



DIRECTORATE-GENERAL FOR INTERNAL POLICIES  
POLICY DEPARTMENT B: STRUCTURAL AND COHESION POLICIES

CULTURE AND EDUCATION

**PUBLIC AND COMMERCIAL MODELS OF  
ACCESS IN THE DIGITAL ERA**

EXECUTIVE SUMMARY

**Abstract:**

This report provides an overview of the status and potential evolution of how content is delivered to the wider public in Europe, including the experience of the public sector and commercial providers. On the base of problems and causes identified, a series of recommendations are made to respond to the challenges of the digital era regarding access to content in Europe.

This document was requested by the European Parliament's Committee on Culture and Education.

## **AUTHORS**

Claudio Feijoo, Sven Lindmark, Juan Pablo Villar, Carlota Tarín, Javier Gelabert, Beatriz Matía

## **RESPONSIBLE ADMINISTRATOR**

Markus J. Prutsch  
Policy Department B: Structural and Cohesion Policies  
European Parliament  
B-1047 Brussels  
E-mail: [poldep-cohesion@europarl.europa.eu](mailto:poldep-cohesion@europarl.europa.eu)

## **EDITORIAL ASSISTANCE**

Lyna Pärt

## **LINGUISTIC VERSIONS**

Original: EN  
Translation: DE, FR

## **ABOUT THE PUBLISHER**

To contact the Policy Department or to subscribe to its monthly newsletter please write to: [poldep-cohesion@europarl.europa.eu](mailto:poldep-cohesion@europarl.europa.eu)

Manuscript completed in April 2013.  
© European Union, 2013.

This document is available on the Internet at:  
<http://www.europarl.europa.eu/studies>

## **DISCLAIMER**

The opinions expressed in this document are the sole responsibility of the author and do not necessarily represent the official position of the European Parliament.

Reproduction and translation for non-commercial purposes are authorized, provided the source is acknowledged and the publisher is given prior notice and sent a copy.

## LIST OF ABBREVIATIONS

**Apps** Application software

**EU** European Union

**ICT** Information and Communications Technologies

**PC** Personal Computer

**TV** Television

## EXECUTIVE SUMMARY

### Scope and Methodology

This report provides an overview of the status and evolution of the way in which cultural and creative, both commercial and public, content is delivered to and accessed by the wider public in Europe. Trends, obstacles and drivers in the transition to a digital era are identified and provide a basis for a set of recommendations.

The media and content sector encompasses a set of industries including music, film and video, publishing (books, newspapers and magazines) and broadcasting (radio and TV) and sometimes also videogames and other information services (news agencies, portals, directories, etc.). These industries include a number of distinct activities (e.g. recording, publishing, performing, distributing, broadcasting and retailing) arranged in value chains with three main stages: production, distribution and consumption.

The report analyses commercial content and public content separately. First, it provides an analysis of four of the main (commercial) industries in the media and content sector – film, videogames, books and newspapers – aiming to highlight the disruption brought about by digitisation, their common attributes as well as their dissimilarities across the industries and possible implications for their future developments. These industries were chosen according to similarities with public content (for film, books and news) and their innovative nature (videogames), in order to maximise lessons to be learned for the public content sector.

Due to its distinctive features (e.g. regulatory and public good implications) when compared to commercial content, public content has been examined separately. In addition, since the digitisation process is still incipient in the public sphere, this structure of analysis helps identify the lessons that can be extracted from commercial provision and applied to public content.

The analysis covers the whole EU, supported by more in-depth analyses of seven Member States: Estonia, France, Germany, Italy, Spain, Sweden and the United Kingdom (including fact sheets in Annex). Data gathered combines desk research with 10 in-depth interviews and an online survey (75 valid surveys were collected, 41 from public stakeholders, and 34 from private stakeholders). In addition, a number of cases have been identified. Short descriptions of these cases are included in the report in boxes to illustrate findings and key aspects of, for instance, the business models or funding models described.

The report is structured as follows. Chapter 1 introduces the objective, scope, method and structure of the report. Chapter 2 overviews the four commercial content industries: Film, videogames, books and newspapers, providing for each one: (1) a general description including overall performance indicators on the status of the current market and the transition to digitisation; (2) value chain analysis; (3) new business models; (4) an analysis of financial sustainability and funding; (5) illustrative case studies; and (6) conclusions. Chapter 3 is dedicated to public content, including (1) introductory definitions; (2) general overview of the status of digitisation; (3) availability of digital content and corresponding business models; (4) funding issues; (5) the role of content platforms and their impact on public content delivery with a brief examination of Europeana; and (6) identifying the main obstacles the public sector is facing in its transition to the digital era. Chapter 4 gives a summary of the general conclusions of the study and a series of recommendations on how to stimulate digital content accessibility and reutilisation in Europe.

Annexes include fact sheets for each of the countries selected for further analysis (Estonia, France, Germany, Italy, Spain, Sweden and the United Kingdom) as well as a summary of the online survey and references.

This summary is in line with the structure of the report with the addition of a general introduction to the (commercial and public) content markets, which synthesizes findings from the report.

## Content Markets – General Features and Developments

Some two decades ago media and content industries were relatively mature, characterised by high returns to scale and scope, with marked barriers to entry (due to the high costs of production) and, therefore, prone to concentration. Markets were culturally segmented and distribution was territorially divided. From the public perspective, positive externalities in media and content were the main argument for different types of public policies and regulations, including in some cases direct provision of content and information through variations of public service.

Digitisation brought radical transformation to the sector, reducing production and distribution costs, as well as changes in user consumption and perception of media and content. These changes have disrupted the structure of the content industries and pose entirely new challenges. In addition, in the case of public information and content, there is now considerably less difference from commercial products/offers, at least from the consumers' perspective.

Regarding the structure of the industry, new entrants and new media have appeared, and although some legacy features of the industry persist, in particular the high returns to scale and scope for professional content, the existence of considerable externalities and cultural distinctions, new digital stakeholders are currently leading the process of re-intermediation. Public information and content is only starting to use the potential of these new entrants and new media, and has yet to work out a model to reconcile public objectives and commercial interests in the digital environment.

Together with technology and socio-economic changes, two other phenomena have had an adverse impact on media and content industries: online copyright infringement (often labelled 'piracy') and the failure of the industry to exploit digitisation to create innovative solutions to compensate the effects of copyright infringement. A Substantial part of the public sector shares this myopic attitude of not providing users with appealing digital content.

New digital media have some specific features differing from traditional media. Apart from the reduction in costs of production and distribution and possibilities for interaction and personalisation of the media experience, new media enjoy reduced costs for service at a distance, thereby creating incentives for de-territorialisation and making traditional regulation more difficult. The capacity for personalisation of digital media also allows for – at least theoretically – better implementation of consumers' preferences for the long-tail preferences of consumers and the catalogue of providers. The lowering of entry barriers to non-professional content and information has created new forms of user-driven innovation where consumers can express themselves more easily than ever, challenging both the legacy industries and existing regulation. Social network innovations have also been used by new players to enter into the distribution sector of this domain. This same absence of barriers has eased abuse of professional content, and regulation and policy making has so far failed to deploy efficient solutions to the problem, proving a lack of understanding of consumer perspective.

Looking at the short to mid-term future, some general trends in the evolution of media and content industries can be identified: They can be grouped by themes: structure of the industry, production, distribution, consumption, business models and consumer behaviour. Regarding the **structure of the industry**, legacy media and content will largely survive but will be smaller than prior to digitisation – the music industry is a key example – and new players will be the driving force in its evolution. New players (e.g. new intermediaries

from the ICT sector) currently aiming to commoditise content as their main business models are only indirectly connected to the production of media and content, therefore not necessarily sharing the “cultural” values traditionally associated with parts of this industry. Also, the current structure of the industry presents new forms of potential market dominance, such as platforms and the ecosystems around them – mobile and social media as main examples (e.g. Android, Apple, Facebook). The platforms behave like multi-sided markets, gathering developers, producers, advertisers and consumers to create a full ecosystem, in which the owner of the platform keeps control over its main features and evolution.

The professional **production** of media and content increasingly needs to consider several media simultaneously considered for content release – the cross-media or trans-media experience. Media conglomerates are adapting their production structures to this new paradigm. However, public content used to be aimed mainly at one particular media (i.e. television) and a lack of resources makes its extension to other media difficult, unless a complementary business model can be found.

**Distribution** of content is where the re-intermediation process is mainly taking place and where new agents have entered the media and content domain (e.g. Apple, Netflix). Their approaches to markets are radically different from legacy media and they are deeply modifying the consumer experience – time shifting in TV, over-the-top services, social media, or mobile apps as main examples. Public content is experiencing difficulty becoming part of the new ecosystem without being cannibalized.

**Consumption** of digital media and content by individuals is taking place in an increasingly connected environment, more interactive, more mobile, more social, and where several media are used complementarily if not simultaneously. Consumers can also become producers of their own content. But all of this requires digital literacy, adequate user equipment and new skills. Therefore, it can create yet another digital divide.

**Business models** in media and content are also changing. Traditionally, the revenue streams of media and content industries came from subscriptions, sales to consumers and selling audience attention to advertisers. However, both these revenue models confront specific difficulties in their translation to a digital environment. In the case of advertising, a relevant part is moving from traditional into social media (and search engines) where reaching out to a wider audience of interested consumers is more effective and where business models involving audience personal information is becoming more prominent. Digital paid-for solutions are still in their infancy, with digital subscription services – where the cloud is taking on an increasingly important role and blurring the distinction of products and services – replacing traditional product purchases. Also, some new business models have appeared, such as virtual items or in-app purchases, typical in gaming. In general, digitisation allows for the introduction of more flexible business models, better suited to specific needs of consumers. However, these have not compensated the decline in revenue streams of traditional businesses.

## Commercial Content Markets – Film, Videogames, Books and News

Apart from these general trends, each of the sectors analysed in the report has its own **specificities**, which are outlined below.

In Europe, the **film** (cinema, video) market is dominated by US films (approx. 60% market share), with strong EU local productions aimed at domestic markets. The main digital challenge is the quest for a suitable modification of the release window system to cope with new media, and the threat from online copyright infringement to achieve a sustainable legal offer of digital films. From the consumer perspective, there is as yet insufficient provision of digital videos and films across territories due to licence limitations. In fact, online digital consumption of video and film is still very limited (5% in 2010), compared

with overall consumer spending, although film production is already mainly carried out in digital format. Digitisation of films reduces costs and simplifies post-production and allows for the implementation of innovative business models, better suited to the demands of users such as impulse purchasing, reproduction quality, price or type of access device.

The **videogames** industry is already a digital industry in terms of production, consumption and, partly, distribution and is a showcase for techno-economic innovations, able to attract increasing demographics to gaming. In fact, among the investigated media and content industries, the videogames industry has the highest percentage of revenue derived from online distribution (42% in 2011). This on-going shift to online distribution is altering the traditional value chain of the sector, increasingly blurring the role of traditional agents, such as publishers and distributors. EU publishers hold a reasonably strong position, accompanied by quite a large number of innovators and entrepreneurs in the games development area, particularly in the growing online or mobile gaming segments. The disintermediation process is favouring the direct relationship between games developers and online retailers, or even final customers. The overlap between videogames and the ICT sector has facilitated the creation of an innovative ecosystem with new technologies and business models. Multiple business models are being adapted to the needs of users in areas such as access modes (via web browser, client application installed on the computer, mobile application, etc.), payment (pay per download, repeat subscription payment, payment for game extensions or to access game extensions, pay per purchase of items, etc.), or game devices (consoles, computers, smart phones, tablets, etc.). One of the business models created by the videogames industry, the "free to play" model (or "freemium" model), may be of interest in the provision of public content, as it allows a simple distinction to be made between public service, basic objectives and further commercial interests.

The **book** industry is the latecomer to the digitisation process (with some notable exceptions for niche products such as encyclopaedias). This fact has given the industry the opportunity to learn from the experience of other media and content industries. In 2012 the e-book market represented just 4.5% of global sales of books in developed countries (North America, EU-5 and Japan). From the EU perspective, it is the only market in the media and content industry where European companies hold a leading position. However, US companies lead the transition to the digital age. In addition, online distribution is dominated by companies outside the book publishing industry (e.g. Amazon) and it is only very recently that publishers have started to launch initiatives to deploy their own market digital platforms to sell e-books online. This e-book market today is just a digital version of the paper market, with the same business models. The key element in the development of the market is the new reading devices: e-book readers and tablets. Currently, two models coexist: closed models, linked to specific devices, in which the user can only acquire books in the store of the device manufacturer and cannot access them from any other device; and open models, based on online platforms with books reproducible on any device. The advent of e-books has altered the cost structure as has already happened in other media and content industries. It is estimated that the total costs of online models are 15% to 25% lower than those of physical models. Public initiatives regarding digitisation processes of existing literature are competing with private initiatives. This situation is causing a shift of intervention based on regulation towards contract or partnerships models.

The **newspaper** industry is witnessing a decrease in circulation, and a strong fall in revenue, due to the impact of digitisation. In many ways, the traditional printed-press sector was the first to be affected by the success of the Internet as a source of information. However, the demand for online news is also growing together with an explosion in types of formats and models of production, and dissemination of news online. Therefore, online journalism has often been referred to as having a potential compensatory effect, even if its structure, skills and possibly values differ considerably from traditional journalism. The overall newspaper business model is confronted by the reality that paying for and reading a daily newspaper is quite different from reading it online free of charge. As a consequence,

declining print and advertising revenues are not sufficiently offset by increases in online advertising revenues. Digital newspapers have attempted to replicate online the business models of print versions, including models of payment per copy, subscription and advertising revenue with mixed results. Some newspapers even experimented with the pay-wall model (access to content via subscription), but had to pull out, once they found that the income from the sale of access to content did not offset advertising losses. After this initial failure, newspapers have tried to reintroduce the pay-wall model for premium content, such as financial information. Finally, the emergence of tablet PCs and e-readers seems to be offering some opportunities to the digital press sector. Several newspapers have launched services for these devices, with a subscription model to access the content. However this is still too incipient to extract general valid conclusions.

## Public Content

The public content analysed in this study includes cultural and historical heritage content and public sector information, with a focus on cultural content held by public service broadcasters, educational, research and cultural establishments. With respect to copyright protection, public content encompasses: (1) works in the public domain; (2) works where copyright appertains to a public entity; (3) works where copyright appertains to a private subject but which are guarded or held by a public entity (including orphan and out-of-commerce works).

Although the EU and its Member States have made a huge effort to make digital content more accessible over the last decade, public content is still in the early stages of digitisation. Overall, some 20% of cultural content has been digitised, ranging from 4% for national libraries to 42% for art museums. On top of that, only about one third of that digitised content has been made publicly available online, hence only about 6% of the European cultural content is accessible online.

Digitisation is a costly process especially when considering that the actual technical conversion to digital form is only one part of the process. Clarifying copyrights and reaching agreements with all copyright holders is particularly costly. The process of making public digital content available in Europe has so far been focused on the digitisation process itself. It has been rather fragmented both at the European and Member State level, consisting in mainly short-term projects with funding coming mainly from public sources, rather than private. Encouraged by the European Commission, a number of Public-Private Partnership (PPP) models have been implemented. Although sometimes successful, there have also been problems with these models. Among other things, the public sector argues that it needs to be in control of projects in order to safeguard public interest, while the private sector argues that public institutions often lack the necessary commercially oriented skills. Given the restricted budgets, the economic uncertainty and the high costs of digitisation, new business and access models have been devised to allow a wider access to cultural content while guaranteeing the copyrights and related intellectual property rights of third parties, and to create revenues to guarantee the long-term sustainability of projects and services. These business models for public content can be categorised according to who holds the copyright (public domain, copyrighted, orphan content) and how content is exploited (commercial use or non-commercial use). The provision of public content to commercial players for exploitation may either be free or involve one-off payments or revenue-sharing schemes (normally at marginal costs). For non-commercial use public content in Europe is mainly provided free of charge on an open access basis. However, business models already in place for commercial content in other industries are increasingly being applied by heritage and cultural institutions for reasons of sustainability. Most cultural institutions do not yet offer ways (or licences) to make commercial use of their content and, with respect to this, policies are not clear. To facilitate the commercial exploitation of public content business models must be specifically designed for this purpose, creating simple licences that boost re-utilisation.

Orphan works constitute a large share of available content. These works create problems for digitisation and online distribution. In spite of the recent EU Directive 2012/28/EU, several problems persist: (1) legal uncertainties; (2) economic uncertainties; and (3) limitations regarding beneficiaries included in the directive.

Clearly, public content is still at a very early stage of digitisation and is faced with a considerable number of barriers to progress. In particular, funds for digitisation are lacking, due to: the reluctance of public administrations, immature business models, high costs and dubious returns. In addition, a clear path is lacking in their transformation to the digital domain and there is an absence of coordination among initiatives at all administrative levels – including EU level. Furthermore, there is a shortage of adequate content management, at least for orphan works and a lack of user awareness in general. There is also a deficit in appropriate skills within public institutions, and the multiple and divergent small-scale negotiations with existing digital platforms are limiting the bargaining power of the public bodies involved.

On the positive side, there is a potentially high demand for public content, waiting to be adequately satisfied with the right combination of highly-qualified professionals working for the public sector and government support – both direct and through regulation. A higher level of coordination would be also needed in intellectual property rights management, and in the digital provision of public content, including a better-harmonised framework for digital intellectual property rights. Finally, user awareness and involvement (social innovation) seems to be a determining factor in the success of the future digital provision of public content.

## Opportunities, Challenges and Recommendations

Finally, having identified the opportunities and challenges for European content, a number of recommendations are outlined here. Common **opportunities** across media and content industries that are still not fully exploited in the EU include: production of cross-media content, the creation of innovative user experiences from the wealth of public content, the use of online distribution to improve content dissemination beyond national borders, and tapping commercial initiatives and social innovation to meet the objectives in public production and diffusion of content.

In spite of the many advantages and opportunities brought about by digitisation, a number of **challenges** across the media and content industries remain. On the supply side, the main challenges lie in that the advantages of digitisation often accrue to different players in the value chain than those who invest in digitised content, creating a resistance to fully embrace it. In addition, digitised goods are threatened by copyright infringement. On the consumers' side, there is still a notable absence of innovative solutions able to satisfy their demands on usability and usefulness – the difficulties with multi-territorial licences in video and film being a main example. More precisely, a simple and effective multi-territorial licensing framework should be the main policy and regulatory challenge for media and content in the EU, together with an intellectual property regime able to foster innovation and creation, and acknowledge society's new perspectives of media and content.

A number of **recommendations** are outlined below, to address the challenges identified in the transition to the digital era and an information-based society.

The first set of recommendations of the study focus on the need for **further funding** of digitisation, preservation, and technical and business innovations. This investment is needed because of the positive economic and societal externalities arising from digitising content. However, a re-think in funding schemes is needed. Further funding should:

- involve continued support for the digital transformation of media and content industries;

- research into the development of technical and business innovations;
- consider cross-media production as a prime opportunity;
- establish new forms of long-term orientated funds, particularly for non-profit organisations;
- create specific programs and tools for entrepreneurs and innovators in digital media and content covering early-stages to consolidation;
- aim at creating European multi-sided platforms and ecosystems in digital media and content, in particular using the sectors and areas in which Europe is leading;
- promote cross-sector and cross-border production and distribution of content;
- encourage PPP in the public domain for the acquisition of expertise, the use of existing technologies and for funding initiatives; and
- re-design existing programs to avoid duplication of initiatives.

Together with funding, European policies should also be orientated towards **increasing coordination and creation of economies of scale** in the use of technical infrastructures:

- create economies of scale both in technical infrastructures and management units for production and distribution of digital content and media;
- encourage centralised or coordinated rights management agencies;
- investigate and reduce transaction costs in the provision of digital media and content throughout Europe;
- fight insufficient provision of digital content and media across EU territories due to market barriers;
- coordinate actions in the digital public provision of content, including production, distribution, consumption and negotiations with existing platforms;
- bring content to wherever the user is: place content in existing platforms;
- foster coordination among initiatives, and at all levels, in the digital provision of public content particularly in their relationship with commercial initiatives; and
- adopt a harmonised framework and package of measures – promotion of legal offers, user awareness, collaboration of players involved in transactions with content and media, specific legal measures – to fight online copyright infringement to “keep honest users honest”.

Specific recommendations regarding the improvement of **multi-territorial licences and revision of the intellectual property regime**:

- improve harmonisation of the framework for digital intellectual property rights and review the intellectual property regime to foster innovative and creative developments, which is particularly needed for orphan works;
- consider an improved multi-territorial licensing regime, including rapid implementation through coordination of existing licences, for media and content to bypass existing barriers to distribution and consumption inside the EU;
- explore, research – and promote – new avenues in the intellectual property regime (commons, open licences, etc):

- promote open access to orphan and out-of-commerce works; and
- guarantee educational use of public content under special conditions (open access is recommended).

The fourth set of recommendations is orientated towards the **improvement of access to public content and the promotion of innovation** around it:

- re-think positively public policy on media and content, including the assessment of direct provision of content and information through diverse variations on public service;
- consider in particular commercial initiatives and social innovation to meet the objectives in public production and diffusion of content;
- create an ecosystem around public content: open data and distribution platform initiatives;
- experiment and use – for specific types of public content – new flexible business models taken from commercial content initiatives, in particular considering the “freemium” model as it allows for a clear distinction between public service, basic objectives and further commercial interests;
- investigate and promote the role of users as “prosumers” of content of public interest; and
- promote the creation of innovative user experiences from the wealth of public content, eliminating the current barriers so that innovators and entrepreneurs can use it fairly.

The final set of recommendations is orientated towards raising **user awareness** and **education of highly skilled professionals**:

- raise user awareness of digital European heritage;
- invest in talent: create positions in the public sector with the required digital expertise; and
- create a forum with the industry to work on a European curriculum for the media and content sectors.

The architecture of the **Creative Europe Programme**, as the new framework programme for the cultural and creative sector within the Multi-Annual Financial Framework 2014-2020, already responds to some of the problems identified here. In particular, it is in line with some of the recommendations made in this report, namely: it is continuing economic support to the creative and cultural sector until 2020; it promotes transnational and cross-sector actions; it focuses on capacity building; it aims to improve user awareness by reaching new audiences; and it addresses, to a certain extent, the fragmentation of funding and the short-term perspective of projects.

However, some of the above recommendations should be more specifically addressed by the Programme, such as: cross-media production of content; cross-border online distribution of media and content; placing EU public content in existing digital platforms; creation of a European Curriculum; education and hiring of highly skilled professionals in digital media and content; support for open public content; coordination of digital provision of public content and use of infrastructures; promotion of venture capital/initial investment and encouragement of coordinated online distribution platforms (public content, newspaper industry).