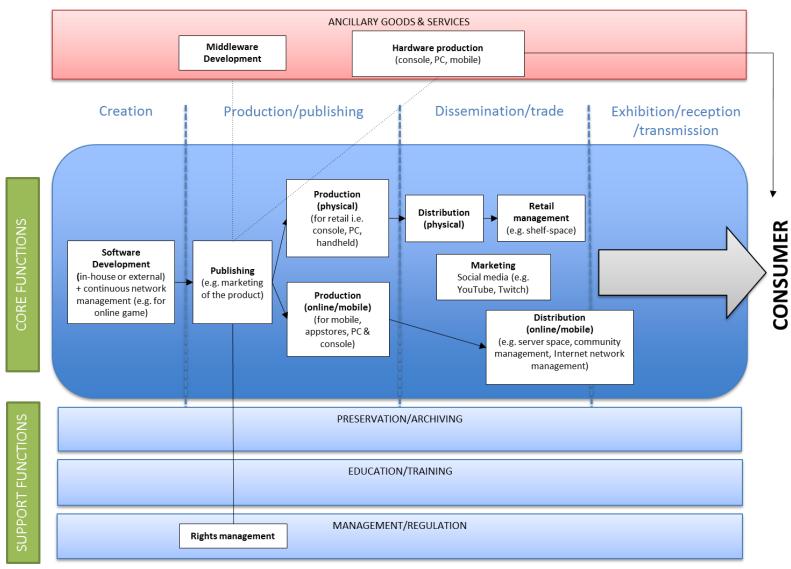
The multimedia value chain consists of four core functions. The actors in the different stages of the value chain carry out the multimedia industries' specialised activities, namely creation, production/publishing, dissemination/trade and exhibition/reception/transmission.

⁵⁷⁴ Interviews

⁵⁷⁵ Interviews

⁵⁷⁶ Interviews

Figure 30: Stylized Value Chain for Multimedia



Creation

The first function consists of developing software that will be the content of the multimedia product. This can be done either in-house (by publishers) or externally. Especially big publishers, like Electronic Arts (EA) or Disney, have their own development companies.⁵⁷⁷

Developers (or studios) can be seen at the core of the value creation process as "actors that create (...) content as part of their technical development activities, using middleware (tools and components) which results in a software product which is published and distributed through a diversity of channels, finally reaching users (gamers) who play it in a hardware platform purchased from a suitable provider."⁵⁷⁸ The developers' creative work is the most important value adding activity – while digitisation may to some extent enable to circumvent traditional publishing and distributing channels, the activity of creation cannot be replaced.⁵⁷⁹ Contrary to independent creators, creators who work for publishers commissioning games (e.g. Marvel) create them without owning the IP rights.⁵⁸⁰

The concept of "game jams" or "hackathons" gained popularity, with one of the biggest ones in the world being the "Nordic game jam". ⁵⁸¹ In such a setting developers come together, create teams and create games in a short time frame. Conferences such as the global GDC (Game Developers Conference) are also popular (about 27,000 attendees in 2016). Next to the actual output, game developers use these events to advance their creative work and share a culture, which is mainly prominent among smaller developers. ⁵⁸²

With the development of online and mobile distribution, developers' tasks have evolved. Actually, online and mobile games may require players to be connected, either continuously (e.g. when game features allow live interaction between players) or from time to time (e.g. to download data). These games usually need to be updated throughout their lifespan, and their development is not finished upon delivery. Thus, **tasks related to network management** have started to play a new and important role in the value chain, and can be performed by game developers.⁵⁸³

More generally, one can observe **disintermediation** in the value chain. Nowadays, games developers are not always reliant on publishers. The emergence of digital platforms enabled game developers, especially in the mobile division, to circumvent publishers and to distribute their product directly.⁵⁸⁴ Crowdfunding makes it nowadays possible for developers to finance certain types of games and software by the 'crowd' rather than by publishers. Thus, the 15 largest developers of the mobile game industry in 2013 were at the same time developers and publishers.⁵⁸⁵

Production/publishing

The second function consists in publishing the multimedia product. The product is aggregated, presented, licensed, priced and marketed by publishers. This step is often supported by promotion activities, also performed by the publishers. This step is often supported by promotion activities, also performed by the publishers have always pursued game development and sometimes even distribution. They have subsidiaries for mobile game development (e.g. major game publisher Activision which acquired King, see above). Content can be produced externally by commissioning a developer to create a game (e.g. based on a licence owned

⁵⁷⁷ Interviews

⁵⁷⁸ OECD (2005), Working Party on the Information Economy Digital Broadband Content: The online computer and video game industry. Available at http://www.oecd.org/dataoecd/19/5/34884414.pd

⁵⁷⁹ Interviews

⁵⁸⁰ Interviews

⁵⁸¹ http://nordicgamejam.org/about/

⁵⁸² Interviews

⁵⁸³ Interviews

⁵⁸⁴ Interviews

⁵⁸⁵ Lescop, D. & lescop, E. (2014).

⁵⁸⁶ Interviews

⁵⁸⁷ Interviews

by the publisher), or internally by a studio. For example, Activision has had the various episodes of its *Call of Duty* franchise developed by three different developers: Infinity Ward, Treyarch and Sledgehammer Games.

The game is then produced ("production" stage). Of course, middleware and hardware development and production have to come together with the software product in those steps, even though they are not directly contributing to the actual content production. Recent popular hardware includes consoles such as the PlayStation 4 (Sony), the Xbox One (Microsoft), the Wii U (Nintendo) and handheld devices such as the Nintendo 3DS. Games can also be produced to be made available in dematerialized format, e.g. via mobile devices' app stores or online PC platforms (e.g. Steam).

Dissemination/trade and exhibition/reception/transmission

The dissemination function consists of promoting, distributing and retailing the games offline and online.

For physical games (cartridges and discs), this includes tasks such as logistics e.g. packaging and transport and retail management. As an illustration, the acquisition of shelf-space in this step of value creation is decisive to ensure an optimal marketing and display.⁵⁸⁹ This function also includes promotion activities relying on social networks (e.g. YouTubers reviewing multimedia products or Twitch users playing games live in front of their audience).

Distributing online and mobile games has a component both in dissemination/trade and exhibition/reception/transmission as these games are dematerialized. Some online and mobile games are distributed via application stores (trade), while other online and mobile games take place on the Internet within communities that interact with each other thus providing an "unmediated experience" to consumers (e.g. Massively Multiplayer Online (MMO) games — see further).

Both functions are grouped because they provide substitutable products to consumers. Furthermore, even in terms of distribution channels, the distinction is no longer clear-cut. For example, it is possible to buy a game cartridge (hence physical), while some of this game's features require to be connected to the Internet. In general, while mobile games are only distributed digitally, PC games and increasingly console games are increasingly distributed digitally as well.⁵⁹⁰

As already evoked, **vertical integration** has led to a blurring of roles for developers acting as publishers, with some stakeholders having tasks in development, publishing, and distribution.⁵⁹¹ Hardware producers have for a long time developed and published games but they currently also provide proprietary platforms allowing to get access to dematerialized games to be downloaded on the console they produce. The relevant stores are Microsoft's Xbox live store, Sony's stores for the PlayStation and the store for Wii from Nintendo.⁵⁹²

Game developer Valve provides an interesting example of a developer owning an online platform (Steam), through which also competing publishers' and developers' games are made available. A much smaller and less popular store is the platform created by game publisher Electronic Arts (EA), which bases its existence mainly on the distribution of a few exclusive titles.

With physical distribution declining (especially in the Nordic markets)⁵⁹³ to the benefit of online and mobile distribution, new players have entered the dissemination stage of the value chain. With Android and iOS being the most dominant and successful operating systems for smartphones and tablet, Google and Apple have entered the multimedia market as new digital distributors. This has led traditional retailers such as the French retail chain FNAC, to act as distributors by dealing with publishers directly.⁵⁹⁴ Even physical goods are distributed via digital market places e.g. Amazon.⁵⁹⁵

Country differences

⁵⁸⁸ Interviews

⁵⁸⁹ See also Abadie, F., Maghiros, I. & Pascu C. (2008). The future evolution of the creative industries: Three discussion papers. JRC Scientific and Technical Reports.

⁵⁹⁰ Interviews

⁵⁹¹ Interviews

⁵⁹² Interviews

⁵⁹³ Interviews

⁵⁹⁴ Prato, G., Feijóo, C., Nepelski, D., Bogdanowicz, M., & Somon, J. P. (2010).

⁵⁹⁵ Interviews

From a European perspective, some national differences in the value chain configuration and/or dynamics can be observed.

Some countries built especially stringent console ecosystems, such as the UK, France or Sweden, and moved slower towards mobile than Finland for example. As one interviewee pointed out, in some Eastern European countries, difficulties exist to access certain distribution platforms, because some do not allow content of these countries like Google Play. 596

There is a striking difference in the apprehension of digital payments, which is important because of the increasing role played by in-game payment for mobile and online games. While Germany for instance still heavily relies on cash, other countries (like Sweden) prefer non-cash payments. Furthermore, while Western European countries rely more on credit cards, in Eastern European countries other kinds of payment methods such as SMS are more common.⁵⁹⁷

Furthermore, some countries favour mobile multimedia games or software more than others. This can be connected to demographics or to the economic situation of a country, i.e. the ability of consumers to afford the newest smartphones or tablets. Cultural differences also come into play: some multimedia goods and practices are better adapted to certain markets. ⁵⁹⁸

In general, Europe lags behind in terms of infrastructure compared to Asian countries such as South Korea, notably concerning (mobile) Internet speed. As a result, it is currently not possible to play many of heavy cloud-based games developed in Asia. ⁵⁹⁹ A recent study on the UK game sector also shows that a stronger broadband infrastructure supports higher levels of video game clustering. ⁶⁰⁰

10.2.2.2 The impact of digitisation

User community involvement

The user is more integrated in the process of value creation than in other value chains. Online and mobile distribution have made it easy for developers to involve users at early stages of the value creation process, and to receive feedback. The innovation process has become "viral": users are constantly engaged and give feedback, which is very different from traditional "blind" to market distribution.⁶⁰¹ On Steam, it is possible by now to let the community play demo versions of a game, in order to get feedback. As a result, developers can implement changes and promote their games.⁶⁰² In a world of digital abundance, the role of promotion, usually fulfilled by publishers -but with digitisation also by developers, gained a new importance. This promotion is especially carried out via YouTube or Twitch (the former for "Let's Plays", a format where YouTubers play and comment their own game; the latter especially for live streaming). The community itself becomes therefore an important asset in the digital world that has to be catered for, may it be for development or business reasons (e.g. subscription)⁶⁰³. For example, Lumberyard, a game engine (hence middleware) from Amazon, makes it possible to create a game with Twitch support. As a result, when streaming the game, users can influence its conception by voting on certain actions e.g. fighting against a certain character.⁶⁰⁴ Besides, cross-promoting games via in-game advertisements becomes common, in particular for free-to-play mobile games.⁶⁰⁵

⁵⁹⁶ Interviews

⁵⁹⁷ Interviews

⁵⁹⁸ Interviews

⁵⁹⁹ Interviews

⁶⁰⁰ Mateos-Garcia, J. et al (2014).

⁶⁰¹ Interviews

⁶⁰² Interviews

⁶⁰³ Interviews

⁶⁰⁴ Interviews

⁶⁰⁵ Interviews

Links with other value chains

New links with other value chains were established in the realm of digitisation. One prominent example is education. Educational institutions - especially schools - started to discover games, applications and specialized software programmes for their students. Multimedia applications make it possible to track students' progress, propose individualized learning solutions and therefore to create a new exchange between educators and students. For other educational purposes (e.g. professional training), gamification becomes an important field as well.⁶⁰⁶

Additionally, it is possible to observe a profitable exchange of content with the publishing and film industries. For example, writer Tom Clancy has first licensed his book into games. By now, the games which developed from his books are turning into books again.⁶⁰⁷

Virtual Reality (VR) will further increase these tendencies, since the technology is relevant outside the multimedia sector. Already now, VR devices are used outside the gaming sector. For example, photographer Ruvan Wijesooriya created a whole fashion show inside virtual reality. Wearables to track the heart rate of users for example, are already part of the daily life of many consumers. Augmented reality is growing while human-computer interfaces e.g. brain computer interfaces might emerge in the next decades.

Big data analytics

Connected to this, **big data** is getting tremendous importance. Stakeholders try to get as much data as possible in the industry. The data is mainly used for three purposes:

- Firstly, as alluded to above, to map how users play the game in order to improve it and to correspond to users' needs i.e. for games analytics.
- Secondly, for targeted and in-game advertisements. In this case, mainly advertisement networks collect the data. 610 Many developers and publishers observe this tendency with worries, since it raises the question of how far developers are responsible for data protection.
- Thirdly, the data is also used for community services, especially to track discussion topics and to eliminate hate speech.

10.2.3 Value Monetisation and pricing

The development of online and mobile distribution has enabled the development of new business models, in particular **new revenue models** (ways to earn money):

- The traditional model consisted in a **pay-to-play model**, where consumers would purchase a game and play with it on their PC or console. Online and mobile games may still rely on this pay-to-play model (where the purchase of a physical game is replaced by the download of a dematerialised version), although it can then be enriched by out-game services such as automatic updates or easy access to sequels.⁶¹¹
- Another direct revenue model is the one when consumers pay a **subscription** to play the game (with or without having to pay an initial unit price to access the game). This is notably successful in the case of Massively Multiplayer Online (MMO) games, which provide a continuous online gaming services where interactions with other players are possible.⁶¹²

⁶⁰⁶ Interviews

⁶⁰⁷ Interviews

⁶⁰⁸ http://nymag.com/thecut/2016/01/virtual-reality-fashion-shoot.html

⁶⁰⁹ Interviews

⁶¹⁰ Interviews

⁶¹¹ Davidoci-Nora, M. (2014).

⁶¹² Davidoci-Nora, M. (2014).

Beyond these rather standard revenue models, online and mobile distribution have allowed for the emergence and development of hybrid revenue models. ⁶¹³ One of the most well-known is the freemium model. The **freemium model** is based on the existence of two or more versions of the product being available. The free version is available for everyone (although it may require a registration,) and allows access to basic functionalities. For example, the free version can consist of a free trial period. ⁶¹⁴ There is also one (which is then usually called **premium**) or several better versions, which allow accessing more functionalities (e.g. more games, account, bonus etc.) ⁶¹⁵. The success of such versioning relies on the fact that on the one hand the basic version is good enough to attract many users, and that on the other hand the better version is differentiated enough from the basic version to incite people to pay to acquire it (generally by subscription). ⁶¹⁶ In 2011, Ambient Insight (2011) stated that the freemium model was becoming the prevalent business model for mobile applications in serious gaming. ⁶¹⁷

Moreover, online and mobile distribution have expanded the ways of **advertising**⁶¹⁸, for example with product placement in the games. Brands or companies can partner with the game platform, even to the extent that the game is packaged with something else (e.g. a subscription to an Internet service). And more generally, the advertising can take place on the platform that hosts the games and/or on the page where the game takes place (e.g. for a flash game), and/or in the game itself (in-game advertising). More and more advertisement-based games are being published, a trend that is likely to continue.⁶¹⁹

Besides, online and mobile distribution have allowed for the development of **micro-transaction models**, ⁶²⁰ i.e. the possibility for (generally very small) purchases inside or in relation to the game for instance virtual items such as clothes for an avatar or access to game extensions (consequently in this case the boundary with the freemium model can be very thin). ⁶²¹ Selling of virtual goods in online environments (in-game sales), while being cheap to produce, can yield great profits. ⁶²²

These are mainly the so-called "casual games" (in particular on mobile devices), which are usually easy to play, that have made it possible for the sector to explore new revenue models in the gaming industry⁶²³ (and thus also reach new consumer segments). Among all revenue models that have been described here, there is currently a shift from pay-per-purchase to freemium, ad-based or subscription models.

Another new business model is e-sports, which can even be considered as a new market, with different skills required. E-sports means gaming in a professional sense, similar to playing football for a living (e.g. there are competitions around Warcraft or League of Legends). Games and tech analysis predict the new sector to become a huge market in a short time frame, from USD 194 million in 2014 to USD 325 million in 2015, to an expected USD 1,072 million in 2019⁶²⁴. Its development is intrinsically related to the one of live streaming.

⁶¹³ Blevn, V.-A. & Ranaiyoson, H. (2012).

⁶¹⁴ Davidoci-Nora, M. (2014).

⁶¹⁵ Gröne, F., & Acker, O. (2015)

⁶¹⁶ Bleyn, V.-A. & Ranaivoson, H. (2012).

⁶¹⁷ AMBIENT INSIGHT 2011. The US Serious Games Market: Segment Size and Opportunity.

⁶¹⁸ Bleyn, V.-A. & Ranaivoson, H. (2012).

⁶¹⁹ Interviews

⁶²⁰ Davidoci-Nora, M. (2014).

⁶²¹ Bleyn, V.-A. & Ranaivoson, H. (2012).

⁶²² Gröne, F., & Acker, O. (2015)

⁶²³ Prato, G., Feijóo, C., Nepelski, D., Bogdanowicz, M., & Somon, J. P. (2010).

⁶²⁴ https://newzoo.com/insights/articles/global-esports-market-report-revenues-to-jump-to-463-million-in-2016-as-us-leads-theway/

10.3 In-depth analysis of interrelations between actors

10.3.1 Market structure and bargaining power

After twenty years of relative stability in terms of market structure, the video game industry's established structure is strongly impacted by the rapid development of online and mobile distribution.⁶²⁵ A few hardware manufacturers and publishers were dominating the industry (a "quasi-cartel")⁶²⁶, but the multiplication of distribution channels and devices for multimedia products is changing the situation.⁶²⁷

Creation

The market for creators can be qualified as **monopolistic competition**, with a large number of developers competing against each other, each having some market power. The number of independent studios and developers has increased⁶²⁸ and the sector has become more competitive, having a generally positive impact on the multimedia sector (see section 10.1).

Developers can be independent or part of the in-house team of large publishers. The former sometimes also act as publishers, as often observed in Norway.⁶²⁹ Usually, one will only find a few big AAA studios per country, i.e. developers that have resources to develop AAA games (the equivalent of blockbusters in the feature film industry). In Germany for example, one of the biggest European markets, three big AAA studios compete with each other.⁶³⁰

Developers have gained new opportunities through the availability of a range of new tools, including many engines that are available almost for free. ⁶³¹ This had two effects: first, it has become easier to become a developer, as even programming skills are not necessarily required anymore (**lowering of entry barriers** into the developers' market). This is especially true for the mobile sector. ⁶³²

Second, developers have the possibility to self-publish their games through the availability of new distribution channels in the mobile and online sphere⁶³³, thus **increasing their bargaining position** towards publishers. In particular for serious games, a single player is likely to perform all activities from developer to distributor (and even vendor) (see also the thematic paper on intertwining).⁶³⁴ At the same time, many independent developers struggle with performing typical publishers' tasks: marketing and reserving enough money for business activities. Due to this lack of business knowledge, independent developers often accept deals which are to their disadvantage. Games of independent developers who do not seek support often fail due to a missing marketing and financial expertise, even though they might have high potential and be highly creative.⁶³⁵

Production/publishing

The market structure for publishing and production activities can be best described as an **oligopoly with a competitive fringe**, i.e. a few major publishers and a great number of mid-size or small publishers.⁶³⁶ However, just like game development (and indeed because many developers are at the same time publishers), game

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<sup>625</sup> Rayna, T. & Striukova, L. (2014).
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⁶²⁶ Chantepie, P. et al (2014).

⁶²⁷ Chantepie, P. et al (2014).

⁶²⁸ Chantepie, P. et al (2014). See also Mateos-Garcia, J, et al (2014) for figures about the UK.

⁶²⁹ Prato, G., Feijóo, C., Nepelski, D., Bogdanowicz, M., & Somon, J. P. (2010).

⁶³⁰ Interviews

⁶³¹ Interviews

⁶³² Interviews

⁶³³ This is somehow comparable to what happens in the publishing sector.

⁶³⁴ Stewart, J., Misuraca, G. (2013).

⁶³⁵ Interviews

⁶³⁶ Small publishers include developers performing publishing activities. While the list of major publishers may vary on the yearly basis, it usually includes Sony Computer Entertainment (also hardware manufacturer), Sega, Telltale Games, Tencent, Microsot Game Studios (also hardware manufacturer), Nintendo (also hardware manufacturer), Activision Blizzard, Electronic Arts, Bandai Namco Games, Nexon, Square Enix and Ubisoft (the only European company in the list).

publishing is getting increasingly crowded. Hundreds of games are published on a daily basis, for instance the online distribution platform Steam used to give access to around 100 published games per year, by now the platform gives access to several hundreds of them per month.

As previously outlined, publishers incorporate all relevant business activities, especially the pre-financing of many games, a position that requires a certain availability of resources and ability to take risk, and thus company size. These assets give major publishers huge **bargaining power** in the value chain. Furthermore, the tendency of large publishers to **vertically integrate** by acquiring developer studios, makes their influence even bigger.⁶³⁷ Publishers remain central in particular for traditional multimedia goods, such as console and PC games. Publishers are less crucial in the mobile game sector, although developers may also need their support for business activities such as branding, marketing, clearing of rights, budget management, etc.⁶³⁸ The situation is different in the case of serious games, where games are commissioned and pre-funded by private or public entities which are not necessarily stakeholders in the game sector (see also thematic paper on intertwining).⁶³⁹

One interviewee argued that publishing has become less lucrative than it used to be, since many new roles such as payment, data providers, and ad providers have to be fulfilled, and more and more services need to be taken up by the publisher.⁶⁴⁰

Dissemination/trade and exhibition/reception/transmission

Recent years have seen a multiplication of distribution channels. However, the most important distribution channels are organised in **oligopolies**. Nowadays, games for handheld devices, consoles, PC and mobile are distributed increasingly or fully in a dematerialized form. The console distribution market is dominated by the platforms of the big hardware manufacturers Microsoft, Nintendo, and Sony. The PC market can be almost regarded as monopolistic, with Steam's huge dominance, which belongs to game developer Valve. Finally, mobile distribution is mainly organised in a duopolistic market setting, with the major platforms being Apple's App Store and Google's app store.

Distribution platforms have clearly increased their bargaining power in the value chain, and this power is expected to even further increase in the future. Each platform has **market dominance** over their distribution channel, which is usually reinforced by some form of vertical integration (e.g. the three major console producers also act as game publishers, which in turn allows them to reinforce the appeal of their console by ensuring a certain number of games being exclusively available on their own console). One interviewee stated that it has become increasingly difficult for developers to make their product visible on these platforms, and that the existence of rumours about which guidelines big platforms follow to promote games, has led to an increasing self-censorship on behalf of developers.⁶⁴¹ Furthermore, each platform aims at locking-in its customers by restricting interoperability. For example, games bought to be played with Sony's PlayStation 4 can only be played with a PlayStation 4, not with another device.

A special case is Steam, which makes games available on the PC market and has recently gained enormous market power⁶⁴². A risk is, one interviewee argued, that since Steam now decides which content is distributed, it could potentially reject any kind of content that does not suit it.⁶⁴³ There are numerous smaller platforms, yet due to their fragmentation, they are not convenient for publishers and are therefore avoided.

The success of distribution platforms has had two other consequences:

- They have significantly reduced the appeal of piracy. This is in particular true for Steam, which offers easy and cheap access to content and online components that cannot be accessed with pirated games, 644 because they require to stay connected for instance.
- The development of online and mobile distribution has led to (at least partly) an increased technical openness. PC was traditionally regarded as the most open platform and biggest market to sell a game, since publishing console games required the adherence to certain rules and specialized developer kits. With digital

⁶³⁷ Interviews

⁶³⁸ Interviews

⁶³⁹ Stewart, J., Misuraca, (2014).

⁶⁴⁰ Interviews

⁶⁴¹ Interviews

⁶⁴² Interviews

⁶⁴³ Interviews

⁶⁴⁴ Interviews

distribution, it can be observed that consoles are starting to catch up, since it became easier to publish on these platforms as well. Nowadays, Xbox is regarded in the industry as the most open and Nintendo as probably the most closed platform, according to one interviewee. Mobile distribution is relatively open, Google Play in particular allows developping applications even outside the platform.⁶⁴⁵

Ownership ties

Ownership was always a hot topic in the multimedia sector, due to the tendency of players to vertically integrate within the value chain. The situation even became fiercer with the arrival of digital distribution platforms.

The newly emerging digital distribution platforms are owned by established industry players, except for mobile.

- Owners in the console market are hardware manufacturers (and publishers) Sony, Microsoft, and Nintendo. Being also owner of the prevailing proprietary devices (e.g. the different generations of PlayStation and PlayStation Portable, Xbox, Wii and Wii U, and Nintendo DS), they now own and control also digital distribution platform for the games they produce (PlayStation Store, Xbox Live Marketplace, Wii Shop Channel, and Nintendo eShop).
- In the PC market, the major platform, Steam, is owned by a traditional industry player: the game developer Valve. 646
- Owners of mobile game distribution platforms, Google and Apple, are not traditional (telecom) industry players.

10.3.2 Contractual arrangements and revenue sharing

Revenue sharing in different distribution models

The terms of revenue sharing in the industry differ according to the type of distribution. The traditional (console) case is described in the following box. For mobile distribution, dominant platforms Apple App Store and Google Play have both opted for a 70/30 revenue share whereby developers receive up to 70% of the price paid by consumers. There is no certainty as concerns online distribution (Steam for PC), since Valve does not release these data. Yet, it is estimated at around 30% for developers.

In general, one digital copy (via mobile or online distribution) yields twice more profit than a copy using physical distribution. This is due to the fact that for physical distribution two to three intermediaries are needed, who take a part of the profit share. Therefore, the development of online and mobile distribution has made the emergence of many European companies possible (see also sections 10.1 and 10.2.1).⁶⁴⁹

In addition, regarding mobile games, most revenues come from ads or in-app purchases, therefore the transition from retail to mobile has lowered prices for consumers. 650

⁶⁴⁵ Interviews

⁶⁴⁶ Interviews

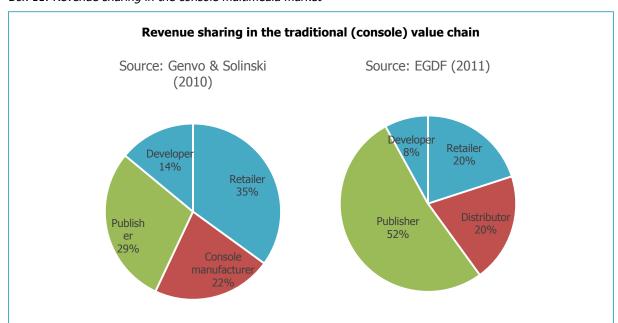
⁶⁴⁷ https://developer.apple.com/programs/,https://support.google.com/googleplay/android-developer/answer/112622?hl=en

⁶⁴⁸ Interviews. See also http://forums.steampowered.com/forums/archive/index.php/t-2073030.html

⁶⁴⁹ Interviews

⁶⁵⁰ Interviews

Box 11: Revenue sharing in the console multimedia market



There are different revenue sharing models provided by literature (and partially confirmed by interviews) for the traditional (console) value chain, which show some discrepancy as illustrated by the examples given above. Developers receive between 8 and 14% of the price paid for the game (in these examples between EUR 50 and EUR 55)

Exclusivity, resale rights, non-disclosure

There is are different copyright traditions among the EU Member States. Usually, IP rights are with the developer or in the console market with the console publisher. However, creators in France for instance have stronger moral rights in comparison with artists from the UK. Additionally, many developers have contracts with artists, musicians and other creators. Yet, these creators are usually in-house or US creators.

In the traditional value chain, the second-hand market for physical games used to be problematic for companies in the sector, since costumers re-used games instead of buying new ones. With digitisation, games rather moved into the area of services. The main problems now relate to cases of game clones or similar digital copyright infringements.⁶⁵¹

National differences

In general, the size and maturity of the multimedia markets differ from a Member State to another. Germany, France, the UK, and to a lesser extent Spain, are big, traditional and well-organised markets with a national customer base. As such, they have their own ecosystem with publishers and many distributors. The markets of other countries such as Austria, the Netherlands, and Central European countries (except Poland) are younger and less developed, with less organised support structures. The community may also be less organised. Slovenia for example, brought its community together only recently by founding its first association in 2015. In Germany and France, associations were founded 10 or 15 years ago. 652

There is also a difference in the use of state aid, which may favour different stages of the value chain. Countries such as France or Finland, offer good Research & Development grants.

Such differences are perceived as positive, since different countries cover different needs: for example some support cutting edge technology, others rather bigger or smaller productions.⁶⁵³ However, other processes such as

⁶⁵¹ Interviews

⁶⁵² Interviews

⁶⁵³ Interviews

rating systems for games or laws regarding publishing differ along national contexts as well and are perceived as cumbersome by industry stakeholders. To adapt to national markets, publishers have to deal with up to twenty variations in their business model, a problem that companies in the US are not facing.⁶⁵⁴

Dominant actors

In the traditional value chain, publishers and console producers have a dominant position, notably due to their role in financing and marketing multimedia goods (for publishers) and their control of one device (for console producers). While often producing content in-house and owning the IP rights, managing the marketing and pricing, some big publishers outsource the distribution.

The development of online and mobile games has weakened the publisher' role, but not significantly. Some of the dominant digital platforms also belong to these players. However, new digital platforms have appeared with strong market dominance over their respective markets.

Contractual arrangements between developers and publishers

In terms of revenue sharing, it becomes apparent that developers can reap greater revenues in the digital market provided they are able to self-publish successfully. But although self-publishing became an option, due to a lack of knowledge of relevant business processes, many independent developers still rely on publishers' business expertise and contacts, often to their financial disadvantage.

A lack of knowledge or opportunity might force developers into disadvantageous relationships with the dominant players. Independent developers often engage in unfavourable deals in terms of revenue sharing with publishers. In such deals, independent developers might give away up to 80% of their company owing to their lack of knowledge and care for business matters. 655

10.4 Other exogenous changes and relations with other sectors

Skills needs

In terms of non-technological changes the multimedia industry is clearly a growing sector of employment. While some other creative industries struggled keeping up the number of employees in the digital age, the employment in the multimedia industry tripled in one decade. This is mainly due to the fact that developing video games is a creative process, usually a team-work, which requires skilled employees in a process that is difficult to outsource. The multimedia sector still heavily relies on full-time employers instead of freelancers. In addition, besides finding employees, smaller companies often struggle with finding investors and (high-risk) capital in order to finish their products.

In the multimedia sector, one interviewee argued, companies compete with each other not on content i.e. games and software, but rather on talent (by getting the best people on board). Higher education can currently not satisfy the demand of the market. Additionally, the talent pool gravitates towards Canada due to the tax advantages and support schemes for developers there, or within Europe towards France owing to an offer of programmes for developers. Especially smaller companies struggle in this respect. With the industry becoming more and more visible, many students aspire to become game developers. However, it takes a long time to change curriculums, while technology can evolve quite fast. As a result, the demand for certain profiles on the labour market (such data scientists and community managers) has exploded, but cannot be covered by educational schemes.

⁶⁵⁴ Interviews
655 Interviews
656 Gröne, F., & Acker, O. (2015)
657 Interviews
658 Interviews
659 Interviews
660 Interviews
661 Interviews
662 Interviews

to one interviewee, graduates are seldom equipped to work in practice on games and therefore need on-the-job training first. 663

Regulatory framework

One of the main obstacles is the lack of harmonisation among EU member states, regarding certain legislations. Game developers face different kinds of regulation for instance in terms of digital taxation, copyright (which makes co-productions more difficult to manage), and consumer protection (e.g. regarding data protection). This is critical, since the multimedia sector is global.⁶⁶⁴ Therefore, the increasing fragmentation of markets and the costs of regulation become a big issue, especially for small players.⁶⁶⁵

Furthermore, the power of distribution platforms is seen as problematic by some interviewees. Besides their bargaining power,⁶⁶⁶ platforms have very different internal guidelines depending on the company that runs them and the country where they are based. This has for example resulted in the banning of certain content. There is a risk that platforms could go as far as to limit freedom of expression and remove content according to their wishes, one interviewee argued.⁶⁶⁷

Some stakeholders also plea for the power of advertisement networks to be critically monitored. Developers express the difficulty to find trustworthy partners because of a lack of transparency. One interviewee gave as an example that developers would not want tobacco advertising in a game for children.

Finally, payment networks such as VISA have an important market power, and potential abuses should be prevented. 668

Furthermore, especially in smaller countries, the multimedia industry has more difficulties to raise awareness about its concerns since the industry and its organisation is younger. In bigger countries such as France, industry players work closely with public institutions as the Minister of Culture and Communication, who are aware of the multimedia sector and promote it. In Poland as well, one interviewee stated that the government strongly supports the industry.⁶⁶⁹ One also needs to consider that developers from certain countries struggle with English as working language which makes it more difficult or costly for them to develop games for bigger markets.⁶⁷⁰

A further general issue for the industry is the bad image of gaming as a waste of time (not to mention video games being accused of being too violent). This image is slowly changing with gaming becoming wide-spread through mobile. What is more, the treatment of minorities is a big issue within the community which starts to affect gaming's image in general. ⁶⁷¹

Grey market activities constitute another problem the industry is faced with. While companies adjust prices for games in certain countries (Poland for example), grey market sellers buy digital keys (i.e. codes that allow for downloading games from online distribution platforms such as Steam) in countries in countries where prices are lower and sell them on other markets. This practice although not illegal, harms the industry.⁶⁷²

Due to EU legislative changes, ⁶⁷³ companies now have to pay VAT in the countries in which they provide their games, and not anymore in the countries where they launch them. While this is an advantage for some companies, especially in Sweden, and not an issue for big companies, smaller players struggle to deal with the regulation as it suddenly became more difficult for them to self-publish. ⁶⁷⁴

663 Interviews		
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667 Interviews		
668 Interviews		
669 Interviews		
⁶⁷⁰ Interviews		
671 Interviews		
⁶⁷² Interviews		
http://ec.europa.eu/taxation	customs/taxation/vat/how	vat work
674 Interviews		

International Sourcing

Overall, multimedia is rather a global than European market, as games are usually released worldwide. The emergence of global players has made distribution easier.

The creative and team component of the work makes game development difficult to outsource on a large scale but big publishers like Microsoft, Nintendo, or Ubisoft, and even first-round start-ups have game-development studios around the globe. They are usually located in countries where it is cost-effective to operate for example in Romania or in Thailand, since rents in some EU cities are getting too expensive, even in Berlin known as "the start-up city". Yet, one interviewee stated that usually only the team moves while the company itself remains based in Europe.

Brain drain is another issue as European cutting-edge data scientists can work anywhere in the world, while it is hard to attract talents from outside Europe because of visa regulations.

Link with other value chains

Serious games are used in other sectors outside the cultural and creative domain, as mentioned in the introduction (and see also thematic paper on intertwining). One application in the cultural and creative domain is cultural heritage, with the possibility for instance to use mobile devices in museums to not only obtain information but also to play mini-games (see also chapter on cultural heritage). It appears that serious games help effectively maintaining and communicating cultural awareness, historical reconstruction and heritage awareness among users.⁶⁷⁵

Multimedia can also rely on other value chains for inputs, in particular music, or possibly from visual arts for graphic design. It is however not clear if music composers and performers, or graphic designers are generally developers' or publishers' employees, or freelance workers.

Mapping the creative value chains – a study on the economy of culture in the digital age

⁶⁷⁵ Michela Mortara, M., Catalano, C.E., Bellotti, F., Fiucci, G., Houry-Panchetti, M., Petridis, P. (2014), "Learning cultural heritage by serious games," *Journal of Cultural Heritage*, Volume 15, Issue 3, May–June 2014, Pages 318–325.

11/ Observations from the sectoral value chain analyses

11.1 Different degrees of impact of digitisation

From the sectoral value chain analyses, it is clear that digitisation has an impact on the structure and market dynamics in all nine creative value chains:

- value chains as a whole have become more complex, with an increasing number of business models that exist next to each other (so-called "business model hybridisation" – Kurt Salomon (2015));
- New actors have entered creative value chains, especially in the dissemination stage both to provide access to catalogues of cultural work for consumption (e.g. Google, Apple,...) and to provide hardware to consume cultural work (tablets, e-readers, game consoles,...).

However, this impact has not been equal in all creative value chains.

Building further on the definition of "digitisation rate" from Kurt Salmon (2015) - the digitisation rate being equal to the share of revenue from digital business lines in the total global revenues of a sector - and based on the different value descriptions, we might distinguish the following three groups:

Value chains with a high digitisation rate	Value chains with a medium digitisation rate	Value chains with a lower digitisation rate
Music	Film	Artistic crafts
Video games and multimedia	Television and radio	Performing arts
	Books	Cultural heritage
		Visual arts

However, only looking at the digitisation rate reduces the impact of digitisation only to the degree to which digital revenues are being generated in the sector so far. But as illustrated in the description of the different creative value chains, the impact of digitisation is multidimensional and (can be) more profound than only providing a new way of revenue generation. Although digital revenues are still limited in the cultural heritage sector, major efforts have already been done to digitise cultural heritage and as such enrich the consumer experience.

Moreover, it does not provide further insight into why digitisation has a more profound impact on the process of value monetisation in some creative value chains and less in others. For this, it is important to look at a number of structural differences between the nine cultural and creative domains with respect to their economic characteristics:

Degree of complexity of creation

Some cultural works are the result of one single or a few creatives working together in a rather simple process. Examples of such cultural works can be found in the visual arts (e.g. creating a painting, photo, etc.), game development, artistic crafts, books (e.g. writing a novel or comic) and music. Other cultural works require a combination of diverse workers with different creative skills that have to work together in a complex process to come to a result. For the latter type of works, good process management and team coordination are critical activities in the production phase. Examples of such products can be found in the performing arts, broadcasting and radio or audiovisual sector. Canoy et al. (2005) talk about 'simple cultural goods' versus 'complex cultural products'.

From the sectoral value chain analyses we find that with the increasing availability of digital tools, especially value chains characterised by rather simple production processes, are most affected by a trend of disintermediation – traditional intermediary actors losing market power. This is often followed by a process of re-intermediation, where new intermediary actors (mostly online platforms) become more important and even gain a dominant position.

Level of upfront investment costs needed in production

One element that all cultural works have in common is that until the moment of consumption the market success of a cultural work to be created is highly uncertain, as consumers can only determine the quality of a cultural work

upon consumption. Arora and Vermeylen (2013) refer to cultural and creative works as being 'experience goods'. Caves (2000) talks about the "nobody knows" syndrome.

This high level of uncertainty about the (economic) success of a cultural work, raises the question of who will take the risk to invest in the creation and/or production of such work. As long as the costs of creation and production - and thus the financial risks for the investor - are rather limited, financing is not a major barrier. This is e.g. the case for creating and producing an artistic craft or a painting. However, for other creative works, the costs of creation and/or production can be (very) high. It requires more significant (upfront) investments before there is any cultural work (a theatre play, a film or television programme). The investments can relate to investments in human resources and coordination, and/or to investments in specialized equipment. Making a theatre play requires especially large investments in human capital, while making a television production requires (also) large investments in specialised equipment. Those investments are sunk costs, meaning that these investments are largely made before any audience has consumed the cultural work (and thus revenues are generated).

As a consequence, strict project coordination management is required in the value chain to ensure that the production process is organized in the most efficient way (production), and that the cultural work can be commercially exploited as soon as possible and in the best possible way (dissemination). The role of coordinator is therefore critical in these types of value chains. This has not changed with digitisation.

Economies of scale

In the cultural and creative sectors we have to make a distinction between three different types of works when we talk about economies of scale⁶⁷⁶:

- A first group of cultural works can easily be reproduced at low marginal cost. Moreover, the cultural value of the work does not diminish with reproduction. Examples are music, books, films, video games, TV series/formats.
- A second group of cultural works cannot be reproduced at low marginal costs, although reproduction would not diminish the value of the work. Examples are a theatre play or concert.
- Finally, a group of cultural works exists for which the value of the work is derived from its originality and uniqueness as product. Even though reproduction might be possible at relatively low marginal costs, such reproduction would negatively affect the value of the original work. This phenomenon can be found in the visual arts, artistic crafts and cultural heritage, but also to some extent in some radio and television productions (talk shows, news magazines, etc.).

Higher digitisation rates – i.e. higher shares of revenue from digital business lines in the total global revenues - can be found especially in the first group of cultural works.

Economies of scope

Different than economies of scale, economies of scope are cost advantages that organisations can obtain not by increasing volume, but by increasing their product variety. Economies of scope can be realized in those sectors where product diversification can be based on the common and recurrent use of proprietary know-how or on an indivisible physical asset (Teece, 1980).

Looking at the nine creative value chains, we find in some value chains more opportunities for exploitation (and thus revenue generation) via different channels – offline and online, than in others. Even not taking into account the impact of digitisation (which has positively influenced the economies of scope in all of the creative value chains - see next chapter). An example of a cultural sector that has traditionally exploited economies of scope is the film sector, where films are first released in cinema, later on DVD, then on pay TV and finally broadcasted on TV for free view. Each "window of exploitation" generates new revenue streams. Safeguarding these different windows of exploitation is very important in the business model of the film sector, to ensure that the high upfront investment costs can be maximally recovered.

Degree of substitutability of digitised versus non-digitised cultural works

Finally, there is a distinctive difference across the nine cultural and creative sectors analysed with respect to consumers' experience of cultural works. For some cultural works consumption of a digitised version might be a close substitute for a non-digitised version. For example, in recorded music, listening to music on CD or vinyl are

⁶⁷⁶ Economies of scale are cost advantages that organisations can obtain due to their size of production, as the cost per unit of output decreased (thanks to low marginal costs).

rather close substitutes to listening to music in mp3. However, admiring a digital version of a piece of artistic craft or visual arts is hardly a substitute for experiencing the original (although digitisation can surely enrich the cultural experience).

11.2 Impact on market opportunities, economic behaviour and industrial organisation

Despite the above-mentioned differences in the economic characteristics of the nine cultural and creative domains that explain the differences in impact of digitisation, digitisation did bring new tools that allow actors in all stages of all nine creative value chains to:

- automate or organise existing activities more efficiently;
- explore new market opportunities, including new roles in the value chain;
- develop completely new activities, including completely new business models whereby digitisation sometimes even (radically) changes the rules of the (business) game.

In the next paragraphs we summarise the main common impacts in each function of the value chains. We pay specific attention to those elements of digitisation that allow actors to change their economic behaviour vis-à-vis other actors in the value chain and thus can lead to shifts in industrial organisation.

In this paragraph we take the so-called "maximum" perspective, where we describe the "maximum" potential impact of digitisation on economic actors that want to maximize returns, without any reflection about the limitations in rationale that occur in reality⁶⁷⁷. In the next section we come back to this.

11.2.1 Creation

- Digitisation has brought new tools that allow creators to **make new creations that did not exist before**: digital 3D modelling, 3D printing, immersive technologies, etc. These tools primarily serve product innovation. The tools are being picked up (slowly) by cultural and creative professionals, and have resulted in new niches arising in all nine cultural and creative sectors, although clearly in some sectors more than in others (e.g. in video games digital tools are at the heart of the creation process). Looking at the value chain organisation, these new possibilities to create did not so much impact the organisation of the core value chain process or interrelations with actors in other stages of the value chain. They did result in **more collaboration with actors in new sectors** (mostly ICT-related firms) and researchers, not only as suppliers of equipment/knowledge but also as equal partners in co-creation trajectories. The FP7 funded program "ICT & Art Connect" which brings together artists and technologists to explore new ways of working is just one example illustrating this latter trend. In the thematic discussion paper on "intertwining and convergence" (see next part of the study) we further elaborate on this evolution and the impact on creatives.
- Traditionally, competition is very high in the creation phase, especially in those creative value chains where 'simple cultural goods' are being created and thus where barriers to entry are low. These **barriers to entry have become even lower with digitisation**:
 - digital DIY tools such as e.g. software for sound and video recording, design software, 3D printing equipment etc., make creators less dependent on specialized providers of (traditionally expensive) goods and services to support their creation.
 - online platforms allow creators to easily upload own creations, without the help of any other actor.
 - digitisation increases the possibilities for creators to attract financing for their creation beyond traditional investors (through crowdfunding).

This has made **competition extremely high**. But despite this extreme competition, there is a continued flow of new cultural work being created because of the "art for art's sake" motivation in combination with the impression of a seemingly "endless" market potential⁶⁷⁸.

 $^{^{677}}$ cfr "behavioral economics" that attempts to make economic analyses more accurate.

⁶⁷⁸ People normally buy only a limited number of functional goods (e.g. a coffee machine, car,...). But cultural works can be bought 'endlessly'. One cultural work is not a substitute for another.

11.2.2 Production/publishing

- In the production stage, digitisation has brought **new tools and techniques to automate or increase productivity of internal processes**, digital design and printing of books being just one such example. Digitisation also provides new tools for talent scouting.
- Digitisation also has brought new tools that **lower the barriers for creators to internalise parts of the production process**, especially where traditionally specialized and often (very) expensive equipment was needed: photographic and film equipment, music recording studios, etc.
- The most profound impact of digitisation in the production stage however, involves the position of the traditional "producers/publishers" as "gatekeepers" and the impact of digitisation on their bargaining position in the value chain. Producers/publishers that (pre-)finance and promote cultural works play a pivotal role in the value chain for creators to reach out to customers and monetize their creativity (see also the previous section on 'experience goods'). Higher costs of production and promotion in combination with more complex markets to reach out to consumers, traditionally lead to more oligopolistic market structures. Their pivotal role has resulted in dominant positions in the value chain, with strong bargaining power vis-à-vis creators as a result. This is the case in e.g. the music, film or book publishing sector.
- In the digital age, the position of such "gatekeepers" in the value chain has changed:
 - Digital tools at the disposal of creators allow them to circumvent intermediary organisations at different levels (production, finance, promotion, collection of revenues)
 - New actors in the distribution stage have built up a pivotal (sometimes monopolistic) position in reaching out to (digital) consumers, in particular internet platforms. Some of these new actors in the distribution stage tend to also move up the value chain and take over (some of the) tasks that were traditionally concentrated with the producers (e.g. financing productions, promotion, etc.). The main rationale behind this being their ability to have access to exclusive content for their platform. The production of 'House of Cards' by Netflix is only one example. Nevertheless, until now the involvement of online platforms in content creation has been minor.

Nevertheless, we find in the different value chain descriptions that despite these changing balances in bargaining power, the central role of gatekeepers in production/publishing still remains very important.

11.2.3 Dissemination/trade

In this function, digitisation has impacted both promotional (marketing and communication) activities and distribution activities, sometimes with profound consequences in the value chain organisation:

- Digitisation has brought **new tools and (cross-platform) communication channels that have changed the design of communication and promotion strategies** for cultural works in different ways:
 - smart phones, social media, etc. allow promotors to reach out to their audience in new ways
 - interactive communication with consumers and big data analysis provide opportunities to get better insights in consumer preferences and behaviour
 - consumers are no longer a passive 'audience' absorbing promotional messages. Consumers themselves have become a virtual part of the communication team (likes, blogs, etc.)

As a consequence, **promotion campaigns** for cultural works have become much more complex to manage.

The new communication tools lower the barriers to setting up digital (international) communication and promotion campaigns. Basically, anyone can easily get access to the tools to do so.

- In distribution, the **position of distributors of physical products is being challenged by new actors** that organise the digital distribution of physical goods (e-commerce), and in some creative value chains also by new actors that have entered the market with **disruptive business models to give consumers access to 'dematerialized' cultural works** (e.g. streaming models for the consumption of music, online gaming, e-books). Digital distributors are not limited by "physical stock" and thus can offer enormous catalogues, also containing products that are in low demand (the so-called "long tail"⁶⁷⁹) and would have large difficulties finding shelf space in physical stores.
- Digital distributors provide interesting platforms for advertisers to reach out (in a personalized way) to specific target groups. This has resulted in **new business models where so-called "third-party ad serving" is used**, where the online distributor presents content for users and includes with it advertisements delivered by another provider. Users can consume the content for free, while the distributor receives revenues from the advertising companies.
- In particular, digital distribution platforms that allow interactive communication with users can **provide** specific services that allow them to build up a stronger position vis-à-vis other actors in the value chain in different ways, which results in relatively concentrated markets that are much more prone to anti-competitive behaviour and abuse of dominant positions:
 - They can gather rich consumer profile data and information about consumer behaviour to serve promotional activities. Access to these data by cultural and creative actors about the consumption patterns of their works on those platforms, has already been signalled as an issue by actors in the music and performing arts sector, as such usage data are often monopolized by the digital platforms. As the AB Music Working Group Report (2016) states "The question at the core of this issue is whether or not it should be mandatory, for digital services and rights owners alike, to share Usage Data pertaining to songs or performances with the creators of these songs and performances so that they could also benefit from their insights in the daily course of their business."
 - Digital platforms have built/can build tools to track the consumption of cultural works that are being presented on their platform (with content identification technologies, such as e.g. the in-house developed 'Content ID' technology of YouTube). These technologies could potentially further develop into a system that supports the management of collective rights that originate from digital consumption of cultural works.

Looking at the impact of digitisation on the distribution of cultural works, the concept of "**two sided market**" (also called "two sided networks") seems very relevant for further analysis. As described by Rochet and Tirole (2004), two-sided (or more generally multi-sided) markets are roughly defined as markets in which platforms enable interactions between end-users, and try to get the two (or multiple) sides "on board" by appropriately charging a fee to each side. Therefore, cost and revenue are both to the left and to the right, because the "platform" has a distinct group of users on each side. The platform product or service incurs costs in serving both groups and can collect revenue from each, although one side is often or not subsidized.

Because of the "network effects," these platform products enjoy **increasing returns to scale**, which explains concentration effects. This can indeed be observed in distribution, with the rise of large global actors such as Google/YouTube. We refer to the thematic paper on two-sided markets in the next part of the study for a more detailed analysis of this concept and its implications on industrial organisation.

11.2.4 Exhibition/reception/transmission

- Digital tools provide new opportunities to **enrich the consumer experience and more closely interact with the audience**: digital cinema, digital 3D modelling, immersive 3D glasses, QR codes, interactive information screens, etc. These digital tools allow different forms of expression to be combined ((audio)visuals, sound, music) to better tell the story that relates to the cultural work.
- Thanks to digitisation a **much wider (digital) presentation of cultural works** is possible (e.g. digitisation of museum collections and archives, digital presentation of opera or theatre performance in cinema, etc.).

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⁶⁷⁹ Chris Anderson (2004), "The long tail", WIRED, January 2004

11.2.5 Consumers

- Thanks to digitisation consumers now have access to an infinite and global offer of cultural works (the long tail). Nevertheless, we find that for many cultural works consumption patterns still remain very localised: books, broadcasting, performing arts and even music. Also, it is questioned to what extent consumers really consume the long tail in the current age of information overload. Is digitisation an opportunity for or rather a threat to cultural diversity? This is further discussed in the thematic paper on cultural diversity in the next part of the study.
- To be able to access and consume digital cultural content, consumers often need specific devices: tablets, e-readers, game console, etc. As illustrated in several of the nine sector mappings, distributors of digital content tend to ally with producers of such devices. Jointly, they create a "lock-in effect" for consumers: customers become dependent on one specific combination of vendors for the device and access to the cultural works. Switching to another vendor (combination) requires substantial switching costs.
- Finally, consumer's willingness to pay for the consumption of culture in the digital age is **increasingly polarised**⁶⁸⁰:
 - On the one hand, consumers look for ease of access to and consumption of cultural works at low to no cost. Recent results of the Eurobarometer Survey (2016) on the consumption of cultural works in the digital age, show how "free access" still appears to be a dominant driver in consumer behaviour with respect to digital cultural content, despite a growing use of subscription based online services such as Spotify in music or Netflix in audiovisual.
 - On the other hand, in the current experience economy consumers value physical, social and shared experiences. They are willing to pay for "tangible and engaging cultural experiences" (Kurt Salomon, 2015) where they can connect with the cultural work as well as with other consumers. This is illustrated in the strong growth of the live circuit in the music business, the success of cultural festivals and cultural tourism.

11.2.6 Cross-functional considerations

At the level of the value chain, digitisation provides opportunities and incentives to different actors in the value chain to vertically integrate several functions within one organisation, thus lowering their dependence on other actors in the value chain:

- Digitisation did not only bring new tools for creators to internalise parts of the production process; it also allows creators to be active even further down the value chain and **be directly engaged in (global) promotion and distribution**. Before digitisation, creators were solely dependent on (oligopolistic) "gatekeepers" to get the opportunity for wide commercial exposure of their work. Now, actors such as YouTube, Dailymotion, Vimeo and others provide a platform to easily upload user-generated content (by the creator) and show it to the world. Moreover, social media provide infinite possibilities to communicate and even actively interact with their potential audience.
- Digitisation also provides tools to creators nowadays to **collect fragmented (global) digital revenue streams** without the necessary intervention of intermediary organisations such as physical stores or rights management companies, through online sales or monetisation possibilities on online platforms. For example, YouTube and Finnish-based music creators' rights organisation Teosto, representing 27,000 Finnish music authors and publishers, have reached an agreement that allows Finnish and international music creators, composers and authors to earn ad-based revenue when their music is accessed on YouTube in Finland.⁶⁸¹ The fairness of revenue sharing by these platforms with right holders however, is highly debated, primarily by right holders from the music industry.⁶⁸² The thematic paper on "remuneration and rights management in the digital age" in the next part of the study further elaborates on this issue.

⁶⁸⁰ See also Kurt Salomon (2015), "Have the cultural and creative sectors found the formula for development in the digital age?", Forum d'Avignon report

⁶⁸¹ Source: http://www.authorsocieties.eu/mediaroom/122/32/Teosto-and-YouTube-Reach-a-Deal-For-Music

⁶⁸² See e.g. IFPI Global Music Report 2016

Distributors – also digital distributors - primarily depend on the gatekeepers in production/publishing for qualitative cultural content to disseminate. With digitisation, however, digital distributors can build direct relationships with both creators and consumers. As such they can **themselves become engaged in talent scouting, invest in production and support promotion/presentation**. From the sectoral value chain analyses, we find that some digital platforms started to engage in financing creative productions (for which they also become right holders and thus can generate revenues too). For example, at the beginning of 2015 the online video platform Vimeo made a deal with Maker Studios, which Disney purchased in 2014. The companies are collaborating to fund exclusive content for Vimeo on Demand.⁶⁸³ In January 2015, Amazon announced its move into the film business with plans to produce 12 films per year with budgets ranging from USD 5 million to USD 25 million, for theatrical release and streaming on Amazon Prime video 4-8 weeks later. ⁶⁸⁴

11.3 Why digitisation has not dramatically reconfigured creative value chains (yet)

Taking into consideration all of the above levels of impact, one could think that the configuration of creative value chains has drastically changed due to digitisation. New technologies and dissemination channels give creators access to essential resources to bypass traditional intermediaries ('disintermediation') and opens the potential to create greater economic value for themselves.

In reality, we observe from the nine creative value chain analyses that digitisation has often resulted in more complex value chains. No actor has become obsolete so far; rather new actors have joined, thus increasing the complexity of value chains. Moreover, although power balances have indeed changed in several value chains, those actors that have dominated the value chains as gatekeepers before digitisation, mostly remain playing a pivotal role in the current economic organisation. Several reasons explain this:

- In all nine cultural and creative sectors analysed, the overwhelming majority of actors in the value chain are small even micro firms. Although new digital tools allow them to get involved in activities down the value chain, they mostly do not have the capacity to take full advantage of these opportunities. Moreover, also in the digital age some activities require strong coordination of complex processes such as the production of complex cultural goods (e.g. film, performance), coordinated collection and redistribution of fragmented revenue streams or managing (increasingly) complex communication and promotion campaigns. Digitisation has even increased the level of complexity of these processes in most cases (by adding new actors, more complex IPR licensing systems, new contractual arrangements, new communication channels). This requires larger corporations to coordinate. So far, none of the new actors has taken over this role and "gatekeepers" stay in the driver's seat for coordinating those activities.
- At the same time, a number of intermediaries have grown out of the need of creators to overcome their individual weak bargaining position vis-à-vis users to control the exploitation of their works and to negotiate fair terms of remuneration for them. This need has not changed. Individual creators' bargaining position vis-à-vis online intermediaries is at least as weak, thus making it very difficult for most creators to negotiate a sustainable remuneration alone.
- Building a reputation is highly important to be successful in the CCS and to make a living. Such reputation only comes with good promotion and marketing through the relevant networks of contacts locally and internationally. A strong reputation is seldom (if ever) built by creators alone without the support of gatekeepers.
- Getting access to sufficient qualitative cultural content is very important for any distributor, also in the digital age. Until now also digital distributors still primarily depend on the traditional gatekeepers (primarily producers and publishers) for their cultural content, despite the investments of some digital distributors (see the examples of Vimeo and Amazon in the previous section, but also e.g. Netflix with 'House of Cards') to engage in financing creative productions themselves. It remains to be seen to what extent they will further move up in the value chain.

⁶⁸³ Source: http://www.cnbc.com/2015/01/15/vimeo-to-challenge-youtube-with-maker-partnership.html

⁶⁸⁴ Source: https://www.yahoo.com/movies/hollywoods-indie-film-pool-prepares-amazon-plunge-045351801--finance.html

- An important part of cultural consumption still remains non-digital: attending a live performance, visiting a cultural heritage site, enjoying a piece of visual art at a gallery. Traditional actors remain the key actors in delivering those types of cultural consumption (although they can work together with new actors that introduce digital tools to enrich the experience).
- The online intermediaries that challenge the traditional structures (e.g. Google, Amazon, Apple, etc.) in some parts of the value chain (mainly dissemination) all have their business built primarily around globally standardized products and services, and lack local anchorage. However, the cultural and creative business is a people's business. Having a strong network of contacts and insights in local markets and tastes, is critical to spot talent, get financiers on board, develop a service that fits the market, etc. No digital tool or platform is able to replace the need for such strong (often very local) network of contacts and market insights (yet).

Rather than drastically changing the configuration of the creative value chains, digitisation resulted in challenging existing power balances by providing alternative models to create, produce, promote or distribute. Creative value chains are in an ongoing process of transformation and restructuring. The position of new actors in creative value chains is changing constantly, also due to public debate. This is clearly illustrated by e.g. the recent discussions on the role of online intermediaries in the 'transfer of value' and fair remuneration in the music, audiovisual, visual arts and literature sectors.

From the value chain analyses it is clear that digitisation did have an impact on the industrial organisation of creative value chains, sometimes leading to new market imbalances. In the next part of the study, we further elaborate on five specific transversal themes that relate to the impact of digitisation on creative value chains' configurations and consumption:

- Intertwining and convergence in creative value chains
- Two-sided markets
- Digitisation and new opportunities for creators
- Remuneration and rights management in the digital age
- Cultural diversity



Thematic discussion papers

1/ Introduction

In the second part of the study we build further on the findings of the value chain analysis and interim horizontal observations, to investigate more in-depth some of the identified market imperfections exacerbated through digitisation. This is done in five thematic discussion papers, focusing on the following themes:

- Intertwining and convergence in creative value chains
- Competitive dynamics in two-sided markets
- Digitisation and new opportunities for creators
- Remuneration and rights management in the digital age
- Cultural diversity

Whereas the sectoral value chains mapping has analysed market imperfections in specific sub-sectors, the five thematic papers either:

- 1) build further on the analysis of the market imperfections discussed in the value chain sectoral analyses, and discuss market changes and key consequences for the CCS stemming from these findings (papers on "digitisation and new opportunities for creators", on "cultural diversity" and on "remuneration and rights management in the digital age"), or
- 2) further analyse market imperfections and overarching market structures from a different perspective than a specific sectoral (papers on "competitive dynamics in two-sided markets" and on "intertwining and convergence in creative value chains").

The purpose of the thematic papers is to analyse existing market imperfections and key issues across the cultural and creative sectors, with a particular focus on changes brought up or exacerbated through recent technological changes and the digital shift. The thematic papers provide complementary insights into the sector mappings, with a view to draw up policy recommendations (third part of the study). The five themes were chosen in consultation with the client on the basis of 1) key issues identified across the sectoral value chains mapping; 2) topics of relevance to policy discussions at European level and 3) overall coherence of the study by ensuring the topics are linked with the sectoral value chain mappings but do not overlap significantly with the research in the sector mappings.

2/ Intertwining and convergence in creative value chains

2.1 Introduction

Cultural and creative industries are said to have a **convergence or confluence culture**⁶⁸⁵, a "natural openness" to intra- and inter-industry collaboration. As such, collaborations and cross-sectoral innovations between cultural actors and non-cultural actors are nothing new. However, the depth of such collaborations and their structural impact on creative value chains *are* a recent trend (Abadie et al., 2010). Both societal developments⁶⁸⁶ and (the speed of) technological advances have made that the linear value chain concept – which has shaped our understanding of industrial organisation for the last decades (Porter, 1985) - has evolved into much more complex structures (Tapscott et. al, 2000). Digitisation has been a co-driver of this process, but also an important enabler supporting this process, as digitisation provided common digital tools for actors across value chains to innovate products and processes, as well as facilitated communication and information exchange between otherwise disconnected actors.

As underlined in the Europe 2020 Flagship Initiative Innovation Union⁶⁸⁷ and the subsequent Horizon 2020 programme⁶⁸⁸, crossovers and cross-sectoral innovation, as well as the development of new industrial value chains are of paramount importance for Europe to retain its competitive position in a changing global market. Cross-sectoral linkages between different value chains can be a source of disruptive innovation and lead to the emergence of new industrial value chains, in sharp contrast with intra-industry collaboration which is more conducive to incremental innovation (NESTA, 2010). As a result, these new reconfigurations and disruptions along the value chain might result in the development of "emerging industries", which can be defined as "the establishment of an entirely new industrial value chain, or the radical reconfiguration of the existing one, driven by a disruptive idea or convergence of the ideas" (Heffernaan & Paal, 2009 as cited in ECO, 2013). Being at the crossroads between arts, business and technology, cultural and creative sectors are in a strategic position to spur innovation in other industries.⁶⁸⁹ As a consequence, non-cultural industries tend to exhibit stronger co-operative and collaborative behaviour with cultural and creative industries than in the pre-digital era.

Convergence culture and intertwining of creative value chains

Despite the heterogeneity of cultural and creative industries in terms of corporate structure, business models, turnover and employment, one can identify a number of common characteristics that explain why the cultural and creative industries as a whole are more receptive to disruptive reconfigurations of the value chains - in relative terms to for instance manufacturing industry:

First and foremost, the role of micro-enterprises in cultural and creative sectors is crucial in fostering cross-sectoral innovation and convergence between industries. In line with the conclusions of the sectoral chapters, market fragmentation along geographical, sectoral and linguistic lines is common to most cultural and creative sectors, particularly at the earlier stages of the value chain with a plethora of micro-enterprises. This situation is relevant for intertwining processes to the extent that industry-wide reconfiguration of the value chain can be path-dependent, conservative and limited, especially when firms experience difficulties in leveraging their existing technological and knowledge base. Thus, bigger firms might be more conservative towards cross-sectoral collaborations and resulting intertwining when they face risks of cannibalising their previous investments in the process due to risk aversion, status quo bias and myopia (i.e. lock-in effect rather than internal competence destruction). On the contrary, micro-enterprises and start-ups are known to be risk-prone and more innovative, which facilitates in return industry-wide value chain reconfiguration and intertwining (Hacklin, et al. 2013).

⁶⁸⁵ According to Jenkins (2006) & Deuze (2007) this convergence culture of CCI relies on 5 main components, namely participatory and active consumer (I), remediation (II), collective intelligence (III) and convergence of media and technologies used (IV) as well as bricolage (V). The remediation component is quite useful in the sense that every new medium diverges from yet also reproduces older media, whereas old media refashion themselves to challenge the new media.

⁶⁸⁶ More complex societal challenges to solve, as well as more sophisticated consumer behaviour

⁶⁸⁷ SEC(2010) 1161

⁶⁸⁸ COM(2011) 808 final

⁶⁸⁹ COM(2012) 537 final – Promoting cultural and creative sectors for growth and jobs in the EU

- Corollary to the previous point, the cultural and creative industries often exhibit **low (physical) capital intensity**, which reinforces the high start-up dynamism of the sector despite the overall access to finance problems for the sector in general (Lämmer-Gamp, 2014). As a consequence, **human capital** (e.g. skills and competences) **as well as social capital** (e.g. networking, which is almost a "second nature" for CCS) are of paramount importance for sustainable economic success and cross-sectoral innovation (Creativ Wirtschaft Austria, 2013). This differential factor endowment of the industry in terms of physical, human and social capital has implications for industry convergence and value chain intertwining: since the creative industries are relatively abundant in social and human capital, they engage more easily in "trading" these factors with traditional industries.
- As stated in the Communication "Promoting CCS for growth and jobs in the EU"⁶⁹⁰, the cultural and creative sectors are also a catalyst for innovation in other sectors, as they **fuel content for ICT applications**, creating a demand for sophisticated consumer electronics and telecom devices.
- Lastly, the business models of cultural and creative sectors are more **service- and customer-oriented**, with a particular focus on value propositions and relationships with clients. This in return facilitates CCS industry actors' access to internal innovation processes and mechanisms of their respective suppliers and clients (Prognos/Fraunhofer ISI, 2012).

As a result of the factors explained above, the cultural and creative industries are increasingly subject to cross-sectoral fertilisation and intertwining, with intertwining being **defined as a structural process characterised by (1) high levels of cross-sectoral networking and (2) cross-sectoral provision of goods and services**.

2.2 From cross-sectoral collaboration to intertwining⁶⁹¹

The notion of value ecologies

The rationale behind increasing cross-sectoral collaboration can be traced back to the disenchantment with vertical integration of organisations in the context of a rapidly changing environment. As the speed and complexity of innovation processes increased, the advantages related to economies of scale and scope as well as bargaining power proved inefficient for large corporations to handle aptly disruptive innovation. Hence, **value-adding partnerships** were introduced to enhance flexibility and adaptability in a process of de-integration and to build inter-firm relationships based on trust and cooperation rather than pure competition, whereby each small operating company focuses on doing just one step of the value-added chain (Boyle, 1993). The cultural and creative sectors in Europe have always been characterised by this type of industrial organisation, with many small (micro-)firms working together along the value chain instead of one large corporation integrating different steps in the value chain.

The further geographic agglomeration of these value-adding partnerships culminated in the development of **clusters**, "geographic concentrations of interconnected companies, specialised suppliers, service providers and firms in related industries that compete but also cooperate, which facilitates in return the mobility of technology, labour, knowledge and capital" (Porter, 1998). As such, clusters can be seen as one of the driving forces behind the cross-sector fertilisation of industries and cross-sectoral innovation (ECO, 2014), especially in the cultural and creative industries due to the "complex nature" of cultural goods and services and the need for social capital to maintain a business. An example of such a geographical concentration of interconnected companies in the cultural and creative sectors is e.g. the audiovisual cluster in Hilversum, the Netherlands. Nevertheless, the development of clusters is not yet a sufficient condition for collaboration to happen across value chains.

In the **value network** concept, value is co-created by a combination of players in the network. Value networks are composed of complementary nodes and links between actors from different sectors. The crucial defining feature of networks is the complementarity between the various nodes and links and how the value is created in these relationships. A service delivered over a network requires the use of two or more network components, which are obviously interdependent but also could have survived independently of traditional production chains in the absence

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⁶⁹⁰ COM(2012) 537 final

⁶⁹¹ The intertwining concept is nurtured both from the **value network/ecology literature** which looks at the internal functioning of the value creation within the value chains, but also from the **convergence literature** which looks at the internal reconfiguration of the respective value chains. Even though the lines are not that clear between the two strands of literature, the first aims at understanding how the business models and economic behaviours of cultural and creative actors are affected by the intertwining process, while the second seeks to analyse more in depth market imperfections and value chain reconfigurations during/after the intertwining process.

of the value network – the latter being the crucial difference from the quasi-vertical integration. An example of such value network can be found in the performing arts sector, where a theatre company co-operates with an audiovisual company to create value from this relationship. As such, competition mainly occurs not between the members of the same value network but rather between networks (Peppard & Rylander, 2006).

Figure 31: Value-adding partnerships and value networks

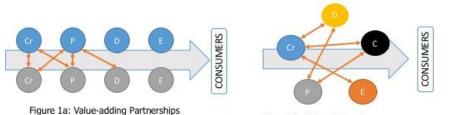


Figure 1b: Value Network

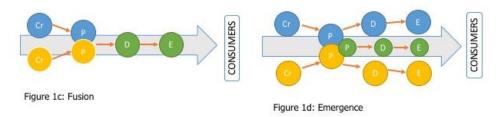
As an extension of the value network literature, the **value ecology** concept encompasses larger dimensions than the network itself so as to include also the increasing role of consumers as value creators in the network, as well as the changing nature of simple cooperation becoming more and more "complex co-opetition" (Hearn et al., 2007). In this consumer-centric model, the consumer can influence where, when, and how value is generated and can participate in value creation at multiple points of exchange (Prahalad & Ramaswamy, 2002). This value network model is well suited to capture the *network*, *information* and *coercive* externalities that are inherent to most cultural goods and services.

Convergence of sectors

Despite the comprehensiveness of the value network literature, there remains nevertheless an open question to know how this increasing level of integration affects previously "isolated" industries. The "convergence" literature tries partially to answer these questions.

Convergence is defined as "a change process initiated by technological, socio-economical and organisational forces, removing or changing traditional industry borders and entry barriers, framing and enabling new resource constellations and eventually leading to industry convergence in the form of sub-industries, new business ecosystems and new markets" (Nyström, 2008)⁶⁹². The literature marks a distinction between the "emergence" process - when two industries are to give birth to a new sub-industry, and the "fusion" process - when one of the two constituent industries is replaced by the new emerging industry and value chain.

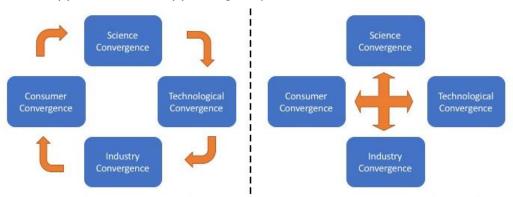
Figure 32: Convergence of industries – Fusion or emergence



As the convergence literature traditionally focuses on convergence of ICT industries, the sequencing generally follows the following trajectory (Hackling et al., 2013): at first, different scientific disciplines realise that their research is of interest to or affected by other neighbouring or completely independent disciplines. Once they start using more research results from one another, a scientific convergence will start with cross-disciplinary collaborations and partnerships. As the different research domains converge, applied science and technology development should follow, leading to a technology convergence. This can trigger market convergence, with new product-market combinations. Finally, firms begin to merge with each other, completing the convergence process with industry level convergence and intertwining of previously disjointed value chains (Figure 33, a).

In the light of this definition, we therefore exclude other variables that might otherwise be included in the intertwining process such as technological convergence, demand convergence or convergence in regulations. Hence, we define intertwining as a structural change, which leads to a relatively high level of integration and overlapping between respective value chains of a cultural domain and a non-cultural domain.

Figure 33: A linear (a) versus non-linear (b) convergence process



Whilst in some cases industry convergence might be built up over each of these steps, on many occasions industry convergence and intertwining follow a rather different logic, especially thanks to the rapidly changing role of the consumers in many value chains. The rapid consumer convergence in expectations and demands (e.g. access to content anywhere, anytime, any device) creates diverse sequencing scenarii whereby first products/services might become increasingly bundled by means of partnerships and/or strategic alliances. With a trickle-down effect, this triggers further exchange of knowledge and competences between industries, eventually to achieve the level of technological convergence. Or alternatively, the consumer convergence might primarily initiate a research convergence, and then following the conventional sequencing described above. The active involvement of consumers in the value chain is quite disruptive for the sequencing and as such the intertwining process becomes much more layered, complicated and iterative (Figure 33, b).

Cross-sectoral collaboration and intertwining in creative value chains

Building further on the convergence process illustrated in Figure 33, Fransman (2000) classifies different types of intertwining according to their locus of convergence (i.e. at which level convergence is happening). The table below recollects some examples of value chain intertwining that involves at least one cultural or creative sector.

Table 3: Loci of Convergence in the Creative Value Chains

	Convergence locus	Explanations		Examples relevant for CCIs
SUPPLY-SIDE CONVERGENCE	Networks/ Infrastructure	Interconnection/interoperability between networks	•	Converging (wireless) networks for telecom (PSTN, ISDN, fixed and mobile) and data and broadcasting – see e.g. the sectoral value chains mapping on film and broadcasting
	Research & Development & Innovation	Research co-opetition between like- minded creatives	•	Arts and science collaborations, arts and ICT (i.e. new media arts, virtual reality in performing arts, etc.) - see also e.g. the sectoral value chains mapping on visual arts or performing arts
	Technology	"common currency" (I)	•	Broadcasting and ICT (I) (e.g. Webcasting, Mobile TV, DMB, IP-TV) Gamification and development of serious games in health, education and military (II) (i.e. exergames, edutainment apps, use of 3D game engines in health training, flight simulation)

	Products/ Services	•	Products/services including some of the functionalities of other products/services sold in previously disjoint markets	•	Lock-in of hardware with content and/or software (e.g. Apple, Itunes and music distribution; Amazon, Kindle and e-books; PlayStation Vue) – see e.g. the sectoral value chains mapping on literature, video games or music)
	Industry/ Managerial	•	Firms/actors previously active in separate markets, converging in terms of markets, product/services and technologies	•	Mergers between telecom and broadcasting companies (e.g. Virgin Media merger) – see e.g. the sectoral value chains mapping on broadcasting, film M&As, joint ventures and strategic alliances between ICT, social media and content industries (e.g. Amazon prime (former Lovefilm), YouView in UK, etc.) – see e.g. the sectoral value chains mapping on music
DEMAND-SIDE CONVERGENCE	Markets/ consumers	•	Previously separate markets based on diverse consumer demands and expectations now demanding similar products anywhere, anytime, any device. Changing role of the end-user from mere passive consumers of the content to "prosumer"	•	Facebook and the role of user generated content (e.g. live streaming) – see e.g. the sectoral value chains mapping on music or video games Multi-device commissioning and distribution of content – see all CCS sectoral value chains mappings

As the level of networking and cross-sectoral provision of goods and services differ between different CCS subsectors, they expose different levels of intertwining. Some sub-sectors of the cultural and creative industries are more prone to intertwining and cross-sectoral innovation (e.g. broadcasting and gaming), while others show much lower levels of openness to and integration with non-cultural sectors (e.g. artistic crafts or visual arts).

To further analyse how intertwining has an influence on market structures and the relations between different actors in the (new) value chain, while at the same time taking into account the diversity of the CCS and the diversity of intertwining processes, we have chosen for a **case study analysis**. In the next part of this thematic paper we specifically focus on the intertwining process of the following sectors:

- Gaming and healthcare
- Broadcasting and telecom
- Arts and science

The main rationale behind the selection of those three case studies is to **illustrate the above-mentioned diversity of convergence processes** in the CCS. The 'gaming and healthcare' case illustrates how a combination of technology and demand-side convergence has led to the emergence of a new value chain next to the traditional healthcare and gaming value chains. The 'broadcasting and telecom' case is a clear illustration of a fusion process where supply-side and demand-side convergence at all levels took place. Finally, in the 'arts and science' case we analyse a convergence process that according to Fransman currently mainly takes place at the level of research, development and innovation.

Corollary to this, the case studies also reflect that the intertwining process might be quite **different in terms of finality of the intertwining process** (e.g. emergence of a new value chain in the case of serious games industry, or fusion of the already existing industries as in the case of broadcasting and telecom, or value-adding partnerships between certain segments of the existing value chains as in the example of arts and science).

2.3 Case Studies

2.3.1 Case Study 1: Gaming and Healthcare

2.3.1.1 Introduction

Serious games (SG) or applied games are games whereby game-like features (e.g. point scoring, reward schemes, competition with others and rules of play) are increasingly adopted in non-game contexts, such as e.g. in education and training, healthcare, sports, etc. ("qamification"), leading to the intertwining of traditionally disjointed value chains.

The serious games industry has seen an exponential growth in turnover over the last decade despite a decrease in the volume of sales between 2009 and 2012 in the aftermath of financial and economic crisis, reflecting the industry's fragile emancipation. According to Alvarez et al. (2010), the industry generated a total of EUR 1.5 billion in revenue around the globe in 2010. The industry is expected to grow globally to a EUR 5 billion in revenue by 2020 with a CAGR⁶⁹³ of 17% per year between 2015 and 2020, in which especially healthcare and education will consolidate their places according to a recent market study (MarketsandMarkets, 2015).

In this case study, we specifically focus on the intertwining of the value chains of leisure gaming and healthcare for the development of serious games in healthcare. Looking at the convergence process, there are a number of drivers that trigger this process:

- From the perspective of the healthcare industry, the factors which are driving the intertwining process include the high return on investment - with relatively lower costs in the development and deployment of the product, growing usage of mobile-based multifunctional technologies (e.g. smartphones, tablets, smartwatches, etc.), and improved (expected) health/learning outcomes (Market2Market, 2015). Furthermore, the healthcare industry is undergoing some fundamental changes towards patient-centred, holistic and integrated care with a focus on behavioural change (most likely for cost and risk reduction), which further stimulates a convergence process with the gaming industry (Oliver Wyman, 2014).
- These driving forces are partly mirrored in the characteristics of the gaming industry that facilitates the adoption of game-like features in the health industry. These characteristics include inter alia cost advantages of hardware platforms, sophistication of software applications (e.g. advanced AI, 3D game engine, etc.), social acceptance of gaming by younger generations as well as creative and disruptive experimentation of content creators in the traditional gaming industry (Smith, 2009).

The convergence process is thus both demand-side driven and supply-side driven at the level of the **products/services being developed** (i.e. introduction of games in healthcare products/services).

Box 12: Cost advantages of game engines in serious-games

Traditionally, the healthcare industry is characterised by high capital requirements for its hardware and software infrastructure. One of the main strengths of the new value chain of SG has been to successfully adapt mainstream and relatively low-cost leisure game environments such as Wii and Kinect, to serious applications like rehabilitation or training, to offer as cheaper alternatives to expensive specialist equipment. For instance, in motion capture and their use in the rehabilitation in physiotherapy, companies like Vicon or Qualisys commercialise high precision systems for motion capture to analyse the body's position, distance and angles position. Besides being very expensive⁶⁹⁴ — these high-precision softwares also require markers attached to the body, causing discomfort. Furthermore, many studies confirmed that the low-cost Kinect hardware achieves competitive measurements with respect to high precision optical systems (Tanaka et. al, 2012). The everincreasing adoption of 3D game engines such as Unity 3D⁶⁹⁵ in the healthcare industry follows a similar logic, especially in medical training. The healthcare industry uses this virtual reality and 3D technologies to create simulators to train medical students to practice on surgical skills, anatomy, etc.

⁶⁹³ Compound Annual Growth Rate

⁶⁹⁴ For example, two-camera Vicon system with one software licence costs around EUR 13,000, while Kinect software can be obtained for EUR 100 to 250, See, http://www.vicon.com/#

⁶⁹⁵ Game engines provide the framework in which the game designers create games without being obliged to code everything from the scratch. The game engine is a complex software system that contains the building blocks of a game – displaying

A sedentary lifestyle is a well-known contributing factor not only to obesity, but also to many diseases such as diabetes and heart disease. Increasing physical activity prevents these problems. Serious games for well-being aim at motivating people to be physically active by means of an entertaining and engaging game play.

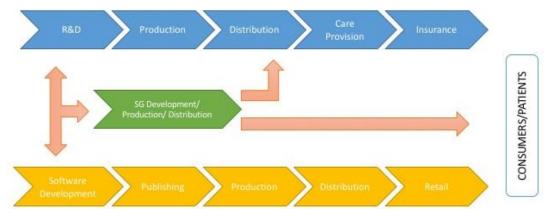
For example, *UbiFit Garden* is a mobile application that turns the background screen of a mobile phone into a virtual garden. This garden flourishes following the amount of daily physical activity of the individual, which is collected using a worn fitness device. A three-month experiment concluded that the background display had a positive effect on participants and helped them sustain their level of activity during the winter months when physical activity tends to decrease (Laamarti et al., 2014). In another multiplayer exergame *Fish'n'Steps*, players wear a pedometer, which counts their daily footsteps. The game can also be played both competitively and cooperatively as a way to further motivate players. A fourteen-week study showed that participants developed healthier daily activity patterns. *Life is a Village* is an example of how two players with different fitness levels can collaborate to play an exercise game at the same time.

The common characteristics of these games is their capacity to add value and induce behavioural change of the end-consumers in the short and mid-run, which would otherwise be absent or sub-optimal in a traditional healthcare or gaming setting.

2.3.1.2 Depiction and analysis of the value chain convergence

The convergence between the healthcare and gaming industry has resulted in the emergence of a new industrial value chain, which has a relatively different structure from both the traditional gaming and healthcare value chain. As shown in the figure below, the traditional gaming value chain has developer studios under the creation function and publishers under the production and dissemination function. In contrast to the latter, in the serious games value chain, it can be observed that there are few, if any, publishers present and most of the SG companies market their own games or simply rely on their partners in the healthcare industry for the downstream functions of the value chains. Most SG companies use in-house production, marketing and promotion activities, supplemented by freelancers if needed (iDate, 2010). This limits in return the outreach of the products, because SMEs active in the industry often lack internal staff and financial resources to conduct e.g. a global marketing campaign.

Figure 34: The serious games value chain



The structural difference between the serious games and the traditional (leisure) gaming value chain can be explained by two complementary phenomena:

the graphics and visual effects content, managing the audio effects, managing the interaction and event handling, and processing the mathematical and physics based calculations required to simulate the game world. Rather than scripting each of these components from scratch, game developers simply call on the various functions that comprise these blocks, thus concentrating more on the mechanics of the game, and on refining and upgrading each of the core building blocks to include new features and optimisations. There are about four game engines (Unreal Engine, CryEngine, Valve Source Engine, Unity Game Engine) that are used by the majority of developers in the industry (USC, 2015).

- In the gaming industry as a whole, there has been a proliferation of small-scale developers particularly active in specific niche markets, which rely much less on gatekeeping publishers to reach their end-users with a B2C business model thanks to digitisation and social media⁶⁹⁶.
- Most actors active in the serious games industry display one-off clients and partners from the healthcare industry and work towards the pre-defined goals of the partners in question, who in return bundle and/or market these products along with their existing health-related services. In other words, the mainstream business model of the health-related SG industry is far closer to B2B or B2B2C models, than to the B2C model found in the traditional gaming sector. Interviewees explain this tendency towards a B2B model primarily by the lack of visibility/outreach (which is still largely determined by gatekeepers in the healthcare industry) and credibility in the consumer marketplace.

2.3.1.3 Market Structure and Market Imperfections

The market structure and related market imperfections characterising the serious games industry are inherently linked to the emerging nature of the industry. According to the academic literature, emerging industries, whilst promising high growth rates and market potential, also exhibit in general weak interconnectedness, limited knowledge exchange, an absence of harmonising standards, limited specialisation, limited division of labour and arguably insufficient evidence of the products' efficacies (Stewart et al., 2013; Garcia Sanchez, 2013).

- Creation: The emerging value chain is decentralised, dispersed and fragmented as there are not many actors that stand out at the global scale, although we can identify many geographical agglomerations for health-related serious games (particularly in the UK, the Netherlands, Denmark and France). This finding is in sharp contrast with the leisure gaming market, which is global and internationalised (see also the sectoral value chain mapping on gaming). This indicates that the market has not consolidated yet and regional/national actors have great potential to expand their global outreach and become global players. The downside of this high level of market fragmentation is that firms fail to benefit from economies of scale and scope. This market fragmentation is further exacerbated by the country-specific characteristics of the healthcare industry. The healthcare industry is particularly subject to very diverse national regulations (e.g. in terms of validation and testing) and cultural/linguistic differences across Europe and as such this hinders the cross-sectoral provision of goods and services between the gaming and healthcare industry (RAGE, 2016).
- Production/Dissemination: The absence of publishers in the serious games industry is partly related to the market fragmentation in the healthcare sector and partly risk-averseness of the publishers. The market fragmentation creates a situation whereby the publishers fail to obtain economies of scale required to be profitable at the national level. In the leisure gaming industry, most publishers market their products at the European/global marketplace, while most serious games are rather country-specific and have to be adapted to each single MS regulations and cultural habits. It implies that the costs of adaptation (e.g. country-specific validation and testing) and publishers' targeted marketing costs are quite high when the adaptations require lengthy processes and/or a complete overhaul of the game⁶⁹⁷.

The scientific validation is also an important barrier in moving up the value chain as the regulations are strict, costs are high and processes are lengthy. Indeed, in the healthcare sector, especially on the treatment side, burdensome scientific validations are required (e.g. Randomised Control Trials) to ensure that human lives are not put in danger and the treatments are efficient. Nevertheless, these processes can take up to two years depending on the national regulations and as such the serious games face the risk of becoming obsolete, even before reaching the marketplace, in the process of scientific validation. Having said that, these validation methods are often not appropriate for serious games because most applications concern in reality prevention and training aspects of the healthcare industry. But since the serious games industry still lacks credibility and faces doubts about their efficacy, clients and public authorities require high-standards and validation tests to minimise the risks associated with an emerging industry⁶⁹⁸.

Also, there is a lack of transparency for both publishers and end-users with respect to the status, operation and effectiveness of these new tools. As the demand for the goods is uncertain, this makes serious games a risky business for publishers and distributors.

⁶⁹⁶ Interviews

⁶⁹⁷ Interviews

⁶⁹⁸ Interviews

Consumers: Another obstacle to the consolidation of the sector is related to the diversity of demand. Given the heterogeneity of stakeholders involved in the convergence process, it can be observed that convergence is almost exclusively occurring on the supply-side. In other words, the demand is thinly distributed among multiple stakeholders such as software companies, intermediate players, health sector investors and target end-users, which prevents the micro-enterprises from achieving a critical mass. This impairs in return suppliers' specialisation strategies, limits economies of scale and scope for SMEs, forces reactive marketing and increases reliance on public grants and project partners for revenue streams (RAGE, 2016).

2.3.1.4 Implications for the actors in the value chain

- The business models have not matured yet and **value monetisation methods still lag behind the traditional gaming industry** in the sense that the product is often offered as a one-off tailor-made product to the client. This is in contrast to the leisure games industry, where processes of 'branched serialisation' (i.e. continuous provision of Downloadable Content Packs and games as a service rather than a product) are more widely used (see value chain analysis on multimedia). Very few serious games companies have a distribution strategy that goes beyond the single title they are working on, nor do they adopt freemium or in–game purchases. They rely excessively on their project partnerships with the healthcare sector for revenue streams (with B2C apps such as health monitoring being the exception rather than the rule).
- There is a large **discrepancy in the bargaining power** of serious games companies on the one hand and their clients in the healthcare industry on the other hand, in line with the market structure. Clients from the healthcare industry (e.g. public organisations, research institutions, etc.) mostly of larger size and with a stronger financial position enjoy significant bargaining power compared to the large fragmented group of game developers that are mainly composed of SMEs and/or freelancers. This reinforces the client-driven nature of the industry.
- In terms of **implications for intellectual property rights and revenue sharing**, it is often the case that the creatives in the serious games sector are in a disadvantaged position due to their low bargaining power coupled with low credibility and visibility issues of the emerging industry as a whole. When the product is developed in partnership with a hospital for instance, it is common practice that the IP rights of the game are bought out by the client. This means that if there is a scaling-up of the product, there are no revenue streams for the creators, except for the development/labour costs charged to the client by the developer company. It is only when the company gains a track-record in successful applications for the healthcare sector that the intellectual property rights are shared on a close-to-equal basis. A number of initiatives do exist to overcome these market and bargaining power imbalances, by pooling of resources and knowledge between small companies by means of a consortium, such as e.g. the g4appliedgames consortium in the Netherlands. However, such initiatives are still scarce. According to interviewees, having a single voice significantly strengthens their position in negotiations with relatively larger and well-established actors and clients⁶⁹⁹.

2.3.2 Case Study 2: Telecom and Broadcasting

2.3.2.1 Introduction

Traditionally, the telecommunication and broadcasting market were separate markets. Telecom network operators delivered voice and data services over their networks and distinct broadcasting actors were responsible for the delivery of content. Increasingly, these boundaries have blurred thanks to **high levels of technological convergence** (e.g. technological advances in compression, the spread of wi-fi, mobile connectivity and the high penetration of mobile and multi-functional smart phones), which induced **also industry/managerial convergence** and resulted in the fusion of value chains. Moreover, digitisation has led to a surge in consumer demand for creative content on (traditionally) telecom devices to the extent that streaming audio and video now dominate net traffic, constituting around half of all data flows on tablets and smartphones (**demand-side convergence**). Against the backdrop of this technological convergence and increasing demand for creative content by consumers, businesses are adapting to the process in many ways, by providing new experiences using pervasive media (delivering mobile content relevant to what you are interested in), or hyper-local media (delivering timely, geographically-based content) over multiple devices.

⁶⁹⁹ Interviews

2.3.2.2 Depiction and analysis of the value chain convergence

The converged industry includes a multitude of actors from both industries that combine their traditional roles with new services and products. These actors include telecom network owners, cable operators, broadcast network owners, content distribution network owners, equipment owners and device manufacturers to content producers, online content aggregators, application designers, application players and operating system providers.

At the industry level, the process of intertwining is mainly driven by technological developments such as the emergence of multi-platform ecosystems, development of various transmission networks and the changing role of user terminals, all with their own opportunities and pitfalls (Song & Park, 2015).

Platforms⁷⁰⁰: The main characteristic of the converged market is the multi-platform ecosystem which is mainly supported by the advent of new formats and new media of transmission such as analogue or digital terrestrial broadcasts, satellite, cable or Internet Protocol (IP) and Over-the-Top (OTT) television, etc. Thanks to multilateral transmission, an increase in channels and the variety of the distribution methods, traditional content is no longer monopolised by content providers. At this level, there is an ever-increasing reconfiguration of roles of the actors in the value chain.

Networks: Development of the various networks is another major driver of the industry convergence. With media to media, short-range and long-range transmission and high speed of transmission through broadband or 4G for example, vast amounts of creative content can be enjoyed quickly and with high quality (ITU, 2013). The resulting consumer satisfaction and consumer experience has also furthered the demand for creative content anywhere, anytime and anyplace. In Western Europe, 71% of all Internet traffic will cross content delivery networks by 2018, up from 55% in 2013 (Cisco, 2014)⁷⁰¹.

Terminals: The changing role of devices from being an ancillary product for content consumption to being a gateway for content production is crucial. Consequently, the control over device technologies and their embedded interfaces (e.g. Android or IOS) also defines the framework in which creative content has to be created/produced.

Taking these new elements in the broadcasting value chain into consideration, we observe that there is a fusion of activities in the broadcasting value chain with actors from the Telecom sector (see *Figure 35*). In this context, it has become common practice that telecom companies start producing their own content (e.g. Orange in France established as early as 2007 a production company "Orange Studio" or formerly known as "Studio 37") or similarly OTT providers assume both content production and distribution (e.g. Netflix and production of the "House of Cards" series) or content providers develop their own distribution networks (e.g. football clubs, which provide traditionally premium content to broadcasters, have established their own channels such as Manchester United TV in UK or Benfica TV in Portugal with online subscription packages) (ITU, 2013). See also the sectoral value chain mapping on TV and radio broadcasting.

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The platforms are defined in a narrow sense in this chapter and only include analogue or digital terrestrial broadcasts, satellite, cable or Internet Protocol (IP) and Over-the-Top (OTT) television. As such, apps, devices, social media are excluded in the "platforms" definition here.

To enable content delivery to customers over the Internet, OTT content providers such as BBC, Netflix, and YouTube have either outsourced video delivery to pure-play CDN companies including Akamai and Limelight Networks, or have built distributed content-hosting infrastructures across the Internet. See, http://blogs.cisco.com/sp/the-shift-to-content-delivery-networks-cdns-supports-more-and-better-customer-video-experiences

Content Platform Network Terminal (ICT)

Content Content Aggregation/ Production Production (Broadcasting)

Content Aggregation/ Production (Broadcasting)

Figure 35: Fusion of Telecom and Broadcasting Value Chains (Adapted from Song & Park, 2015)

At the firm level, industry convergence appears to be manifested through internal innovation activities, such as increasing development of bundled products and solutions, which represent responses to the underlying industry trends and convergence between two industries. Examples are the range of bundled products and services such as triple (internet, telephone and broadcasting) and quadruple (triple + mobile) packages reflecting this internal innovation process. Convergence thus gives consumers access to a distinctly expanded variety of services. Whereas household telephone users or cable subscribers previously received only one service, they can now receive three voice, video, and data over either network (Papadakis, 2007) as telecommunication networks provide more and more casting services such as Web-casting, Mobile TV, DMB, IP-TV, etc.

Yet, the convergence/intertwining process is no longer solely determined by product and process innovation alone (Kland and Hacklin, 2013). The firms which are most successfully dealing with the intertwining process have undergone relatively larger transformations in their underlying business models, with serious repercussions on their respective value chains. The figure below summarises the intertwining process at the firm level (i.e. product innovations).

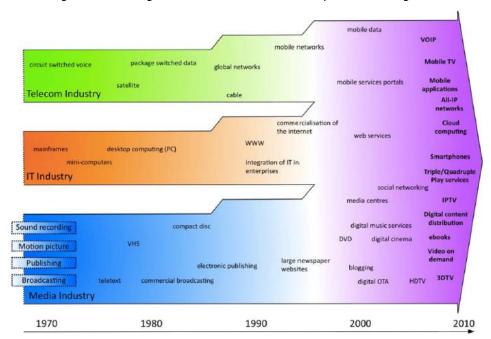


Figure 36: Intertwining of broadcasting and telecom at the firm level – product convergence and bundling

Source: Carneval Ventures

2.3.2.3 Market Structure & Imperfections

As shown in the previous section, the fusion of two previously distinct industries erodes and blurs boundaries between knowledge and technology bases of the established players and their applications. As such, the intertwining process creates new mutual dependencies between organisations, e.g. through change in competition, collaboration or buyer-supplier relationships (Hacklin, Marxt and Fahrni, 2009). As a result of such radical change in the environment, firms increasingly find themselves confronted with situations where the decision to enter a new industry needs to be considered seriously. While technological evolution and the emergence of new products and services have rendered media markets more competitive, some developments in the intertwined telecom and broadcasting market enhances challenges for competition policy⁷⁰². Traditionally, the broadcasting sector has been associated with the following entry/exit barriers: government regulation and licensing, high market concentration, switching costs, high capital requirements, transmission/network constraints and access to content (OECD, 2013). In the context of intertwining between telecom and broadcasting, we observe that access to premium content as well as bundling seem to be exacerbated by the process, whereas new forms of market imperfection emerge such as double exclusivity and net neutrality, excessive audience segmentation, incumbent advantages on consumer data and online advertising, etc. (see also the value chain analysis on broadcasting).

Convergence in the mobile technology industry resulted in a fragmentation of well-established value chains and redefinition of market structure.

From a theoretical point of view, the convergence process induces a de-integration of vertical structures for horizontal alignment, which is only to be followed by a tendency to re-integrate certain vertical segments of the value chain (Hacklin et al. 2013) because it is naturally very costly for a firm to vertically integrate two distinct value chains simultaneously. In this new environment, a number of new players entered the market as industry outsiders (e.g. YouTube from a platform for user-uploaded videos to live-broadcasting of public and private channels). Outsiders that either entered the market exploiting the commercial application of advanced technologies (e.g. OTT) and/or challenged the mobile industry by shifting the focus of attention to software and content mainly through bundling/tying (like in the case of Apple TV or PlayStation Vue).

Corollary to the previous point, the industry disruption comes along with market consolidation, cross-ownership of electronic media platforms and strategic alliances when traditionally established entry barriers become dramatically reduced (Lei 2000; Hacklin 2008; Hacklin et al. 2013).

The Google/Alphabet search engine service has developed multimedia channels (e.g. YouTube) and also invested in broadband infrastructure (handsets, fibre networks, data centres, "Loons" and drones) and the company is now active in broadcasting through YouTube. In a similar vein, global social network Facebook has partnered with mobile operators to provide content (Free Basics), invested in infrastructure (satellites, drones, wireless) and developed its live-streaming service, which might eventually reposition the platform in the broadcasting industry. Outside the relevant market of telecom and broadcasting, online retailer Amazon has invested in content creation, cloud services and licensing content, and has become a major multimedia broadcast channel with over 50 million subscribers (Amazon Video).

The horizontal alignment between actors in previously disjointed value chains raises concerns about their anti-competitive effects on lock-in entertainment ecosystems.

Economic theory suggest that firms may choose to bundle a good or service from a competing market with a good or service where they have some degree of market power, with a view to engaging in horizontal foreclosure (Rey and Tirole, 2006). During recent years, there has been a remarkable surge in the partnerships between telecommunication operators and OTT providers (e.g. Spotify and Deezer as part of the subscription packages of bundles in many EU countries, or Vodafone, Portugal Telecom providing their subscribers access to online music stores or cable operators such as Virgin Media in the UK or SFR in France which include Netflix app in their set-top boxes).

⁷⁰² For example, if technical convergence results in increased economies of scale and scope, it will, other things equal, increase entry barriers, as fewer facilities-based access providers may be able to survive in the market. However, if the extent of such economies relative to the market remains limited, convergence may reduce market entry barriers, especially for applications and service providers who may be able to choose from competing network platforms (Bauer, 2005). In a fully digital environment, network service providers have many opportunities and incentives to differentiate their services to create endogenous market entry barriers, especially if they are not subject to any non-discrimination requirements as is the case for broadband in the U.S. At the same time, network operators have incentives to make their platform available to third parties to internalise some of the complementary externalities created by applications and service providers (Farrell & Weiser, 2003). The incentives of platform owners to grant access to third parties may be further enhanced once the initial costs are sunk.

The inclusion of an app in a set-top box can be beneficial for consumers in terms of cost reductions and better consumer experience, yet the principle of technological neutrality (i.e. similar services should operate under the same rules and conditions) seems rather inappropriate for these new business models.

Multi-device commissioning

In most industries, market failure and anti-competitive behaviour lead to higher prices. However, in the broadcasting industry where the output concerns mainly "credence" goods⁷⁰³, higher market concentration and less competition have an impact on the quality and diversity of the content rather than on prices (OECD, 2013). In the context of "digital abundance" thanks to the convergence between telecom and broadcasting, the entry barriers have lowered and the volume of the content increased significantly. Nevertheless, many industry surveys and analyses show that there is an ever-increasing tendency to recycle the same content even longer (i.e. excessive windowing practices) and to re-version them over multiple devices. The convergence of broadcasting and telecom thus allows producers to develop the tools and work processes in order to re-purpose content and assets for use in different contexts and across an ever more diverse range of devices (Doyle, 2015). Some authors argue that there has been a shift in what multi-device commissioning implies for creatives from the bold 360° production commissioning towards a re-versioning of native content on multiple devices (ITU, 2013). This path dependency is mostly linked to the linear production culture of the public and private broadcasters and their lack of capacity to absorb sectoral contributions. What this implies for broadcasters is that they have to reinvent themselves as the "content curators" in a changing competitive environment.

Intertwining and digitisation have significantly **reduced barriers to access transmission facilities** and alleviated its physical constraints.

With analogue broadcasting and given the capacity constraints of the radio spectrum, it was believed that the number of television channels would remain limited. However, with digitisation came along a substantial increase **in transmission capacity** by compressing television signals and the decreasing cost of reproducing and transmitting information. This technological evolution has significantly reduced some of the entry barriers in the broadcasting sector. Nevertheless, competition concerns have not completely ceased to exist with respect to access to transmission networks (OECD, 2013). For instance, a regulatory decision to limit the distribution of DTT signals to only one technology may prevent TV broadcasters from changing network operator or making use of other transmission technologies, and deprive third party network operators of opportunities that the digital switchover provides. When such physical assets are controlled by a dominant firm, there are high chances that the company unilaterally engages in anti-competitive behaviour as e.g. in the case of Astra/Abertis in Spain.

Access to premium/exclusive content has become an increasingly important source of market power in the broadcasting industry.

Premium content such as e.g. premium sport events (e.g. Olympic Games or football matches) and new releases of movies, which have no substitutes, are essential to the successful functioning of pay TV providers. Barriers to accessing content can arise from the integration of content owners and broadcasters, exclusive contractual arrangements or from vertical foreclosures by a dominant firm. In that way, content platforms, ISPs or mobile providers that don't have that premium content will find it increasingly difficult to compete in the traditional broadcasting market as most consumer surveys point out the fact that premium sport events and blockbuster movies/events are one of the main driving forces behind subscription (OECD, 2015). Hence, the main new concern becomes access to premium content which is becoming relatively scarcer despite a multiplication of platforms that provide similar services. This bottleneck causes a chronic problem for time critical content and for which broadcasting has no substitutes (e.g. there is still only one World Cup every four year but an ever-increasing number of traditional and emerging broadcasters). This tension is e.g. highlighted by the quarrel between BSkyB (leading pay TV operator that bundles its pay TV services with its internet service Easynet) and Virgin Media over the acquisition of ITV (second largest TV news provider) (OECD, 2013). This bottleneck effect in general fosters converging firms' willingness to deepen the value chain intertwining and move up the broadcasting value chain (e.g. Netflix investing in own content).

Digital technology has advanced audience segmentation and individual customisation, making media content less diverse at the exhibition/reception function.

The advantage but also downside of the advances of the technology is that content can now be disaggregated into more discrete consumable units such as TV clips online or through the downloading of individual songs. Although there has been a dramatic increase in the range of available sources and content via online modes, audience attention can become highly concentrated around a selective range of sources (Champion et al., 2013). As Hindman (2009) asserts, the internet does not change the economic logic of concentration. If anything, the Internet's ultralow distribution costs would seem to guarantee even larger economies of scale.

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⁷⁰³ i.e. a product or service whose economic value/utility is difficult or impossible to determine before use.

2.3.2.4 Implications for the actors in the value chain

- The most important implications for creators are in terms of cultural diversity. On the one hand, the convergence of broadcasting and telecom has heightened the hopes for a digital abundance era. A main problem remains how to compete in term of marketing and visibility of content with the big commercial mainstream content, as is also explained later on. Concerns have also been expressed about the diversity levels compromised by larger volumes of content and content sources (re-cycling and concentration in a few marketable creative "brands").
- As for the consumers, although at first sight the convergence seems to reduce subscription costs and to facilitate the consumer experience over a connected entertainment ecosystem, there are also issues raised by the increased use of customer data, privacy and online advertising, as there are no clear indications of the data feedback between different operators.
- The main challenge raised by the convergence of the telecom and broadcasting sector is the regulatory aspects of the convergence. The issue at stake for regulators is how to ensure fair competition in a market whose delineation increasingly becomes obsolete in the context of convergence (e.g. competition from outside the relevant market, cross-market consolidation, etc.). There have been few examples in Europe where the regulatory aspects are handed over to one single authority to enhance the efficacy of the measures (e.g. OFCOM in the UK, regulating both telecommunications and broadcasting content).

2.3.3 Case Study 3: Arts and Science

2.3.3.1 Introduction

Creativity is at the core of both scientific and artistic endeavours. As such, most art-science partnerships place creativity and cross-sectoral innovation at the core of their collaboration. More than that, the importance of **observation** in both disciplines provides a common fertile ground for collaboration. Lastly, often unacknowledged and impossible to replicate, the role of **serendipity** in scientific and artistic endeavours creates a situation whereby different partners stimulate innovation with new questions and perspectives.

Collaborations between arts and science can take multiple forms and serve different purposes such as 1) science/art as inspiration for art/science, 2) science communication/visualisation and 3) artistic use of technology. The collaborations often take the form of value-adding partnerships that contribute to research, development and/or innovation activities (for both partners).

2.3.3.2 Depiction and analysis of the value chain convergence

Contrary to the intertwining processes in the previous cases, cross-overs between arts and science do not always have repercussions on the structure of the respective value chains, due to the limited scope and nature of alterations to the value chain as a whole.

In a context of "science/art as a catalyst for art/science" (see (I) in Figure 37), collaboration mainly occurs at the research and development phase. The intertwining concerns mainly basic research, applied research, prototyping and product development. The rationale behind such collaboration is strongly rooted in the idea that a notable hybridity of competences of many - creative - practitioners in the field of technology and arts can contribute to cross-sectoral innovations at the "edge" of industry boundaries at the earlier functions of the value chain (EC, 2015). The actors often involve research and development centres, universities, corporate and governmental organisations, which either directly host artists or provide an institutional framework for communication between artists and researchers/engineers. Reputable institutionalised examples that foster collaboration between arts and technology in Europe include Ars Electronica Linz in Austria, with a particular focus on industrial innovation (in collaboration with industry partners such as Daimler, Intel, Siemens and Toshiba); ZKM and Transmediale in Germany with a strong emphasis on social innovation. This type of collaboration is traditionally driven by bottom-up industrial actors' initiatives, although it has been increasingly promoted by policy-makers at the regional, national or European level. Public funds play the triggering role in the process, though the organisations might eventually become self-sufficient over time by diversifying their value monetisation models. For example, Ars Electronica owns a FutureLab for commissioned R&D projects as well as a for-profit division conducting interactive installations, trade show boots, exhibitions, which support in return their regular cross-sectoral innovation activities⁷⁰⁴.

Box 14: Arts as Catalyst for Science – Life of Breath Project

Life of Breath in the UK is an interesting example of a multidisciplinary collaboration between physicians, artists and humanities in order to examine the understanding of breathlessness in chronic obstructive pulmonary disease (COPD). The rationale behind the project is that the contribution of performers and artists can actually enhance the diagnosis and treatment of this increasingly prevalent disease. As part of the project, they are conducting an empirical work that actively builds on the inputs from artists/performers (e.g. a study of 'aware breathers' (performers, singers) and respiratory patients to uncover differences between non-pathological and pathological breathlessness. The outcome of the project will be further utilised in clinical practice and research. The project is put in practice by the collaboration between the University of Bristol and the University of Durham since 2014.

Science communication/visualisation (II in Figure 37) refers mainly to aesthetic or social valorisation of science. This is mainly achieved by the use of artists and artistic ideas by corporate organisations or research centres in order to improve and enhance their public image, improve acceptance of new developments in science as well as to communicate complex scientific concepts to broader audiences. For instance, CERN in Geneva, which consumes large amounts of public funding for particle accelerators with little "tangible" output for the grand public, has a long-established residency program for artists.

Box 15: Artistic creation to support the uptake of new technologies

3D printing has opened up a new world of possibilities to manufacture individualised, tailor-made prosthetics. While at first these developments focused primarily on the technological and technical aspects of designing 3D-printed prosthetics, visual artists and designers increasingly team up with medical scientists and engineers to develop prosthetics that are affordable, comfortable and aesthetic, thus helping the acceptance of the prosthetic by both the user and its social network. "Enabling the Future" is a collective of engineers, 3D-printing enthusiasts, physical therapists and designers who create practical and low-cost prosthetic limbs for children. The organisation encourages confidence among children with disabilities and ensures they are made to feel special rather than inadequate. Their 3D-printed superhero prosthetic arms are made for children and are modelled after various comic book heroes like Wolverine and Iron Man.

A third type of collaboration occurs in the production function, when there is an **artistic use of scientific output/technology** (III in Figure 37) i.e. the artistic practice requires by design or choice, access to and participation in the development of new technologies. Historically, some of the art forms have systematically developed new industrial value chains by adopting disruptive digital technologies, which have culminated in the emergence of **new media arts**. Examples include digital art, digital graphics and animation, virtual art, Internet art, interactive art, computer robotics, 3D printing, cyborg art and art as biotechnology.

⁷⁰⁴ See, http://www.aec.at/press/en/category/about/

⁷⁰⁵ http://enablingthefuture.org/

French Tech Culture is an accelerator/living lab ecosystem composed of major engineering companies, technological research centres, serial entrepreneurs, cultural industry managers, investment funds and creative industries training centres and universities. The collaboration between actors from the engineering sector (e.g. the European company *Atos* and the start-up manufacturer *Optinvent*) and the performing arts sector (e.g. "Theatre in Paris", a French cultural tourism company) in a living lab format has resulted in the launch of multilingual augmented-reality subtitling through connected glasses for theatrical performances during the Festival of Avignon⁷⁰⁶. Atos integrates and aligns technology with the constraints of live entertainment. The glasses are designed and manufactured by the French start-up company, Optinvent. Thanks to these successful showcases, the glasses are now also deployed in a number of theatres in Paris to increase the accessibility of plays to a larger and more international audience.

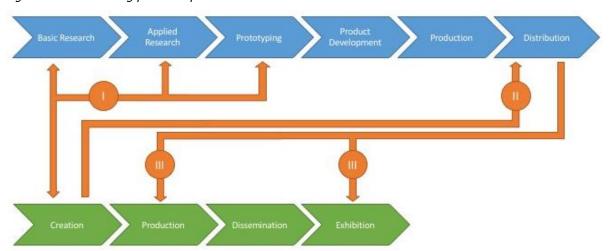


Figure 37: Value-adding partnerships between Arts & Science

Source: IDEA

2.3.3.3 Market Structure and Imperfections

Creation/Production:

- An important barrier to arts and science co-operations is (the lack of) scientific literacy of artists and vice versa for scientists. According to our interviewees, there is a lack of common language between artists and scientists at the individual level that hinders the proliferation of further collaborations in the creation function. This does not necessarily mean that the artists/scientists should adopt or completely master the scientific/artistic language, but rather that a conceptual understanding in terms of purpose and intentions is developed between the partners.
- Partnerships between artists and scientists are often taking place in an opaque marketplace. This is further exacerbated by the excessive reliance on social capital (word-to-mouth partnerships, individual networks) and this hinders the development of institutional long-term partnerships (exceptions are well reputable examples such as CERN and Ars Electronica). Some European initiatives have facilitated the establishment and the proliferation of these types of collaborations (e.g. Starts Prize). However, the involvement of the actors from the respective communities are often disproportionate in most cases artists are overrepresented, whereas the scientific community is underrepresented, which exemplifies the cultural barriers that still exist between the two creative domains.⁷⁰⁷

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⁷⁰⁶ http://www.theatreinparis.com/uploads/2/6/5/8/26584449/atos avignon festival press release.pdf

⁷⁰⁷ interviews

V2_Lab for the Unstable Media⁷⁰⁸ is an interdisciplinary centre for art and media technology in Rotterdam (the Netherlands). It presents, produces, archives and publishes research at the interface of art, technology and society. Founded in 1981, V2_ offers a platform for artists, designers, scientists, researchers, theorists, and developers of software and hardware from various disciplines to discuss their work and share their findings. In V2_'s view, art and design play an essential role in the social embedding of technological developments.

In V2_'s interdisciplinary workspace, national and international artists, scientists and technicians collaborate on electronic art projects and technical research projects, for example hardware or open source software development. The often long-term research projects focus on the use of new technical possibilities for artistic means, research on the cultural and social implications of these techniques and the development of technically innovative (web) applications. Apart from that, V2_ organizes public programmes ranging from exhibitions to workshops, presentations, and community events. These V2_ events showcase the most exciting developments in the field of art and technology, present V2_'s research and development, and function as a platform for debate. V2_'s events offer artists opportunities to present new work to a broader audience and to exchange ideas with other artists, researchers and technicians.

The activities at V2_ are funded by a combination of public actors (Creative Industries Fund NL, City of Rotterdam), funds and private companies.

Corollary to the previous point, one important problem is that artists and scientists do not necessarily draw the same benefits from the cooperation (which does not necessarily mean that one has more interests than another): while artists often get a tangible output (e.g. an artwork for an exhibition) from the cooperation in the short run, the scientists in contrast often obtain a non-tangible output (e.g. communication skills or new perspectives) in the medium-to-long run, hence a **time-inconsistency** problem.

Dissemination/Exhibition:

- Under the dissemination function, **the main bottleneck in terms of market imperfection is the dominance of mainstream visual and performing arts**, which crowds out innovative activities resulting from arts-science co-operations. In this case, there is a feeling that the responsibility for success or failure of a project lies with the individual artist and scientist as it lacks in general a constant form of institutional support and knowledge accumulation. This sense of individual responsibility coupled with lack of peer support demands a high level of persistence. The public intervention is thus required to correct this market failure and there are a certain number of national and/or European initiatives to support these types of collaborations (e.g. Starts initiative⁷⁰⁹, FEAT project⁷¹⁰, etc.). At the basic level, this public intervention can take the form of public funding, which not only allows work to be completed but also to be disseminated and exhibited publicly. The importance of public support also provides these collaborations with some level of credibility vis-à-vis other mainstream disciplines and contextualises their outcomes in the bigger picture of cross-sectoral innovation⁷¹¹.
- Collaborating artists and scientists often have to rely on specific art galleries and/or museum to be able to exhibit their joint creation, since most regular venues (e.g. science museums, art galleries, etc.) are rather conservative in their handling of innovative endeavours.⁷¹² These endeavours are often hosted by small-scale organisations (e.g. labs, studios, creative hubs, residencies, etc.), which significantly reduces the public outreach and visibility.

⁷⁰⁸ See http://v2.nl/

⁷⁰⁹ See http://www.ictartconnect.eu

⁷¹⁰ See http://featart.eu/index.php?id=5

⁷¹¹ Interviews

⁷¹² Interviews

2.3.3.4 Implications for the actors in the value chain

- As explained in the introduction, we define intertwining as a combination of level of networking and cross-sectoral provision of goods and services. In arts and science, what we observe is that even though there are several initiatives aiming to provide opportunities for networking and communication between artists and scientists through one-off projects, clusters, artists-in-residents programs, commissioned products, etc., networking between both communities remains limited. Moreover, also the cross-sectoral provision of the goods and services is limited, which functions as a bottleneck in the level of integration between arts and science. Consequently, the level of convergence/intertwining is not deepened as is the case for other examples such as gaming and health. Value-adding partnerships between arts and science partners often result from personal contacts, rather than that they happen on a more systematic basis.
- With respect to IPR management, artists might favour the open source model to increase user outreach and engagement with the product⁷¹³, while manufacturers might prefer a licensing-model to generate revenue from the product they commercialise. Nevertheless, in most cases, since the collaborations take place in a relatively small setting such as a residency programme or a lab, the **IPR management is mostly handled with a relatively simple process**. As confirmed by interviewees, in a residency programme for instance, the hosting university due to practical costs of enforcing and monetising intellectual property rights, generally does not retain any property rights for the creative work that has been created within their premises (except for non-exclusive rights for documentation).

2.4 Conclusions and recommendations

Creative industries that absorb more effectively knowledge and technology generated by non-neighbouring industries are said to be more successful in initiating, managing and adapting to changes in the value chain in order to remain competitive at a global scale (Menzel & Fornahl, 2010; Lämmer-Gamp, 2014).

As shown in the three case studies (as well as indicated in the different creative value chain mappings), all CCS sub-sectors show an openness and convergence with non-cultural sectors, although at different degrees. But despite the diversity, there are certain observations that come out from the analysis, that currently limit CCS actors from exploiting the full potential of cross-sectoral collaborations:

A major constraint in terms of cross-sectoral innovation and intertwining between CCS and traditional industries is related to the **underrepresentation of traditional industries in the customer base of most cultural and creative organisations**, with few contacts with (potential) clients from traditional industries. In fact, the CCS predominantly serve private households, public administration, education, health, construction and tourism⁷¹⁴. Thus, the issue at stake is to valorise even more the social capital that the CCS holds and to diversify the conventional customer base of cultural and creative industries with relatively higher levels of networking between CCS and other industries. To overcome this barrier, and in line with the recommendations formulated in the Communication "Promoting cultural and creative sectors for growth and jobs in the EU"⁷¹⁵, initiatives by relevant public and private stakeholders to reinforce interaction and cooperation between CCS actors and other sectors should be stimulated.

⁷¹³ Interviews

⁷¹⁴ According to Prognos/Fraunhofer ISI (2012) industry survey of creative industries in Germany, the customer structure of the creative industries is as follows: Private households and public administration (>25%), education, health and construction (21-25%), tourism (16-20%), Financial services, wholesale/retail, electronics/IT, machinery, textiles, furniture (11-15%) and R&D/business services, transport, chemicals, food and plastics (1-10%).

⁷¹⁵ COM(2012) 537 final

CREATIVE WALLONIA⁷¹⁶ is a framework programme from the Walloon government (Belgium) that places creativity and innovation at the core of the economic development of the Walloon region. With the Contracts for the Future and the Marshall plans, over the last ten years, Wallonia has been mainly favouring networking in order to consolidate the most promising sectors in the region. To this end, the Walloon government promotes and funds actions along three different axes:

- Promotion of the creative society;
- Fertilisation of innovative practices;
- Supporting innovative production.

To support the development of innovative ecosystems, structures have been created suitable for co-working, the development of innovation clubs has been supported as well as networking opportunities for entrepreneurs and academic actors and researchers. A number of actions in that respect include CoWallonia, SmartWork Center and ID Campus. ID Campus aims at stimulating the emergence of a creative society, more precisely by:

- offering innovative solutions to enterprises or organisations active in all sectors (commercial, social, arts, cultural, sports, associations, collective, etc.);
- Innovating the education of students by acquiring new competences linked to creativity and transdisciplinarity, and by the completion of real, tangible projects;
- Being a permanent laboratory for creativity and transdisciplinarity;
- Decompartmentalising society, more specifically in its cultural, economic or technological components, by stimulating abilities such as the entrepreneurial spirit, creativity, the relation between arts and culture, etc.
- Social capital is a valuable asset for the cultural and creative sectors to intertwine. However, the **social capital in CCS organisations is often used in a sub-optimal way for intertwining** due to market imperfections: e.g. the co-operations occur in an opaque marketplace, lack of common language, no continuum of institutional support and reliance on individual partners. This results in a lot of new burgeoning activities, which often lack consistency over time. To address the skills needs in a rapidly changing and increasingly complex environment, partnerships with education and training providers are required to guarantee adequate and relevant learning. The EU funded project 'Training Artists for Innovation (TAFI): competencies for new contexts' (2013) mapped out a qualification framework for artists that conduct artistic interventions in various organisational settings, that can serve as a source for curriculum planning to better train artists for such interactions.
- The dynamics of knowledge sharing and crossovers are rather different when it comes to bottom-up versus top-down processes. Evidently, the **bottom-up processes** (e.g. technological convergence in ICT and broadcasting) **are more conducive to intertwining than top-down processes** (e.g. when artists and scientists would have to cooperate with no common currency, such as technology).
- Creators are often in a disadvantaged position to benefit fully from the potential benefits of the convergence as they lack skills and financial resources to reposition themselves vis-à-vis their new partners/clients from other industries. Due to low **credibility and visibility**, they also have to invest in building a track record in the converging value chain (e.g. successful game developers have to show that they are also successful health game developers or artists have to convince the scientific community that the scientific foundations of art-inspired projects are sound). This often limits creators' bargaining power in cross-sectoral collaborations. Policy makers should continue promoting the added value of arts, culture and creativity for the European economy and society at large.

⁷¹⁶ http://www.creativewallonia.be/

In 2013, the EU-funded project Creative Clash published a mapping report on artistic interventions⁷¹⁷ in organisations. They concluded that « producers of artistic interventions are the front-line communicators to organisations and other entities outside the world of the arts about the value of the arts and artistic competence for development. This is a hard role to play, often because of lack of understanding and prejudices from the different fields: both the art world and the business world. [...] Therefore it is not surprising that producers dedicate a lot of time and energy on communicating the value of the arts, and how the competencies artists have can contribute to the development of organisations, society, and citizens. »

Building further on the conclusions of that study, providing (financial) support for the coordinated organisation of sharing practices to promote the value of artistic interventions in the economy and society at large is an important role of policy makers to ensure that documentation of good practices takes place and that learning lessons are accessible with the aim of communicating and promoting of artistic interventions.

Public support (e.g. funding, support of networking opportunities) to stimulate cross-sectoral collaborations is often concentrated at the beginning of the value chain (creation). However, there are also important bottlenecks at the later stages of the value chain, especially in dissemination/exhibition (get access to distribution channels/audience). Supporting cross-sectoral cooperation at those later stages would enable the products and services resulting from such cooperation to make their way to the market more easily and would complement existing funding schemes available for creation. Giving visibility to tangible results of collaborations could also contribute to alleviate the challenge of establishing trust between actors operating in very different sectors.

Box 20: Creativity and cross-sectoral cooperation and innovation – European Network of Creative Hubs

European Network of Creative Hubs⁷¹⁸

Creative hubs are cross-sectoral by nature and work on film or computer games as well as on music, dance, theatre, visual arts and their digital applications, as well as in a wide variety of sectors crossing over from areas such as architecture, publishing, media, technology, health or other applications.

Creative hubs are about organising creative work in today's world of innovative disruptions and can also help to provide solutions for societal problems (youth unemployment, social inclusion) and is an asset to city development and giving a new life to industrial cultural heritage buildings and their neighbourhoods.

The European Network of Creative Hubs project is funded as a grant under the Creative Europe Programme/ Cross-sectoral Strand; the aim of the project is to reinforce networking of creative hubs at European level through different activities, such as a peer-to-peer exchange of creative hubs and to contribute to policy-making both at the local, regional and the European level.

Innovative developments that happen at the borderline of traditional sectors and/or policy areas, are often confronted by "silo thinking" and regulatory barriers that limit the flexibility to experiment. Funding for creative experiments and innovation is often targeted (through the language being used, the eligibility criteria (e.g. you need to be a for-profit legal entity) or the policy department that provides the funding) towards either cultural/creative organisations or businesses in other sectors. Policy makers should overcome this silo thinking to support CCS in their research, development and/or innovation efforts to explore new audience development strategies, new business models, etc. Funding instruments for innovation should take a broad approach to innovation, including also non-technological and social innovation, as also highlighted in the Innovation Union flagship initiative.⁷¹⁹ Specific funding could be earmarked for projects that involve cross-sectoral collaborations with at least one cultural or creative actor.

⁷¹⁷ The concept of artistic interventions roughly represents processes in which people, products and/or practices from the art world enter organisations with the aim to support or trigger development. See Grzelec, A. and Prata, T (2013), "ARTISTS IN ORGANISATIONS - mapping of European producers of artistic interventions in organisations", Creative Clash/TILLT

⁷¹⁸ http://creativehubs.eu/

⁷¹⁹ COM(2010) 546

In 2010 the Dutch government earmarked 9 sectors as 'top sectors' that are crucial for the Dutch economy to be in the top 5 of most competitive knowledge economies worldwide. One of those 9 sectors is the Creative industries. The aim of the Dutch Creative Industry top sector is to bring people and resources (from private and public actors) together with the aim of making the Dutch creative industries an international leader.

To this end, CLICK (Creativity, Learning, Innovation, Co-creation, Knowledge) has been established. It is a network of 7 networks consisting of creative actors, knowledge and research institutes, private companies and (regional) government that want to work together more closely on innovations to tackle societal challenges in the Netherlands and internationally. A coordination office – CLICKNL⁷²⁰ - has been established to connect the different network partners in this unique ecosystem. CLICKNL signals and initiates highly promising forms of cooperation and creates cross-overs within the network and beyond. It acts as the national and international point of contact for all those players that want to innovate in and with the Dutch creative industries.

Bi-annually the different actors in the network jointly agree on an 'innovation contract', in which they present the innovation agenda for a 2-year period as well as the commitments of each of the stakeholders involved to financially contribute to the realization of this innovation agenda. In 2014 four cross-over projects started with the joint commitment of public and private investors:

- Create Health
- Create Energy
- Smart Industry / High-Tech
- Smart Retail

In the current 'innovation contract 2016-2017' government, private companies and knowledge institutes have committed themselves to jointly invest EUR 84 million in strengthening the knowledge base of Creative industries. CLICKNL monitors the progress and quality of its implementation.

⁷²⁰ www.clicknl.nl

3/ Competitive dynamics in two-sided markets

3.1 Introduction

Cultural sectors are getting increasingly organised as two-sided markets (J.-C. Rochet & Tirole, 2002a), where new online companies play the role of platforms mediating between different categories of users (e.g. advertisers and readers).⁷²¹ These platforms allow others to interact and exchange goods, services or information over the Internet (Nielsen, Basalisco, & Thelle, 2013). Online intermediaries perform or provide activities such as search, e-commerce, social networks and cloud computing (Nielsen et al., 2013). Online platforms come in various shapes and sizes (European Commission, 2016b), and there is no consensus on their legal definition (European Commission, 2016c).

One aim of this paper is to try to define what an online platform is, in particular in relation to cultural and creative sectors, and the link with two-sided market.

These online companies play an increasing role in the economy, and in particular in the CCS, as notably shows a series of studies done by Copenhagen Economics on online intermediaries. Online platforms continue to evolve at a pace not seen in any other sector of the economy (European Commission, 2016b), at around 15% annually (Thelle et al, 2015). Online intermediaries' activities in the EU made a direct GDP contribution of EUR 270 billion in 2014 (Thelle et al, 2015) vs. EUR 160 billion in 2009 (Nielsen et al., 2013).⁷²² By 2015, the largest listed "online platform" companies worldwide had a market capitalization of USD 3.9 trillion (European Commission, 2016a). Thelle et al (2015) predict that e-commerce will continue to grow to reach EUR 609 billion in 2017 (Thelle et al, 2015) vs. EUR 310 billion in 2009 (Nielsen et al., 2013).

Besides the contribution to GDP, the *public consultation on the regulatory environment for platforms, online intermediaries and the collaborative economy*, organised by the Commission and open between September 2015 and January 2016, showed a consensus on the growing importance of online platforms for European social and economic wellbeing (European Commission, 2016c). The most frequently quoted benefits are: making information accessible, facilitating communication and interaction, increasing choice of products and services, access to new market and business opportunities (European Commission, 2016c). Online platforms also offer the potential to enhance citizens' participation in society and democracy, as they facilitate access to information, in particular for younger generations and across borders (European Commission, 2016b).

The development of platforms is a pervasive trend in the CCS. Most online platforms originate from outside of the CCS, but now they are all active in one or several functions of creative value chains, as illustrated in the mappings or in this paper. Besides, traditional players in the CCS have reacted to the development of online platforms by providing their own. This process is labelled as "platformisation" (Mansell, 2015), whereby all sectors (besides creative ones) get tangled to one another. The competitive setting has thus changed, shifting from a sectoral competition to blurring boundaries between CCS, since some stakeholders are starting to take an active role in several CCS.

Another crucial reason to analyse the role of online platforms in CCS is the underperformance of European platforms. As the *Commission Staff Working Document Accompanying the document Communication on Online Platforms and the Digital Single Market* explains, Europe has the potential to be a leading digital player in the world (European Commission, 2016a). Actually, it benefits from well-developed digital infrastructures, a well-educated population increasingly using the Internet, combined with a culture of creativity and innovation, as well as a solid industrial base (European Commission, 2016a). However, Europe is lagging behind. In their global survey of platforms, Evans and Gawer (2016) highlight how out of the total 176 platforms they studied, only 25 (i.e. 15%) were European, accounting for a little over 4% of market value. The vast majority of platforms originate in the US and Asia. **The CCS are no exception with the domination on local markets of global players** as we illustrate in this paper. A few EU platforms have a global scale (e.g. Spotify), the EU context is however one of a competition between US platforms (e.g. Netflix, iTunes) and their local EU counterparts.

The development of platforms raises also challenges in terms of competition. This paper also analyses market imperfections in relation to two-sided markets, and **the impact of two-sided markets on competition in the**

⁷²¹ As explained in detail in next chapter, two-sided markets are two distinct markets for which the utility of any customer A (in market 1) is correlated to the number of customers B (in market 2).

There are three main components of their direct GDP estimate. First, the activity of online intermediaries will increase as a result of general GDP growth and increasing consumption. Therefore part of the increase can be explained by general GDP growth, but this part is small because of the relatively modest underlying growth of the European economy between 2009 and 2012. Second, online intermediaries are a part of the broader Internet economy, which is growing much faster than the rest of the economy. More Internet users and more e-commerce spending is a significant source of growth for online intermediaries, and consequently their GDP contribution increases accordingly (Nielsen, Basalisco, & Thelle, 2013).

creative value chains. These market imperfections are intrinsic to the functioning of two-sided markets in the CCS.

In the remainder of the paper, Section 2 details the functioning of two-sided markets and how it is at the core of online platforms. Creative value chains are used mainly for illustration purposes. Section 3 discusses the impact of online platforms on competition in the CCS. Section 4 proposes some concluding remarks and provides a short analysis of options for competition policy. Some CCS sub-sectors are used as examples along the paper to illustrate how the theory of two-sided markets applies in practice. The paper also includes examples that are not directly related to the CCS to better clarify some points.

3.2 Two-sided markets in the CCS: from advertising to online platforms

There is no such thing as "a unified theory of [two-sided] markets" (Bounie and Bourreau, 2008, p.477). Two-sided markets are closely related to the concept of network effects. For the purpose of this paper, this concept is briefly explained hereafter.

3.2.1 Network effects

In economics and business, a *network effect* is the effect that one *user* of a good or service has on the value of that product to other users (European Commission, 2016a). A synonym of network effect is network externality.⁷²³ Network effects were first used to describe network infrastructures, e.g. telecommunications. There are such effects when the utility derived from one good or service is correlated with the number of users of this good or service. They may be direct or indirect (Katz & Shapiro, 1994), positive or negative. In the presence of *positive network effects*, the utility derived is positively correlated with the number of users. Network effects belong to the larger category of increasing returns (Arthur, 1988), i.e. mechanisms that lead to self-reinforcement of trends and phenomena.

Effects are direct when the number of users has a direct positive impact on the utility derived from the product (Liebowitz & Margolis, 2002), e.g. the higher the number of phone users, the more utile for phone users to own a phone. Direct effects are synonymous to *same-sided network effects* or intra-group network effects.⁷²⁴ This standard literature on same-sided network effects has been completed since the turn of the century by the analysis of cross-sided network effects (Buchinger & Ranaivoson, 2013).

Cross-sided network effects (Armstrong, 2004; J. C. Rochet & Tirole, 2003) occur if an increased usage on one market side creates benefits for the distinct user group on the other side(s) of the market (J. C. Rochet & Tirole, 2003). For example the sellers on an online marketplace benefit from a higher number of buyers (European Commission, 2016a). Another way to explain is to say that the impact is mediated by another market (Liebowitz & Margolis, 2002), e.g. the higher the number of video game consoles of a given brand are sold, the higher the number of games are developed for this console resulting in higher utility for the owners of this consol. Cross-sided network effects are synonymous to indirect network effects or inter-group network effects.

Cross-sided network effects can have asymmetric intensities on the various sides of a platform. The asymmetry of indirect network effects is lower in the case of classical marketplaces (both sellers and buyers benefit) and higher, for example, in the case of advertising based platforms where both positive (supply of content) and negative indirect network effects (advertising) are present (European Commission, 2016a).

3.2.2 Two-sided markets and their implications

Cross-sided network effects are defining features of two-sided markets. Two-sided markets exist as soon as the utility of any customer A is correlated to the number of customers B. Conversely, cross-sided effects run 'across markets' and can only occur in at least two-sided markets (Parker & Van Alstyne, 2005), as opposite to same-side effects.

Table 1723 Externalities include everything an economic agent gets from another economic agent's (consumption or production) activity without any market counterpart (i.e. without giving or receiving money for it). Pollution is a typical example of (negative) externality: in the absence of regulation (e.g. law), the one polluting is producing negative effects on others without compensating them for such negative effects.

⁷²⁴ Implicitly, the former refers to users being on the same side of the market; the latter to users belonging to the same group of users.

First models of two-sided markets were applied to credit card markets (J.-C. Rochet & Tirole, 2002b); on such markets, the higher the number of credit card holders, the more interesting it becomes for the shops to be equipped with devices that allow to pay by card. Conversely, the higher the number of equipped shops, the more utility one card holder will derive from having such a card.

The most common case of two-sided market in the creative sectors, is the one of advertising, in particular for broadcasting. In the case of television, the two categories of users are on the one hand viewers (but it could be newspapers' readers or radio listeners) and on the other hand advertisers. Broadcasters act as platforms whose role is to connect both categories of users (Farchy & Ranaivoson, 2011). The edited and broadcasted content is a joint product, i.e. on the one hand it is a content for the viewers and on the other hand it is these viewers' attention for the advertisers.

The main peculiarity of two-sided markets organised around advertising – compared to other two-sided markets – consists in the fact that **cross-sided network externalities are not necessarily positive for all players**. Externalities are positive for the advertisers but can be negative for the viewers (Bounie & Bourreau, 2008). The higher the number of viewers, the higher the number of advertisers willing to pay to get an ad; however the higher the level of advertising, the less satisfied the consumers can become. There might be differences according to the kind of content (advertising on the radio or on the television is more annoying than on the Internet or in the newspapers) or the market segment (advertising might be considered as more interesting on specialised media like newspapers targeting professionals).

This example shows that if one market side experiences positive externalities from joining the platform it is sufficient to sustain this system, as long as the benefits of the exchange outweigh the costs of the other market side (Hoelck et al., 2016). As long as the advertiser's benefits compensate the consumers costs of being confronted with advertisements, the platform will use the possibility of a value-creating exchange (D. S. Evans, 2014; Roson, 2005). The theory of two-sided markets analyses the resulting tension between these players' contradictory interests (Anderson & Gabszewicz, 2006) and the role of platforms in managing this tension.

Two-sided network theory has often been criticised as it does not allow to take into account the peculiarities of some industries, notably due to their limited and formalist scope (Ballon, 2009). In the ICT sector, it has been argued that the two-sided network theory should be extended to analysing multi-sided markets, to including dynamic competition between multiple platforms, and to deciding between a multi-sided market strategy or not (D. S. Evans, Hagiu, & Schmalensee, 2005). As an example of multi-sided markets, the video-sharing website YouTube is mediating between not two, but (at least) three market sides: users, video providers and advertisers.

The existence of network effects in two-sided markets has unexpected economic consequences on price formation, level and structure (J. C. Rochet & Tirole, 2003). Cross-sided network effects enable platforms to pursue a pricing strategy which is not feasible for merchant firms, i.e. cross-subsidisation. Concretely, platform companies can charge prices at one side below marginal cost (P < MC), in some cases prices can even be 0 or negative and derive profit on the other side(s) of the market. Platforms can attract with this pricing structure additional participants on the subsidised side of the market to foster participation on the profit-making side (D.S. Evans & Schmalensee, 2007).

More precisely, a profit-maximising platform should apply higher tariffs to the customers whose price elasticity is the lowest, to attract customers whose price elasticity is the highest, as in case of advertising. Broadcasters of channels available for free apply higher tariffs to advertisers to fund television programmes to the viewers. This is an extreme case where revenues are entirely generated by advertisement while content is freely available to consumers. This is also the case for other creative content such as free-to-air radio, free newspapers, etc.

The presence of cross-sided network effects results in **two paradigmatic effects in platform markets, namely the 'chicken or the egg' dilemma and the 'winner-take-all' dynamic** (Hoelck, Cremer, & Ballon, 2016).

Regarding the chicken or the egg dilemma, due to cross-sided network effects, a platform has to attain a critical mass of participants on one market side to attract participants on the other side and vice versa. Thus, it is very difficult to start a platform and to enter in market competition (Hagiu, 2007; Melody, 2007; Rysman, 2009). In the case of broadcasters, they must have a significant number of interesting programmes to attract viewers as advertisers are going to fund such programmes only if they know they can reach a sufficient audience.

While it is difficult to start a platform, its long-term sustainability is facilitated by the winner-take-all dynamic. Due to cross-sided network effects, an increasing amount of group members on one market side will attract further group members on the other markets side(s), which, again, attract new members on the other side – a snowball effect is in place. Thus, once an instalment base has been procured, it becomes almost impossible to stop a successful platform (Bresnahan & Greenstein, 1999; Eisenmann, 2008; Eisenmann, Parker, & van Alstyne, 2006; Melody, 2007). Gawer & Cusumano (2008) describes the situation as 'tipping', in which a platform war of at least two competing players ends with the domination of one of them. The snowball effect may stop when there is

congestion, i.e. when the number of users is so high that networks are saturated or it affects services' quality in a wrong way.

In his *Competition with Reciprocity in a Two-Sided Market - A Primer* report for the UK collecting society The MCPS-PRS Alliance Limited (now PRS for Music Limited), Will Page applies the theory of two-sided markets to collecting society (Page, 2008). To do so, it goes back to its origins in France, circa 1850. Here, the society provided a platform which allowed restaurants on one side to compensate composers on the other. Both categories of users are therefore restaurants and composers, which are mediated by the collecting society. According to Page, not only did the platform allow the transaction to take place more with reduced transaction costs but also with better enforcement (Page, 2008).

Furthermore, he argues that collecting societies constitute a unique case when trying to apply two-sided market thinking. For instance, "collecting societies are not only designed on a not-for-profit basis, but owe a fiduciary duty to act in the best interests of their members." (Page, 2008)

3.2.3 From two-sided markets to online platforms

Platform theory, especially when related to the ICT industries, conceptualises platforms as a particular and important structuring element within an 'industry architecture' (Jacobides, Knudsen, & Augier, 2006). Technically, an ICT platform may refer to a hardware configuration, an operating system, a software framework or any other common entity on which a number of associated components or services run. Economically, platforms and their providers mediate and coordinate between various stakeholder constituencies.

In the simplest setting, **platforms work as mediating entities that create value by facilitating interactions in a triangular fashion between upstream and downstream agents** such as sellers and consumers. This enables them to exploit cross-sided network effects between both types of agents affiliating with the platform (Eisenmann et al., 2006; D.S. Evans, 2014; D.S. Evans & Schmalensee, 2007; J.C. Rochet & Tirole, 2003; Rysman, 2009). The demand of the different customer groups for the platform is related to the supply of other platform customer groups and vice versa (European Commission, 2016a). Therefore platforms differ from merchant companies that operate in linear bilateral 'retail' markets and follow the rational of linear bilateral exchange: they acquire the necessary complements from an upstream seller and sell the finalised product to a downstream consumer, thus operating in a linear fashion (Hagiu, 2007). Business models in platform markets, rather than to focus on profit maximisation in a single market, primarily deal with getting the various stakeholder groups on board, with balancing interests between these groups and with balancing openness and lock-in of customers (Cortade, 2006).

Thus, platforms can, but do not need to have a technological basis. This understanding is inspired by the work of authors such as Parker et al., 2016, Hagiu & Wright, 2015 or Schlesinger & Doyle, 2016 who refer to platforms as 'intermediaries'. As such, this view originates in economic theory of two-sided markets, yet, it was also quickly adopted by other social sciences such as communication studies (Hoelck et al., 2016).

How do platforms coordinate and mediate between stakeholders? Platforms provide infrastructure and rules (Parker & Van Alstyne, 2005). They design pricing in order to get the connected user groups "on board" (J.-C. Rochet & Tirole, 2006; Roson, 2005), so that they can benefit from having access to each other (D.S. Evans & Schmalensee, 2007). Among online platforms, online marketplaces (see after) may 'vet' third-party sellers in some way or another (e.g. by awarding certificates, displaying customer reviews or requiring authentication measures), and they may increase consumers' level of trust given that they intermediate in the payment process (European Commission, 2016a).

As pointed out by Evans and Schmalensee (2007), platforms arise in situations in which network externalities exist and in which transaction costs prevent the user groups from solving these externalities directly (Hoelck et al., 2016). The platform can facilitate transactions by reducing transaction costs (European Commission, 2016a). Digital technologies play a crucial role; in particular, as reminded by the European Commission's staff working document *Online Platforms*, "the global reach of the Internet makes it one of the most efficient and cost effective solutions for e-commerce and online platforms" (European Commission, 2016a, p. 15).

⁷²⁵ interdependencies may exist between platform customer groups such as (inter alia): (i) producers of complementary products (e.g. app developers) and end consumers (gamers), (ii) advertisers and readers, (iii) shoppers and sellers, (iv) job seekers and recruiters, (v) accommodation providers and accommodation seekers, (vi) transportation providers and passengers (European Commission, 2016a).

While cross-sided network effects are intrinsic features of platforms, they can also be subject to same-sided network effects. To illustrate, multi-sided online social networking platform Facebook creates same-sided network effects between its users (the more users there are, the more valuable for a user to have a profile and interact on the platform) and cross-sided effects between users and application developers and advertisers.

Based on this background, the Communication from the European Commission on Online Platforms and the Digital Single Market Opportunities and Challenges for Europe points out that online platforms share some important and specific characteristics (European Commission, 2016b):

- They benefit from network effects;
- They operate in two- or multi-sided markets, i.e. the network effects they benefit from include (but are not limited to) cross-sided network effects;
- They rely on digital technologies, which allow to bypass physical factors in terms of reach, growth and available space
- They have the ability to create and shape new markets, to challenge traditional ones, and to organise new forms of participation or conducting business based on collecting, processing, and editing large amounts of
- For all these reasons, they play a key role in digital value creation, notably by capturing significant value, facilitating new business ventures, and creating new strategic dependencies.

3.2.4 Typologies of online platforms

The aforementioned Working Document the European Commission distinguishes between 5 different types of online platforms, each relying on a different business model (European Commission, 2016a);⁷²⁶

- Marketplaces and e-commerce platforms, i.e. online platforms on which direct transactions between sellers and buyers of (physical or digital) goods and/or services can take place. On some of these (e.g. Amazon or Bol.com), both the vertically-integrated platform operator as well as third-party sellers are active in the sale of goods. Online marketplaces can generate revenue in a variety of ways, principally through fees charged on third-party sales but also through the sale of online advertising space. One major example of online marketplaces active within the European Economic Area, and related to the CCS is Amazon Online marketplaces have fundamentally changed entire retail sectors, such as book publishing, film and music.
- Mobile ecosystems and application distribution platforms, i.e. mobile Operating Systems (OS) and app stores. OS are the supporting infrastructures allowing to run apps and services for the mobile ecosystem participants (consumers, developers, etc.). App stores are the main way for consumers to download softwares on their devices. They have simplified distribution issues previously faced by developers (e.g. related to user acquisition, payment, invoicing, after-sales service, etc.)
- Internet Search Services that help Internet users find the relevant answers to their search requests on the web. Users on each side include Internet users seeking information, website operators seeking an audience for their content, and online advertisers targeting potential customers. 727

- Internet search engines and portals
- E-commerce intermediaries, where such platforms do not take title to the goods being sold
- Participative networking platforms, which include Internet publishing and broadcasting platforms that do not themselves create or own the content being published or broadcasted
- Data processing and web hosting providers, including domain name registrars
- Internet access and service providers (ISPs)
- Internet payment systems

⁷²⁶ The Commission typology reminds of OECD (2010)'s classification of Internet intermediaries into six groups:

⁷²⁷ Search services provide an interesting example of same-sided network effects operating in a different manner in the various sides. For Internet users, they are positive since they benefit from search engines being used by other users because search engines collect aggregate data about the relevance of search results to particular queries and use this information to improve results for subsequent queries (European Commission, 2016a). However they are negative for advertisers (resp. content

- **Social media and content platforms,** i.e. "services which enable users to connect, share, communicate and express themselves online or through a mobile app" (European Commission, 2016a).⁷²⁸
- Online advertising platforms

Other interesting typologies include:

- Ballon (2009), in his overview of platforms in ICT industries, suggests to distinguish the various types of platforms according to (i) whether there is control over assets and (ii) whether there is control over customers.
- Evans (2003) proposes a classification that distinguishes between three types of online platforms: market makers, audience makers, and demand coordinators. Market-makers bring together two distinct groups that are interested in trading, increase the likelihood of a match, and reduce search costs. Audience makers match advertisers to audiences. Meanwhile demand coordinators, such as software platforms, operating systems, and payment systems coordinate demand between different user groups (for example card holders and merchants, developers and smartphone users).
- Finally, one can distinguish between transaction and non-transaction platforms (Filistrucchi, Geradin, van Damme, & Affeldt, 2013).

3.2.5 The platformisation of the creative value chains

Several authors have showed that the success of the leading new Internet-based media and communications companies is attributable to their functioning as online platforms (Hoelck et al., 2016; Lee, 2014). As a response to the significant competitive advantage of being a platform, **incumbents have adapted to the competitive situation by striving for platform-based business models themselves** (Hoelck et al., 2016). They have transitioned their companies progressively from classical downstream buyers or upstream suppliers of products or services to platform businesses.

As a result of such trends, there are whole ecosystems of platforms in which they operate not only next to each other in direct horizontal competition but also on top of each other in the value chains. (Hoelck et al., 2016) label platformisation such a convergence of interrelated and layered platforms. This platformisation not only affects the market structure, but also the economic interactions within those increasingly complex ecosystems, leading to major power shifts (Hoelck et al., 2016). For example, in the book publishing sector, many retailers started to build their own distribution platforms in order to compete against Apple and Amazon, as detailed in the sectoral value chain mapping on publishing. In some countries, such as Germany, such platforms could gain significant market share.

Television broadcasting provides an interesting illustration of this trend towards platformisation, as analysed by Doyle (2016) with a case study around BBC Three. There has been a steep rise in the number and popularity of online distributors of television content (Doyle, 2016), such as Netflix. This constitutes a competitive threat for TV broadcasters of potential substitute. Public service broadcasters in particular fear losing relevance in a multi-platform environment and to be unable to offer a sufficient variety of content. Besides, as already noted in the sectoral value chain mapping on broadcasting, broadcasters are also especially worried about copyright and fair revenue sharing.

This has led many television companies to adopt an increasing online-facing approach both to production and distribution (Crow, 2014). They produce and aggregate content for distribution across the multiplicity of available digital platforms (Doyle, 2016). There are several international examples, in both the private and the public sector (Doyle, 2010).

Besides the threat, such strategy is driven by hopes of exploiting two sources of economic opportunity (Doyle, 2010):

- First, strategies of re-versioning of content into new outputs and of re-use of it across new platforms enables greater value to be extracted from content.
- A second area where digitisation and multiplatform distribution provide opportunity for innovation and improved efficiency relates to the unprecedented ways that new technology allows media suppliers to get to know their audiences and to match up content more closely to their needs and desires.

providers) since they compete against each other in a bidding process for advertising space (resp. users' attention) (European Commission, 2016a).

⁷²⁸ YouTube could be classified in this category, as it enables users to share and access to audiovisual content.

Television broadcasting also allows to illustrate that platformisation leads to increasingly complex ecosystems. As already noted in the sectoral value chain mapping on broadcasting, **not only broadcasters, but also TV distributors (including telecom operators) have started playing a two-sided platform role themselves**, i.e. between broadcasters and customers. So far TV distributors' business model had resembled that of utility providers.

Platforms in the cultural heritage value chain (based on the sectoral value chain mapping on cultural heritage)

As outlined in the cultural heritage value chain mapping, digitalisation has a huge impact on the field of cultural heritage. In Europe, a few online platforms have emerged. The sectoral value chain mapping on cultural heritage develops among others the cases of Europeana (EU) and Google Art Project (international). This box reframes these examples from the point of view of the platform theory.

Europeana (or the Google Art Project) provide a platform mediating at least three types of users: (i) Internet users (the general public) who can discover and explore heritage artefacts and collections from all over the world; (ii) institutes (museums, libraries, etc.) that can provide access to their collections; and (iii) expert users such as researchers.

There are positive cross-sided network effects. The more institutes take part, the larger the number of digitised items to which users may have access to. Conversely, institutes may have as a duty to reach the largest audience as possible. Hence they benefit from having their works available for a large audience.

Finally, the mapping mentions the difficulty for online platforms providing access to digital cultural heritage to reach a critical mass. For example, Europeana is focusing on building up a critical mass of digital records to facilitate new research approaches such as text and data for humanities researchers to unlock connections across previously prohibitively large bodies of information (see also http://strategy2020.europeana.eu/update/).

One relevant issue is where more than one platform is available to do the same task. This may lead to **users choosing to join and use several platforms, i.e.** *multi-homing*. This is because customers might find certain features of different competing platforms attractive and therefore rely on several (e.g. most people have more than one payment card) (Page, 2008).

Conversely, users *single-home* **when they only use one platform** and therefore restrict themselves to interacting with customers on the other side of that platform (e.g. most people use one operating system on a single device) (European Commission, 2016a). A platform aiming to develop a single-homing business model will try to ensure that a customer spends as much time as possible on that platform (European Commission, 2016a).

Other two-sided platforms have multi-homing only on one side, as most end-users rely on a single software platform for their personal computers, while many developers write for several platforms.

3.3 The impact on competition and policy options

3.3.1 The online platforms' impact on competition

This section analyses the **competitive impact** of the development of two-sided markets, focusing on the entities relying on such markets and benefiting from digitisation: online platforms. Two-sided markets are often characterised by **market dominance** of one or a few platforms, which may raise **competition issues**.

The Commission's aforementioned public consultation highlighted a number of concerns from certain stakeholders about unfair trading practices from online platforms. The most common alleged problems include the following (European Commission, 2016b)

- Platforms imposing unfair terms and conditions, in particular for access to important user bases or databases;
- Platforms refusing market access or unilaterally modifying the conditions for market access, including access to essential business data;
- The dual role that platforms play when they both facilitate market access and compete at the same time with suppliers, which can lead to platforms unfairly promoting their own services to the disadvantage of these suppliers;
- Unfair 'parity' clauses with detrimental effects for the consumer; and

Lack of transparency — notably on platform tariffs, use of data and search results — which could result in harming suppliers' business activities. Nine out of ten respondents to the public consultation considered that there is room for improvement in business-to-business (B2B) relations between platforms and suppliers. They highlighted allegedly problematic examples of contractual clauses and practices covering a wide number of sectors (European Commission, 2016b).

As a consequence, the Commission committed to carry out a targeted fact-finding exercise on B2B practices in the online platforms environment, which will examine more closely the issues raised in the public consultation as well as the potential means of redress beyond the application of competition law, e.g. (voluntary) dispute resolution mechanisms, transparency and better information measures or guidance.

Since the economic logic of platform companies differs from merchant companies, the set-up of platform-dominated ecosystems is distinct from those in merchant ecosystems. **The market structure of platform ecosystems is gravitating towards concentration**, since platform markets are characterised by a 'winner-take-all' dynamic and 'the chicken or the egg' problem, which give platform companies the opportunity to gain massive market power while reducing competition and creating high entry barriers (Eisenmann, 2008). Platforms can cross-subsidise market sides, foster their growth and raise entry barriers for new entrants.

Platforms can leverage their market power in their step of the Value Chain to benefit from better conditions towards downstream or upstream players. In other words, they can act as gatekeepers in their market. As discussed in the sectoral value chain mapping on music, online music platforms' greater market power allows them to benefit from powerful bargaining positions in their relations to right holders. In particular, it seems that music publishers receive a slightly lower share of revenues from digital platforms than when they negotiated with record companies⁷²⁹. This echoes current debates around the "value gap" whereby online platforms are criticised for challenging creators, producers and right holders to *monetise* their copyrighted works and negatively affecting the redistribution of revenue streams in the creative value chain (see also the thematic paper on remuneration of creation).

Platforms in this ecosystem often cooperate to foster each other's growth. Thus, these platforms are in the paradoxical situation in which they have **to balance between competition and cooperation**. On the one hand, platform companies have to consolidate their market position; on the other hand, they have to support the creation and maintenance of a sustainable ecosystem. This leads to the inter-firm dynamic of **'co-opetition'**, i.e. the collaboration between firms with incomplete congruence of interests, often in the presence of market power asymmetries (Brandenburger & Nalebuff, 1996). As a result, companies' strategic incentives are directly at odds with the platform 'ecosystem' logic (Weyl, 2008).

3.3.2 Platforms specific strategies to strengthen their market positions

Besides the advantages provided by network effects, online platforms follow specific strategies that increase entry barriers for potential competitors and reinforce their market position towards competitors (often themselves platforms too).

Platform envelopment occurs when a platform extends another platform's value proposition and offers it in a multi-platform bundle, by leveraging overlapping user bases and harnessing cross-sided network effects and economies of scope to swallow the other platform (Eisenmann, Parker, & van Alstyne, 2011). During an envelopment attack, a platform is using the advantage of cross-sided network effects to not take over its rival but aiming at forcing it to leave the market. It can be used (and possibly it is most often observable) to enter other, not directly related, ecosystems. Indeed, Apple, Google and Amazon used similar approaches to enter various CCS (Hoelck et al., 2016).

In a **silo competition, a platform can compete with another platform** next to it (i.e. providing a similar product or service) **by increasing its grip on the downstream or upstream layers**. This can be done by gathering suppliers and sellers through the creation of a closed ecosystem. This can be achieved via strategic growth, acquisition or strategic cooperation (Hoelck et al., 2016), for example in the form of exclusivity agreements with companies providing complementary products or services (Hagiu & Lee, 2011). In the case of Video on Demand (VOD), there is no exclusivity for feature films as VOD contracts are mainly based on non-exclusive conditions. This is however counterbalanced by the development of exclusive content by VOD platforms such as Netflix or Amazon Instant Video, e.g. Netflix's popular series 'House of Cards'. Thus doing, they increase their grip on upstream layer (content production), which makes them more attractive towards viewers (Ranaivoson, De Vinck, & Van Rompuy, 2014).

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⁷²⁹ Interviews

Finally, **vertical commoditisation consists for a platform in diversifying into a related vertical market and offering the same service as a competitor for a highly-discounted price or even for free.** In more details, the platform expands in an aligned upstream or downstream layer, by providing there a product or a service. This new product or service, which is vertically integrated with the mother company, is not profit earning. It aims at decreasing the rivals' profits and may even force them to leave the market, while increasing the value of its own major platform. This strategy is for example repeatedly carried out by Google. Google internet-based platform services Google docs or Google maps are offered for free and are connected to Google larger ecosystem (Hoelck et al., 2016).⁷³⁰

Arguably, this is the path that could be followed by online platforms in the music (recording) industry, some observers argue. There are doubts regarding whether music streaming services that are not backed by a technology company can survive in the long term (Dredge, 2016; KEA & VUB, 2012). Actually, Spotify, Pandora, Deezer or Guvera are still making losses (Dredge, 2016). Technology companies have entered the music sector, following such a strategy of vertical commoditisation. At the time, Apple, with the music download market leader iTunes gained more revenues with the sales of iPods than through its online music store (Laung Aoaeh, 2011). Arguably the success of iPods was important for Apple to favour the adoption of the Mac ecosystem and related platforms by consumers (KEA & VUB, 2012).

3.3.3 From platforms to platform silos

The emergence and development of platforms, and the self-reinforcing effects that two (or more) platforms can have on each other (cross-platform effects), raise the issue of a potential impact on innovation.

An increasing number of users on platforms 1 can lead to an increasing number of participants on platform 2, thus transforming cross-side network effects into *cross-platform effects*. The growth of both platforms is coupled and *platform silos* (i.e. groups of platforms with cross-platform network effects between the platforms) are created. This in turn is supposed to lead to an increase of the value of the platform for the users as well as a higher profitability for the platform provider. Silo competition and vertical commoditisation both result in a form of platform silos (Hoelck et al., 2016). Thus, the creation of Platform Silos reinforces the already existing tendency in platform networks towards concentration of market power.

⁷³⁰ In the case of creative sectors, this strategy can be related to Roland Berger's finding in their 'Cultural content in the online environment: Analysing the value transfer in Europe' report that several technical intermediaries (which can be characterised as online platforms) generate value from cultural content without any compensation or without appropriate compensation to date (Roland Berger, 2015). They find that these technical intermediaries create value thanks to cultural content in three ways:

⁽i) Direct impact, through direct consumption or showcase of (or monetised direct links to) cultural content (e.g. Google AdWords, in Facebook feed,...)

⁽ii) Indirect impact, thanks to the service stickiness, usage intensity and usage repetition that are driven by the abundance of content made available (in other words: what revenue would remain if there was no cultural content made available by the service)

⁽iii) Implicit or collateral impact (qualitative): in a fast-moving, technically complex, oligopolistic and usage-driven competition, market leaders derive increased future revenue generation capabilities, consumers knowledge and market valuation from those same usages that are significantly driven by cultural content

Platform silos: the example of book publishing (based on the corresponding value chain mapping)

Two disruptive innovations opened the publishing market for technology platforms such as Apple and Amazon, namely the introduction of online retail and the advent of e-books. Amazon is a dominant online retailer in Europe (and globally), where its platform sells books among others. In 2007, it entered the e-book activity, launching the Kindle e-reader and the Kindle Store, an e-book store. Both platforms can be considered as an example of Platform Silo, where there are positive cross-platform effects between the Kindle Store and Amazon's retail website.

The impact on competition is ambiguous, as developed in the Book Publishing value chain mapping. They are open to any publisher and even directly to authors with Kindle Direct Publishing allowing to independently publish their books directly in e-book format. On the other hand, third parties (publishers and authors, as well as book resellers) working with these platforms have to follow Amazon's terms and conditions. In addition, Amazon's e-book format is proprietary, thus locking-in consumers in the Amazon ecosystem.

Platforms and platform silos should not necessarily be equalled with lack of openness. Actually, the emergence of platforms has been accompanied by innovations, developed by third parties that make use of platforms, as well as by platforms themselves. This is a deliberate strategy on behalf of platform providers to create attractive, innovative services (Hoelck et al., 2016). However, the risk is that platform providers make use of their economies of scale or leverage market power in adjoining markets, in a direction that could reduce innovation by third parties in the longer term (Hoelck et al., 2016). **Such ambiguity in the relationship between platforms and innovation is crucial to understand the tendency to neither prevent nor penalise online platforms' dominance**. Actually such dominance relies on innovation and can be challenged by potential competitors, in particular in markets that are not stable, like for most online content platforms.

Potential threat to competition – the case of PC video games (based on the multimedia value chain mapping)

Online, dematerialised distribution is increasingly important for the video games industry. PC video games are dominantly distributed via digital distribution platforms. The emergence of such platforms has enabled game developers to circumvent publishers and to distribute their product directly.

However distribution platforms have clearly increased their importance in the value chain. A special case is Steam (provided by game developer Valve), which makes games available on the PC market and has recently gained enormous market power, making it now very difficult for competitors to compete with it - a good illustration of the winner-take-all dynamic developed before. Steam has a strong bargaining power, especially towards game developers and small game publishers. For developers, according to one interviewee it has become increasingly difficult to make their product visible on these platforms, and they run the risk of seeing their software rejected by the platform.

3.3.4 Two-sided markets' implications in terms of competition policy

Online platforms are subject to existing EU rules in areas such as competition, consumer protection, protection of personal data and single market freedoms. As the European Commission states, compliance with these rules by all including platforms is essential to ensure that all players can compete fairly (European Commission, 2016b). The first case of platform regulation in the EU dates back to the early 2000s, when Microsoft was accused of tying Windows media players with Windows to accelerate the growth of the platform. The case relied on general competition policy (anti-trust and merger legislation).

According to Evans & Schmalensee (2013), **most classical tools fail when it comes to the assessment to two-sided markets**. It is crucial to consider cross-sided network effects when regulating platforms but what is usually missing is the taking into account of interconnection of demand in two-sided markets. On 11/09/14, the ECJ recognised it essential in two-sided markets to consider both market sides.

In the literature on two-sided markets and platform theory, some authors, such as Evans (2003), Wright(2004) and Evans & Schmalensee (2005), have focused on competition policy (Filistrucchi, 2008). One implication that can be drawn from the growing body of literature on two-sided markets, initiated by Rochet and Tirole (2003, 2005), Caillaud and Jullien (2003) and Armstrong (2005), is that in two-sided industries "market definition and market power analyses that focus on a single side will lead to analytical errors", as pointed out by Evans (2003). Because

of demand interactions between the two sides of the market, the standard mark-up formula does not hold (Argentesi & Filistrucchi, 2007). 731

There are several market imperfections related to platforms abusing of their market power, which can be relevant for regulators.

- Platforms have the possibility of subsidising one of their market sides in order to foster their growth as well as to create a difficult competitive environment for their opponents. In practice, it is usually the case that one side of the market subsidises the other side, which might end up paying a price below marginal cost. Examples of platforms that do not charge one side are internet portals, commercial televisions, and free newspapers. According to Wright (2004), the cross-subsidisation across different markets for profit maximisation is often falsely regarded as predatory when prices on each market side are considered separately. One solution would be to judge the relative price of both sides instead of the single price set on each side in order to assess a platform's market power (David S. Evans & Schmalensee, 2013).
- Market entry can be difficult for a new player, for reasons already discussed before (see 2.2). The chicken or the egg dilemma makes it difficult to start a platform while the company's sustainability is facilitated by the 'winner-take-all' dynamic. Established platforms like YouTube for video sharing, iTunes for music download, or Amazon for e-books, benefit from such dynamic that make it unlikely for competitors to emerge. All this leads to high concentration tendencies, and self-enhancing dominance (Mansell, 2015). On the other hand, competitors have to really differentiate (e.g. music streaming to compete with music download) in order to thrive. Thus this dynamic may, favour innovation, at least to a certain extent.
- The specific strategies analysed above (platform envelopment, silo competition, vertical commoditisation, see sections 3.1 to 3.3).

3.4 Conclusion and recommendations

The economic theory of two-sided markets provides a fruitful approach to understand how most cultural and creative sectors function, in particular under the influence of digital technology. Relying on the existence of cross-sided network effects between different types of users, two-sided markets were mainly useful to analyse advertising, in particular from a business point of view. Two-sided markets have become more and more pervasive with digitisation. They are at the core of the functioning of online platforms, which are increasing their market power in most (if not all) creative value chains. Platforms were initially provided only by stakeholders new to the CCS. However, incumbents of these sectors are increasingly deploying their own platforms. The platformisation trend is modifying the strategic relationships between stakeholders in the Creative Value Chains.

After having described two sided-markets and online platforms, this paper has analysed their impact on competition. The mere existence of platforms leads to a high market concentration. Such markets follow a winner-take-all dynamic and new entrants face a 'chicken or the egg' dilemma. Moreover, online platforms can use specific strategies to increase their market power. Finally, cross-sided network effects can lead to cross-platform effects where the success of one platform contributes to the success of another one, and conversely. The market dominance tendency of online platforms obviously raises issues in terms of competition policy and the need to go beyond standard tools to assess market competition.

Deriving concrete competition policy implications is however far from trivial. Indeed, as Filistrucchi (2008) argues, "most policy contributions (relying on theories of two-sided markets) (...) have mainly criticised the application of standard competition policy results to two-sided markets rather than suggesting alternative ones and, from the practical point of view, they argued against existing practice rather than providing new methods to practitioners". More research is needed to elaborate exhaustive competition policy recommendations. The following recommendations intend to partially bridge this gap.

The ambiguity stems from the fact that it is not clear whether platforms should be specifically targeted by regulators. The increasing concentration tendencies might support such an argumentation. Yet, as argued above, innovation can be flourishing within platforms, in particular coming from third parties (developers, creators, etc.). As such, the potential harmfulness or desirability of platforms depends on the time frame and prevailing context in which they arise (Hoelck et al., 2016).

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⁷³¹ For example, the TV broadcasters' optimal pricing behaviour would depend on four different elasticities: the elasticity of viewers' demand with respect to price (e.g. TV subscription), the elasticity of viewers' demand with respect to the quantity of advertising, the elasticity of advertising demand with respect to advertising prices, and the elasticity of advertising demand with respect to the number of viewers (Argentesi & Filistrucchi, 2007).

Therefore, this paper suggests that **regulatory measures concerning online platforms should be set up on a sectoral basis**. This follows the Commission's own conclusions, notably following the aforementioned 2015 public consultation on online platforms and the proposal for an updated Audiovisual Media Services Directive.

First, the Commission states that future regulatory measures should only address **clearly identified problems relating to a specific type or activity of online platforms** in line with better regulation principles (European Commission, 2016b). It is however difficult for many platforms to place them in a sector-specific policy framework.⁷³²

Second, in its proposal for an updated Audiovisual Media Services Directive, the Commission concludes that **a 'one-size-fits-all' approach is not appropriate** for consumers to benefit from the opportunities and for the rules to meet the different challenges posed by the very diverse types of online platforms (European Commission, 2016d).⁷³³ However, there should be a set of common principles when dealing with online platforms.⁷³⁴

Third, however, **there is a need to reduce the fragmentation of the EU market**. The issue arguably is not specific to two-sided markets and platforms. However online platforms cannot fully benefit from economies of scale if they face 28 different sets of rules for online platforms in a single market. Differing national or even local rules for online platforms create uncertainty for economic operators, limit the availability of digital services, and generate confusion for users and businesses (European Commission, 2016b). This market fragmentation owing to differing national or local rules also constitutes an obstacle to the sustainable development and scaling-up of online platforms (both for established market players as well as for new entrants).

The audiovisual sector (which overlaps in the present study delineation with two sectors: film and broadcasting) is the one where most regulatory measures are envisaged, notably at the EU level.⁷³⁵ In particular, the Commission proposes a stronger role for audiovisual regulators: the updated Audio-Visual Media Services Directive should ensure that regulatory authorities are truly independent from governments and industry, and can play their role best to ensure that audiovisual media act in the interest of viewers (European Commission, 2016d).

This paper also showed that **two-sided markets are of interest for CCS beyond the audiovisual sector**. Firstly, this theory provides the best economic approach to understand strategies followed by media as soon as advertising is involved. Secondly, online platforms play an increasing important role in most if not all Creative Value Chains. It is therefore important to understand how they function and the issues they may raise.

(iv) a level playing field for comparable digital services;

- (vi) transparency and fairness for maintaining user trust and safeguarding innovation;
- (vii) open and non- discriminatory markets in a data-driven economy.

⁷³² During the« The Platform is the Message » conference (http://colloque2016.csa.be/pages/257), Madeleine de Cock Buning (Commissariaat voor de Media/ERGA) in a related way highlighted the difficulty to define rules for platforms because of their activities in several functions of the Value Chain, obviously for distribution, but also production, etc.

⁷³³ During the The Platform is the Message » conference (http://colloque2016.csa.be/pages/257), Madeleine de Cock Buning (Commissariaat voor de Media/ERGA) also stated that it was not possible to envisage a one-size-fits-all solution.

⁷³⁴ The European Commission (2016b) suggests the following:

⁽v) responsible behaviour of online platforms to protect core values;

⁷³⁵ During the« The Platform is the Message » conference (http://colloque2016.csa.be/pages/257), Bernardo Herman (CSA in Belgium) and Thomas Langheinrich (media broadcasting authority of Baden Württemberg in Germany and DLM, the Director's Conference of the German Regulatory Authorities for Broadcasting) similarly called for specific rules at the EU level for audiovisual platforms.

4/ Digitisation and new opportunities for creators

4.1 Introduction

Over the last few years, the cultural and creative sectors (CCS) have received increasing attention due to the recognised contribution of culture-based creativity to knowledge-based economy, innovation, employment and economic growth (KEA, 2009).

The *creator* is at the heart of the creative process and without his/her imagination and talent the CCS would simply not exist. The definition of what constitutes a creator is elusive and it has expanded with time; today, next to traditional figures such as artisans, painters and musicians we count digital artists, video-makers, game developers, and 3D specialists. The creative economy is closely linked to the digital economy and many creative occupations are connected with digital technology (Tether and Benaim, 2016). What creators have in common is the ability to think laterally, to create new forms of expression and challenge conventional solutions and visions (KEA, 2009). As underlined in the sectoral value chain mappings, the importance of creators in the creative value chains has not changed with the digital shift (yet). The cultural content, as form of creative expressions, is a key asset of the Internet economy and new market players highly benefit from its impact in terms of value creation and revenues (Roland Berger, 2015).

The role of content - and who produces and owns it - is still at the centre of determining how the CCS will evolve in the future (Liberty Global, 2015). What has changed is the redistribution of the value generated by creators all along the value chains. The digitisation process changed the way creators work, train, trade, collaborate (Deresiewicz, 2015) and they have been significantly challenged by new players and business models. At the same time, technological innovations also provide new opportunities to nurture the creative process and avoid possible market and revenue imbalances. This paper aims at investigating further which new opportunities are available to creators and how these are tapped into, taking into account the different characteristics of the sectoral value chains. The paper will also focus on the emerging paradigm of the creative entrepreneur as a creator of economic value. The main trends driving these changes have been considered in the background analysis taking into account the recent literature: (1) economic and market trends, particularly regarding new market players and business models (2) technological trends such as the future improvement of ICT infrastructures and Future Internet (3) external factors such as the decreasing of public funding available for creators and globalisation.

Background analysis

The digital revolution is a non-reversible phenomenon and it had a great impact on European companies in every sector. The EU's Internet economy generates some EUR 700 billion a year, or 5%, to GDP, and the high-tech sector employed near 8.5 million people in 2013, almost 4% of total employment (BCG, 2015). The CCS makes no exception and the digitisation process had a significant impact on the CCS market ecosystem, even if it has not dramatically reconfigured the creative value chain's overarching structure yet.736 One of the main consequences of digitisation is the entry of new players from the ICT sectors in the CCS market. These new entrants provide not only communication infrastructures and networks, hardware/software for computers and portable devices, but also new services such as the digital distribution of physical goods (e.g. e-commerce and online retail) or digital content (e.g. VOD, downloading and streaming), as well as new dissemination/marketing channels (e.g. social media).

These changes have increased the competition in the CCS market especially on the dissemination/trade segment of the value chains, and have forced traditional players to redefine their roles after years of market consolidation. The "balance of power" has shifted from the production side toward the distribution side (from upstream to downstream), mainly in the media⁷³⁷, music business and audiovisual sectors (Simon, 2012). Producers or "gatekeepers" also lost part of their bargaining power, even if big high-tech companies seem not to be interested in directly taking over the creation and production of content - at least till now. 738 The new market players - with new exploitation rights and business models - augmented the *complexity* of the value chains (for example in terms of IPR licensing systems and contractual arrangements between creators/right holders, publishers/producers and intermediaries, including collective management organisations). This process worsened some market imperfections (i.e. lack of transparency and information asymmetry) and questioned the redistribution of

⁷³⁶ Source: sectoral value chain reports

⁷³⁷ The media sector is concerned with the production and distribution of information on a one-to-many basis, such as broadcasting and publishing. European Commission, DG Competition (2002) "Market Definition in the Media Sector - Economic Issues"

Some attempts to be directly involved in the content creation sector have been done by Netflix: https://techcrunch.com/2015/07/07/netflix-moves-into-original-feature-films-starting-this-october/

value across the value chains (i.e. higher transaction costs and licensing fees), negatively affecting the position of creators. Market changes are also associated with a shift in consumers' behaviour towards new ways of consuming cultural products. An increasing number of platforms and content aggregators are offering cultural content via *business models of free* mainly to reach a broader audience (Anderson, 2011) benefiting from the advertising profits generated by the high traffic. This system challenges other models based on pay-per-use and questions the consumers' *willingness to pay* to consume cultural content. The rapid development of platforms and the possibility to access more easily goods and services has fostered the emergence of new business models and the development of the **sharing economy** (VVA, 2016). **New forms of consumption based on** *access* **rather than** *ownership* **increase the use of streaming-based services⁷³⁹ that increasingly replace both sales and broadcast, especially in the music business. To confirm this trend, Amazon has recently announced the launch a streaming service platform following negotiation with music labels. The Streaming is a good opportunity also for independent labels, as the usage of indie repertoire on streaming services is increasing. The However, this shift is not always reflected in the treatment of rights when it comes to creators' remuneration (Adami report, 2015).**

In some creative value chains, the *oligopsony* market structure further weakens the bargaining powers of creators; with control over distribution, majors could use their financial dominating position to maintain control over which creators would sign their contracts, acting as "gatekeepers" over their creative possibilities (Dahl, 2009). Following the first wave of the digital revolution, the restructuration of the traditional players led to a strong market concentration trend (Simon, 2012), especially in IPR-intense sectors such as music business and audiovisual. In the music business, the exclusive use of IPR gives majors a competitive advantage deriving from the revenues of their large catalogues (Bernardo and Martins, 2013). With control over production and distribution, vertically integrated companies can benefit from economy of scale and scope, commit significant resources to production and marketing, reduce and/or spread risks over several products, and reinvest profits in new projects (European Commission, 2014). A tendency to market concentration is also present in the visual arts (especially for larger galleries)⁷⁴² and performing arts sectors due to some structural entry barriers in the production market.⁷⁴³ At the same time, new technological tools for self-production and new dissemination channels based on social networks and community resources can potentially provide creators with access to essential resources to bypass traditional intermediaries and take control of their business: financing, collaboration, management, marketing, distribution, and direct communication with fans (Bernardo and Martins, 2013). The disintermediation process may constitute a viable alternative for creators to avoid possible market and revenue imbalances and ensure fairer remuneration, especially for "niche" creators who had little bargaining power in the brick-andmortar world (PwC, 2015).

This process can be supported by future technological developments and the increasing presence of **new digital devices.** It is important to recall that digitisation is an evolving process and great changes are expected to come in the next four-five years (PWC, 2015). First, the presence of the Internet will be even more pervasive considering the improvement of current ICT infrastructures, both broadband and wireless (VVA, 2016) and the advent of the Internet of Things (IoT), supported by faster processing computers, big data, and cloud computing. The increasing penetration of the Internet at global and local level, coupled with the availability of more affordable devices (PC, tablets, mobiles) will increase the number of connected users, also in developing countries. Furthermore, the upcoming new-generation wireless technology (5G)⁷⁴⁴ and the multiplication of devices will increase the connectivity via mobile. The IoT will multiply the "screens" (wearables, cars' windscreen, etc.), pushing further the technological convergence. According to a recent study, CISCO predicts there will be 50 billion connected devices by 2020, which represent 6.58 per person on the planet (CISCO, 2011). These two trends should be considered by creators because they will likely affect consumers' behaviour (Martel, 2015). First, the increasing penetration of the Internet will likely further increase the consumption of cultural goods on digital formats instead of physical products. The higher connection speed will increase the capacity for download and streaming, and the improvement of cloud computing will allow for a higher digital storage capacity of video, film, music, pictures in computers and portable devices. This trend can facilitate creators to reach new markets and audience. Semantics and data mining, coupled with Big Data analytics and algorithms, could improve the prediction of users' behaviour and preferences to allow creators to produce more customised products and services (VVA,

⁷³⁹ Interview

⁷⁴⁰ Source: https://www.ft.com/content/bc735108-6bc8-11e6-ae5b-a7cc5dd5a28c

⁷⁴¹ Source: http://www.merlinnetwork.org/news/post/new-data-shows-independent-music-is-helping-drive-streaming-market

⁷⁴² Source: Visual arts sectoral value chain report

⁷⁴³ Source: Performing arts sectoral value chain report

⁷⁴⁴ Source: 5G Manifesto for timely deployment of 5G in Europe, available at http://ec.europa.eu/newsroom/dae/document.cfm?action=display&doc_id=16579

2016). Some publishers and broadcasters are already harvesting various forms of data to construct detailed consumer profiles and use them to create and deliver personalised content across multiple screens. T45

Second, the consumption pattern is shifting from the fixed screens of home entertainment toward mobiles (Martel, 2015). Portable devices will be the principal way to access to cultural content, making the content available anytime, anywhere, at any devices (ATAWAD). This could improve the app-based distribution of content, already widely used in multimedia sector. Furthermore, this pattern will further influence the format of content: for instance, video and text should be shorter to allow for consumption in a shorter time (while going to work for example), and more interactive. This shift is already ongoing and it might explain the success of TV series composed of several short episodes. Third, these trends will further favour the active participation of users in the creative process (co-creation) and the creation and sharing of their own content (user generated content) via social media and networks. The digitisation has not only fostered creators' communities but it has fully enabled

collaborative creation processes (KEA, 2014), and this trend is likely to continue.

Another aspect to consider is that **innovative technological tools** (such as LED technologies for holograms and facial recognition; sensors) **allow for new forms of experimentation**, which are already taking place especially in visual and performing arts, audiovisual and multimedia. Creators can create **new formats of content to better answer to the users' expectations** and create new immersive experiences, such as 3D content, virtual reality, augmented reality and transmedia content, based on social media, portable devices and users. An increasing number of artists/creators have an ICT background, and new "hybrid" professional figures have recently emerged such as transmedia storytellers and virtual reality specialists. The availability of new technological tools will increasingly *support* creators in the production process, such as 3D printing (PwC, 2014), software for modelling, etc. For example, 3D software house Digital Forming provides software that enables companies to share product design with their customers who can adjust shape, surface design, colour and material according to their needs (CSC, 2012). *Automation* will likely to increase, but the CCS seems more resistant than other sectors (Bakhshi, 2015).

Following these changes, it is possible to expect an increasing number of new professionals employed in the CCS (such as legal experts, software engineers and ICT specialists) at the expense of more traditional jobs involving the physical creation and distribution of content.

In this context, it is worth reminding that the **public funding is decreasing**, mainly due to the 2008 financial crisis and the subsequent recovery period. The financial gap in CCIs over a 7-years period is estimated to range from EUR 8 billion to EUR 13.4 billion (VVA, 2016). This situation raises further challenges in access to finance, a well-known critical issue for creators. Financial institutions usually have limited understanding of the characteristics of CCS business models and they have some difficulties in assessing their IP assets adequately (EC, 2015).

The phenomenon of **globalisation** affected the distribution and consumption of creative content, as well as its production. In the 60', Marshall Mc Luan was amongst the first to predict a shift of taste from fragmentation and individualism to a "collective identity" and mass-production. This phenomenon has been exacerbated by the liberalisation and privatisation of media companies in the 80s and the Internet revolution, new international trade agreements and international standards and regulatory frameworks. In this context, US companies benefit from competitive advantages such as a common language, a single market, powerful distribution infrastructures that allow for high economy of scale and scope.

4.2 Opportunities for creators

In modern times, artists need to become more independent, "commercially" oriented and closer to society. The digital revolution offers creators new opportunities to have a more autonomous and self-sufficient role at different levels of the creative value chain (HKU, 2010), address possible market imperfections and create greater economic value. New technologies and dissemination channels offer the possibility to lower the entry barriers to the market and be independent from traditional "gatekeepers", facilitate the access to finance, allow for new forms of co-creation and the set-up of collaborative networks. This process of "disintermediation" brings creators closer to their customers, reinforcing the personal engagement and

⁷⁴⁵ Source: http://www.emarketer.com/Article/Internet-of-Things-Changing-How-Media-Entertainment-Companies-Operate/1013545

⁷⁴⁶ Source: New European Media (NEM) Initiative vision and SRIA position papers available at http://nem-initiative.org/documents/position-papers/

⁷⁴⁷ Source: Vision document of the FP7 funded-project EuroTransmedia

⁷⁴⁸ The disintermediation process occurs when intermediaries are removed from the supply chain, also known as "cutting out the middleman". Chircu, Alina M.; Robert J. Kauffman (1999). "Strategies for Internet Middlemen in the Intermediation/Disintermediation/Reintermediation Cycle". Electronic Markets. 9 (1-2).

avoiding transactional costs and value loss. Disintermediation is also possible in the "offline" world, but the ubiquitous nature of digital channels facilitates the distribution of goods as well as direct interactions between market players. This phenomenon highlights an important form of innovation in the CCS (Tether and Benaim, 2016), which contributes to the new paradigm of the "**creative entrepreneur**". The concept of creative entrepreneurship gained consent in the last decade and drew the attention of academia and policy makers (Tether and Benaim, 2016).

In the production stage, **new affordable digital technologies** and the near zero marginal costs of digital reproduction **allow many creators to self-produce their works** and be completely independent in their creative process. In the music business, for example, artists can self-record their own music tracks in home studios and make arrangements using specific computer-based software (i.e. Digital Audio Workstations). Artists can also self-produce their music videos thanks to new devices (e.g. cameras integrated on mobiles). Before the digital revolution, this process would have required both financial investment in technical equipment and more specialised professionals (Bernardo and Martins, 2013). In visual arts and crafts, 3D printing allows for the creation of high-quality physical products, prototypes and packaging. Until now, this was not possible without very expensive machinery and investments in tooling and sophisticated CAD/CAM software, and most people lacked the skills and financial resources to design, let alone manufacture or distribute, a product (CSC, 2012). Furthermore, the Internet allows creators to find and communicate more easily with suppliers directly from their studios.

New digital dissemination channels allow creators to sell and promote their works online, overcoming the barriers linked to physical distribution which requires heavy financial investments (e.g. shipping or storage). The increasing penetration of the Internet at global and local level and globalisation trend could allow creators to find new markets, reach new audience and offer a broader range of cultural products and services (PwC, 2015). Many European companies and creators had taken advantage of this possibility to successfully sell their products and services abroad, especially in the video games/multimedia and book publishing industry (VVA, 2016). Furthermore, this trend allows for cross-border cooperation and collaborative projects amongst creators. This is particularly interesting for creators of "niche" products that are usually in low demand in physical stores, the so-called "long-tail" (Anderson, 2006). The increasing storage capacity of computers and devices (e.g. clouds) and the long-lived nature of digital content allow for an infinite variety of cultural products and service to be available online. This variety can satisfy an increasing number of consumers, who can be more aware of "niche" products and benefit from a higher choice, and foster cultural diversity.

Authors can self-promote their work on their website or on authors' collaborative website (KEA, 2014). The set-up and maintenance of a website or a blog (e.g. WordPress) is a more affordable investment. Thanks to user-friendly content-management-systems (CRM), creators can easily update the content and be less dependent on IT companies. A famous example is the music group Radiohead. In 2007, the band released its latest album as a free download on its own website before it was released as a traditional paying model (KEA, 2014). Self-publishing and self-promotion are often facilitated by large platforms and content aggregators in order to reach a broader audience. This phenomenon is known as "re-intermediation" (Chircu and Kauffman, 1999), as another intermediary (e.g. the platform) is introduced between the creators and the consumer after disintermediation. Recently, the rap music star Frank Ocean published his latest album "Blonde" directly on the streaming platform Apple Music, leaving Universal Music and its label Def Jam. 750 Using this channel, Frank Ocean will keep 70% of the revenues generated by the album produced by his own label Boys Don't Cry, instead of the usual 14%. In book publishing, Amazon offers Kindle Direct Publishing, a self-publishing tool that allows creators to publish an e-book on Kindle stores worldwide in a few days. Creators are in control of their rights, can set the price and are offered up to 70% of royalties, 751 Using this channel, John Locke, a self-published writer, managed to reach 1 million copies sold (at 0.99 euro) in less than five months.⁷⁵² In the audio-visual sector, it is worth mentioning the platform Pantaflix, 753 founded by producer Dan Maaq. Pantaflix allows film makers and right holders to upload a video on the platform for free, select the countries they want the work to be available in while keeping the total control over their rights and track their revenue streams. Pantaflix gets 25% of the revenues while 75% is left to the rights owners. In the multimedia sector, the increasing popularity of independent games has allowed their distribution on

⁷⁴⁹ The OECD/EUROSTAT Entrepreneurship Indicator Project describes six themes as determinants affecting entrepreneurial performance: regulatory framework, market conditions, access to finance, technology and R&D, entrepreneurial capabilities and entrepreneurial culture. OECD (2008), "A Framework for Addressing and Measuring Entrepreneurship". Available at http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?doclanguage=en&cote=std/doc(2008)2

⁷⁵⁰ Source: http://www.lesechos.fr/tech-medias/medias/0211236794402-musique-les-sites-de-streaming-en-concurrence-frontale-avec-les-majors-2023509.php?8xxuk6slc5cw335m.99#

⁷⁵¹ Source: https://kdp.amazon.com/

⁷⁵² Source: http://www.dailymail.co.uk/news/article-2006629/John-Locke-sells-1-million-Kindle-eBooks.html

⁷⁵³ Source: www.pantaflix.com

popular gaming platforms such as the PlayStation Network, Nintendo eShop, and Xbox Live, as well as app shops for mobile devices. Powerful channels for video artists or musicians are YouTube, Vimeo and MySpace. Another interesting platform to showcase and discover creative work is *Behance*. With over 75 million page views per month, the network offers creators a good window to showcase their work to potential clients, as well as to connect with other creatives. Another example is *DeviantART*, one of the largest online communities of artists and art enthusiasts.

This development has opened up **opportunities for creators who have been dropped by their publishers (or have not found one) to seek out alternative channels.** In the music industry for instance, a distinct split existed between featured artists with access to large-scale promotional capabilities and independent artists, who were largely excluded from commercial marketing (PwC, 2015). Now, **both signed and unsigned artists have the possibility to access global distribution services.** Furthermore, digital platforms offer new ways to discover new cultural products using algorithm-based recommendation engines built into streaming and other distribution platforms (PwC, 2015). In the music sector, consumers have the choice of buying single tracks rather than whole albums, significantly lowering the barrier to music discovery.⁷⁵⁴

Creators can also make use of social media to increase the visibility of their brand and work and reach out to a large audience. High popularity increases the possibility to attract the attention of the press or specialised magazines (still very important in some sectors), find a publisher/editor, attract sponsors, and launch successful crowdfunding campaigns and ultimately increase their revenues. Social media can also offer new *professional opportunities* from trusted contacts; new possibilities of *collaboration* with other artists or freelancers for mutual projects (LinkedIn groups have proven to be particularly useful)⁷⁵⁵, and *new ideas or inspiration* for future projects. The increasing number of people participating in the arts through social media is indicative of the potential that digital media can offer in terms of new market opportunities (HKU, 2010). LinkedIn, Twitter or Google+ are widely used by professionals and can be used to promote the work to corporate clients, while Facebook targets a broader variety of users. The photo/portfolio-sharing platforms Instagram, Tumblr and Flickr are particularly used by emerging visual artists in the hope to increase their chances to be discovered and contacted directly by collectors, bypassing art galleries. Photos can be uploaded under an open content licence (KEA, 2014). **User-friendly tools for data analytics** (e.g. Google analytics) can also provide creators with valuable information to better segment their audience and plan targeted marketing campaigns. **Creators can also benefit from specialised websites to self-design and self-produce their promotional and press materials**⁷⁵⁷ such as the company logo, catalogues, portfolios, business cards, brochures, flyers, and even small gadgets.

Another competitive advantage favoured by social media and other interactive channels is the possibility to **engage with the audience and understand its expectations**. A well-known example is Artic Monkeys: they used MySpace to sell their first single track and engage with users (on top of touring), and managed to reach top charts with independent sales and marketing (Bernardo and Martins, 2013). **The concept of user engagement goes beyond the traditional marketing techniques** and can be very useful for creators to reach a competitive advantage:

- The interaction with the target audience is essential to monitor trends or initial reactions by early consumers of their own products (HKU, 2010), giving the creators the opportunity to learn more about consumer preferences and tailor their products to the consumer's needs. This process can be facilitated by semantics and data mining, Big Data analytics and algorithms (VVA, 2016).
- An active role of the public could support the *circulation* of the product/service. There is a fundamental difference between the "distribution" and "circulation" of content on the Internet (Jenkins, 2006). *Distribution* is related to a "top-down" system used in the media sector, while *circulation* is based on the "bottom-up" diffusion of content by people themselves through social networks. Circulation can easily make a content "viral" greatly expands its economic and cultural worth. In fact, the economic value of a cultural content highly relies on the number of people that consume it.
- A closer relation with the audience can create a *community experience* around the products/service.

Users are not only active in the distribution of content but also in the creation process (co-creation and UGC). Florida (2002) notes that individuals increasingly value creativity, as a route to self-expression and job satisfaction. The empowered role of the audience is linked to the concepts of *participatory culture* and *collective intelligence*, which refers to the fact that consumption has become a *collective process* which generates new *knowledge*, shared through the Internet via collaborative platform (Jenkins, 2006). Wikipedia is the best example of such collaborative projects (KEA, 2014). The assumption is that the amount of information available

⁷⁵⁴ Source: music sectoral value chain report

⁷⁵⁵ Interview

⁷⁵⁶ Source http://lateralaction.com/articles/social-networks-for-creatives/

⁷⁵⁷ Interview

on the Internet cannot be assessed by individuals but by groups in a collaborative manner. This cultural shift led to a **new, empowered role of consumers** as a "collective entity" which can also contribute to innovation. The co-creation process is not specific to the Internet and it is already used by CCS for example in performing arts, but it has been amplified thanks to the use of new technologies such as social media or blogging. **Open sources licences** make such a creative process easier as they authorise anyone to use and modify works they relate to for the creation of new ones (KEA, 2014). The **open innovation process across the creative economy** further increases the possibility for creators and users to share content and ideas (VVA, 2016). **An interesting example is** *crowdsourcing*, the process of obtaining ideas or content by soliciting contributions from a large group of people, especially an online community. In this respect, producers and users collide in the hybrid form of the "prosumer" (Jenkins, 2006). A good example is the online platform "Wattpad", a self-publishing platform and a storytelling app, based in Toronto, Canada that counts more than 45 million readers worldwide. The concept of the platform is to publish serialised web fictions written by the users, who are readers and writers at the same time. Wattpad eliminates any remaining distance between creator and consumer. The readers can also support the writer in shaping the story, creating a social experience around the novels. Other platforms for co-creation used by micro-business and individuals are Apple's Apple Store (for mobile apps), Valve's Steam (for video games).

User engagement solutions can also be used as an alternative source to access finance. Creators increasingly rely on self-financing and public and private grants have a residual role, while other sources are secondary (HKU, 2010). According to a recent study⁷⁵⁹, 94% of the creative entrepreneurs who answered the survey mentioned that they used their own resources to found their business. The initial capital to start a business can be modest. Furthermore, in the disintermediation process creators cannot rely on advance payments from intermediaries (such as labels or producers). Crowdfunding is a new financing mechanism based on user engagement. Coupled with other types of traditional creative financing models, it is becoming increasingly popular amongst creators. Crowdfunding consists in funding a project (such as a new work of art, an album recording, a concert tours) or a venture by collecting small amount of funding directly from multiple investors using social media and internet channels (EC, 2015). Crowdfunding has shown remarkable growth in the past few years: total funds raised in 2011 reached more than EUR 1.1 billion worldwide and, as projected, almost doubled in 2012, to about EUR 2 billion (PwC, 2015 and Nesta, 2015). It has become very popular in CCS as it suits the need of the sector in terms of flexibility and community engagement (EC, 2014). Crowdfunding can also contribute to foster entrepreneurship (EC, 2014) not only in terms of access to finance but also as an additional marketing tool to test the viability of the product or project. It is possible to identify various different types of crowdfunding mechanisms, but the most common used by creators are the ones with non-financial returns (crowd sponsoring):

- Reward-based crowdfunding: people donate with the expectation of a non-financial reward, such as goods or services, when the project is completed;
- Donation-based crowdfunding: people donate without anything in return.

P2P lending could also be useful for scaling up companies. Crowdfunding is particularly interesting for "niche" creators, because they have more difficulties in accessing funding compared to famous artists with a proven track record. However, even mainstream artists use crowdfunding. A famous example of an artist who successfully used crowdfunding is Amanda Palmer, who managed to raise more than USD 1.2 million using the US platform Kickstarter in nearly thirty days. Go Other examples are visual artist and performer Marina Abramovich or the Veronica Mars Movie Project. Go Other successful examples of European crowdfunding platforms in the CCS are KissKissBankBank (France), Voordekunst (the Netherlands), Nordstarter (Germany) or the new Giffoni Hub (Italy). Crowdfunding is beneficial also to users, as it improves community engagement and sense of involvement in the financed project. Contributors can also be actively involved in the project life-cycle expressing their own opinions or ideas. Crowdfunding is also linked to new forms of **patronage**; a good example is Culture Time, Sec a website that allows users to launch a cultural project to be funded by patrons via crowdfunding. According to some experts, Sec a website that allows users to launch a cultural project to be funded by patrons via crowdfunding. According to some experts, Sec and Sec a

Mapping the creative value chains – a study on the economy of culture in the digital age

⁷⁵⁸ Source: http://www.nytimes.com/2014/03/24/technology/web-fiction-serialized-and-social.html

⁷⁵⁹ Source: FP7 funded CRE8TV.EU project on 'Unveiling Creativity for Innovation in Europe' Policy Seminar, 20th April 2016, Brussels

⁷⁶⁰ Source: https://www.theguardian.com/media/2012/sep/26/amanda-palmer-future-of-music

⁷⁶¹ Source: https://www.thequardian.com/technology/2014/apr/17/kickstarter-crowdfunding-technology-film-games

⁷⁶² Source: <u>www.culture-time.com</u>

⁷⁶³ Interview

the impact of crowdfunding⁷⁶⁴. Crowdfunding creates opportunities as a financing tool in the broader financing mix of cultural and creative actors, while it is difficult to imagine that crowdfunding can substitute the financial capacity of a producer for a high-budget film or performance. **Other crowd-based strategies are micro-donation platforms** (such as Flattr), or **the use of a donation button in the artist's website or blog** (Bernardo and Martins, 2013). Widgets can be provided by PayPal or Bitcoin – while not necessarily so innovative per se, *access* to such tools has considerably widened through the digital shift.

New platforms can also **support creators in business and project management** (such as Trello, Asana, Team Camp) and to **follow their revenue streams and IPR management**.

4.3 Challenges for creators

There are, however, not only opportunities for creators through digitisation, but also challenges and drawbacks. Nowadays, the CCS labour market is often characterised by irregular forms of employment, such as part-time or temporary (VVA, 2016). This shift has been exacerbated with globalisation and the evolution of the modern economy. Some forms of patronage/sponsorship still exist (EC, 2015), but access to finance is critical and not all the creators manage to ensure a regular stream of revenues and make a living out of their creativity (Tether and Benaim, 2016).

New forms of work and precarity are exacerbated by diminishing revenues in today's "sharing" world of for-free creative content. Claims by artists for a basic salary are commonly heard in this context; there are also other organised forms of trying help artists make a living, such as through SMART⁷⁶⁵ in Belgium, who are also negotiating with collaborative economy crowd-working platforms for fairer contracts. New forms of work and the challenges for creators is therefore a topic that is closely linked with creative value chains and digitisation.⁷⁶⁶

4.4 Link with market imperfections

Disintermediation seems to be useful to address possible market imperfections discussed before.

Lower entry barriers for market access

The disintermediation process further lowers the entry barriers to access to the CCS market, especially in some sectors (music, multimedia, book publishing) and gives creators the possibility of a global reach. Disintermediation is also beneficial for consumers, who can have a larger choice of products at lower cost.

Producers and "gatekeepers" are directly affected by this trend, as creators depend less on traditional intermediaries to access to the market. However, it should be noted that **it is not always easy to bypass intermediaries**, especially in some sectors. In visual arts for instance, the personal contact with "gatekeepers" (art galleries) is still very important⁷⁶⁷ and it would be highly challenging for creators to bypass them and achieve recognition in the international market. In performing arts, film and broadcasting, the creation and production processes are still very complex, require heavy financial investments and the collaboration of different professionals. The current business models make it difficult to bypass the figures of the publisher or the producer, except for very small productions. Furthermore, the intrinsic "experience" nature of some cultural goods (such as theatre performance) prevents users from relying only on the digital format.

If disintermediation further lower entry barriers, **barriers to success and growth are still substantial** (Tether and Benaim, 2016). The **reputation effect** is particularly relevant here. The CCS market is a **"winner-takes-it-all"** market and this is the main reason why not all creators are able to make a living, despite the low entry barriers. The public is still attracted by "hits" pushed by publishers that can rely on large networks and high budget for

Relevant examples include Goteo in the basque country or Spacehive in London. More examples can be found here: https://www.crowdfunding4culture.eu/case-studies and https://www.crowdfunding4culture.eu/match-funding-when-public-institutions-meet-crowdfunding4culture.eu/case-studies

http://smartbe.be/fr/ SMART is also present in other EU Member States. For more information, also see their recent booklet: http://smartbe.be/fr/news/sortie-de-louvrage-refaire-le-monde-du-travail/

The string reading on these topics are 2 recent booklets: http://creativehubs.eu/wp-content/uploads/2016/10/How Work Works-Publication-PDF Preview.pdf and http://creativehubs.eu/wp-content/uploads/2017/01/syn-acting-together-publication-web.pdf

⁷⁶⁷ Source: visual art sectoral value chain analysis

⁷⁶⁸ Source: related sectoral value chain analyses

promotion and marketing purposes.⁷⁶⁹ Creators must have a high reputation in order to increase their bargaining power and negotiate better deals, attract sponsors and investors. Well-known artists can self-manage their own portfolio/repertoire more easily and conclude advertising deals with famous brands, which foster their international reach. The creation of a solid base of (international) contacts requires solid marketing and promotional skills, such as branding and communication via social media. Creative entrepreneurs often lack the skills to promote their expertise/products/services to their customers and engage with them (HKU, 2010). This implies that there might be an overwhelming quantity of artists on the Internet without any chance of being "discovered", which in turn increases the need for additional marketing/intermediaries ("re-intermediation" process). This aspect questions the real benefit of disintermediation for "niche" products and the contribution to cultural diversity. Furthermore, the abundance of micro-firms and freelancers on one side and few incumbents on the other side put the micro-firms and freelancers in an unfavourable position, as they cannot benefit from economy of scale and scope. To increase their bargaining power, it is increasingly common for artists and creators to group in associations or networks in order to have access to a wider pool of resources (such as sharing the costs of working spaces, accounting services or other logistic support via creative hubs, clusters or co-working spaces) and facilitate the dissemination and marketing of their works. Furthermore, they can benefit from larger catalogues which is very important especially in the music industry. The rise of artist advocacy groups in multiple territories (such as the International Artist Organisation - IAO) is also beneficial to protect their IP rights and other rights. Creative firms are usually embedded in social and digital networks that they expand by collaborating with partners and freelancers (Tether and Benaim, 2016). Furthermore, collaboration and networks allow for a greater exchange of information which is beneficial for the innovation process (Tether and Benaim, 2016). The term *value creating ecologies* embraces the idea of a "constellation" of firms working together creating value through clusters and networks in a dynamic way, including the consumer as co-creator of value (Hearn et al., 2007).

Another obstacle to the effectiveness of low entry barriers is the **European market fragmentation**. The lack of comprehensive legislative harmonisation among EU member states regarding critical issues such as digital taxation, and consumer protection (e.g. regarding data protection) makes it **difficult for creators to expand their business abroad or establish co-productions**, especially in globalised sectors such as multimedia.⁷⁷⁰ Furthermore, many countries encourage the investments in local market via tax credit, private copy, and market quota. **Linguistic barriers** should also be taken into account here. This aspect still prevents the consumption of cultural content across borders, also because many creators and digital service providers do not have an editorial team for smaller markets. In the music sector, the Anglo-American repertoire has a competitive advantage due to the use of the international language (English).

Furthermore, the **lack of information on market opportunities** is another problem, especially in accessing the market across regions and cross-border (HKU, 2010). Several creative entrepreneurs also prefer to retain control and ownership of their firms, they appear to resist to their companies' expansion, they produce content on a project basis, thus limiting distribution and they work within a limited client base (Tether and Benaim, 2016).

Decrease of lack of transparency and information asymmetry

Direct sale and self-promotion of their works allow creators to reduce transaction costs and licensing fees. They are more in control of their business, intellectual rights and royalties' distribution.

A question could be the effective efficiency of disintermediation in relation to "re-intermediation". Traditional "gatekeepers" might be replaced by new ones (platforms and content aggregators) which still invest little in content creation (Pessach, G, 2013).

To be effective in the market, however, creators need solid **business and entrepreneurial skills** or team up with good business managers who can provide the required expertise, ranging from basic business plan development skills, presentation (e.g. pitching ideas to sponsors and investors), to management and accounting skills. Traditionally, these supporting services were provided by intermediaries. In the music sector for instance, labels provide artist/repertoire managers, IPR lawyers, accountants, and promoters (Bernardo and Martins, 2013). **Creators often lack business competences and skills** (HKU, 2010), which can prevent them from running their business efficiently and independently. Even if some attempts to effectively blend entrepreneurship and the arts have been proposed (Roberts, 2015), business skills are not always developed in art school curricula (HKU, 2010). Internships and learning-by-doing as well as personal relationships/networks are the most relevant determinants to accumulate entrepreneurial and business skills in the CCS (HKU, 2010). The Internet offers several

⁷⁶⁹ Interview

⁷⁷⁰ Source: multimedia sectoral value chain report

resources for self-learning such as free downloadable manuals or MOOC to design a communication and marketing strategy and a business plan, widely used by creators.⁷⁷¹

Another aspect to consider is the **time required to manage the business**, which should not be underestimated. Customer services and direct interactions with fan/consumers are very time-consuming tasks, especially for microbusinesses. Some difficulties might also be related to the **tension between the artistic side** (creation-oriented) **and the business side** (commercially and growth oriented) of the creative entrepreneur's role (HKU, 2010), and finding an equilibrium might be a difficult task.

Access to finance

There are different possibilities available for CCIs at EU and Member States level to access finance and an EU Member States expert group has recently worked on this topic and produced a report⁷⁷² with best-practice examples and recommendations.

In addition, new forms of co-creation (such as crowdfunding⁷⁷³) provide new ways to access finance, which is a traditional critical issue for creators. However, setting up a financial campaign is not easy and requires strong **networking and user engagement skills**.

Financial skills are important to expand the business and there is often a difficulty on the creative entrepreneurs' side in terms of pitching their idea to potential funders as they tend to focus on the creative side of their project rather than giving emphasis on the business case (Tether and Benaim, 2016). The Financial Guarantee Facility of the Creative Europe programme⁷⁷⁴ is an interesting initiative in that respect, as it includes a capacity building component for creative SMEs as well as for financial intermediaries (banks), facilitating mutual understanding of the two sectors and potentially easing access to loans for the CCS.

4.5 Conclusions and policy recommendations

The digital revolution implies both challenges and new opportunities for creators to have a more autonomous and self-sufficient role at different levels of the creative value chain, address possible market imperfections and create greater economic value. New technologies and dissemination channels offer the possibility to lower the entry barriers to access the market and increase independence from traditional "gatekeepers". They also facilitate access to finance, and allow for new forms of co-creation and the set-up of collaborative networks. This process of "disintermediation" brings creators closer to their customers, reinforcing the personal engagement and avoiding transactional costs and value loss.

The disintermediation process does not offer opportunities only to creators who decide to become entrepreneurs, but also to others who prefer to focus only on their creative work. For instance, as underlined in the previous paragraph, 3D printing and software allow for faster prototyping and experimentation in the creation process. Furthermore, social and digital networks expand the possibility of collaborating with partners and freelancers and mutualize non-creative services such as accounting or legal expertise.

In order to be successful in the digital ecosystem, however, creators need to turn into *polymaths* (KEA, 2009) and master an increasing mix of abilities. Artists need to combine their talent and creative skills with business, technical and social skills. Training does not often cover these topics and creators have to rely on learning-by-doing mechanisms or outsourcing. Another obstacle is related to the limited access to finance and knowledge about opportunities in foreign markets.

Based on the above, the following recommendations are suggested for policy makers at European or Member States level:

Investments in media/digital literacy

Policy makers could foster the support for new programs/modules for the development of e-skills and media literacy adapted to the needs of creators and artists, following the recommendation of the study "E-skills for jobs in Europe: measuring Progress and moving ahead" (Empirica, 2014). As shown in the paper, creators need new skills and competences to make the most out of the digital shift, especially in terms of promotion and marketing skills. EU funding programmes that directly provide financial support for creators and SMEs to acquire this new skillset should be encouraged. Funding should also be available to develop and adapt digital applications that help to understand

⁷⁷¹ Interview

⁷⁷² http://bookshop.europa.eu/en/towards-more-efficient-financial-ecosystems-pbNC0416091/

⁷⁷³ https://www.crowdfunding4culture.eu/

⁷⁷⁴ https://ec.europa.eu/programmes/creative-europe/cross-sector/quarantee-facility_en

consumer behaviour, facilitate closer engagement with target audiences through social media, and test new business models.

Another important point would be strengthening life-long learning programmes to face a fast-changing technological environment, for example via the Erasmus programme.

Support for spill overs effects

The support for cross-fertilisation programs and projects combining ICT and the Arts should also be considered, as well as the cooperation amongst research centres and creators, especially in IT and ICT. Actions should be taken to increase interactions between arts and culture, science (exact sciences, social sciences and humanities). engineering, technology and business, for example enhancing the cross-sector collaboration in EU-funded projects or promoting inter-sectoral approaches between different areas of learning, for instance through offering joint programmes between cultural and technical sciences (see also the thematic paper on intertwining of the creative value chains for additional details on this).

As shown in several EU-funded projects (iMinds, 2013), cross-innovation (VDI/VDE Innovation and Technik GmbH, 2014) between the ICT and CCS could generate positive spill overs and contribute to nurture innovation and growth. This argument has also been supported in the Communication of the European Commission 'Promoting cultural and creative sectors for growth and jobs in the EU' (2012), which points out the importance of spill over effects of the CCIs (Tom Fleming Creative Consultancy, 2015), and this approach is also undertaken in the recent European Parliament resolution on a coherent EU policy for cultural and creative industries (13 December 2016)⁷⁷⁵.

Investments in entrepreneurial education and skills

The support for entrepreneurial culture should start already during formal education, via innovative curricula in arts education with a better integration of business, marketing and entrepreneurial courses, and more flexibility in combining different disciplines.

Another potential action is about supporting environments conducive to creative entrepreneurship, such as creative hubs, living labs, creative business incubators and co-working spaces and to enhance peer-learning and business opportunities. Such support could follow up on the example of the recent EU-funded initiative of a European Network of Creative Hubs and its different activities, such as the peer-to-peer exchange programme.⁷⁷⁶

Another aspect to consider is the underrepresentation of women⁷⁷⁷ as creative entrepreneurs. Specific measures should be taken in this regard.

Better access to finance

Access to finance is one of the key issues for many creative entrepreneurs, and public funding for the CCS is declining in many Member States. We suggest the following measures:

Support crowdfunding:

Facilitate investment on crowdfunding platforms by clarifying the legal framework applicable for lending, donating and investing across borders⁷⁷⁸ and communicating it clearly through relevant channels for CCS operators and for end-users⁷⁷⁹;

Implementation of fiscal incentives/tax shelters (also for reward-based and donation-based crowdfunding) and increased exemption limits to encourage entrepreneurial activities.

⁷⁷⁵http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+TA+P8-TA-2016-0486+0+DOC+XML+V0//EN

⁷⁷⁶ http://creativehubs.eu/news-p2p-round2/

⁷⁷⁷ Source: FP7 funded CRE8TV.EU project on 'Unveiling Creativity for Innovation in Europe' Policy Seminar, 20th April 2016, Brussels

⁷⁷⁸ Legal clarity - especially for equity-based crowdfunding - was identified as a potential issue in the consultation (and subsequent Communication) on Unleashing the potential of Crowdfunding in the European Union: http://eur-lex.europa.eu/legalcontent/EN/TXT/HTML/?uri=CELEX:52014DC0172&from=FR

⁷⁷⁹ DG FISMA is currently working on the topic, but clear and user-friendly guidelines disseminated through DG EAC's communication channels would have a greater impact for CCS operators : see pp. 6-7 here http://ec.europa.eu/finance/general-policy/docs/crowdfunding/160217-minutes-ecsf_en.pdf

- Promote joint initiatives between crowdfunding platforms, banks and business incubators. An interesting initiative is Creatis (*Résidence d'entrepreneurs culturels*)⁷⁸⁰ funded by ING and KissKissBankBank to create the first business incubator for CCIs in Belgium.
- Encourage public authorities (local, regional, national) to partner with crowdfunding platforms to support CCS through match-funding schemes for example.
- Promote a culture of crowdfunding in Europe and engage in awareness-raising activities, for example via EU-funded projects such as Crowdfunding4Culture;⁷⁸¹

Support public-private cooperation:

- Implementation of the Creative Europe Guarantee Facility and monitoring of its success in securing loans for the CCS, and assessment of the opportunity for an investment instrument. The structure of the cultural and creative sectors is quite diverse, and while there is certainly a demand for gap financing and loans (especially for the audiovisual sector), only a few equity-based vehicles exist for cultural and creative industries while they are instrumental in scaling up design, fashion or video games companies for example. Successful examples such as St'art in Wallonia (Belgium) or the VC Creative Industries fund in Berlin (reconducted for 2014-2020 with an earmarked budget of EUR 40 million)⁷⁸² could contribute to the design of such a programme;
- Support creators in expanding their business/participation at pitching events and B2B fairs. Such support is seldom available specifically for CCS and the list of fairs and events for which support is available often do not include CCS ones. Some regional or national trade associations do include more targeted support, such as Wallonia Brussels International which has dedicated agencies and services for the internationalisation of architecture, fashion, design, music, performing arts, dance, publishing and audiovisual companies⁷⁸³. In Netherlands, such activities are also supported via the Creative Industries Fund for internationalisation⁷⁸⁴.

Support for CCS SMEs for markets also outside of the EU

The European Commission should take initiatives to overcome the current cross-sectoral fragmentation (as well as sub-sectoral fragmentation within the CCS), by providing support to small businesses to also access markets outside of the EU and to support collaboration and networking amongst creative entrepreneurs. A good example is the EU funded project "Creative Tracks" which aims to connect existing networks of young entrepreneurs active in the cultural and creative sectors across the world.

Support transparency through the legal environment

The European Commission can promote initiatives to foster the development of a favourable legal environment for creators improving transparency of remuneration flows to ease negotiations and revenue tracking for creators and collecting societies. (see also the next chapter on remuneration of creators).

Ensure social protection of creators in an increasingly precarious working environment

In its Resolution of 13 December 2016, the European Parliament recalls that it is increasingly rare for cultural and creative artists to be in permanent employment and that they are, to an increasing extent, self-employed, alternating between self-employed and employed activity or engaged in part-time or irregular activity. Flexibility and mobility go hand-in-hand in the context of professional artistic activity, and that it is therefore important that the unpredictable and sometimes precarious nature of the artistic profession is offset by a guarantee of genuine social protection.⁷⁸⁶ Measures should be undertaken to help creators cope with these challenges.

⁷⁸⁰ Source: http://www.residencecreatis.fr/creatis-bruxelles/

⁷⁸¹ Source: www.crowdfunding4culture.eu

⁷⁸² http://www.berlin.de/projektzukunft/en/ict/article/vc-funds-100-million-euros-of-fresh-cash-for-ibb-venture-capital/

⁷⁸³ http://www.wbi.be/culture#.WFpWalPhDcs

⁷⁸⁴ http://stimuleringsfonds.nl/nl/internationalisering/

⁷⁸⁵ Source: www.creativetracks.org

⁷⁸⁶ http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+TA+P8-TA-2016-0486+0+DOC+PDF+V0//EN

5/ Remuneration of creation, transparency and rights management in the digital age

5.1 Introduction

Intellectual property (IP) plays a key role in modern economies due to the globalisation of markets, the development of the knowledge economy (OHIM/EPO, 2013) and the creative economy, based on intangible assets. Notably, the cultural and creative sector (CCS)⁷⁸⁷ relies highly on copyright, and related rights, to foster creativity and investments in creative content (EC, 2016a). Rights owners' contractual freedom, exclusivity, territoriality and enforcement are the four fundamental principles of copyright to encourage innovation and boost the competitiveness of the CCS in the global market (KEA, 2010). Even if copyright regulations differ from one country to another, the common ground is the property rule granting creators, producers and other right holders a temporary exploitation monopoly which enables them to monetise their artistic and financial investments in the creative process. The protection of copyright is important not only from an economic but also from a cultural perspective in order to guarantee *cultural diversity* and nurture individual creativity (KEA, 2010). In the European context, the interaction between cultures and identities is a key driver for creativity and innovation (KEA, 2009). Furthermore, copyright fosters consumers' protection and ensures an equal and fair treatment for all (KEA, 2010). In recent years, the Internet has become the main marketplace to access and consume copyright-protected content (EC, 2016e). As the digital economy and new market players highly benefit from creative content to generate value (Roland Berger, 2015), authors and producers should be strictly associated in the exploitation of their works (KEA, 2014). They are at the heart of the creative ecosystem as the production of cultural goods and content depends on their talent and financial investments.

However, in the digital world the enforcement of copyright and related rights has become more problematic. New forms of online content distribution have emerged that may make copyright-protected content uploaded by endusers widely available at almost no marginal cost, increasing the possibility for illegal use of copyrighted works. Furthermore, there is a growing concern as to whether the value generated by some of these new forms of online content distribution is fairly shared between distributors and rights holders (EC, 2016b), particularly for publishing, music, images, audio-visual and multimedia. In some sectors, such as the music business (IFPI, 2016), stakeholders recognise a "value gap" in the collection of revenues. 788 These problems are linked to the multiplication of digital intermediaries and the complexity of the licensing processes, as well as the difference in bargaining power between creators and other rights holders and their counterparts (e.g. digital providers) when they license or transfer their rights (EC, 2016e). Besides the question of the fair distribution of value between distributors and right-holders owning the content accessed online, there is an issue of fair remuneration of creators as initial actors in the value chain, which is notably related to the lack of transparency in their payment flows. These difficulties represent a challenge for the objective of the Digital Single Market to ensure a fair return on investment for all players (EC, 2016e). Collective management organisations (CMOs), which have been historically supporting creators and other rights holders for the collection of revenues, have also been confronted by digitisation. In particular, the decrease of revenues deriving from mechanical rights and the parallel increase of new form of access to content (e.g. streaming and downloading) forced them to restructure their activities.

This paper intends to look into how existing or emerging digital tools can facilitate the tracking of digital content by creators, producers and collective management societies as an indispensable element to improve the transparency of payment flows and ensure a fair remuneration for cultural creation in the digital environment. In this context, the paper will also consider the role of collective rights management (CRM) and the development of innovative models to simplify the licensing process.

The main issues causing lack of transparency will be briefly presented in the background analysis, based on the recent literature: (1) Role of digital intermediaries and impact of new business models (e.g. streaming) (2) Complexity of licensing processes and clearance of rights (3) Contractual arrangements and information asymmetry (4) Fragmentation of the European market and the complexity of licensing schemes.

WIPO defines the core copyright industries as "industries which are wholly engaged in the creation, production and manufacture, performance, broadcasting, communication and exhibition, or distribution and sale of works and other protected subject matter". Core copyright industries, as defined by WIPO, include: Press and literature; Music, theatrical productions, operas; Motion picture and video; Radio and television; Photography; Software and databases; Visual and graphic Arts; Advertising services; Copyright collecting societies – WIPO (2015) "Guide on Surveying the Economic Contribution of the Copyright Industries" http://www.wipo.int/edocs/pubdocs/en/copyright/893/wipo_pub_893.pdf

⁷⁸⁸ The Global Voice of Music Publishing, 'The Value Gap' (2016) available online: http://www.icmp-ciem.org/news/value-gap-0 or Music Business Worldwide, 'Mind the Gap: why artists must be at the centre of a new music business' (2015) available online: http://www.musicbusinessworldwide.com/mind-the-gap-artists-centre/

Background analysis

Copyright grants rights owners (usually the creator/author) the *exclusive right* to prevent third parties from using and exploiting their copyrighted works (KEA, 2010). Right owners can decide if and under which conditions to allow (or to prohibit) the use of their works. In order to *monetise* these rights, the holders grant *licences* to numerous distributors at national and international level (according to each country's legislative framework). Right owners control the circulation of their protected goods and content all along the value chain, in space and time (Simon, 2012). The economic justification of copyright is twofold: first, it allows cultural goods to be traded as economic goods; second, it balances productive efficiency with distributive efficiency and thus provides income for the rights owners (WIPO, 2015). In fact, cultural goods are characterised by high initial fixed cost (opportunity costs, effort, etc.), variable production costs but relatively lower reproduction costs. Without any protection, cultural goods can be easily reproduced and distributed without any remuneration for the creator or the producer. As the individual management of copyright and related rights is quite complex both for authors and users especially in some sectors, collective management organisations (CMOs) facilitate the task and act as intermediaries.

The digital revolution challenged the principles of copyright and related rights for several reasons, summarised hereafter. According to recent studies, the **limited transparency in licensing practices** is making it more difficult for creators and other right holders to monetise their copyrighted works and negatively affects the redistribution of revenue streams in the creative value chains (Guibault et al., 2015 and 2016).

The first point to consider is the **role of new digital intermediaries** (access providers, hosting providers, search engines, etc.). While producers and distributors still highly rely on the efficiency of copyright enforcement to stimulate, protect and reward creation, new players are pushing toward broader access, as their strategic assets are protected with other IP means such as patents and trademarks (Simon, 2012). Two different kinds of economics collide: the economics of production of physical goods and the economics of distribution of digital content and services (Simon, 2012). In fact, while some online service providers negotiate licensing deals with CMOs and producers for distributing their works online, thus contributing (at least in part) to the financing of creation (Riester et al., 2011), others offer both licensed content and non-licensed user-generated or uploaded content, or do not sign any agreement for the content they distribute (or display) while making a profit out if it through advertising. In the latter case, creators and other rights holders do not have the opportunity to decide on the use of their uploaded content or be remunerated for its use. Furthermore, the E-commerce Directive⁷⁸⁹ in Articles 12-14 foresees the so-called "safe harbour" provisions, which harmonise the conditional exemption of liability for intermediaries for third parties' content (and thus also for copyright infringements) in a situation where they have no actual knowledge or awareness of the existence of illegal infringement of copyright-protected content on their services (KEA, 2010). In exchange, platforms are required, once they have actual knowledge (via a notice or through own investigation), to expeditiously remove or disable access to the respective infringed material. Some stakeholders underline that many platforms and content aggregators claim to be covered by this provision which favours them, considering that the cultural and creative content - whether uploaded legally or illegally - attracts traffic and generates advertising revenues.⁷⁹⁰ Furthermore, some platforms often make the content available for free on the basis of ad-based services (Anderson, 2011). This leads to a decrease of artists' share of royalty revenues and unfair competition with licensed services. In the music sector, stakeholders argue that there is a "value gap" due to the increasing use of platforms services which benefit from the liability exemption and thus are not obliged to conclude a licensing agreement (IFPI, 2016). In visual arts, ⁷⁹¹ many online platforms and aggregators (such as Pinterest, Wikipedia) offer images and photography of works of art downloadable for free. Authors do not have any control on the digitised copies that can be published and exploited without proper authorisation and remuneration. Furthermore, many websites do not host the images but increasingly frame them from third party websites, without paying any license fees. 792 However, these services usually have in place a "notice and take down procedures", according to which, following a notice of illegal information or activity, an intermediary takes down or disables access to the information or activity (EC, 2012). Some member States have also introduced by law copyright-specific notice-and-takedown mechanisms. The multiplication of procedures leads to legal uncertainty and determining which one applies and in what way is often challenging, be it for intermediary service providers or for victims of infringements (EC, 2012). To balance the situation, right holders demand for a stricter liability regime and a reform of the safe-harbour principles (EC, 2011) while online platforms demand legal certainty and a predictable liability regime. The European Commission clearly identified the fair sharing of value along the value chain as an issue in the 'Communication Towards a modern, more European copyright framework' (EC, 2015b) and

⁷⁸⁹ Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market ('Directive on electronic commerce')

⁷⁹⁰ Interview

⁷⁹¹ Source: Visual art sectoral value chain report

⁷⁹² Ibid.

the 'Communication on online platforms and the Digital Single Market' (EC, 2016a). In the 'Proposal for a Directive of the European Parliament and of the Council on copyright in the Digital Single Market' (EC, 2016f) the Commission proposed measures that aim at ensuring a well-functioning marketplace. In article 13, the proposal provides for an obligation for online platforms that host "a large number of works" that have been "uploaded by their users to put in place appropriate and proportionate measures, for example content recognition technologies", in "cooperation with right holders".

Market developments have also attempted to tackle these issues arising from the digital shift in terms of remuneration of creators and other rights holders by introducing new business models. Several industries came up with innovative ways to commercialise content through digital channels: the multimedia industry paved the way to a new economic paradigm by introducing two main business models ("premium" and "free"/ad-based) and several hybrid solutions (freemium).⁷⁹³ In the music sector, the new business model is increasingly based on **licensing** music content to streaming platforms. The increasing penetration of mobile devices and the availability of faster broadband and wireless Internet connections are shifting the consumption pattern from a model based on ownership to a model based on access (IFPI, 2016), with decreasing music downloads and a raise of streaming consumption (Roland Berger, 2015). For instance, Spotify has overtaken iTunes in terms of revenues in Europe. 794 However, streaming services have yet to yield sufficient income for creators. In the music sector, in principle streaming services (e.g. Spotify) devote roughly 70% of their gross revenues to right holders, which corresponds to the rate applied by download-to-own services such as iTunes (Berklee ICE, 2015). However, according to a recent study, out of the individual EUR 9.99 monthly streaming subscription only EUR 1 is redistributed to authors and composers and even less for performers – only EUR 0.46 (Adami report, 2015). So where is this money going? Streaming services do not distribute the revenues collected directly to artists but they use record labels or digital aggregators as intermediaries. Record labels receive a significant higher share of licensing revenue from streaming services compared to the artists' (Berklee ICE, 2015). This discrepancy is due to the fact that labels pay artists based on recording contracts with usually low royalty rates. In addition, multiple deductions are applied due to different licensing and transaction costs to different players such as service providers and aggregators (KEA, 2012); more transparency would be needed in the payment reports for creators and other rights holders.

Another problem is the debate over the classification of streaming (and downloading) as a "reproduction" right or a "making available" right -as part of the "communication to the public" right (De Wolf and Partners, 2014). The distinction between reproduction (or mechanical) rights and performance (e.g. communication to the public) rights is clear in the offline world but blurry in the digital world. This issue is important for two main reasons. Firstly, the two rights are remunerated differently. For instance, in the music sector, under the UK system 50% of performing rights income is always paid directly to the songwriter by PRS, oblivious of whether or not they have recouped on their publishing deal, but all reproduction rights income is paid to the publisher, which then pays the songwriter their share according to their specific publishing contract (Cooke, 2015). Secondly, equitable remuneration is compulsory under communication to the public but not under making available right (Cooke, 2015). In response to some of these issues, in the audiovisual sector, in 2011 the Society of Audiovisual Authors (SAA), which mainly represents screenwriters and film directors, proposed the introduction of an "unwaivable" right of authors to remuneration for their making available right, based on revenues generated from online distribution and collected from the final distributor (SAA, 2015). The entitlement should exist even when exclusive rights have been transferred in individual contracts in order to secure a financial reward for authors proportional to the real exploitation of their works. SAA suggests that the administration of this remuneration should be entrusted to collective management organisations in order to establish a direct revenue stream between the exploitation stage and the audio-visual authors. In the music sector, some major artists such as Madonna and Daft Punk launched the collectively owned TIDAL, a new streaming service with a business approach centred on the artist. Unlike Spotify, TIDAL does not offer free content based on ads and promised to pay double the standard royalties for streaming services. This approach is however more challenging for unknown artists.

The second point to consider is the **multiplication of the number of licensing contracts** (KEA, 2012) in order to complete all stages from creation to final production and distribution/marketing, following the entry of new players in the CCS market. New players with different exploitation rights and new business models **increase the complexity of the creative value chain**, which has a direct impact on the remuneration of creators due to the **increasing number of transaction costs and licenses fees**. In the music sector for instance, producers pay less author's rights as the value is transferred toward new distribution players (e.g. Google) but also to service providers (Telecoms).⁷⁹⁵ On the other hand, the fragmentation of rights, right holders and repertoires make it difficult for online music service providers willing to set up multi-territorial services to enter into negotiations with

⁷⁹³ Source: sectoral value chain mapping of Multimedia

⁷⁹⁴ Source: Techcrunch, 'In Europe, Spotify Royalties Overtake iTunes Earnings by 13%' (2014) available online: https://techcrunch.com/2014/11/04/in-europe-spotify-royalties-overtake-itunes-earnings-by-13/

⁷⁹⁵ Interview

a multiplicity of right holders and managing entities (record producers, aggregators, CMOs for publishers) (KEA, 2012). Furthermore, this new ecosystem makes it very difficult for creators to understand what remuneration they are owed for the exploitation of their rights and negatively affects the transparency in the payment system. This opacity is particularly critical in the music sector and in the performing arts, where the complexity of the value chains makes it difficult for the artists (who are very often both creators and performers) to follow the payment flows. 796 The management of rights became more complex also for the TV and broadcasting industry, 797 while it seems to be a less of an issue for the audiovisual sector in which the rights are centralised by producers and the general trend for lump sum payments and salaries "one-stop-shop" for the clearance of rights (Guibault et al., 2015). In the multimedia industry, the publisher plays a role similar to a movie studio, whereby the publisher finances, develops, distributes and markets a product to consumers (WIPO, 2013). However, the publisher does not always own the copyright to the game but it depends on the contractual arrangement with the developer(s). In some cases, the publisher might act only as a distributor of a finished game, receiving a fee for its services. In fact, many self-financing developers may not have the expertise, money and relationships needed to distribute and market their game on the various platforms and need to rely on publishers (WIPO, 2013). The lack of transparency is exacerbated by the fact that creators do not always receive their monthly or annual royalty reports (Guibault et al., 2015), thus they cannot verify if the calculation is correct or not. Even when they do receive their reports (Berklee ICE, 2015), very often they are very complex and uneasy to read and analyse. This problem is exacerbated with the collection of royalties for international performances. To tackle this issue, the 'Proposal for a Directive on copyright in the Digital Single Market' (EC, 2016f) includes some positive measures to protect creators; article 14 introduces in EU legislation transparency obligations on the creators' contractual counterparties (notably producers and publishers). Authors and performers will be entitled to receive "timely, adequate and sufficient information on the exploitation of their works and performances from those to whom they have licensed or transferred their rights" (EC, 2016e).

The third point to analyse are contractual arrangements especially in the publishing, music and audiovisual sectors, as the creators' revenue streams are strictly dependent on their contractual arrangements with the labels/publishers/producers (in form of lump sum or royalties) and the subsequent deals with the intermediaries. In the audiovisual sector for instance, although in some countries standard contracts exist, in practice fees are negotiated individually in the contract between the author and the producer, and are usually based on the authors and performers' popularity. 798 Many authors receive a lump sum payment for the writing and/or directing of the film (SAA, 2015), and in some countries they receive no further payment from the producer independently from the commercial success of the film. In the music sector, contracts have not fundamentally changed in the digital world, but some artists would prefer some adjustments (for example in the management of the making available rights' clause). 799 The use of model contracts developed as a result of negotiations between representatives and collective bargaining agreements (including by CRMOs) has a potential significant impact on remuneration also for freelance authors of books and scientific journals, translators, journalists and visual artists (Guibault et al., 2016). It should also be noted that creators are often not involved in the negotiation process between publishers/CMOs and distributors and this clearly entails an **information asymmetry** and lack of transparency.⁸⁰⁰ For example, a leaked 2011 contract between the major label Sony and the streaming company Spotify (Knopper, 2015) reveals the inner workings of the streaming music business which directs the money towards the labels, not the artists. It is known that Google applies a strict non-disclosure agreement (NDA) clause in its agreements with collective societies for the use of copyrighted music embedded in videos for YouTube (Haunss, 2013). Furthermore, some artists and creators complain they are unaware on their rights and pay-out structures from various sources of revenues (Berklee ICE, 2015) and have no means of verifying if the revenue streams they receive for copyrighted work are correct. This situation prevents creators to know the real market value of their work (Guibault et al., 2015). In this regard, the "Proposal for a Directive on copyright in the Digital Single Market" (EC, 2016f) introduces the possibility for creators to request an additional appropriate remuneration in cases where the remuneration agreed would be disproportionately low compared to the revenues generated by the exploitation of the work and alternative dispute resolution mechanisms in articles 15-16, in addition to the transparency obligations laid down in article 14 mentioned earlier on.

One last critical point is the **fragmentation of the European market and regulatory framework** and the **consequent fragmented contractual protection of creators and producers in the national laws of the Members States** (KEA, 2012). The fragmentation of the European market is strictly linked to European cultural

⁷⁹⁶ Source: performing arts sectoral value chain mapping

⁷⁹⁷ Source: broadcasting sectoral value chain mapping

⁷⁹⁸ Source: film sectoral value chain mapping

⁷⁹⁹ Source: music sectoral value chain mapping

⁸⁰⁰ Ibid.

and linquistic diversity. Cultural products differ from other types of products as they are "experience goods" and can be socially shared, and their relative value can vary according to the different cultural communities and the pre-defined tastes of the target audience. As a consequence, investments in marketing and versioning for instance of audio-visual content or books are dictated by the different territorial contexts in the Members States, and each licensing contract requires a specific negotiation on a territorial base to pre-finance the production (KEA, 2010). This is the main reason why there are few economies of scale in negotiating contracts for multiple territories. The European context is very different from the US market in which blockbusters are usually designed for a global audience, also thanks to the monolingual market (English). Producers and broadcasters are the largest investors in content production and the protection of their investments is ensured by the territoriality of copyright, one of the four principles enshrined in the WIPO treaties⁸⁰¹ and included in the acquis communautaire (KEA, 2010). The territoriality of copyright allows right holders to decide on the geographic scope of a licence; thus, the exclusivity that a licensing agreement confers is strictly limited to the territorial boundaries of the Member States for which the rights are granted. In the digital environment, however, users have the possibility to access and consume copyrighted-protected content across borders more easily than in the physical market, the Internet being borderless by definition. Digital distribution gives access to any person anywhere, thus exposing creators, producers and distributors to different laws in the jurisdiction where the consumer resides. Furthermore, barriers arising from the territorial exploitation of copyright have been questioned as a limitation for the free movement of goods and services within the European internal market and more specifically for the development of a fully functioning Digital Single Market (EPRS, 2015). The 'Proposal for a Directive on copyright in the Digital Single Market' (EC, 2016f) aims to address some of these challenges by facilitating and simplifying the licensing and clearance of rights in some specific cases.

5.2 Possible solutions to increase transparency in the remuneration of creation

Enhancing the transparency and accountability of the digital payments system and licensing process is instrumental to ensure a fairer redistribution of value for creators and other right holders. To this end, this paper examines two sets of measures:

- the need for a better application, recognition and control of metadata for tracking of online copyrighted content;
- the use of collective bargaining and licensing initiatives for the improvement of right holders' bargaining power and the reduction of transaction costs

Application and recognition of metadata

Metadata could be defined as "structured information that describes, explains, locates, or otherwise makes it easier to retrieve, use, or manage an information resource" (NISO, 2004). To simplify, metadata is "data about data". Metadata is not new and it has been used for centuries in the cultural sector, especially in music, printing (library, archives, and bibliographies) and later on in photography and audio-visual content. Examples of metadata include the title for a song, the location and the camera setting for a photo, or the author for a book, Following the digital shift, metadata also appeared in digital form and it grew in importance both for consumers and right holders. Without metadata, online items are invisible; they are not present in the physical world thus there is no chance a consumer will discover them accidentally. Besides, metadata (especially ownership and licensing data) is fundamental to gather information about creators' rights and it could be a very useful tool to overcome many of the obstacles to monetisation. As underlined in the previous paragraph, the rapid increase of digital cultural content delivered to homes and mobile devices presents a challenge to track the audience and use of works. Metadata, coupled with innovative ICT-based technologies, allows the tracking of the use of digital copyrighted works. the identification of the right holders (creators, publishers, performers) and thus ensures a correct revenue streams (Lescure, 2013). For these reasons, metadata is one of the solutions identified by several stakeholders to improve the tracking of online content, the enforcement of copyright and related rights and facilitate the calculation of payments of royalties and other rights to the right owners (AB Music Working Group Report, 2016). The correct and efficient use of metadata is also a key issue for CMOs considering the increasing competition, especially in the music, audio-visual and book publishing sectors. In 2011, Google bought *RightFlow*,802 a company that supports YouTube and Google Play by simplifying music licensing through song identification, monetisation, reporting and payment efforts directly to the artists (Lescure, 2013).

Metadata is important for two main reasons. First, **descriptive** metadata *describes* an item (a song, a painting, etc.) in order to **enable users to identity and qualify** it, even if metadata is not necessarily included

⁸⁰¹ Article 5(2) of the Berne Convention

⁸⁰² Source: http://www.rightsflow.com/

in the item itself (Lescure, 2013). Descriptive metadata could also "enrich" the content and provide an added-value for the user, e.g. the biography of the author, or the lyrics of a song (Brooke, 2014). For example, the Dublin Core Schema, developed by the Dublin Core Metadata Initiative (DCMI), is commonly used to describe web resources (video, images, web pages, etc.), as well as physical items such as books, CDs or artworks. On the publishing sector, MARC standards (MAchine-Readable Cataloging) are widely used for the description of items catalogued by librarians, such as books. In the audio-visual sector, MPEG-7 or PBCore standards offer a very comprehensive framework for describing audio-visual materials. In the digital world, this type of metadata could be generated by algorithms and give complementary information based on the preferences of other users (similar authors/product, selling rates, etc.). Secondly, **legal metadata is also used to** *protect* **property rights**, **licensing**, **privacy**, **and confidentiality issues** in the entire creative value chain (Lescure, 2013). This type of metadata include:

- metadata related to the *ownership* of the item, which enable the identification of the right holder(s). Ownership metadata or *identifiers* (both in the off-line and online world) is addressed by ISO standards aiming to facilitate the circulation and avoid any confusion related to homonymy, misspelling, and other mistakes (Lescure, 2013). Some examples are:
 - the International Standard Work Code (ISWC) and the International Standard Recording Code (ISRC) in the music sector;
 - the International Standard Audiovisual Number (ISAN) in the audio-visual sector, which relates to specific descriptive metadata (i.e. titles, language, type, duration, director, producer, characters, actors, etc.) for any audio-visual works and versions (including films, shorts, documentaries, television programs, sports events, advertising, etc.)
 - the International Standard Book Number (ISBN) and the International Standard Serial Number (ISSN) in the publishing sector
 - the International Standard Name Identifier (ISNI), an identifier for uniquely identifying the public identities of contributors to media content such as books, TV programmes, and newspaper articles
- metadata related to the *management of rights* by producers, distributors, etc. in charge of the commercial exploitation. In the visual arts sector, the IPTC Photo Metadata sets the industry standard for administrative, descriptive, and copyright information about images. In the audio-visual sector, MPEG-7 or PBCore standards are also used for management of rights.

Metadata (both descriptive and legal) has a very positive potential for creators and could be beneficial to address lack of transparency and information asymmetry (Lescure, 2013):

- From a legal viewpoint metadata can support right owners to **better track the illegal use of their copyrighted works and ask for the take down of content** exploited without their authorisation, thus facilitating the enforcement of their financial and moral rights. Metadata could be coupled with new technologies that automatically detect copyrighted works on distribution platforms, enabling rights owners to save time in the search and removal of illegal content. Some issues arise around "false positives", content identified as illegal but covered by copyright exemptions. Some platforms already propose some tools to automatically recognise music tracks and illicit content (Pons, 2015);
- Metadata can **address the lack of transparency in royalty payments** by enabling distribution platforms to collect sales/streaming information more easily, send more accurate reports to the majors/aggregators (and thus to the producers and the creators/performers) and allow creators for a real-time electronic access to royalty information. Metadata can **decrease the information asymmetry** and enable creators to have a better overview of the value of the content and thus negotiate better deals with distributors. Furthermore, it can allow for a **more efficient management of revenue streams by CMOs**;
- Metadata can help users who want to legally exploit the content to identify the right holders more easily and negotiate a licence;
- Metadata can support creators in terms of **branding and audience development** (Brooke, 2014). As explained across the sectoral value chain mappings, creators are very often directly involved in online marketing and promotional activities (especially through social media);

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⁸⁰³ Source: http://dublincore.org/documents/dcmi-terms/

Metadata is also beneficial for users, as it can facilitate the search of an item, the management of collections, and thereby **enhance cultural diversity** (Brooke, 2014). Overall, improving the situation for right holders will incentivise them to make more content available online, increasing consumer choice through legal offers. ⁸⁰⁴ The correct application of descriptive metadata is particularly important in the case of digital libraries and archives especially in visual arts, cultural heritage and publishing sectors. For example, the Europeana project places considerable emphasis on the correct application of metadata. In the publishing sector, only providing minimal metadata limits opportunities for a book to be discovered and sold; thus, the success in the virtual marketplace requires the distribution of book metadata that fully supports findability and discovery and that provides information that engages the potential reader (Mcllory and Register, 2015). Precise and detailed descriptive and enriching metadata is also crucial **to retrieve non-mainstream content** (such as old movies) or to preserve information following the shift from physical support (e.g. CD's cover and information) to digital item

However, the correct application of metadata (both descriptive and legal) is still a problem for several reasons:

- Descriptive metadata is not always used by consumers and the industry, or it may be used incorrectly (the most common is the misspelling of the author/creators' name or the title of the work). In photography, EXIF metadata is embedded into most digital photos. Likewise, an mp3 music file should systematically have the band information, song name, and even the CD cover image, etc.
- **Each CMO has its own database** with specific information (Lescure, 2013).
- Lack of universal identifiers: over the last 15 years, different organisations and companies have built their own proprietary metadata systems using different schemas, creating metadata "silos" (Berklee ICE, 2015). As the consumption of music shifted to download then streaming, each supplier of metadata came up with its own schema/protocol.
- The **implementation of existing international standards** varies across countries. In the music sector for instance, while both IRSC and ISWC were adopted as international standards by the ISO in 1980s, each country has its own administrative agency for them, often following different rules and conventions for applying the numbers.⁸⁰⁵

This situation results in lost opportunities for creators and other right holders (revenue streams, promotion), increases the management costs and creates confusion among customers.⁸⁰⁶

Some attempts to address the problem have been made by **Kobalt Music Group**. Kobalt offers artists, songwriters and publishers access to copyright administration and usage tracking of their work on streaming, broadcasting and even on piracy platforms (Hosoi et al., 2015), in an attempt to bring them closer to their products throughout the value chain. Another initiative is **The Linked Content Coalition (LCC)**, a not-for-profit global consortium of standards bodies and registries. The members of The LCC are organisations that create and manage data standards associated with content, particularly for identifiers, metadata and messaging.⁸⁰⁷ The purpose of the LCC is to facilitate and expand the legitimate use of content in the digital network through the effective use of interoperable identifiers and metadata. The LCC supports interoperability between the computer systems of any legitimate participants in the digital network; to this end, the LCC has set out a Manifesto⁸⁰⁸ which describes the ten targets for the rights data network. A practical demonstration of the innovative framework developed by The LCC is the Rights Data Integration (RDI) project,⁸⁰⁹ partly funded by the EU and by media industry participants. The work of the LCC is closely linked to **The Copyright Hub** (Lescure, 2013). The Copyright Hub is a not-for-profit organisation that works on a voluntary basis.⁸¹⁰ It is built around a website which has **two main functions**: information/education on how copyright works aimed at a wide audience, and access to simpler licensing systems for users benefiting from lower transaction costs. The main technical principles are twofold:

http://www.linkedcontentcoalition.org/phocadownload/LCC%20Manifesto%20and%20Ten%20Targets%20v1%200.pdf

⁸⁰⁴ Source: http://europa.eu/rapid/press-release_MEMO-16-3011_en.htm

⁸⁰⁵ Source: Smart Content News, 'Music Industry Still Hoping For Metadata Harmony' (2016), available at: http://www.smartcontentnews.com/music-industry-still-hoping-for-metadata-harmony/

⁸⁰⁶ Source: Billboard, 'Metadata Confusion Costing the Industry More than Money, Delegates Told at NARM 'Music Biz' Summit' (2013), available at: http://www.billboard.com/biz/articles/news/retail/1560735/metadata-confusion-costing-the-industry-more-than-money-delegates

⁸⁰⁷ Source: http://www.linkedcontentcoalition.org/

 $^{^{\}rm 808}$ The LCC (2014), "The LCC Manifesto", available at

⁸⁰⁹ Source: http://www.rdi-project.org/about2

⁸¹⁰ Source: www.copyrighthub.co.uk

- assign identifiers to each item to help people to identify the right owners;
- facilitate the interoperability between different databases (public or private).

The overall objective of the Copyright Hub is to facilitate the connections and relations between the "offer" (creators and other right holders) and the "demand", helping users to get the permission (or not) to use copyrighted works (Lescure, 2013). The Copyright Hub is also a forum where members of the creative industries and others meet across sector and national boundaries to streamline licensing processes and organisations. The Copyright Hub is funded by the creative industries; its technical development is designed and developed by Digital Catapult, which is partly financed by the UK Government via the Technology Strategy Board.

Another interesting initiative is DDEX (Digital Data Exchange), a consortium of leading media companies, music licensing organisations, digital service providers and technical intermediaries, focused on the creation of digital supply chain standards. DDEX aims at identifying how the CCS as a whole can work to improve the operation and interoperability of standard identifiers with the goal of automating as much of the supply chain as possible. DEX standards will help rights holders, retailers and technical intermediaries to communicate information more effectively along the digital supply chain, leading to more efficient business transactions, reduced costs and increased revenues for all sectors involved. DDEX is discussing with organisations that have or are developing standards of relevance to the digital supply chain, for instance IFPI in relation to GRid and ISRC, and CISAC in relation to ISWC and ISNI. DDEX has also been trying to find ways of improving the overall quality of the metadata itself across the whole supply chain.

CMOs are aware of the problem of applying metadata and traceability of digital content online. For instance, the Audio-visual authors' collective management organisations are, in cooperation with the online operators, developing the necessary ICT infrastructure to guarantee payments to audio-visual authors (SAA, 2015), for example by encouraging Europe-wide use, from the earliest stages of production, of work identifiers such as ISAN.

The **recognition and management** of legal metadata is also an issue, and some distribution players have developed new systems to tackle the traceability issue. The best known is the **ID Content** system developed by Google, which allows copyright owners (e.g. CMOs, new licensing entities, record producers) to identify and manage their content on YouTube. Videos uploaded on the platform are scanned against a database of ID files that have been submitted to YouTube by content owners. Copyright owners can decide what happens when content in a video on YouTube matches a work they own: mute the audio that matches their music; block the whole video from being viewed; monetise the video through advertising, and in some cases sharing revenue with the uploader. B12 During the ID Content claim or dispute period, the video continues to earn revenue and is held separately by YouTube. Once the ownership issue is resolved, YouTube pays out that revenue to the appropriate party. The cost of developing the Content ID system is borne up-front by YouTube (KEA, 2012). In 2014, YouTube confirmed that it reached USD 1 billion in pay-outs from the ID Content system since its creation in 2007. B13 However, the system does not prevent the upload of unlawful content (unless the right-owner chooses to block the video) and relies on right holders to identify their illegally used content (KEA, 2012).

Other tools are available for tracking content outside YouTube on the market. One example is **Audible Magic**⁸¹⁴ which offers content owners the ability to control their content on different locations (e.g. social media sites and cloud storage services such as Facebook, SoundCloud, Dailymotion, Vimeo, Veoh, and on college and university campuses). During the registration process, a fingerprint of the content is created, which is then combined with related metadata. Content suppliers may also specify business rules (such as block, allow, monetise, etc.). There are three available registries for media: one for music and music videos, one for video content and one for live broadcast television content. Examples of companies registering with Audible Magic include music labels, movie and television studios (21st Century FOX), multi-channel networks (MCNs), music artists, musical libraries, and video creators regardless the size of the catalogues. It should be stressed that the content registration is free, while platforms pay for this service. In the music sector, **Dubset Media** is a US-based music licensing and digital distribution company working on innovative solutions for DJs, labels, publishers and streaming services.⁸¹⁵ The company owns a technology, MixBANK, which enables legal distribution of unlicensed remixes and DJ mixes (mostly user-generated content) by scanning content for copyrighted material and paying relevant right holders. This gives independent songwriters and publishers access to an emerging new royalty system and creates the first legal

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⁸¹¹ Source: http://www.ddex.net/about-ddex

⁸¹² Source: https://support.google.com/youtube/answer/3244015?hl=en-GB

Source: Billboard, 'YouTube Pays Out \$1 Billion with Content ID' (2014), available at: http://www.billboard.com/articles/business/6281696/youtube-1-billion-content-id

⁸¹⁴ Source : http://www.audiblemagic.com/

⁸¹⁵ Source: http://www.dubset.com/

marketplaces for these tracks. ⁸¹⁶ The company tackled the specific problem of DJs' and user-generated content's mixes and remixes, as the majority of these tracks could not be distributed through traditional music services due to a number of issues related to complex rights clearance processes (identification of right holders, multiplicity of owners, territoriality). Dubset Media has reached agreements with Sony/ATV, the National Music Publishers' Association (NMPA), Apple Music and Spotify. **Geo Track ID** is a German company that allows artists, labels or publishers to track their songs all around the world on UGC platforms, played on TV and radio, and performed at clubs and festivals using digital identification. ⁸¹⁷ This technology is particularly useful to monitor the diffusion of music in venues such as clubs and improve the distribution of royalties collected by CMOs to artists. ⁸¹⁸

Collective intermediation, bargaining power and licensing initiatives

Another attractive solution to facilitate multiple (and cross-borders) licensing and save transaction costs is **collective intermediation and licensing initiatives** which offer a "one-stop-shop" for rights clearance (Graber, 2012).

Bearing in mind that it is for holders of exclusive rights to decide to either manage rights individually or opt for collective licensing, collective management organisations (CMOs) can play an important role in both sustaining the licensing capacity of creators and producers and meeting the needs of digital services.

CMOs are very important for negotiating deals with distributors (e.g. SACEM with Universal and GEMA with Sony and Warner)⁸¹⁹ and they increase the bargaining power of creators, especially for emerging artists (KEA, 2006). In the case of music, licensing occurs very often with the help of collective societies considering the high number of right holders (KEA, 2010). In the audiovisual sector, rights are usually managed on an individual basis but collective management takes place in relation to some rights (the cable retransmission right, the licensing of musical works and private copying). In the digital world, however, collective licensing is becoming more important **especially for small players** that individually do not have the resources to license multiple digital platforms operators across the world (KEA, 2010). CMOs allow artists to benefit from lower transaction costs and risk sharing, since transaction costs for collecting small royalties from many users (bars, clubs, etc.) are generally too high to be performed individually. CMOs carry out three main tasks for their members: first, they license to users the access to the copyrighted work of their members; second, they collect and distribute the royalties stemming from secondary use (broadcasting, public performance, etc.) of creative works; third, they monitor the use of copyright and related rights ensuring a stronger enforcement of copyright provisions. Associations of artists are also important to increase artists' bargaining power and support them in managing their rights, where they are established. A good example is the unilateral move from the international association representing independent labels (WIN) to establish the principle of revenue sharing with artists and more transparency in contracts with digital platforms, which is presented as a case study below.820

CMOs are particularly important for **independent authors/artists** as they offer schemes of rights management to counter-weight the *oligopsony* of vertically integrated transnational companies, thus **promoting cultural diversity** (Graber, 2012). Independent producers cannot count on a large catalogue and can benefit from collective rights management organisations in order to increase their bargaining power. Beyond their economic function, CMOs have an important social and cultural role, increasing the spirit of solidarity amongst famous and non-famous artists (Graber, 2012). CMOs became indispensable intermediaries in the copyright system of the 20th century. **CMOs are also beneficial for the licensees** (e.g. broadcasters, cable operators or digital media providers) considering the high number of right holders that need to be identified, asked for permission, and remunerated for the use of their copyrighted work. This task is very complex and time consuming and cannot be undertaken by some licensees, such as radio stations, for practical reasons. Considering the increasing complexity of the digital value chain, collective societies provide valuable support both to artists (on rights management and legal advice) as well as to digital distributors. For example, radio stations use a lot of copyright protected material (especially music); as such radios have to acquire the necessary rights usually through rights collecting societies to clear

⁸¹⁶ Source: Billboard, 'Dubset Inks Deal With Sony/ATV: Exclusive' (2016), available at: http://www.billboard.com/articles/news/dance/7476088/dubset-sony-atv-partnership-exclusive

⁸¹⁷ Source: http://www.geotrackid.com/en/fr

⁸¹⁸ Source: CDR Project, 'The future: Geo Track ID' (2014), available at: http://cdr-projects.com/future-geo-track-id/

⁸¹⁹ Interview

⁸²⁰ Source: http://winformusic.org/declarationhomepage/

authors' rights and related (neighbouring) rights.⁸²¹ Two examples of collective rights management models are presented in the case studies (Merlin Network and Armonia/BMAT).

In today's digital reality, however, collective management services cannot be viable if they are not offered in a strongly data processing supported environment. At the same time artists in creative sectors like music, who wish to benefit from the opportunities offered by licensing their works over multiple territories, cannot be bound to a collective management body that, due to its own choices, does not intend to upgrade its capacity to cater for multiterritorial licensing. A key concern is related to the increasing ICT infrastructure capacity that is required for CMOs to be able to process and correctly manage a growing amount of data and information in terms of volume. Such data and information is collected from the complex web of users and distributors involved in the exploitation of their members' works worldwide. The increasing volume of data is often associated to a decrease in quality, which represents another issue (SACEM, 2015). Some CMOs are investing in technological improvements and recruiting specialised experts. CISAC, the International Confederation of Societies of Authors and Composers, is involved in an innovative project to develop a new visual art recognition tool.⁸²² The project is aimed at helping visual art societies monitoring the use of visual art online. When fully operational, the new tool will provide efficiencies and allow for better royalty collections linked to the online usages of visual works. According to CISAC annual report 2015, this initiative will have immediate benefits for visual creators since the better the technology, the more efficient societies will be as collecting royalties. Another example is provided by SACEM, Société des Auteurs, Compositeurs et Editeurs de musique. This CMO has also put in place new technologies to adapt to the new needs investing almost EUR 50 million in 2015 (SACEM, 2015). The IT infrastructure that collects and manages data and information coming from the digital market has been separated from the one related to traditional channels. SACEM uses Big Data technologies such as Cassandra, Elastic Search and Hadoop in order to increase its processing capacity. In 2015, SACEM managed almost EUR 5 billion users' lines representing 589.4 billion downloading and streaming operations, twice as much as in 2014. In 2016, the number of operations raised up to 982.5 billion. SACEM is also involved in the development of DDEX and Fast Track - which aim at increasing the international exchanges of documents and information within the music industry - and it is a member of ARMONIA, which recently signed up a cooperation with the Spanish company BMAT to develop a tool for a faster recognition of online works (see case study). These investments enable SACEM to increase the speed to manage the data and provide more timely and quality information to rights holders. Furthermore, in January 2017 SACEM announced a 10-year partnership with IBM to develop **URights**, a new global platform based on IBM Cloud for the management of IPR in the digital music sector. 823 The platform will provide a clear added value for rights holders as it will enable SACEM to improve data analysis and recognition of digital works, thus ensuring a fairer remuneration. URights has been conceived as an open platform to other CMOs worldwide in order to benefit from shared costs. A specific multipurpose, multi-user client-server application is developed by the World Intellectual Property Organization (WIPO), WIPOCOS.⁸²⁴ The software helps administer that information easily, accurately and efficiently, and thereby enhances the operational efficiency of the management of copyright and related rights.

The **Collective Rights Management Directive** adopted in February 2014⁸²⁵ aims to address challenges raised by the digital transformation. The Directive establishes very detailed provisions on governance and transparency of the CMOs, including rules on the distribution of royalties to right holders, as well as disclosure of information. The Directive provides for the freedom of choice of CMOs by right-holders, which can lead to an increase in the competition amongst CMOs to attract the most successful artists. Organisational and management costs are completely borne by authors through rights revenue deductions. It is therefore in their interests to find the appropriate balance in governance, transparency and distribution rules to keep the cost bearable for all members (SAA, 2015). In Italy, several famous artists (such as Fedez, Gigi D'Alessio and others) decided to leave SIAE and give their rights to an independent management entity called "SOUNDREEF",. ⁸²⁶ In Tuscany only, 380 artists followed their example. SOUNDREFF uses a 100% analytical accounting system in order to pay artists' royalties in timely fashion. The Directive also includes specific provisions to enhance transparency, notably "in terms of transparency of repertoire represented and accuracy of financial flows related to the use of the rights" (recital 40). In chapter 5 "Transparency and Reporting", article 22 mandates an annual transparency report to ensure that right holders are in a position to monitor and compare the respective performances of collective management

⁸²¹ Source: http://www.aereurope.org/

⁸²² Source: http://www.cisac.org/

⁸²³ Source: https://societe.sacem.fr/ressources-presse/par-publication/Communiqu%C3%A9s/la-sacem-et-ibm-unissent-leurs-forces-et-developpent-une-nouvelle-plateforme-globale-de-gestion-des-droits-dauteur-pour-la-musique-en-ligne

 $^{{}^{824}\,}Source: \underline{http://www.wipo.int/publications/fr/details.jsp?id=250\&plang=EN}$

⁸²⁵ Directive 2014/26/EU of the European Parliament and of the Council of 26 February 2014 on collective management of copyright and related rights and multi-territorial licensing of rights in musical works for online use in the internal market

⁸²⁶ Source: http://www.treccani.it/magazine/spettacolo/Diritto_d_autore.html#

organisations. Collective management organisations should also make public an annual special report, forming part of the annual transparency report, on the use of amounts dedicated to social, cultural and educational services (recital 36). They are required to provide certain information to individual rights holders at least once a year, such as the amounts attributed or paid to them and the deductions made (recital 34).

CMOs are also facing *restructuration* as a result of the technological shift. Following the digital revolution, the system has been challenged due to the emergence of new powerful players (e.g. Google), new distribution channels such as streaming, with different business models compared to traditional ones (such as radio, television broadcasting, public performance and physical supports). The complexity of the licences panorama is further exacerbated by the fact that many artists are bypassing traditional intermediaries and sell and promote their work themselves, in order to better monitor the use of the content and diminish transaction costs (disintermediation). Many music publishers also opt-out from collective societies in order to license their repertoire themselves. This represents a problem especially for smaller users such as local radio or SMEs, which often lack the necessary resources to negotiate with powerful players (as a result, radio stations often have to produce podcasts without music). Ranother issue is the possibility to license part of the repertoire under non-exclusive open content licence, for example Creative Commons (KEA, 2014). Not all the collecting societies are adapting to this shift and new entities are emerging such as the "cultural commons collecting society".

5.3 Case Studies

5.3.1 Case Study 1: Merlin

Merlin (Music and Entertainment Rights Licensing Independent Network, www.merlinnetwork.org) is a UK-based **global digital rights licensing agency for the independent label sector** created in 2007 in response to the evolution of licensing practises (KEA, 2012). Merlin represents record producers on a non-exclusive basis and is owned and controlled by a not-for-profit foundation, supervised by a member-elected board of 15 people (five each from North America, Europe and Rest of the World), with up to six non-voting observer members. The organisation includes more than 700 members - representing more than 20,000 labels and distributors across 47 countries. According to a recent survey, 828 its constituency commands about 12% of the global digital recorded music market; 65% said that their overall revenue had grown in 2015 from the prior year, and within overall revenue, 73.5% said they had experienced an increase in digital revenue. Merlin is supported by IMPALA, the Independent Music Companies Associations. The independent music record label sector us worth USD 5.6 billion representing 37.6% of the global market according to a recent WIN study. 829

5.3.1.1 Value-added and industry potential of the case study

This initiative offers **a one-stop shop** for a large number of rights to online music services which entails **a better position in negotiations for right holders** (KEA, 2012) and ensures that independent music is appropriately valued and protected in the digital market. Furthermore, the independent sector is the fastest growing sector in the music business, representing not only a huge breadth and diversity of local music on a territory-by-territory basis, but also an increasing number of hit. Merlin acts to ensure its members **have effective access to new and emerging revenue streams**. Merlin is specialised in negotiating licences relating to digital technologies and thus focuses on licensing streaming and mobile services, and any other innovative service. Accordingly, Merlin does not have agreements with important traditional download services (e.g. iTunes), as all of its members are already involved with them through their own aggregators/distributors (KEA, 2012). Merlin supports its members to manage the transition from unit sales to access, which is a difficult process for many labels. ⁸³⁰ New forms of consumption based on *access* rather than *ownership* increase the use of streaming-based services, and according to the Merlin survey, within digital, 46% of respondents said audio streaming and subscription was their dominant revenue stream while only 28% of respondents said downloads were.

⁸²⁷ Interview

⁸²⁸ Source: Billboard, 'Members of Merlin Report Digital Gains in Annual Survey' (2016), Available at http://www.billboard.com/articles/business/7408756/members-of-merlin-report-digital-gains-in-annual-survey

⁸²⁹ Source: http://impalamusic.org/content/first-global-market-share-analysis-independent-music-sector

⁸³⁰ Source: http://www.merlinnetwork.org

5.3.1.2 Market Structure and Imperfections

Merlin provides blanket licences for independent repertoire for multi-territorial use to online music service providers (KEA, 2012). Merlin represents the larger single basket of rights outside of those held by the three "major" labels (Sony, Universal and Warner). Individual independent labels do not have enough bargaining power to compete with the "big three", but together they count on a catalogue large enough to be able to negotiate with digital services. Since its launch Merlin has established itself as a partner to the world's leading new-generation digital music services including Google Play, Spotify, Deezer, Beats Music, Sony Music Unlimited, Rdio, rara.com, YouTube and Muve Music, and reached copyright infringement settlements with, among others, Limewire, XM Satellite Radio and Grooveshark. Regarding the transparency of payments, Merlin states to be 100% transparent regarding the terms of the agreements secured and provide full details to members of each licence Merlin signs. Furthermore, Merlin shares equally all the benefits amongst its members once operating costs are covered. Merlin also reduces the increasing transactions costs and licensing fees due to multiple licensing: it allows digital services the opportunity to globally license - via a single deal, instead of hundreds of individual local deals - independent music labels from across the world. In this way, Merlin members can better follow the payment streams and make their business decisions in the digital marketplace.

5.3.1.3 Implications for stakeholders

Merlin has positive impacts on producers and creators because it allows for a fairer redistribution of revenues (less transaction costs and licensing fees), more transparent payments and increase of bargaining power. According to a recent survey, 831 86% of respondents say that membership of Merlin is important to their business. Drawing on an analysis of over 11.5 billion audio streams (Jan-March 2016) usage of Merlin members' repertoire on audio streaming and subscription services was 27% higher on paid streaming tiers compared to free ad-funded tiers. The global scale of digital music consumption benefits independent record labels and distributors; 39% of respondents report that over half of digital revenues came from outside their home territory compared with only 16% reporting the same trend for physical sales. Merlin is also beneficial for consumers in terms of access to a diversity of works. They can benefit from a broader choice of legally acquired music. As a result, the ability to discover, explore and share new music on digital platforms is enhanced. According to a recent WIN study, independent record labels are characterised by diversity as they provide a platform for artists that do not "fit" the major label model.

5.3.2 Case Study 2: ARMONIA/BMAT

ARMONIA is an **online licensing alliance** started by three European CMOs (SACEM in France, SGAE in Spain and SIAE in Italy) on 30 April 2013 **to facilitate pan-European licensing** by offering a **single point of entry for the use of repertoires that they represent.** ARMONIA is a European Economic Interest Grouping (EEIG) and represents 6.5 million works over a territory of 35 countries. The hub gathers the repertoires managed by the three founding members SACEM (representing UMPI and Wixen), SGAE (representing Sony Latin and Peer Latin) and SIAE, plus the repertoires of other European CMOs that joined over the years: Artisjus (Hungary), AKM (Austria), SABAM (Belgium), SUISA (Switzerland), and SPA (Portugal). Furthermore, SACEM recently signed a deal with its Canadian counterpart SOCAN and the SOCAN/SACEM mandate is handled through the ARMONIA platform. The "one-stop service" enables **simplified rights negotiations** for digital music services operating in Europe and thus **faster and more precise payments of royalties to right holders**. The ARMONIA societies signed agreements with Google making granting access to their repertoires for its customers worldwide.

ARMONIA is not the only example of licensing alliance among European CMOs. Another example is **ICE** composed by three of Europe's biggest collection societies, PRS for Music (UK), STIM (Sweden) and GEMA (Germany). 833

Source: http://www.merlinnetwork.org/news/post/merlin-membership-survey-2016-accelerating-digital-growth-for-independent-m

⁸³² Directive 2014/26/EU of the European Parliament and of the Council of 26 February 2014 on collective management of copyright and related rights and multi-territorial licensing of rights in musical works for online use in the internal market

⁸³³ Source: Billboard, 'British, Swedish and German Collection Bodies Unite, Look to Simplify Digital Royalties' (2015), available at http://www.billboard.com/articles/business/6598243/british-swedish-and-german-collection-bodies-unite-look-to-simplify. The recent Collective Rights Management Directive aims also at facilitating multiterritorial licensing for the online use of musical works.

5.3.2.1 Value-added and industry potential of the case study

In May 2014, **ARMONIA** appointed **BMAT**, a Spanish company, to jointly build the fastest growing digital copyright platform in Europe to allow any copyright owner to track their compensation chain, from the Digital Sales Report (DSRs) to the distribution money, over a multi-functional interactive dashboard. BMAT is connected and receives DSRs from the major digital music service providers. According to the data published on their website⁸³⁴, BMAT has processed and stored over 1,500 DSRs, undertaken 220 million transactions and reaped 7 billion sales from iTunes, Deezer, Amazon, Spotify, Google, YouTube, Xbox, Sony, Omnifone, Beatport, Rdio, Rhapsody, Vevo, Nokia, Recisio and 7Digital. BMAT platform leverages on parallel and cloud computing to reach an average capacity of processing of 2 gigabytes per minute. **The platform is equipped with the most advanced identification technologies based on audio fingerprint and metadata description**. ARMONIA is today capable of processing 2 billion video views per month against 50 million song references. The next steps aim at easing the identification of music works by enriching DSRs with BMAT metadata. Following a recent deal with CISAC, subscribed by 30 Authoring Societies, BMAT will propagate ISRC, ISWC, producer, publisher and composer information to the digital music services reports to make work identification easier, faster, and more secure.

5.3.2.2 Market Structure and Imperfections

ARMONIA aims to develop and facilitate on-line music service offerings by providing a "one-stop shop" for licences for numerous repertoires enabling the decrease of the licensing costs for music users, as well as to guarantee the diversity of the works represented within these services. This system guarantees more efficiency and transparency in managing authors' rights.

5.3.2.3 Implications for stakeholders

ARMONIA and BMAT allow creators to have a better tracking of the use of their online content also in mash-up and UGC platforms, thus improving their revenues stream. A recent test conducted on 50.000 UGC videos - representing 2 billion viewers - showed that 30% on these videos contained musical work that have not been recognised by the UGC platforms (SACEM, 2015). ARMONIA/BMAT is an example of efficient cooperation between collective management societies to the benefit of authors, composers and music publishers and the advantage of users. Furthermore, ARMONIA reinforces cultural diversity in Europe by facilitating pan-European licensing of music.

5.3.3 Case Study 3: WIN

The **Worldwide Independent Music Industry Network (WIN)** is a global forum for the professional independent music industry launched in 2006.⁸³⁵ WIN membership includes *independent industry trade bodies* representing sound recording right holders, including A2IM – American Association of Independent Music (USA), AIM – Association of Independent Music (UK), **IMPALA – Independent Music Companies Association (Europe)**, UPFI – *Union des Producteurs Phonographiques Francais Independants* (France), and VUT – German Association of Independent Music Companies (Germany). The WIN provides support for the independent music sector to face business, creative and market access issues through interaction with representative trade organisations and groups. The WIN monitors the policies and effectiveness of collective rights management and licensing organisations for independent right holders and works directly with collecting societies to ensure independent right holders' interests are properly represented internationally. Furthermore, the WIN provides legal and commercial support to independent trade associations and promotes the development of representative groups in countries where they do not yet exist.

5.3.3.1 Value-added and industry potential of the case study

In July 2014, the WIN launched the innovative initiative **Fair Digital Deals Declaration**, 836 a statement of commitment made by independent record labels in order to **treat their artists fairly** in agreements relating to

⁸³⁴ Source: http://www.armoniaonline.eu/

⁸³⁵ Source : http://winformusic.org/

^{...}

⁸³⁶ Source: http://winformusic.org/declarationhomepage/fair-digital-deals-pledge/

digital exploitation of artists' work in recorded music agreements with third parties. Signatory companies commit to share the benefits of dealing with digital services fairly and clearly with authors, in order to **ensure a sustainable economic relationship between the independent recorded music industry and the artists**. Any label signing up to the Declaration also commits to communicate to its artists that they have signed it. Up to now, 1000 independent labels signed the Declaration from 29 countries. The move received support from artists and associations such as BASCA, the British Academy of Songwriters, Composers and Authors and FAC, the Features Artists Coalition.

5.3.3.2 Market Structure and Imperfections

The WIN is an example of how collaborative networks of associations and trade unions **can improve fairness and transparency as well as authors' and performers' bargaining positions** vis-à-vis users by engaging in **collective negotiations**. The signatory companies of the Declaration are committed to:

- Ensure that artists' share of download and streaming revenues is clearly explained in recording agreements and royalty statements in reasonable summary form;
- account to artists a good-faith pro-rata share of any revenues and other compensation from digital services that stem from the monetisation of recordings but are not attributed to specific recordings or performances;
- encourage better standards of information from digital services on the usage and monetisation of music;
- support artists who choose to oppose unauthorised uses of their music.

5.3.3.3 Implications for stakeholders

The WIN is very positive for independent creators because it allows for a fairer redistribution of revenues (less transaction costs and licensing fees), more transparent payments and increase of bargaining power.

It enables to show the actual contribution of independent labels to the economy and conduct market research on a global scale. According to WIN (2016), independent record labels represent a 37.6% global recorded music market share and contributed USD 5.6 billion to the global music industry in 2015. This is important since market share is used by online music service providers such as Apple and Spotify when negotiating with the independent sector and contributes to determining the levels of remuneration paid by these companies to music right holders.

The WIN is also highly beneficial for consumers, who can benefit from a broader, more compelling choice of legal music offer than before.

5.4 Conclusions and policy recommendations

As highlighted in the paper, the digital shift challenged the copyright system and its enforcement, which had several implications for the CCS and especially for creators and producers. The CCS are important for the development of the European Digital Single Market (DSM), its economic ambitions and its cultural and social objectives. It is pivotal to find the right balance between the protection of creation and the needs of the new ecosystem in terms of access. Copyright provisions (contractual freedom, exclusivity and territoriality) are not an obstacle to the development of the DSM but rather an indispensable instrument to ensure the creation of value for right holders and foster the creative process. Thanks to copyright, creators and producers are able to exploit and trade their rights independently and in accordance with their legitimate and moral interests (KEA, 2010). The real issue is to enhance the transparency and accountability of the digital payments system and licensing process in order to ensure a fairer redistribution of value for creators and other right holders. A more efficient system could also be beneficial for users and enhance cultural diversity. Overall, improving the situation for right holders will incentivise them to make more content available online, thereby increasing consumers' choice and ensuring legal certainty for all players.

To this end, the paper highlights two sets of measures: on the one hand, the need for a better application and recognition of metadata for online tracking; on the other hand, the importance of collective bargaining and licensing initiatives or mechanisms, exemplified in the three case studies analysed in the paper (MERLIN, BMAT/ARMONIA and WIN). These initiatives are good examples of how collective action can have positive impacts on producers, creators and other rights holders because they address some of the main obstacles to a fairer redistribution of revenues underlined in the paper. As discussed, collective licensing and bargaining initiatives can reduce the transaction costs and licensing fees, increase creators and other rights holders' bargaining power and implement voluntary actions to increase the transparency of payment streams.

More specifically, the European Commission can consider the following recommendations to improve the position of creators and other right holders:

Increase creators' bargaining power and ensure fair remuneration

- 1. Systematic, wider and correct application and recognition of metadata:
- Foster the development of solutions such as **registries or systems that could enable authors and artists to access the data related to all the recordings of their works** and correct them in case of
 encoding mistakes in order to improve the correct application of metadata;
- Enhance the cooperation of right-holders in the identification of their content and support initiatives such as DDEX to set up an international standard for metadata as well as an open metadata database shared between different CMOs and cultural industries in order to avoid duplication, following the "GSM" model in the telecom sector (Pons, 2015)⁸³⁷;
- Support automation in tracking uses of creative content online with ID databases building on existing initiatives or pilot projects (e.g. The Linked Content Coalition, The Copyright Hub);
- Support initiatives for the tracking of protected work in mash-up or UGC, such as BMAT/ARMONIA
- Launch a feasibility study for the set-up of an independent regulatory authority for metadata.
- 2. Ensure better control of right-holders over the use of their content by digital service providers distributing user uploaded content.
- 3. Promote knowledge of intellectual property issues and raise awareness about the importance of negotiating contracts amongst creators and other right holders, at national level;

As already described in the sectoral analysis chapters, fair remuneration of creators and non-precarious jobs for artists need to be ensured when dealing with imbalances in the value chains in the digital age. This issue has also been addressed by the recent European Parliament resolution on a coherent EU policy for cultural and creative industries. 838

Increase transparency in payment of royalties to creators

- 1. Promote initiatives to raise awareness amongst creators and other right holders about which technological solutions exist to register their content;
- 2. Increase awareness across creators, other right holders and users (e.g. industry, service providers, consumers) about the correct and systematic application of metadata.
- 3. Promote the exchange of best practices amongst CMOs for the improvement of their ICT infrastructure and use of Big Data.

Simplify the licensing process

1. Continue to support voluntary creation of licensing hubs and registries to identify right holders for example with the increasing use of metadata via the research and innovation programme Horizon 2020 or the Creative Europe programme. In particular, the Creative Europe MEDIA sub-programme is promoting the development of licensing hubs to facilitate the licensing of works that are not yet available in a given Member State. An example is the International Cinema Exchange project, which is currently developing a film cloud that will offer users an unlimited cross-border access to a selection of films.

2. Promote the establishment of ICT-based internationally connected licensing infrastructure: this can be achieved by promoting market-driven one-stop shop solutions, interoperability between existing services and tools, as well as stronger cooperation of right holders, users and technology stakeholders.

⁸³⁷ During the '80s, a mobile operator was able to develop a proprietary model in its country that was so strong that it forced subscribers to rent a mobile phone and sign a contract with a foreigner mobile operator while they were travelling abroad. The portability of mobile phones and subscriptions was not possible. In the '90s, the GSM standard allowed for a legal and technical interoperability between mobiles phones and subscriptions from different mobile operators

⁸³⁸ http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+TA+P8-TA-2016-0486+0+DOC+PDF+V0//EN

Enhance cultural diversity (see also next thematic paper on cultural diversity for additional insights on this topic)

- 1. Support the correct use of metadata to retrieve non-mainstream content;
- 2. Support collective licensing initiatives to promote the distribution of small catalogues.

6/ Cultural Diversity

6.1 Introduction: on the importance of Cultural Diversity

There are obviously good reasons why Cultural Diversity has become **a cornerstone in the development of policies related to culture**, and beyond. It can be seen as a common heritage of humanity (Unesco, 2005). The sheer existence of Cultural Diversity enriches the whole of humanity. At an individual level, Cultural Diversity increases the range of choices available (Unesco, 2005). In fact, from an economic point of view, consumers value diversity because they have different tastes, or because every consumer has a taste for diversity (Ranaivoson, 2012). Beyond the economic approach, Cultural Diversity is a capacity for expression, creation and innovation (Unesco, 2001).

Cultural Diversity is also an important component of European identity (Fuchs & Klingemann, 2011), as regularly outlined in EU policy documents on the creative sectors (see European Commission, 2014). In fact, the respect of the EU's cultural (and linguistic) diversity is an objective of the Treaty on European Union and the EU is Treaty-bound to take the cultural dimension into account in its core policies. However such an objective may prove difficult to reach – mainly because **the concept is too blurred** (Bonet & Négrier, 2008). For example, in the 2005 UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions, Cultural Diversity "refers to the manifold ways in which the cultures of groups and societies find expression" (Art.4), 839 which could include any expression, and prevents diversity from being assessed.

The interlinkages between Cultural Diversity and market imperfections are particularly relevant to study in relation to digital developments and will constitute the background for all issues analysed in this paper. Almost by definition, diversity is a market imperfection since perfect competition assumes a market where all goods and services exchanged are homogenous. Besides this conceptual paradox, there are crucial challenges for Cultural Diversity that directly stem from market imperfections, and in particular that there is no level playing field for creators and their works. Let us note that cultural diversity can be approached in two (related) ways: by considering that it refers to the diversity of the people's identities, or that it deals with the diversity of cultural expressions. The latter includes (but is not limited to) the content produced and distributed by creative sectors. Because of its **focus on market imperfections**, this paper considers Cultural Diversity in the latter sense but refers to "Cultural Diversity for clarity's sake. Furthermore, it seeks to identify features that are common across several creative sectors whilst highlighting, where appropriate, issues which have received a special attention in EU policy making (such as challenges in the film sector).

Digital technology could modify the current imbalance to which some creators and their works are subject, in favour of more Cultural Diversity. Actually, marginal costs of reproduction and distribution are reduced. Physical constraints and market barriers are dramatically lowered for some functions in the value chain. The paper analyses the corresponding opportunities opened up by digital technology, while also highlighting the (so far) relatively moderated impact.

The paper aims at summarising recent studies on cultural diversity, addressing current challenges faced by most creative sectors although the examples focus on a few of them, in particular due to the limited amount of data (and studies) available. In the remainder of the paper, section 2 discusses how cultural diversity can be practically defined, and the related challenges, in particular in terms of market imperfections. Section 3 examines the notion of the Long Tail and the hopes it raises in terms of increasing cultural diversity. Section 4 analyses issues related to the circulation of content, with a focus on broadcasting and cinema content across the EU. Section 5 briefly discusses some of the most common policy options used to protect and promote diversity.

6.2 Cultural Diversity: a polysemous concept

6.2.1 The need for a definition of Cultural Diversity

A core assumption of this paper is that Cultural Diversity is an important concept for European policies. **The concept however needs to be more precisely defined, in particular to allow its assessment** (KEA, 2015; Ranaivoson, 2013). There is growing literature on the topic but it still lacks a common framework. A precise

⁸³⁹ Since cultural expressions are "those expressions that result from the creativity of individuals, groups and societies, and that have cultural content" (Art.4), for the purposes of the paper, cultural diversity and diversity of cultural expressions will henceforth be used interchangeably

definition of Cultural Diversity should provide a common basis for discussion among scholars or in the view of building policies. It stands also as a crucial step to build and evaluate policies in favour of Cultural Diversity.

A more precise definition of cultural diversity is therefore needed. As in the case of biodiversity, this is clearly "more than matters for semantic wrangling" (McIntosh, 1967). Definitions of biodiversity have enabled researchers to discuss this concept in a way that is neither ambiguous nor arbitrary (Sugihara, 1982) and have given practitioners the means to balance goals in terms of diversity with the cost of promoting it (Weitzman, 1994). In a nutshell, defining diversity is important because of the valuable knowledge it provides, a knowledge that can be used notably to build and evaluate policies in favour of cultural diversity.

Therefore, this section aims at providing a practical definition of Cultural Diversity, allowing a global understanding of the phenomenon and in particular of the underlying issues. Some of these issues are analysed in the following sections. Following Ranaivoson (2007a), we assume Cultural Diversity encompasses 3 dimensions:

- Diversity is a mix of variety, balance and disparity;
- Diversity can be assessed at three levels (at stakeholder, product and consumer levels);
- There can be differences between the diversity as supplied and the diversity as actually consumed.

6.2.2 Diversity as a mix of variety, balance and disparity

Cultural Diversity can be operationalised by considering that any form of **diversity is a mix of variety, balance and disparity** (Stirling, 2007). This definition did not originally apply to Cultural Diversity (Ranaivoson, 2007b), however it is applied to an increasing number of creative sectors from film (Fialho de Araùjo, 2007; Moreau & Peltier, 2004), to book publishing (Benhamou & Peltier, 2007), music (Ranaivoson, 2010b), broadcasting (Farchy & Ranaivoson, 2011), and cultural heritage (Saccone & Santagata, 2012). It is, in particular, used by the Unesco Institute of Statistics (UIS) since it set up an international Expert Group to develop a blueprint to measure the diversity of cultural expressions. As part of its efforts to create benchmarks, the UIS has incorporated the measurement of the diversity of expressions into its analysis of the biannual Feature Film Survey.⁸⁴⁰

To assess the diversity of a system (e.g. of the catalogue of a Video-on-Demand platform), the first step is to group its elements (i.e. audiovisual works in this case) into categories. Once this categorisation has been carried out, variety corresponds to the number of categories; balance to the way the elements are spread among categories (e.g. the share of every category of audiovisual works in the catalogue); disparity to the level of difference between the categories (e.g. between every pair of them or between the two most distinct).

6.2.3 Concentration vs. Diversity

An important issue when dealing with Cultural Diversity, in particular in creative industries, consists in how market concentration impacts diversity. **The relation between concentration and diversity should not be taken as granted.** To better understand it, it is important to distinguish between product and stakeholder diversity.

6.2.3.1 Diversity of products vs. stakeholders vs. consumers

The second dimension of our definition of cultural diversity encompasses **product, stakeholder and consumer diversity** (Ranaivoson, 2007b). These three elements largely correspond to Napoli's classical distinction between content, source and exposure (Napoli, 1999).

Product diversity refers to the diversity of the characteristics of products that can be goods or services, either supplied or consumed.

Stakeholder diversity means diversity of actors at every stage of the creative value chain. The distinction between stakeholder and product is not always obvious, especially for creators since they also benefit from marketing and communication. The products are generally linked to their creators, which is specific to cultural products. Stakeholders are different from products insofar as they are able to change. Once a movie has been released, it cannot change; if another version of this movie is released, it is another movie. However, an artist can evolve and develop vastly different products but remains the same person.

⁸⁴⁰ http://www.uis.unesco.org/Culture/Pages/cultural-diversity.aspx

Consumer diversity consists of the diversity of the people who obtain and consume products. Consumers are targeted by creators, producers and distributors who encourage them to consume their products. Consumer diversity should not be confused with demanded diversity. While the latter is an economic concept that relies on the assumption of stable preferences that are independent of the nature and level of supply, the former aims to reflect the diversity of consumer tastes. Above all, consumer diversity is linked to diversity of cultural identities, beliefs and habits. It reaches far beyond economic issues.

6.2.3.2 The ambiguous impact of market structure

The impact of market structure on content diversity is ambiguous (Van Cuilenburg & Van der Wurff, 2001).841

On the one hand, there is indeed **an opposition between economies of scale and diversity** (Dixit & Stiglitz, 1977; Lancaster, 1979a). Economies of scale exist when fixed costs are large in relation to variable costs. This is the case for many creative products. For example, this phenomenon incites video games publishers to focus their efforts on a few games since an increase in their consumption will decrease their average production costs (by unit sold). The opposition between diversity and cost reduction is a standard result in the literature on monopolistic competition, starting with Chamberlin (1933). This literature finds that in order to reduce production cost, producers tend to supply less diverse products, that do not reach the diversity of consumer demand.

In addition, **economic models show a tendency for competing producers to end up offering standardised products** (Hotelling, 1929). Indeed, producers want to obtain the greatest market share and, to do so, aim to produce the product that best fits the tastes of the average consumer. As such, they fail to cater for consumers with more marginal tastes. As a result, although there may seem to be an increasing variety of cultural goods and services, even more of them target the average consumer and are therefore even more alike. Thus in the case of media, Assogba (2015) argues that having several media companies does not necessarily lead to diversity of news, notably because each media then lacks sufficient means to produce quality content.

On the other hand, **economies of scope can also incite producers and distributors to offer a diverse range of products**. Economies of scope can be realised in those sectors where product diversification is based on the common and recurrent use of proprietary know-how or on an indivisible physical asset (Teece, 1980). A diversified catalogue has several assets. It first allows companies to follow a portfolio, akin to financial assets (Markowitz, 1952a). It is also a way to reduce competition: saturation of the market allows erecting barriers to entry (Curien & Moreau, 2005; Lancaster, 1979a; Schmalensee, 1978a). The sectoral value chain mapping on visual arts thus illustrates the economic relevance for stakeholders to diversify: museums diversify their activities to face budgetary restrictions; sales galleries and art dealers diversify their portfolio in order to reduce risks. In general, this argument applies well to all cultural industries, thus in the book sector, retailers can benefit from economies of scope, which tend to favour the biggest stores, i.e. the ones with the largest, and potentially most diverse, catalogues (see also the sectoral value chain analysis on book publishing).

On the relation between market concentration and diversity in the music industry: Cyclical account Vs. Open system account (based on Ranaivoson, 2007)

A compelling controversy among music sociologists has opposed advocates of the 'cyclical account' (Peterson and Berger, 1975; Rothenbuhler and Dimmick, 1982) and proponents of the 'open system account' (Lopes, 1992; Dowd, 2001; 2004). According to the former, market concentration (on the supply side) hinders innovation because the major companies and their executives are characterised by their conservatism, whereas vertical integration allows them to restrict competition (Peterson and Berger, 1975). However, innovation is a necessary condition for diversity (Peterson and Berger, 1996). As such, when there is greater concentration in the recording industry, which is the case from the 1950s and onwards at least for the USA, there is also less diversity.

On the contrary, according to proponents of the 'open system account', there may be further concentration but the majors decentralise their production and organise internal competition (Dowd, 2001). More specifically, the major companies deal with finance and distribution, leaving their labels to deal with production, and readily associate with independent producers (Lopes, 1992). As a result, there can be both higher concentration and greater diversity.

Therefore, there is no straightforward way to describe the impact of the greater concentration of the music industry (in particular for distribution) on the diversity of music. As analysed in the sectoral value chain mapping

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⁸⁴¹ This is also due to difficulties related to the empirical observation of links between concentration and diversity, as George (2015) highlights in the case of news production.

on music, mergers in the music industry took place and there are now three music majors left. According to the cyclical account, this should lead to a lower diversity, and this could be the contrary according to the open account. The policy implication is that **limiting market concentration** (cf. for example decisions regarding mergers in the music industry) favours stakeholders' diversity but not necessarily product diversity, and hence, again, **the impact on cultural diversity is ambiguous**.

In addition, digitisation makes it even more challenging to directly transpose these theories, as additional players access the market, especially in terms of distribution.

6.2.3.3 What digitisation changes

Digitisation does not make the relationship between market structure and diversity of products less ambiguous. On the one hand, there is a much greater amount of content available to citizens thanks to the democratisation of content production; reduction of distribution to an audience that is potentially global; and constant emergence of new services relying on innovative business models (Masnick & Ho, 2012, 2014). Such services or new activities are at all steps in the Value Chain from creation to distribution. A consequence would be **greater diversity** also at user level (Anderson, 2006; Cowen, 2002; Peltier & Moreau, 2012a).

However, digital technologies are likely to threaten traditional players in cultural industries (creators, intermediaries) to the benefit of players who are not traditional players in these industries and not primarily or exclusively focussed on cultural production (i.e. Google, Amazon, Facebook and Apple or 'GAFA' as well as smaller players). As seen in the individual value chain mapping, some distribution channels are very concentrated with online platforms in monopoly or oligopolies.

What is the impact of such concentration? Some authors point out that these online platforms' commercial strategies are likely to lead to more homogeneity in content supply and consumption (Feigenbaum, 2007; Véronique Guèvremont et al., 2013) . These platforms however have incentives to provide a diverse offer, as seen in the previous section but reinforced by digital technologies' capacity to attenuate time and space constraints.⁸⁴²

6.2.4 Supplied diversity vs. Consumed diversity

The third and final dimension to approach cultural diversity consists in **distinguishing between supplied diversity and consumed diversity** (Van Cuilenburg & Van der Wurff, 2001). For most cultural activities, there is a production and then there is a market for that production in a broad sense, i.e. a place where supply meets demand. This is clearly the case for cultural goods and services and is also arguable for other cultural activities. In this case, in every market, you have two kinds of diversity: diversity as it is supplied by suppliers and diversity as it is accepted by consumers.

Supplied diversity corresponds to the diversity of what is made available. Consumed diversity refers to diversity as it is actually consumed, thus depending on both consumer tastes and supplied diversity. Suppliers may be the creators or any (upstream) intermediary actor in the value chain. Likewise, consumers can be the audience or any (downstream) intermediary actor in the value chain), from publisher to retailer. The word "consumption" must be understood in a very broad sense: a consumer does not necessarily pay for its consumption. Neither is the product necessarily destroyed after this consumption.

The analysis of the links between supplied and consumed diversities has been revived with the advent of the Long Tail theory and surrounding debates regarding its impact in the creative sectors (see next Chapter).

6.3 Supplied and consumed diversities. The case of the Long Tail

This chapter focuses on the Long Tail theory. This theory is often evoked when addressing the role of digital technologies to alleviate market imperfections and increase cultural diversity. The chapter rapidly explains how it works, the potential impact on actors in the value chain, and whether this theory is realistic, i.e. whether a Long Tail can be observed in creative sectors.

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⁸⁴² See also the thematic paper on online platforms.

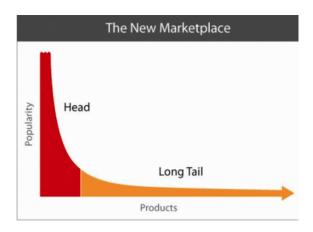
6.3.1 What is the Long Tail?

Anderson coined the Long Tail to predict that digital technology will allow consumption to become much more diverse (Anderson 2006). The Long Tail consists in two trends:

- The decreasing importance of the Head (popular products) in relative or even absolute terms (e.g. respectively the decrease of their market shares or of their sales volumes);
- The increase of the Tail, i.e. the increase of niche products. The latter idea is also argued for by Brynjolfsson et al. (2003) when they discuss the importance of obscure works in online sales.

In the following figure, the Head is on the left side, it includes the works that are the most purchased/consumed/etc. The Long Tail is on the right side. The Long Tail theory assumes the number of works in the Long Tail increases thanks to digital technologies. In addition, their economic importance increases.

Figure 38: The Long Tail



Source: (Anderson, 2006)

This theory has been regularly **opposed to theories of Superstars, which aim at explaining why consumption is focused on a restricted number of products or creators,** the so-called Superstars (e.g. best-sellers, hits, etc.).⁸⁴³

6.3.2 Why can there be a Long Tail?

The existence of the Long Tail is due to (Ranaivoson, forthcoming):

- A democratisation of production means (Anderson 2006). Personal Computers and more recently mobile devices have been instrumental in such a trend.
- A reduction in costs to access content, notably thanks to the internet (Anderson 2006). Actually, in the offline world, space (or time e.g. for broadcasting) must be reserved to best-sellers rather than left to works that take as much space but sell less (Anderson 2006; Brynjolfsson et al. 2003). In other words, supplied content diversity is broader online than offline as physical space restrictions and logistics are reduced (Le Lec, Lumeau, & Tarroux, 2015).
- ► The fact that digitisation allows to group enough consumers to create market niches of a sufficient size (Anderson 2006).

⁸⁴³ There are two theories with different, though compatible, approaches Rosen's (1981) and Adler's (1985). According to Rosen (1981), some creators (or products) are Superstars because they are more talented and benefit from technology that allows them to reach a great number of consumers at a low cost. The Theory of Superstars in Adler's (1985) approach puts information at the core of the choice by consumers and hence of the resulting (lack of) consumed diversity. Since consumers try to find out as much as possible about what they consume, the most famous creators or products are advantaged, and this is a self-reinforcing feature (Adler 1985). This chapter focuses on the Long Tail. For more information on this theory, it is possible to refer to (Ranaivoson, forthcoming).

Relevant filters exist that help consumers find what is likely to please them in spite of the abundant supply (Ranaivoson, forthcoming).⁸⁴⁴ Anderson (2006) argues that the lower costs in acquiring information concern the products and creators for which it is more difficult to get information offline, i.e. those that belong to the Tail. Furthermore, they benefit from decentralised prescription and promotion, contrary to more centralised traditional media.

6.3.3 The impact on value chain stakeholders

Anderson (2006) predicts that the development of the Long Tail will have a clear impact on some of the market players, with differentiated effects depending on their functions.

First, consumers benefit from the Long Tail through this much larger choice available. Brynjolfsson et al. (2003) thus assess that in the US book market, consumers have benefited more from the increase in supplied variety than in price reduction. Consumers also benefit from the constant emergence of new services relying on innovative business models (Masnick & Ho, 2012).

Regarding creators, while Anderson (2006) predicts **a positive impact on creators**, it should be on average **of limited scale**. Marcone (2010) does not predict major changes for independent creators since the Tail is not developing fast enough.

The greatest beneficiaries are those companies that give consumers access to a great variety of goods or services (Anderson 2006; Brynjolfsson et al. 2003). Such companies are generally **platforms** that act as intermediaries between different types of users, for example Amazon acts between consumers and third-party retailers who sell on its platform. **They are incited to increase the diversity of their offer thanks to economies of scope** (see previous section).

However, it is also a way to reduce competition since saturation of the market allows barriers to entry to be erected (Lancaster, 1979b; Schmalensee, 1978b). Therefore, **the impact on traditional intermediaries** (bookstores, record producers, etc.) **is ambiguous** (cf. thematic paper on two-sided markets). Goel et al. (2010) believe that there is a risk that the online platforms' increasing control over access to cultural works may threaten the visibility and promotion of marginal cultural works even compared to the current situation. The **crucial question** here is **to what extent platforms are willing to ensure that marginal cultural works** (e.g. created by young creators, produced by independent producers, or originating from small countries, etc.) **are not only available but are promoted in a way that can compensate their initial lack of visibility**. This is in essence the result of a research recently published by Peltier et al (2016) on the French publishing industry: sales are less concentrated online than offline, and the smallest publishers are the ones benefitting from the rise of the online market.

There are, **on the contrary, examples where platforms limit diversity of the content they make available**. The analysis of the book publishing value chain provides a few examples, notably with Apple pulling off 1,500 comic strips from a French digital comics publisher because of the representation of nudity. Similarly, in the analysis of the multimedia value chain, it is explained that while platforms such as Steam allow all kinds of developers and publishers to sell their games, some developers censor themselves because it has become increasingly difficult to make their product visible on these platforms, and there would be guidelines big platforms follow to promote games. A report by the European Audiovisual Observatory on the visibility of films on VOD in the French, German and British markets (Fontaine, 2015)⁸⁴⁵ shows that only a small minority (under 10%) of the catalogue is actually promoted. Most of these films (between 65% and 80%, depending on the country) are recent films (produced in 2014 or 2015). Among these recent films, a limited number benefited from the most visibility: at national levels, the 10 most promoted films gather between 37% and 43% of all the promotional spots. About one third of films which are promoted are European films. In Germany, the majority of European films promoted were non-national, whereas national films accounted for about 60% of promoted films in France and the UK. In the three countries, the share of US films among promoted films is in the range of 55%.

⁸⁴⁴ See also the thematic paper on two-sided market for a discussion on how platforms may use filtering, and their potential impact on competition.

⁸⁴⁵ It includes data from October 2015, focusing only on Transactional VOD, i.e. services where each work is rented or bought, as opposed to Subscription VOD, i.e. services where users pay a regular fee to consume as many works as they want. The note builds on data gathered by the company AQOA, who monitors on a daily basis the films put forward by a representative sample of on-demand services, available either on cable/IPTV or Over-the-top, and covering at least 70% of the on-demand transactional market.

6.3.4 Does the Long Tail exist?

Since the advent of the Long Tail theory, several papers have tried to assess its relevance to describe current trends regarding the impact of digital technology on creative sectors (and beyond). Based on (Ranaivoson, forthcoming), the following table lists some of the papers that focus on creative sectors in EU member states. A first result is the lack of recent research applied to the EU and, at that time, the ambiguous results regarding whether the Long Tail effect exists or not in the examined sectors.

Article	Sectors	Country	Long Tail effect?	Findings
Benghozi (2008)	Film and Music (DVD, CD)	France	+	DVD sales are concentrated online. LT effect stronger for CDs
Benghozi & Benhamou (2008)	Film and Music (DVD, CD)	France	+	LT effect although less strong during periods when sales are the highest
Bourreau et al. (2011)	Music	France	+	Increased consumed variety. Weight of top 100 is lower online, as well as the Hirschman Herfindahl Index (index measuring market concentration).
Dodson (2016)	Music	Belgium, Sweden	+/-	Less variety for Spotify Belgium compared to singles charts. Other indicators are more or less similar between Spotify and singles charts.
Gallego (2016)	Music	Spain	-	Even less balance on online platforms compared to radio (the paper does not strictly rely on the Long Tail approach)
Goel et al. (2010)	Film, Music ⁸⁴⁶	n/a	+	Most consumer choices are at least a bit eccentric so a long tail effect can be observed overall (the paper deals more with consumer satisfaction)
Hinz et al. (2011)	Film (transactional VOD)	Germany	+/-	A growing offer leads to greater demand per customer, although on a diminishing scale. A growing catalogue size does not necessarily lead to the end of the "blockbuster era". Strong influence of search technologies on the demand distribution. Niche demand is mainly generated by heavy users
Moreau & Peltier (2011)	Book	France	+	Sales have decreased for top 500 and all the more restrictive tops. They have increased for all other categories. Increase in the number of titles available as well.
Page & Garland (2009)	Music	UK	-	Volume (legal sales or 'pirate' swaps) is concentrated amongst a small proportion of the available tracks. The gap between hits and niches is widening
Peltier & Moreau (2012b)	Book	France	+	Bestsellers got smaller market shares online than offline, contrary to medium- and low-sellers. Both online and offline sales shift from the head of the distribution to the tail with increasing magnitude. The LT appears to be more than just a short-lived phenomenon caused by the specific preferences of early adopters of e-commerce.
Smyrnaios et al. (2010)	Online news	FR (French- speaking)	-	French-speaking news websites have quite similar characteristics to those of traditional media. News appears to be both varied and very unevenly distributed.

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⁸⁴⁶It also includes web search and browsing

The Long Tail theory strongly relies on the positive role played by digital technology to reduce market imperfections and thus lead to a greater Cultural Diversity. It is however not clear whether this theory is a good predictor of the impact of digital technology on creative sectors. In addition, it assumes that online platforms play a positive role in ensuring a more diverse offer (which should result in a more diverse consumption). Whether this diverse offer can be maintained in the long run by dominant players in the digital economy remains to be seen.

The next chapter further analyses whether online platforms favour the cross-border circulation of content.

6.4 Circulation of cultural content in the EU

An interesting and important case of tension between concentration and diversity is the fragmentation of cultural markets in the EU. As some sectoral value chain mappings show, each market remains focused on their national production, with limited interest in the rest of the EU (and in the world)'s products. Only one type of production is present across the whole European Union and is thus able to take advantage of related economies of scale: US cultural products. This feature itself **reinforces concentration in favour of US products and stakeholders**.

This chapter will discuss to what extent, although cultural diversity is a value enshrined in the TFEU, a lack of interest in other Member States' cultures may be observed. In other words, the fragmentation of the industry structure corresponds to a lack of cross-border circulation for cultural content. This has an impact on the overall economics of content production and distribution in the EU. In particular, the Digital Single Market remains fragmented into 28 national markets, and the EU continues to lag behind its main international competitors (Szczepański, 2015).

This chapter focuses on film and TV broadcasting (with a few examples and analogies drawn with other sectors) but the issues discussed here are relevant for most – if not all – creative sectors. Film (and to a lesser extent TV broadcasting) have been chosen because of the larger amount of data available at the EU level on diversity provided by offline and online services.

6.4.1 The lack of circulation of EU content

The first observation when considering consumption of cultural content in the EU is **the lack of circulation of cultural content across Member States**. In the case of publishing, this may correspond to a domination of books originally written in English. Thus, books in translation represent an estimated 75% of the books produced in the Netherlands, with English being the most important source language (Johnson & Cox, 2016). This follows a general trend towards market concentration, e.g. in France (Peltier et al, 2016) or in Poland (Johnson & Cox, 2016).

Data on the film sector allow the most precise example to be provided. Actually, **the lack of cross-border distribution and consumption of European films has been a weakness of the European sector for several decades** (KEA & Cerna, 2010; Ranaivoson, De Vinck, & Van Rompuy, 2014) and has therefore been thoroughly documented. There is an imbalance between production, distribution and consumption, i.e. between the number of films produced and the number of films that actually reach their targeted audience. There are substantially more European than US productions but European films are distributed on a smaller scale and have difficulties in reaching a wider audience in non-domestic markets, including within the EU (European Commission, 2014).

Recent figures provided by the European Audiovisual Observatory confirm this trend. They show, in particular, for the circulation of films in cinemas in the EU that (Grece, 2016):⁸⁴⁷

- EU films do not travel as well as US films. On average, EU films were released in cinemas in 2.6 countries, US films in 9.7 countries:
- ▶ 63% of EU films were only released in one country, mostly their national market;
- 82% of international (neither European, nor US) films were released in two countries or fewer;
- ▶ EU films represented 64% of the total number of films released but accounted for only 27.4% of total admissions (respectively 16% and 70.1% for US films).

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⁸⁴⁷ This concerns films released in EU cinemas between 2005 and 2014.

6.4.2 A lack of cross-border circulation of content not remedied by digital technology

In a period of important transitions, fuelled by the spread of digital technology and solutions, **online content markets have sometimes been seen as an opportunity for European content to circulate across borders**. This is notably the case for audiovisual content (Ranaivoson et al., 2014). The hope is that online content services could set up a cross-border on-demand presence. Actually, they may contribute most to the establishment of pan-European communities for European film, crossing traditional language and culture borders and aggregating small "fan bases" in a feasible new business proposition (cf. Gubbins, 2012).

Such hopes have, however, not been achieved so far, with **still a quite limited online circulation of content across the EU**. Data on film – although relatively scarce – gathered in previous studies suggests that the online market is not more diverse, neither in terms of supply nor demand (see e.g. KEA & Cerna, 2010). De Vinck et al. (2014) show that VOD does not score particularly better than linear transmission, mainly relying on data provided by the French *Centre national du cinéma et de l'image animée*, the agency responsible for the production and promotion of audiovisual content in France. The cinematographic offer is more diverse in cinemas than on VOD (especially with a less hegemonic place for US films). This happens in spite of the fact that online content services can be beneficial to new artists. This is the case for music streaming services in Sweden according to the *IFPI Digital Music Report 2014*.

This diagnosis is confirmed by the latest figures (October 2015) provided by the European Audiovisual Observatory. The report "How do films circulate on VOD services and in cinemas in the European Union?" shows that films do not circulate better on VOD than in cinemas, and that US films circulate better than EU films (Grece, 2016). 848 It first shows that EU films do not circulate well on EU VOD services. EU films travel less well on VOD than US films. 949 On average, EU films are available in 2.8 countries (and half of them in only one country), US films in 6.8 countries. EU co-productions circulate however better than the rest of EU films. (Grece, 2016) assumes EU co-productions tend to be released in the national markets that participated in the co-production, thereby widening their country distribution. The gap between EU and US films can also be observed when considering the proportion of theatrical release films that make it to VOD: 47% of EU films released in EU cinemas were available on at least one VOD service (vs. 87% of US films). (Grece, 2016) finds that the number of theatrical release markets has a stronger positive influence on the number of VOD release markets than admissions for EU films. In terms of release markets, all films (except for films from the rest of the world) have a wider distribution in cinemas than on VOD services. VOD therefore has only a few advantages. First, the gap in terms of availabilities between EU and US films is smaller for VOD than in theatres. Second, documentaries have a wider circulation on VOD services than in cinemas.

6.4.3 Main impediments

This section shows why, in spite of the opportunities opened up by digital technologies, content (here in particular films), do not circulate enough across the EU. This is **related to two of the structural weaknesses of the European film sector in reaching potential audiences in the European Union** and globally, as identified by the European Commission (European Commission, 2014):

- Limited opportunities and incentives to internationalise projects and to target several markets;
- Fragmentation of production and financing.

6.4.3.1 A lack of cross-border demand?

Stakeholders in the cultural sectors often explain the lack of cross-border circulation of content across the EU by **pointing out the lack of demand for content from the rest of the EU** in every market. As recalled in the sectoral value chain mapping on film, the European film landscape is characterised by a high level of diversity, as cultural and linguistic features of different European countries largely shape audiovisual storytelling and content production. An industrial consequence is that, in particular within the independent film industry, it is very rare that a film is disseminated by one and the same company, but rather by a diversity of distributors operating nationally (the situation is not necessarily different for e.g US blockbusters). At consumer level, the consequence is that citizens have different tastes across the EU, which leads them to having different expectations regarding content

⁸⁴⁸ These are data from October 2015, focusing only on Transactional VOD, i.e. services where each work is rented or bought, as opposed to Subscription VOD, i.e. services where users pay a regular fee to consume as many works as they want.

⁸⁴⁹ The study shows in general that films from the rest of Europe and the rest of the world do even worse.

and therefore to consuming different films. Therefore, there are few incentives for stakeholders in the EU to target more than one country and internationalise their production.

On the other hand, US blockbusters show that EU citizens do not differ so much in terms of tastes, in other words **these blockbusters** (as well global best-sellers in the publishing industry, music hits or AAA video games) **are able to circulate across the whole EU**, and often globally. Regarding content originating in the EU, the success of a number of European films and TV series in different territories, with for instance German or Scandinavian crime series being sold and watched by large audiences on distinct national (TV) channels, is proof that at least in some cases, a cross-border demand can be identified (De Vinck et al., 2014). Moreover, the continued existence of a parallel illegal circuit that does not adhere to geographical or other borders, may also point towards underserved audience segments (Ranaivoson et al., 2014).

Besides the lack of demand, a previous study for DG CONNECT (De Vinck et al., 2014) on the *Fragmentation of the Single Market for on-line video-on-demand services* shows that **online content service operators** (in that case VOD representatives) **have little information about potential demand outside their home market**. It analyses a somewhat paradoxical situation in which several interviewees point out the lack of audience demand for cross-border services and content in Europe, while at the same time recognising that they do not know enough about potential demand outside their home market (De Vinck et al., 2014). VOD services operate country by country even Netflix (For example House of Cards produced by Netflix is shown in France by Canal +)

Therefore, the study continues, **when expanding to new markets, language and culture considerations to play a role for VOD services**. The BBC, for instance, chose to launch its Global iPlayer first in those countries with a high concentration of English speakers. Likewise, some stakeholders who are considering other countries to expand to, look first of all towards neighbouring countries and/or countries with the same language (De Vinck et al., 2014).

Instead of there not being a cross-border potential for VOD content circulation, the problem from the side of stakeholders such as the producers or VOD service providers seems to be that **the risk levels are perceived to be too high. Making titles available in other territories indeed entails additional costs**, which many interviewees consider as too high compared to the expected revenues. Next to the costs of acquiring different language licenses, there are also additional costs related to language adaptation. For example, dubbing and subtitling costs can run up very high. From a consumers' perspective, the lack of knowledge/promotion of non-US films that could fit their taste can also be a reason for not consuming "long-tail" production unless adequately promoted.

Cross-border access to online content (TNS Political & Social, 2015)

A recent study by TNS Political & Social analyses the EU citizens' behaviour regarding the access to content (audiovisual, music, e-books and video games) from the rest of the EU, using digital technology. Some of its findings help in understanding whether there is a lack of demand for content from the rest of the EU or not, as well as market potential for cross-border services (see next section).

It first finds that 62% of Europeans (in the Member States where English is not the official language) say that they only watch films or series that have either audio or subtitles in their national language(s). However, the younger the respondents, the less likely they are to only watch content dubbed or subtitled in their national language(s).

In terms of cross-border access, 17% of the respondents who pay a subscription have tried to use it to access online content while in another Member State. 21% have never tried this, but would be interested in doing so in the future. 33% of those who do not currently have a paid subscription say that if they took out such a service in the future it would be important for them to be able to access it when in another Member State.

8% of Internet users have tried to access content through online services generally meant for users in other Member States. The proportion of respondents who have tried to access online content across borders is higher among people aged 15-24. They do this mainly to look for content unavailable in their country and get a more diverse choice of content.

Few studies tackle the issue of this lack of demand for content from the rest of the EU. Thus, for Plum Consulting (2012), which showed that in the EU 17.6 million of people could be interested in cross-border services due to the fact that they live outside from their country of origin, and 108 million due to their language skill or interest.

6.4.4 Are cross-border online content services the solution?

The other reason for lack of circulation of audiovisual content across the EU is, as the sectoral value chain mapping on film describes, that the EU film market is characterised by a wide diversity of smaller players working at different levels of the value chain. Furthermore, audiovisual sectors (film and TV broadcasting) are particularly characterised by the fact that they remain national (or regional) markets, with national ecosystems of production (film financing, broadcasters, regulation, etc.) (De Vinck et al., 2014). Presales by national distributors remain important in the financing of films.

The resulting fragmentation of production and financing, as well as lack of cross-border distribution infrastructure, would also limit the circulation of content. Hence, the question of the role that online platforms could play in promoting cross-border circulation of content arises. Can they do better than national operators, by exploiting economies of scope and scale (see the paper on two-sided markets) to overcome the barriers to cross-border circulation?

The already mentioned study on the Fragmentation of the Single Market already focused on the cross-border reach of VOD services. Most VOD services are available in more than one territory (this result is inflated by services such as itunes or Netflix in fact present in one country only even if they are established in another country, the country of origin). The European Audiovisual Observatory estimated in 2013 that 52% of the VOD services available in one EU country are established in another (European Audiovisual Observatory, 2013). Some, for example, are available in a set of countries from the same region (e.g. the Romanian VOD service Voyo provides six different services in Romania and five neighbouring countries). Heimseh TV's VOD service is available for German-speaking people everywhere, except in Germany, Austria and Switzerland (De Vinck et al., 2014).

Some VOD services are global, or aim at being available across the whole world, e.g. the VOD service DAFilms that is specialised in documentaries. They usually provide various language versions on the same platform. Examples of this approach are US-based services such as Mubi, Cinecliq or Netflix. The main country-specific differentiation of their service is linked to the composition of their catalogues: depending on the territory, the consumers of these services will access a different set of films. Often, such services will further localise the presence of their different "branches" by setting up distinct marketing and distribution strategies (De Vinck et al., 2014). For the time being, many of the online content brands well-known by consumers across different EU countries however tend to be related to US companies. This is notably the case for VOD with Netflix (De Vinck et al., 2014), for e-books with Amazon's Kindle, for video games with Steam. There are however a few exceptions such as online music streaming with Swedish company Spotify.

The question of whether cross-border online content services favour the circulation of content, and more generally contribute to cultural diversity, has never been studied, to our knowledge. A first attempt consists in Hongfei (2016)'s research on VOD services. It compares the catalogues of Netflix (in France and in the UK), with those of respectively MyTF1 VOD and BBC1 (on iPlayer), with a focus on series. The result is that Netflix's catalogue shows more diversity with more titles available, more genres (although with a higher concentration in terms of availability on a few genres). Finally, more series from countries other than the US and the hosting country are available. However the research does not provide analysis of actual consumption of such series, because of missing data. Hongfei (2016) provides a few different hypotheses to explain why Netflix does better than its competitors

- Netflix's knowledge of its customers (strong user ownership), which allows it to reflects its customers' diversity (of tastes, at least).
- Its international scope, which leads to have both a local and a global approach (e.g. *Marseille*, produced by Netflix and which takes place in France with a French cast is watched outside of France).
- While certainly much smaller than streaming nowadays, transactional VOD can focus on content that people like the most (best content in popular genres) and people can also watch from another service if what they are looking for is not available.

Another research by Dodson (2016) shows that the online music streaming platform Spotify does not really lead to more diverse consumption when compared to music purchase. In particular, in terms of circulation, there is not more diversity in terms of nationality of artists. He does so by comparing the diversity of music consumption on Spotify and in total single charts. His focus is on the top 50 or 100 (i.e. 50 or 100 most streamed titles and most purchased singles) and the European countries he includes are Belgium and Sweden. Finally, regarding the impact of online content services on diversity, Champion (2014), analysing eight UK traditional media's online platforms (including the BBC), finds that the emergence of multiple platforms for content distribution is increasing the volume of content being produced by media organisations but that could lead to high levels of concentration and repetition (Champion, 2014).

At industry level, other solutions are emerging leading to the advent of cross-border services. For example, **regional cross-border alignment** may form a feasible strategy, as shown by some players in the Nordic countries

(De Vinck et al., 2014). Another interesting European cross-border alternative is **the EuroVOD network**⁸⁵⁰ **supported by the MEDIA programme**, which federates national VOD services in eight EU countries, with a focus on independent, art house films. Their aim is to take fragmentation as a given (there are differentiated film markets within the EU, which each local actor knows best) but to benefit from some economies of scale and scope, e.g. in terms of negotiating with right holders and sharing technological infrastructure costs (De Vinck et al., 2014).

The lack of cross-border circulation of content across the EU remains an issue. This has been analysed here in the cases of film and TV broadcasting sectors but **qualitative analysis** (based on interviews) **shows that this is an issue for many creative sectors**. Digital technology does not, by its sole advent, solve this issue for at least two reasons. First because of the perceived low demand for content from other EU countries, stakeholders (notably distributors and VOD service providers) have no incentive to promote this cross-border circulation. Second, production, financing and distribution have historically been fragmented at EU level, with a lack of cross-border infrastructure.⁸⁵¹

6.5 Conclusions and policy recommendations

This paper has analysed issues regarding cultural diversity and their relationships with market imperfections in the creative sectors, focusing on the Long Tail and then on the lack of circulation of content in the EU, with a focus on films

Both issues may seem quite apart. The Long Tail shows how the interactions between supplied and consumed diversities are more complex than it looks. **Increasing supplied diversity does not necessarily lead consumers to have more diverse consumption patterns overall.** Even in his very optimistic, almost technologically deterministic, view, Anderson recognises the former does not necessarily lead to the latter. Such an outcome is crucial to keep in mind also in terms of policy-making.

The issue of content circulation in the EU emphasises complex interactions this time between product, stakeholder (from creator to distributor) and consumer diversities. One explanation could consist in saying that consumers are very different over the EU, which would lead to different content being produced and lack of interest for these other types of content, but this does not explain why some products appeal to most consumers. Therefore, the visibility and promotion of content seems to be crucial for a diverse consumption. (This is certainly also true for other sectors, such as theatre or visual arts but also books and music.)

On the other hand, the fragmentation of creators and intermediaries (i.e. of the offer) makes it more difficult for products within the EU to find their audience outside their home market. The development of cross-European or global stakeholders could be a solution, or at least a way to establish bridges between these creators and intermediaries. Importantly, **diversity of products and diversity of stakeholders do not necessarily go hand in hand**.

Both issues can be given a complementary explanation using the Stirling Model (diversity as a mix of variety, balance and disparity, as explained above). There is an increase in variety: more films and in general more content are produced in the EU and most of all, more and more content is available online. Disparity is also increasing in the sense that now internet users have access to works that are very different e.g. from all over the world. However, the question of having a more balanced offer and consumption remains unsolved. Cultural consumption remains concentrated on the US and English language offer and, to a lesser extent on local content, at the expense of cultural content from the rest of the EU and of the world. The Long Tail theory states that consumption becomes more balanced, however this mainly benefits actors that concentrate market power in online content markets.

Further discussion on cultural diversity in the EU is needed.

6.5.1 Quotas as tools to promote visibility?

Promoting the share and visibility of diversity in the offer of content services appear as an important instrument to promote cultural diversity in the EU. For example, for audiovisual productions the Commission's proposal for an updated Audiovisual Media Services Directive (AVMSD) on the one hand, confirms that TV broadcasters shall continue to dedicate at least half of viewing time to European works and on the other

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⁸⁵⁰ http://www.eurovod.org/

⁸⁵¹ Probably the biggest player is Youtube in terms of video (and music) consumption. It would be interesting to have data available on the impact of consumption via Youtube on cultural diversity, as the "long tail" in this case can be much longer than on other platforms, due to the fact that content is directly uploaded and consumed by users all over the word.

hand stipulates new rules for video-on-demand providers. The latter will need to ensure at least a 20% share of European content in their catalogues and should give a good visibility (prominence) to this content. The proposal also clarifies that Member States are able to obligate on-demand services available in their national market to contribute financially to Europeans works (direct investments or levies payable to a fund). This would reduce the gap between European TV broadcasters who invest around 20% of their revenues in original content and on-demand providers investing less than 1% (European Commission, 2016b).⁸⁵²

Another field where mechanisms are used based on the imposition of shares of local content ("quotas") is music diffusion on radio broadcasting, as recalled in the sectoral value chain mapping on broadcasting. Several EU countries have quotas for diffusion of local music on public (and sometimes also private) radio. There too, there is a need to address how it can be applied to the online provision of music since these quotas are likely to become less relevant with further digitisation (Milosavljevic, Tajtakova, Szigety, & van der Graaf, 2016), unless a prominence requirement could also be applied (the efficiency of the latter has to our knowledge however never been assessed).

6.5.2 Policy interventions to foster regulatory harmonisation and level playing field

The lack of regulatory harmonisation is often evoked as a constraint for the circulation of content. In the aforementioned study on the fragmentation of VOD markets, VOD services state that, despite existing frameworks, it should be ensured that different compliance regulations would not hamper cross-border activities in VOD (De Vinck et al., 2014). Content regulations are to a certain extent harmonised in the Audiovisual Media Services and other EU Directives, but there may be different applications of the guidelines in the EU member states, which impact the ease with which content travels across borders.

The sectoral value chain mapping on multimedia also reports that some game developers see the lack of harmonisation at the EU level as a constraint in their development. This could constrain the development of some local industries.

The circulation of content can also be limited due to transaction costs faced by online services, as KEA and VUB analysed in the case of online music (KEA & VUB, 2012). The recently proposed directive on Copyright in the Digital Single Market could help in alleviating this constraint for audiovisual works to VOD platforms, by requiring Member States to set up a negotiation mechanism allowing parties willing to conclude an agreement to rely on the assistance of an impartial body (European Commission, 2016a).

The access to and visibility of a diverse content offer may also be prevented by a lack of level playing field affecting a creative sector's ecosystem. Thus, for instance, if such situation occurs at the level of online distribution services, it may negatively limit the diversity of content made available. Regulatory measures that aim to ensure a level playing field on the market and seek to promote a diversity of services in relation to the online distribution of protected creative works, including editorial and algorithmic curation, are also important to sustain discoverability of diverse content to the extent that they better empower creators and other actors in the production value chain to get players at the level of distribution to pay attention to less visible content (e.g. local music repertoires). It is however important to keep in mind that a diversity of services does not automatically lead to more diverse content being made available.

6.5.3 Schemes to promote diversity

Various schemes exist that may promote diversity by supporting local production or favouring the circulation of content. Thus, as the sectoral value chain mapping on music explains, some European countries have set up regulatory and financial support schemes (e.g. tax credits, support to music production) to encourage investment in local production. In Belgium, the tax shelter, a fiscal incentive in the film sector, is designed to support the local industry and mostly film production. Furthermore, by attracting film producers from other countries (in particular French ones), it leads to a development of co-productions, which tend to better circulate in Europe (Blanchart, De Vinck, & Ranaivoson, 2015).

852 Quotas are however also criticised. Burri-Nenova (2009) in particular provides a critical assessment of quotas, in particular how they are applied in the Television W-without Frontier and AVMS directives. She points at the dubious justification and effectiveness of the quota mechanism (Burri-Nenova, 2009). While she recognises the high levels of European and independent productions at that time, she doubts they are due to quotas (Burri-Nenova, 2009). Besides, she thinks that a quota system for non-linear audiovisual services is doable but not necessarily desirable, and more likely to fail (Burri-Nenova, 2009). More recently, during the « The Platform is the Message » conference (http://colloque2016.csa.be/pages/257), Frederic Young (SACD) said that the AVMS Directive has successfully met some

(http://colloque2016.csa.be/pages/257), Frederic Young (SACD) said that the AVMS Directive has successfully met some objectives but failed on others such as quotas. Only 30% of EU works can be found in VOD service providers' catalogues, and the situation is getting worse, he said.

There are various measures at EU or national levels that support the distribution of European works. They include:

- **Support for production and dissemination** through the Creative Europe MEDIA programme.
- **Support for dubbing, subtitling and translation.** The sectoral value chain mapping on book publishing explains how the European Union Prize for Literature, financed by the Creative Europe Programme of the European Commission aims among others at promoting the circulation of literature within Europe and encouraging greater interest in non-national literary works. Efforts are on-going.
- Support to festivals showcasing local talents in performing arts. The sectoral value chain mapping on performing arts details the importance of festivals in promoting local creators and welcoming creators from other countries, hence contribution to the circulation of content and creators.
- **Support to networks** (and dissemination), e.g. the MEDIA programme (Creative Europe) supports the Europa Cinemas network of theatres focusing on European films and the EuroVoD network of independent European Video-on-Demand platforms (De Vinck et al., 2014).

6.5.4 Tools to assess and monitor diversity

Finally, any policy to promote and protect Cultural Diversity requires to follow up on how it is evolving, hence there is an effort required regarding its assessment and monitoring. The conceptual discussion in Section 2 of this chapter precisely provided the basis to build indexes that can be used to assess diversity of cultural expressions in sectors, in order to compare (across countries, across sectors, between different content providers, etc.) and monitor its evolution. As discussed in 2.2, the definition of diversity as a mix of variety, balance and disparity (combined with the two other dimensions) has been used in several researches but, in terms of policy-making, only in the Unesco Institutes of Statistics' work on film. Hence, little has been done in order to operationalise the assessment of cultural diversity (KEA, 2015).

To this effect, it seems worth considering building on synergies with existing data collection and research resources (e.g. the European Audio-visual Observatory, Eurostat etc.) to define and narrow down relevant aspects of cultural diversity (e.g. discoverability) for policy assessment.

The French *Observatoire de la Musique* has been providing a yearly analysis of musical diversity on the radio since 2004 853 (since 2009 for musical diversity on the television 854). To our knowledge, it is the only institution that provides such statistics in the field of music, thus playing a key role in enabling policies in favour of diversity. It also demonstrates a strong political will not to leave the collection and analysis of data to industry professionals alone (Ranaivoson, 2010a).

http://philharmoniedeparis.fr/fr/ressources-numeriques/observatoire-de-la-musique/etudes/la-diversite-musicale-dans-le-paysage

http://philharmoniedeparis.fr/fr/ressources-numeriques/observatoire-de-la-musique/etudes/la-diversite-musicale-dans-le-paysage-0



Recommendations for EU action to redress market imbalances

1/ Five areas of action to redress market imbalances

From the analyses in the nine sectoral value chain mappings and the five thematic papers, it is clear that market relations and competitive dynamics in creative value chains have been subject to significant change over the last decade.

These changes have been largely (but not solely) influenced by digitisation, bringing about new opportunities for innovative practices at all stages of creative value chains and even creating radically new types of interaction with audiences.

At the same time, digitisation has altered the competitive landscape of creative value chains significantly: new actors have entered the market and boundaries between creative value chains and other value chains have become more blurred. The latter process of blurring boundaries has been further reinforced by a relatively recent process of rethinking the role of culture, arts and creativity in a complex society in transition, which is struggling with global issues such as climate change, globalisation, immigration or terrorism that require innovative multidisciplinary approaches to be solved.

Some of these evolutions also lead to market imbalances such as the increasing dominance of online platforms in large parts of creative value chains, the use of creative content without transparent remuneration models, the installation of closed ecosystems leading to 'lock-in' effects, the changing position of 'gatekeepers' as investors in creative talent and increased pressure on creators related to the broader opportunities for disintermediation.

For cultural and creative actors in Europe to make the best out of these significant evolutions and for European policy makers to further develop the right framework to support the competitive position of those actors and ensure cultural diversity in Europe, the research team has identified five different areas where actions can be taken at EU-level in order to redress the above-mentioned market imbalances:

Better statistics / data for monitoring

Official statistics on CCS provide an important amount of information that allow the understanding and monitoring of how CCS are evolving. There are, however, discrepancies across sectors and across countries regarding available data and more data could be obtained. Moreover, official data on the CCS mostly focus on data at the level of individual entities (business units) and traditional sectors (following the NACE classification), rather than taking a value chain perspective. Official statistics need to be complemented with data that go beyond the traditional delineation of the CCS.

Improve the regulatory environment

Digitisation has led to new actors entering the CCS value chain (e.g. online platforms, new service providers such as online music stores etc.) and new types of relations being built across the value chain and between different value chains (e.g. gaming and healthcare). This has brought about both new opportunities and challenges. Taking into account the priorities and interventions already undertaken or announced under the current EU policy agenda, there are a number of issues that still deserve further consideration by policy makers to promote an enabling environment for cultural and creative actors.

Connect to overcome fragmentation

Powerful dynamics take place at the borderlines between various sectors, but sectors and policies are still often organised in sectoral silos, limiting the scope for synergies and the emergence of new solutions and businesses (cfr. COM(2012) 537 final – Promoting CCS for growth and jobs in the EU). Actions are needed to overcome the current cross-sectoral fragmentation (as well as sub-sectoral fragmentation within the CCS).

Support capacity building

New developments require new skills. Many CCS organisations currently fail to get the most out of the opportunities that digitisation and the changing societal context brings, due to a lack of skills and/or lack of scale.

Optimise the use of EU funding

In addition to CCS-specific programmes such as Creative Europe or MEDIA, there are also EU funding programmes focusing on increasing the competitiveness of organisations (through innovation, capacity building, etc.), which are also accessible to CCS actors, inter alia. However, barriers to access for this type of EU funding are still (very) high for most CCS actors, despite the many challenges that CCS actors face to remain competitive in the digital age.

In each of the five areas of action, a number of statements have been designed that outline directions for possible actions. Each statement focuses on one idea. A total of 26 statements have been formulated, balanced across the five areas where according to the research team, action is needed. We refer to Annex 3/ for the final list of proposed statements that was published on the DISCUTO-platform (see next chapter).

2/ Crowdsourcing to validate proposed actions

The set of proposed statements was the basis for an online crowdsourcing process with experts and stakeholders, with the aim to further refine and/or validate the statements on possible actions at the EU-level, as a direct input for the conclusions and recommendations of the study.

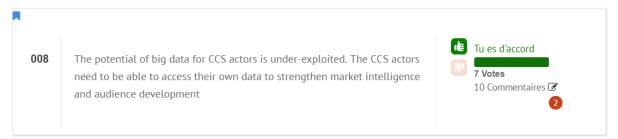
The organisation of the online discussion allowed for a wide range of invited experts and stakeholders to participate in the discussion. Invited stakeholders and experts could comment and interact with each other, which resulted in additional information and new insights to further refine the proposals for action.

2.1 The DISCUTO process

The crowdsourcing process has been organised with the online tool Discuto.io. The online tool offers the possibility to assess the relevancy and necessity of the proposed policy actions through two specific functions:

- The voting function'. More specifically, participants were invited (in the introduction) to vote positively on actions that are deemed necessary and to vote negatively on actions that are deemed irrelevant (or unnecessary).
- The comments function'. Participants were invited to leave comments on actions that they wanted to modify. Participants were also invited to leave comments in order to provide further information or justifications on voting choices and were invited to react on other people's comments.

Figure 39: Illustrative visual of the two main functions – A (French-speaking) user perspective, having already voted and provided comment



The results from these two functions gave a view on the consensus (or lack of consensus) on specific statements as well as to further enrich them, based on the comments provided.

Preparation and set up

The 26 statements (outlines for policy actions) were uploaded on the platform and structured according to the five areas of action. For each area of action, a short paragraph highlighted the main findings from the research that led the research team to suggest some policy actions in the field (see Figure 40 as an illustration for the area "Improve the regulatory environment").

Figure 40: visual of the WP2 DISCUTO Dialogue's First 2 Statements of the area of action 2 - a user perspective

2. Improve the regulatory environment Context: Digitisation has led to new actors entering the CCS value chain (e.g. online platforms, new service providers such as online music stores etc.) and new types of relations being built across the value chain and between different value chains (e.g. gaming and healthcare). This has brought about both new opportunities and challenges. Taking into account the priorities and interventions already undertaken or announced under the current EU policy agenda, there can be a number of issues that may deserve further consideration by policy makers to promote an enabling environment for cultural and creative actors. 11 Votes 006 The regulatory environment should encourage co-creation and 9 Comments 🗷 dissemination of creative content Change 9 Votes 007 There is a need to minimize lock-in situations at the level of distribution 1 Comment 2 (interoperability) that limit the circulation of creative content

In addition to the presentation of the statements, the following information was made available to participants on the webpage:

Change

- An introduction, which complemented the invitation email (see below) and presented the context of the discussion, the voting 'rules', etc.
- Two background documents:
 - The first document highlighted the overall objectives of the study and provided the definitions used in this study of "cultural and creative sectors" and of "creative value chains".
 - The second document contained interim observations from the research on the impact of digitisation on creative value chains.

Invitation

The online discussion was open to a selection of stakeholders and experts in the field of Cultural and Creative industries. The set of participants was limited/targeted in order to ensure meaningful discussions among them, given that strong expertise and knowledge of the study's context were required. More specifically, the following groups of experts and stakeholders were invited:

- Experts and stakeholders having participated in interviews related to sectoral value chain mappings and/or to the thematic discussion papers.
- Policy makers, both at national (member state) and European level.

Other stakeholders or experts from European associations, companies, etc. included in a list of contacts developed in cooperation with the European Commission in the context of the study.

The electronic invitation was mailed on the 22nd of November 2016 to a total of 215 individual email addresses. This invitation included information related to the context and the objectives of the discussion, the registration process, etc. When clicking on the link available in the invitation mail, prospective participants were invited to set up a DISCUTO account to participate to the discussion.

Following this first email, several actions were taken in order to trigger participation:

- During the week of the 28th of November, personalized emails were sent to all invitees;
- Telephone follow-up of several invitees in order to motivate them to participate;
- During the week of the 14th of December an additional personalised email was sent in order to remind the invitees of the discussion and to share with them some first insights from the discussion:
- A last personalised email was sent during the week of the 20th of December in order to inform the invitees that the discussion would soon close;
- Finally, a last email was sent on the 2nd of January 2017 in order to inform the invitees that the discussion was extended until the 9th of January (instead of the 27th of December, as foreseen initially). We extended the discussion due to a growing interest and participation during the last days.

On the 9th of January, the online discussion was closed. On the 25th of January 2017, an email was sent to the participants in order to thank them for their collaboration. As indicated above, the discussion remained open for 7 weeks (including holiday period) and allowed to gather a wide range of experts' insights. These insights are analysed in the next chapter.

2.1.1 Outreach and participation

A total of **33 participants provided 243 votes and 88 comments on the statements, as well as 3 additional suggestions**. The intensity of participation was high among participants: most participants provided multiple comments and votes on all aspects of the discussion, including those presented at the end of the webpage.

Throughout the discussion, the research team monitored the discussion and interacted (asking questions, etc.) when necessary.

Next to the online discussion the research team also received additional comments (including reflections on the background documents being uploaded) by email from two invited participants.

2.2 Analysis of the crowdsourced feedback

Based on the feedback from the community – that was largely supportive to the proposed statements, there appeared to be no statements that were controversial (i.e. where the crowd disagreed with one another) and thus there was no need to modify statements during the crowdsourcing process.

The intensity of participation remained balanced across the five different sections (see Table 4) with an average of 48.6 votes and 17.6 comments per section. The only noteworthy deviation is the number of comments on the section related to "Improve the regulatory environment", in combination with the low number of votes. On the other hand, few comments relate to section "Optimise the use of EU funding". The number of votes associated to this section, however, shows that the section was not subject to less visibility (because of its position down the DISCUTO page), but rather that it was less subject to debate than other paragraphs and statements in the discussion.

Table 4: Votes and comments in the different sections of the discussion

Section	# statements	# votes	# comments
Better statistics/data for monitoring	5	59	24
Improve the regulatory environment	5	35	27

Connect to overcome fragmentation	6	59	14
Capacity building	5	45	14
Optimise the use of EU funding	5	45	9
Average		48,6	17,6

The next paragraphs summarise the feedback per section.

2.2.1 Better statistics/data for monitoring

The table below presents the number of positive and negative votes as well as the number of comments for each statement in this area of action.

As a reminder, the following rule was associated to the 'voting function': participants were invited (in the introduction) to vote positively on actions that were deemed necessary and to vote negatively on actions that were deemed irrelevant (or unnecessary).

Table 5: Votes and comments on the proposed policy actions related to "Better statistics/data for monitoring"

Statements "Better statistics/data for monitoring"	# Positive votes	# Negative votes	# Comment s
It is important to invest in additional official statistics on CCS that take the value chain perspective (making a distinction between the different stages in the value chain: creation, production/publishing, dissemination/trade and exhibition/transmission)	13	0	5
More data should be collected to adequately monitor evolutions in the remuneration and working conditions of creatives	13	1	2
A monitoring framework should be developed - including the definition of relevant dimensions and indicators, that allows an assessment of (evolutions in) cultural diversity* in the digital age (*i.e. diversity in the types of creative content being produced, distributed and consumed)	9	2	4
More investments are needed to make better use of social media and internet data (e.g. search trends data on Google) to monitor new forms of engagement in cultural activities for research and policy purposes, within the limits of confidentiality and data protection rules (i.e. appropriate analysis requires socio-demographic data on users, which may threaten privacy)	7	2	9
It is important to invest in additional statistics to better understand and assess the role of online markets in cultural consumption	11	1	4

Based on the input from the discussion, there appears to be a broad consensus about the need for better data – both quantitative and qualitative – and statistics to improve the understanding of (the dynamics between actors within) creative value chains. The comments on the different statements in this section further highlight the following:

- The current **NACE classification** is inadequate to give the right data to analyse the economic structure of cultural and creative sectors, let alone structural changes in the business environment over time. However, it is also recognized that CCS are quickly growing emerging industries that are difficult to monitor in a statistical framework such as the NACE classification.
- New statistics should focus on (better) monitoring and understanding the relationships between actors in different stages of the value chain, the networks of collaboration, who invests in creation and how they are being remunerated (not only the creators themselves, but also the firms investing in them).
- The participants recognise the importance to better monitor and understand the impact of digitisation on (the diversity of) creation, dissemination and consumption of cultural and creative content. The role of digitisation in all stages of creative value chains has become too important (including in import and export activities of countries) to neglect in statistics and monitoring systems. However, the comments highlight that **research methods** to adequately do so are still to be found.

2.2.2 Improve the regulatory environment

Table 6: Votes and comments on the proposed policy actions related to "Improve the regulatory environment"

Statements related to "Improve the regulatory environment"	# Positive votes	# Negative votes	# Comment s
The regulatory environment should encourage co-creation and dissemination of creative content	10	1	9
There is a need to minimize lock-in situations at the level of distribution (interoperability) that limit the circulation of creative content	8	1	1
The potential of big data for CCS actors is under-exploited. The CCS actors need to be able to access their own data to strengthen market intelligence and audience development	7	0	10
There is a need to further develop and disseminate the tools that enable the tracking of creative content	1	1	6
Registries for metadata need to be optimised and streamlined	5	1	1

Again, a large majority of voters supported the proposed policy actions and confirmed the need to (further) shape a regulatory environment that sets out a correct framework to tackle the challenges and opportunities offered by the entry of new actors in the CCS value chain (e.g. online platforms, new services providers such as online music stores etc.) and by the development of new types of relations across the value chain and between different value chains (e.g. gaming and healthcare). Through their comments, participants have highlighted some specific challenges and points of attention:

- Sustainable co-creation, co-dissemination and co-distribution require a well-designed **copyright framework** that can encourage, among others, the financial contribution of internet players for the use of creative content, while also allowing users to create content based on existing creative content (e.g. in the game industry). Comprehensive reviews of existing propositions directed towards a reform of copyright could therefore be conducted.
- **Competition rules** applied in the (digital) creative age should prevent dominant players (e.g. online platforms) from abusing their dominant position through unfair trading practices (for example, censorshipstyle negotiating practices such as threats to remove content) when dealing with SME's. In this view, the application of a non-discrimination principle applying to online services should be considered, in order to ensure that there is no discrimination between owners of large versus small catalogues.

More **co-ordination** is needed at the European level to secure that the European regulatory framework for the Digital Single Market area remains coherent. For example, there is currently an increasing tension between VAT regulation, data protection regulation and consumer protection regulation, each originating from a different legal perspective without an overall vision.

Participants also support a greater use and a correct application of metadata in order to improve the tracking of the use of copyrighted works and to address the potential lack of transparency in remuneration flows. The comments related to these challenges were mainly devoted to the following aspects:

- Participants agree on the importance for CCS actors to be able to access their own data in order to strengthen market intelligence and audience development. However, participants highlighted the following limitations and concerns:
 - Creative and cultural actors might lack the necessary skills and knowledge to make meaningful analyses based on big data;
 - This evolution could strengthen the market power of bigger organisations, that are more able to collect and analyse the data;
 - Finally, regarding the promotion of possible information/learning modules on big data⁸⁵⁵, it has been
 pointed out that many creative sectors still distribute their content through mediums that do not allow
 the full exploitation of big data analytics.
- There are wide discrepancies between sectors in terms of **tracking content**: while it exists in video services (for music) it should be extended to the game industry as well (content used in gameplay videos). If the tracking of creative content aims at better controlling remuneration flows, costs of setting up such a system should be compared with economic benefits.

The tracking aspect requires a more flexible approach in order to minimize the hindrance and shutdown of authorized uses of content. Such hindrances and shutdowns usually occur when intermediaries rely on inaccurate algorithms to track unauthorized uses of content.

2.2.3 Connect to overcome fragmentation

Table 7: Votes and comments on the proposed policy actions related to "Connect to overcome fragmentation"

Statements related to "Connect to overcome fragmentation"	# Positive votes	# Negative votes	# Comment s
Cross-sectoral collaboration between CCS actors and other sectors should be (financially) stimulated	7	3	3
Networking among creative entrepreneurs should be (financially) stimulated	10	3	2
More measures are needed at the EU or national level to support the distribution of European works in the digital age	10	4	1
More interactions between arts and culture, science (exact sciences, social sciences and humanities), engineering, technology and business should be encouraged in formal education	11	0	2
Closer collaboration between different policy areas is a necessary condition to develop an adequate policy framework and policy instruments to promote a competitive CCS in the digital age	9	0	2
EU projects conducive to the development of creative ecosystems should be (financially) stimulated	2	0	4

⁸⁵⁵ This comment was made on the section on "Capacity building" but is presented here, in order to cluster all comments related to big data.

Participants generally support the proposed policy actions to decrease the current cross-sectoral fragmentation (as well as sub-sectoral fragmentation within the CCS). When compared to the other four areas of action, one might however point out that the consensus is less broad: some statements were more often deemed "irrelevant" (for example, there were 4 negative votes on the statement "More measures are needed at the EU or national level to support the distribution of European works in the digital age"). We summarise below the comments made by the participants on the statements in this area:

- Given that most of the actors in CCS are self-employed or very small businesses (which need financial support for conducting networking/cross-sectoral activities), the proposed financial stimulations to foster **cross-sectoral collaborations** could have a positive impact. Some, however, doubt that a financial stimulation could effectively foster collaborations. Finally, one participant pointed out that financial support to cross-sectoral collaborations should not crowd out sectoral financial supports, which are deemed more effective. A participant further added that financing networking does not often create added value, and therefore suggests that funding should primarily focus on actual content creation.
- Measures are needed to help develop **business models and content** suitable for the digital age, instead of focusing solely on the distribution side.
- In order to support more interactions in formal education between arts and culture, science, engineering, technology and business it is important to valorise further such interactions (e.g. publications in science). It has been also pointed out that such interactions can already be found in some sectors (game industry professionals are trained in virtual studios, where programmers, artists and game designers study together).

2.2.4 Capacity building

Table 8: Votes and comments on the proposed policy actions related to "Capacity building"

Statements related to "Capacity building"	# Positive votes	# Negative votes	# Comment s
Digitisation has increased the pressure on individual creators to become entrepreneurs, sometimes at the expense of being creator. There should be support measures in place that allow creators to focus as much as possible on their creative activities and leave more managerial aspects (communication, promotion, IP) to others at an affordable price	3	1	7
Creators need to be made more aware about the importance of IPR and its potential for value monetisation in the digital age	9	3	1
Cultural and Creative sector actors would benefit from information/learning modules on the potential of big data	11	0	2
Support to cultural entrepreneurship should start already during formal education, via innovative curricula in arts education with a better integration of business, marketing and entrepreneurial courses and more flexibility in combining different disciplines	10	0	3
Creatives should be supported in their efforts to join forces and increase their bargaining power	7	1	1

There is broad consensus among participants about the relevancy and necessity of the proposed policy actions that aim at tackling the lack of skills and/or the lack of scale among CCS actors. The comments on the different statements in this section further highlight the following:

- Some **managerial aspects** (communication, promotion, IP) are closely related to the creative process and should therefore be outsourced with much caution. Indeed, such an outsourcing might imply a loss of control of the creative content (e.g. when outsourcing IP related aspects) or undermine the positive influence that some activities might have on artistic direction (e.g. when outsourcing networking / project management related aspects). However, it has been pointed out by another participant that a system of collective management can ensure fair negotiation power for individual creators and allows creators' involvement in the administration and decision-making process.
- The importance of **education** has been further highlighted: formal arts education should better integrate business, marketing and entrepreneurial courses as well as cross-overs between business education and art education should be promoted. Arts should also have a more prominent importance at primary or secondary schools in order, among others, to ensure and support understanding and participation to the arts.
- It is important for creatives to be supported in their efforts to join forces and increase their **bargaining power**. In this view, legal and time constraints that prevent independents from joining forces should be assessed and removed when relevant.

2.2.5 Optimise the use of EU funding

Table 9: Votes and comments on the proposed policy actions related to "Optimise the use of EU funding"

Statements "Optimise the use of EU funding"	# Positive votes	# Negative votes	# Comment s
CCS actors should be made aware of EU funding possibilities for research, development and innovation (e.g. Horizon2020, COSME, SME instrument) as well as for skills development, to explore the opportunities of digitisation for CCS actors and build up capacity.	8	1	2
Given the structure of the CCS, the requirements for EU funding should be reviewed to make funding more accessible in practical terms to Micro-enterprises and SMEs in the relevant calls	12	0	2
Dissemination/distribution is the most affected function of the creative value chains by digitisation. EU funding should support CCS actors to better distribute their work in the digital age (as it is doing for the film sector through the MEDIA programme).	9	1	3
The impact of funding on cultural diversity should be assessed (produced, distributed and consumed diversity).	7	0	2
Micro-enterprises and SMEs should get access to more funding and other support to develop and adapt digital applications that help to understand consumer behaviour, facilitate closer engagement with target audiences through social media and test new business models.	7	0	0

The proposed policy actions aimed at removing barriers to access EU funding have been positively supported by a large majority of participants, with only 2 negative votes for 5 proposed policy actions.

The comments on the different statements in this section further highlight that the **small size of the majority of CCS actors** must be taken more into account when designing the requirements and selection processes of EU funding. Highly innovative projects led by small companies (that do not necessarily have the network, skills and experiences in drafting successful applications to EU funding) should be further supported by, for example, possible changes in selection processes. In addition, SMEs are often the main "diversity suppliers" and should therefore be supported in order to ensure and support cultural diversity.

3/ Consolidated recommendations for further EU action

Integrating the 26 original statements with the feedback from DISCUTO, we can confirm that the five suggested areas of action are all considered very relevant by stakeholders. Taking into account the number of votes and comments per area, we present a prioritized list of recommendations for further action at the EU level. This list has been constructed in a context where the European Commission has already taken specific actions recently to improve the regulatory framework for using creative content in the digital age⁸⁵⁶.

3.1 Better statistics / data for monitoring

The official (structural business) statistics can provide data on employment, production, trade etc. in CCS, however only to the extent that the CCS can be identified in the current NACE classification. Furthermore, these data focus on traditional sectors (cfr. the NACE classification), rather than taking a value chain perspective.

As a consequence, the current official statistics are incomplete as a tool to adequately monitor the market dynamics and identify market imbalances in such highly dynamic and diversified value chains as creative value chains. Moreover, current methods of data gathering and analysis fall short in capturing the impact of digitisation on CCS business (digital production, distribution, international trade, consumption).

But despite the shortcomings of the current NACE classification and related structural business statistics, (only) revising the NACE classification cannot solve the problem, due to the fact that 1) a number of cultural and creative sectors are quickly growing emerging industries and 2) most creative value chains are interconnected with other sectors.

Based on those findings, we recommend that EU actions with respect to better statistics/data should focus primarily on the following two axes:

- New data gathering on market relations/dynamics within value chains to complement current official structural business statistics
- Development of new research methods to better monitor the impact of digitisation on creative businesses and CCS in general

More specifically, we recommend to:

- invest in additional data gathering both quantitative and qualitative for CCS that take the value chain perspective and focus on (the impact of) interrelations between different market actors (e.g. networks of collaboration, ownership and investment relationships). When doing so, it is important to make a distinction between the different subsectors in the CCS on the one hand, and the different stages in the value chain (creation, production/publishing, dissemination/trade and exhibition/transmission) on the other hand.
- develop a monitoring system to adequately monitor evolutions in the remuneration and working conditions of creatives. This could be in the form of a periodical (annual, bi-annual) survey at the European level.
- screen and revise current statistical frameworks to adequately include CCS business via online markets.
- financially support the research community to find research methods to better understand and monitor:
 - the impact of digitisation on (the diversity of) creation, dissemination and consumption of cultural and creative content. A monitoring framework should be developed including the definition of relevant dimensions and indicators, that allows an assessment of (evolutions in) cultural diversity* in the digital age (*i.e. diversity in the types of creative content being produced, distributed and consumed)
 - the use of internet data (e.g. search trends data on Google, data from social media) as a source for market analysis and to monitor new forms of engagement in cultural activities, within the limits of confidentiality and data protection rules (i.e. appropriate analysis requires socio-demographic data on users, which may threaten privacy) for research and policy purposes.

⁸⁵⁶ The Commission put forward legislative proposals and other policy initiatives inter alia on copyright, online transmissions, AVMSD, geo-blocking and online platforms (full references available in the bibliography).

The research community should also find answers to the challenges related to this monitoring, such as the global nature of some of the creative value chain parts, access to data of (major) internet players and privacy issues.

3.2 Connect to overcome fragmentation

In the communication from the European Commission⁸⁵⁷ (and subsequent reactions from the European Parliament, European Economic and Social Committee as well as the Committee of the Regions), CCS are praised for their 'ability to come up with innovative solutions to stimulate economic growth and wealth, but also to give hope to businesses and citizens'. As such, CCS play an important role in economic and societal transformation processes. These powerful dynamics often take place at the borderlines between various sectors.

However, the current organisation of the educational system, sector representation and policy development are not supportive of cross-sectoral exchange and collaboration. They still often work in sectoral silos. Traditional industries are underrepresented in the customer base of most cultural and creative organisations, with few contacts with (potential) clients from traditional industries. This results in an undercapitalisation of the social capital in CCS for the benefit of European society.

To successfully overcome this fragmentation, we recommend that actions are taken at different levels to address the current fragmentation:

- Awareness creation with CCS actors, other businesses, academia, teachers and policy makers about the added value of cross-sectoral collaborations between CCS actors and other sectors ('inspire');
- Provide supporting tools that lower the barriers to engage in cross-sectoral collaborations ('support cross-sectoral experimentation');
- Actively promote the importance of 'out-of-the-sector' thinking and cross-sectoral connections for the European economy and society at large by bringing together policy makers from different policy areas (education, innovation, economic policy, social affairs, ...) and stimulating exchange of experiences, barriers,... ('stimulate supportive policy development').

More specifically, we recommend to

Financially support cross-sectoral collaborations (from creation to development of sustainable business models and dissemination) between CCS actors, businesses, educational institutes and/or academia. Learning by doing is very important in exploring the potential of new avenues ('entrepreneurial discovery'). However, most CCS actors are too small to take the risks that go with this type of R&D activity. Also most traditional businesses are unwilling to take all the risks, a market failure that is similar in other R&D processes as well. Providing specific funding for this type of activity can lower the barriers.

When designing such funding programme, it is very important to take into account the following:

- Most CCS actors are micro entities with very limited capacity. Funding structures and criteria should reflect this;
- An important point of attention in joint R&D processes is the distribution of IP rights. It would be good to provide information and guidelines (or even model contracts) for CCS actors on this issue;
- Take into account the fact that cross-sectoral collaborations happen at the cross-roads of different activities and thus can involve very different actors when defining the selection criteria;
- Incorporate a monitoring of the impact of cross-sectoral collaboration on the different partners. This information can serve for 'inspirational' purposes (show cases see next point) as well as for policy learning purposes on the benefits and bottlenecks of cross-sectoral collaborations;
- Learn from similar policy initiatives that have already been taken at the local/regional level across Europe to optimize such funding programme. One such example is the pilot funding programme "Call for Innovation with Creative Industries" (CICI) from the Flemish government in 2013-2015.

⁸⁵⁷ COM(2012) 537 final – Promoting CCS for growth and jobs in the EU

- **Collect and share show cases** of a wide variety of cross-sectoral collaborations to increase awareness about the topic and possibilities. As an example, the Dutch Creative Council in the Netherlands published cases of cross-sectoral collaborations⁸⁵⁸ in the context of their 'Topsectorenbeleid'. An effective communication and sharing strategy should be developed that takes into account the fact that cross-sectoral networks are currently largely lacking. Therefore efforts directed at different types of networks and stakeholders have to be made at the same time.
- Financially support the organisation of cross-sectoral networks that bring together CCS actors, other businesses, academia, teachers and/or policy makers to discuss common topics of interest and exchange views.
- Expand funding available under the **Cross-sectoral strand** of the Creative Europe programme (under which, for example, the European network of creative hubs has been funded).
- Facilitate networking among educators and educational programme developers to discuss and encourage more interactions between arts and culture, science (exact sciences, social sciences and humanities), engineering, technology and business in formal education. Facilitate learning from interactions that already exist in some regions and sectors (e.g. game industry professionals being trained in virtual studios, where programmers, artists and game designers study together).
- Continue the **pro-active promotion of the valuable contribution of cultural and creative industries in regional and economic development** through communication and by bringing together policy makers from different policy areas (education, innovation, economic policy, social affairs, ...) to stimulate exchange of experiences and barriers.

3.3 Support capacity building

The analysis of market dynamics in creative value chains has clearly illustrated the high degree of change that all creative value chains face. The business environment for CCS actors is very dynamic and changes rapidly. Moreover, digitisation has led to creatives being increasingly responsible for managing their own business in networked ecosystems, as well as organisations having increasing opportunities to better exploit big data to the benefit of their work.

However, these new developments require new skills from creatives and other actors in creative value chains. Many CCS organisations currently fail to get the most out of the opportunities that digitisation and the changing societal context brings, due to a lack of skills. This is reinforced by the fact that most CCS entities are micro-sized, thus having a very limited absorptive capacity.

For some managerial aspects CCS actors might rely on experts to support them. However, other managerial aspects (communication, IP, promotion,...) are closely intertwined with the creative process and should therefore preferably be supervised by the CCS actor him/herself.

To overcome the small size of many CCS entities, collective management structures might result in more efficient work processes and capacity building, as well as increased negotiation power.

To support capacity building with CCS actors, we recommend the following actions at the EU level:

- Support intermediary organisations to further **promote entrepreneurial and business skills as an integral part of CCS actors' curriculum**, as well as non-formal skills development specifically targeted at CCS (such as the peer-to-peer exchange programme⁸⁵⁹ under the European creative hubs programme).
- Stimulate intermediary organisations to develop adequate material and **training about the business implications (opportunities and challenges) of digitalisation**. One type of output could be a toolkit on how to make smart uses of all the data that CCS actors collect (including inspirational examples). Such toolkit should sufficiently take into account sector specificities to be relevant.
- Stimulate the CCS to find **new models of co-operation to overcome the smallness of most entities**, and to join forces to increase their bargaining power, by facilitating exchange of good practices and learning lessons. The establishment of MERLIN in the music sector serves as a good example in that respect.

⁸⁵⁸ See http://www.creative-council.nl/ docs/DCI crossoverworks 1 EN.pdf

⁸⁵⁹ http://creativehubs.eu/news-p2p-round2/

- Help the cultural and creative sectors to build collective representation through sector associations. Creative SMEs are not sufficiently represented in the decision process relevant to entrepreneurship or innovation policies and programmes.
- CCS' skills can also be very valuable not only at the receiving end, but also by providing skills (for example innovation hubs/creative hubs/maker libraries teaching 3D-printing skills in their premises, which is often not provided for in formal education curricula.) Such capacity-building could be enhanced for increased cross-fertilisation and also to generate additional income and recognition for CCS.

3.4 Optimise the use of EU funding

Our analysis has shown that in the creative value chains dissemination/distribution is the function most affected by digitisation, whereas national support schemes for the CCS are mostly geared towards production of content. Few incentives exist for CCS to reach new markets and grow internationally. EU funding has a key role to play to complement existing national and local support schemes, and promote the richness of European Cultural Diversity. The digital shift has also considerably affected marketing skills required across creative value chains, and creators are increasingly led to take up self-promotional activities, time permitting.

The CCS are characterised by a constellation of MSMEs and freelancers, often overstretched in terms of human resources and capacity to access new sources of funding. As highlighted in the online consultation, it should be noted that beyond their economic impact, those MSMEs greatly contribute to cultural diversity in Europe. This should be taken into account when considering any form of support for the sector: while the CCS are potentially eligible for many EU funding programmes (Creative Europe, Horizon2020, COSME, SME instrument, Structural Funds), effective access remains an issue, especially for smaller companies.

Based on those findings, we suggest that EU action focus on:

- Supporting CCS cross-border operations and expansion beyond EU-markets, including distribution and commercialisation.
- Promoting inter-clustering and cross-sectoral networking.
- Optimising access to funding for cultural and creative SMEs.

In particular, we recommend to:

Support CCS cross-border operations and expansion beyond EU-markets, including distribution and commercialisation

- Support **digital marketing strategies** to brand European works: EU support programmes should give more support to rights holders that wish to further fine-tune and implement their digital marketing strategies in order to access video-on-demand markets. Funds should be available to develop and adapt digital applications that help to understand consumer behaviour, facilitate closer engagement with target audiences through social media, and test new business models.
- Make available **market information** on consumer trends and practices throughout Europe to support access to foreign markets, especially in the context of the digital shift. The Single Market is fragmented along cultural and linguistic lines for the CCS. The CCS have little in-house capacity to gain understanding and knowledge of consumer markets in Europe in particular in relation to the digital economy (data analysis tools, consumption patterns on e-retailing platforms or streaming/VOD for content industries).
- In the context of the EU strategy for international cultural relations, work should be undertaken with the EU Delegations/Commission/European External Action Service to **professionalise EU film festivals** and implement the outcomes of the feasibility study to support Delegations of the European Union in organising European film festivals all over the world (KEA 2015).
- In the framework of the 2016 EU Communication "Towards an EU strategy for international cultural relations" 860, ensure that coordinated actions led by European Cultural Institutes in third countries involve the CCS and contribute to their internationalisation.

⁸⁶⁰ http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52016JC0029&from=EN

- The European Commission should take initiatives to overcome the current cross-sectoral fragmentation (as well as sub-sectoral fragmentation within the CCS), by providing support for small businesses to access international markets. **Support for collaboration and networking** amongst creative entrepreneurs should also be considered. Good examples of EU-funded projects include "Creative Tracks"⁸⁶¹ or the European creative hubs network⁸⁶² which aim to connect creative hubs and existing networks of young entrepreneurs in the cultural and creative sectors across the world.
- Support creators in expanding their business/participation at **pitching events and B2B fairs**. Such support is seldom available specifically for CCS and the list of fairs and events for which support is available often do not include the CCS, in coordination with existing initiatives from regional or national trade associations or export agencies.

Promote inter-clustering and cross-sectoral networking

- Promote networking and knowledge-sharing between cities and regions supporting the CCS at local level to identify best policy practices, using the example of the culture for cities and regions project⁸⁶³. It enabled more than 150 local authorities to exchange views on information and policy exchange on creative entrepreneurship, access to finance, or incubation and acceleration schemes supporting creative MSMEs locally.
- Develop a template for business support organisations at EU level (e.g. creative hubs, incubators, clusters) dedicated to creative MSMEs or artists/entrepreneurs with less than 20 employees. These organisations could help with the administration (and other non-creative functions) of MSMEs and promote European collaboration, with the support of Creative Europe desks.
- Launch an annual event for EU-supported initiatives (from all programmes: Creative Europe, COSME, H2020, Interreg and URBACT linked to culture and creativity) to encourage networking as well as collaborative projects, and raise awareness about the different forms of EU support among creative communities (and beyond).
- Help SMEs in the cultural and creative sectors to identify clustering opportunities in research and technology projects, especially in the distribution and dissemination functions of the value chains to develop products and services ready to access the market. Such support should be linked to clear monitoring and evaluation indicators to better assess the impact in terms of creative spillovers.

Optimising access to funding for cultural and creative MSMEs

- ▶ Building on the EU OMC experts group on Access to Finance of CCS, "Innovative instruments to facilitate access to finance for the cultural and creative sectors: good practice report⁸⁶⁴", further awareness-raising about its findings is needed to gain access to new funding for CCS.
- Encourage crowdfunding for the CCS, notably via fiscal incentives/tax shelters (also for reward-based and donation-based crowdfunding) and increased exemption limits to encourage entrepreneurial activities. Public authorities (local, regional, national) should also partner with crowdfunding platforms to support the CCS through match-funding schemes, for example.
- **Encourage equity investment** in the cultural and creative sectors by building bridges with the financial community, and by assessing the opportunity for an investment instrument (parallel to the Creative Europe Guarantee Facility). Only few equity-based vehicles exist for the cultural and creative sectors in Europe while they are instrumental in scaling up cultural and creative MSMEs.
- In conjunction with the capacity-building component of the Creative Europe Guarantee Facility, invest in a **framework for the valuation of creative content** and agreed standards for valuations of intangible assets. Intangible assets are the core of CCS business models but they are not factored in accounting/controlling instruments. This contributes to chronic underinvestment in CCS MSMEs.
- Launch an EU initiative to simplify access to public procurement (including EU funding) for the CCS.

⁸⁶² Source : <u>http://creativehubs.eu/</u>

 863 Source : <u>www.cultureforcitiesandregions.eu</u>

⁸⁶¹ Source : <u>www.creativetracks.org</u>

⁸⁶⁴ Source: http://bookshop.europa.eu/en/towards-more-efficient-financial-ecosystems-pbNC0416091/

- Launch a pilot action under the Creative Europe programme to **support digital distribution** and commercialisation. The Media sub-programme should keep encouraging the sub-titling of films and access to digital distribution platforms.
- Assess the **impact** of existing support programmes on supplied, distributed and consumed **cultural diversity** through independent studies. This could be combined with testing the feasibility of embedding cultural diversity indicators across EU programmes for the next multiannual financial framework.
- Facilitate cooperation between relevant stakeholders, including the platforms, aimed at increasing the availability, promotion and "discoverability" of European content, focusing on sectors that have been reshaped, in particular, by digitisation such as the music sector.
- **Monitor the participation** of cultural and creative MSMEs across EU funding programmes (especially Creative Europe, COSME and H2020).

3.5 Improve regulatory framework

The European regulatory framework for the cultural and creative sectors is undergoing a significant overhaul under the DSM strategy, as mentioned in the introduction of this section. While this study does not attempt to provide a comprehensive review of the different legislative proposals, some key principles and ideas arose from our analysis. The CCS are important for the development of the European Digital Single Market (DSM), its economic ambitions and its cultural and social objectives.

The regulatory framework and, in particular, provisions ensuring contractual freedom, exclusivity and territoriality should not be seen as an obstacle to the development of the DSM but rather an indispensable instrument to ensure the creation of value for right holders and foster investment in the cultural and creative sectors.

It should be noted that despite globalisation European content production still caters mainly for local linguistic markets. The unification of these markets into a single one is extremely challenging. Today the single market operates largely to the benefit of Anglo-American language and hit-driven productions in the CCS (e.g. film, music and performing arts). Europe's incredible diversity and excellence in production has difficulty reaching consumers outside their country of origin.

Additionally, the increased role of licensing adds pressure on smaller players of the value chains due to the multiplication of contracts and negotiating parties. Our recommendations thus cater to solutions easing the rights management processes and reducing the administrative burdens, especially for creators and SMEs.

The EU policy objectives should aim to:

- Promote cultural diversity and a competitive European creative sector as part of EU innovation and cultural agendas.
- Support the establishment of a single market for the circulation of cultural and creative works, and incentivise investment in content creation and production.
- Increasing transparency across the creative value chains and achieve fair remuneration

The following policy actions could be considered:

Promote cultural diversity and a competitive European creative sector as part of the EU innovation and cultural agendas.

- Facilitate acquisition of **visas for foreign artists**, for example by promoting dialogue between national authorities in charge of issuing visas and the cultural sector (and ministries in charge of culture) to ensure fair and quick treatment of visas for artists and cultural professionals.
- Review taxation to support cultural consumption via a reduced VAT rate.
- Monitor the **impact of Brexit negotiations on the cultural and creative sectors** and ensure the European acquis on culture and audiovisual policies is preserved as part of negotiations.
- Include (and enforce) tougher monitoring and reporting obligations related to the promotion of cultural diversity as part of the review of the AVMS Directive (e.g. through independent evaluations of the mechanisms set up by Member States).

Support the establishment of a single market for the circulation of cultural and creative works, and incentivise investment in content creation and production.

- Preserve **key principles encouraging investment** in cultural and creative content, such as the country of origin principle and territoriality in the audiovisual sector.
- Monitor the market structure of the value chain and potential concentration issues from a competition policy perspective in distribution as well as conditions to access digital platforms.
- Encourage **one stop shop solutions** (e.g. licensing hubs) to facilitate licensing and reduce rights management costs for both right holders and service providers.
- The EC should also support the emergence of internationally-connected **digital rights licensing infrastructures**. This can be achieved by licensing hubs, but also by promoting interoperability between existing services and tools, as well as stronger cooperation of rights holders, users and technology stakeholders. It should encourage the development of, and interoperability between, rights registries, more homogenous technical standards (in relation to encoding, delivery and metadata) across Europe, as well as better interplay and cooperation between numerous platforms.
- Promote the exchange of best practices amongst CMOs and industry associations for the improvement of their ICT infrastructure and use of big data (such as Urights, developed jointly by SACEM and IBM⁸⁶⁵).

Increasing transparency across the creative value chains and achieve fair remuneration

- Tackle the issue of the 'value gap' to allow protected creative content owners to be better remunerated and be able to control the use of their content by certain service providers;
- Support the creation of a registry or a system that could enable creators to access the data related to their works and correct them in case of encoding mistakes in order to improve the correct application of metadata and keep track of their use;
- Support for rights management initiatives from right holders that ease the copyright licensing process, and increase the bargaining power of right holders across the EU (e.g. Merlin⁸⁶⁶, Armonia⁸⁶⁷). Rights licensing should not act as a deterrent⁸⁶⁸ to international distribution of European content.

Source: https://societe.sacem.fr/ressources-presse/par-publication/Communiqu%C3%A9s/la-sacem-et-ibm-unissent-leurs-forces-et-developpent-une-nouvelle-plateforme-globale-de-gestion-des-droits-dauteur-pour-la-musique-en-ligne

⁸⁶⁶ Source: http://www.merlinnetwork.org

⁸⁶⁷ Source: http://www.armoniaonline.eu/

⁸⁶⁸ Due to complexity and number of licensing deals for small operators, and difficulties to negotiate with larger players



ANNEXES

1/ Interviews

Name	Organisation	Position	Theme
Carola Streul	European Visual Artists	Secretary General	Visual arts
Adriaan Raemdonck	Federation of European Art Galleries Association (FEAGE)	President	Visual arts
Marianne Hoet	Christie's	International Director Post-War & Contemporary Art	Visual arts
Cathy Cardon	'Kunst in huis' (artotheque)	Director	Visual arts
Susan Corr	European Confederation of Conservators and Restorers	President	Cultural heritage
Enrico Bertacchini	University of Torino	Professor	Cultural heritage
Koenraad Van Balen	R. Lemaire International Center for Conservation	Director / Holder Unesco Chair on Preventive Conservation	Cultural heritage
Siebe Weide	Dutch Museum Association	Director	Cultural heritage
Alberto Cavalli	Fondazione Cologni	Director	Crafts
Rosy Greenlees	UK Crafts Council	Executive director	Crafts
Nan Van Houte	IETM	Secretary general	Performing arts
Anita De Baere	PEARLE	Director	Performing arts
Tilo Gerlach	AEPO-ARTIS	President	Performing arts
Frederique Lamy	Arty Farty	CEO	Performing arts
Anne Bergmann- Tahon	Federation of European Publishers	Director	Books
Enrico Turin	Federation of European Publishers	Deputy Director/Economist	Books
Frédéric Martel		writer, researcher and journalist/radio moderator	Books &Broadcasting (Radio)
Lucia Miklasová	LITA, Slovakia	Head of the Licensing Department	Books & Broadcasting (TV)
Tímea Virágová	LITA, Slovakia	Interim Head Collective Mngmt & Internat. Relations Depart.	Books & Broadcasting (TV)

Mariebeth Aquino	Central European Games Conference & Games, Austria	Founder & Executive Director	Multimedia
Johanna Nylander	Swedish Games Industry Association	Policy Affaires	Multimedia
Jari-Pekka Kaleva	European Games Developers Fed. / Neogames Finland ry	COO / Senior Policy Analyst	Multimedia
Stan Just	CD Project	R&D Manager	Multimedia
Michel Lambot	PIAS	Deputy CEO	Music, audiovisual
Dirk de Clippeleir	Ancienne Belgique	Managing Director	Music
Paul Pacifico	Featured Artists Coalition	CEO	Music
Kristina Janusauskaite	IFPI	European Regional Counsel	Music
Christophe Depreter	SABAM	Director General	Music, audiovisual
Véronique Desbrosse	GESAC	General manager	Music, audiovisual
Michel Reilhac	ex-Arte	ex-Directeur du Cinéma	Film, Television
David Kosse	ex-Channel 4	ex-director of filmmaking division Film4	Film, Television
Jan Runge	UNIC	CEO	Film
Benoit Ginisty	FIAPF	Director general	Film, Television
Victor Ginsburg	ECARES, Université Libre de Bruxelles	Professor	Creative Value Chains
Dmitry Gelfand	FEAT project	Artistic Director	Intertwining
Mir Wermuth	Growing Games	Program Manager	Intertwining
Evert Hoogerdoorn	Ijsfontein DE/NL	Strategist	Intertwining
Irmgard Noordhoek	ClickNL Games	Program Manager	Intertwining
Pascal Keiser	French tech Culture/Technocité	Directeur	Intertwining
Ignacio Gallego	Universidad Carlos III de Madrid	Professor	Cultural diversity
Octavio Kulesz	UNESCO	Expert on the 2005 Convention	Cultural diversity
Antonios Vlassis	Université de Liège	Researcher	Cultural diversity
Pieter Ballon	imec	Director	Two-sided markets

Gillian Doyle	Uniersity of Glasgow	Professor	Two-sided markets
Anne Bergmann- Tahon	Federation of European Publishers	Director	Two-sided markets
Lucia Miklasová	LITA	Head of the Licensing Department	Two-sided markets
Ross Biggam	Discovery	Director	Two-sided markets
Vincent Sneed	AER	Director Regulatory Affairs & Manager	Two-sided markets
Wouter Gekiere	EBU	Deputy Head of Brussels	Two-sided markets
Mariebeth Aquino	Central European Games Conference	Executive Director	Two-sided markets
Johanna Nylander	Swedish Games Industry Association	Manager	Two-sided markets
Jari-Pekka Kaleva	EGDF	COO	Two-sided markets
Michael Cheah	Vimeo	General Counsel	Digitisation and new opportunities for creators
Edouard Meier	KisskissBankBank Benelux	CEO	Digitisation and new opportunities for creators
Virginie Civrais	St'art Invest	Managing Director	Digitisation and new opportunities for creators
Amadea Choplin	Dailymotion	Head of Corporate Development & Communication	Digitisation and new opportunities for creators
Helen Smith	IMPALA	Secretary General	Music, Remuneration & rights mgmt in digital age
Olivia Regnier	IFPI	Director European Office	Music, Remuneration & rights mgmt in digital age
Will Page	Spotify	Director of Economics	Music, Remuneration & rights mgmt in digital age
Cécile Despringres	SAA	Secretary General	Film, Remuneration & rights mgmt in digital age
Loic Baud	Hadopi	Director Depart. Diagnostics, Research and Development	Remuneration & rights management in digital age
Amadea Choplin	Dailymotion	Head of Corporate Development & Communication	Remuneration & rights management in digital age

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3/ List of statements for DISCUTO

Better statistics/data for monitoring

- It is important to invest in additional official statistics on CCS that take the value chain perspective (making a distinction between the different stages in the value chain: creation, production/publishing, dissemination/trade and exhibition/transmission)
- More data should be collected to adequately monitor evolutions in the remuneration and working conditions of creatives
- A monitoring framework should be developed including the definition of relevant dimensions and indicators, that allows an assessment of (evolutions in) cultural diversity* in the digital age (*i.e. diversity in the types of creative content being produced, distributed and consumed)
- More investments are needed to make better use of social media and Internet data (e.g. search trends data on Google) to monitor new forms of engagement in cultural activities for research and policy purposes, within the limits of confidentiality and data protection rules (i.e. appropriate analysis requires socio-demographic data on users, which may threaten privacy)
- It is important to invest in additional statistics to better understand and assess the role of online markets in cultural consumption

Improve the regulatory environment

- The regulatory environment should encourage co-creation and dissemination of creative content
- There is a need to minimize lock-in situations at the level of distribution (interoperability) that limit the circulation of creative content
- The potential of big data for CCS actors is under-exploited. The CCS actors need to be able to access their own data to strengthen market intelligence and audience development
- There is a need to further develop and disseminate the tools that enable the tracking of creative content
- Registries for metadata need to be optimised and streamlined

Connect to overcome fragmentation

- Cross-sectoral collaboration between CCS actors and other sectors should be (financially) stimulated
- Networking among creative entrepreneurs should be (financially) stimulated
- More measures are needed at the EU or national level to support the distribution of European works in the digital age
- More interactions between arts and culture, science (exact sciences, social sciences and humanities), engineering, technology and business should be encouraged in formal education
- Closer collaboration between different policy areas is a necessary condition to develop an adequate policy framework and policy instruments to promote a competitive CCS in the digital age
- EU projects conducive to the development of creative ecosystems should be (financially) stimulated

Capacity building

- Digitisation has increased the pressure on individual creators to become entrepreneurs, sometimes at the expense of being creator. There should be support measures in place that allow creators to focus as much as possible on their creative activities and leave more managerial aspects (communication, promotion, IP...) to others at an affordable price
- Creators need to be made more aware about the importance of IPR and its potential for value monetisation in the digital age
- Cultural and Creative sector actors would benefit from information/learning modules on the potential of big data
- Support to cultural entrepreneurship should start already during formal education, via innovative curricula in arts education with a better integration of business, marketing and entrepreneurial courses and more flexibility in combining different disciplines
- Creatives should be supported in their efforts to join forces and increase their bargaining power

Optimize the use of EU funding

- CCS actors should be made aware of EU funding possibilities for research, development and innovation (e.g. Horizon2020, COSME, SME instrument) as well as for skills development, to explore the opportunities of digitisation for CCS actors and build up capacity.
- Given the structure of the CCS, the requirements for EU funding should be reviewed to make funding more accessible in practical terms to Micro-enterprises and SMEs in the relevant calls
- Dissemination/distribution is the most affected function of the creative value chains by digitisation. EU funding should support CCS actors to better distribute their work in the digital age (as it is doing for the film sector through the MEDIA programme).
- The impact of funding on cultural diversity should be assessed (produced, distributed and consumed diversity).
- Micro-enterprises and SMEs should get access to more funding and other support to develop and adapt digital applications that help to understand consumer behaviour, facilitate closer engagement with target audiences through social media and test new business models.

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