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# The Digital Shift in the Media and Content Industries

## POLICY BRIEF

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## **Introduction**

The digital shift – that is the digitisation of information, the generalisation of the Internet protocol, and the rapid take-up of these technologies (final user equipments, broadband infrastructures, etc.) is transforming the way we produce, store, distribute and consume goods and services.

The Media and Content Industries (MCI) – which cover the book, broadcasting, cinema, music, newspapers, and video games industries – are among the industries that have been first and heavily hit by the digital shift.

This policy brief offers a structured review of the major transformations the MCI industries have been going through. It provides some further insights on the policy questions these transformations are raising and suggests novel ways of implementing policies, discussing their effectiveness in a digital world. It also allows us to apply the lessons learned to the future of many other sectors of our advanced economies. .

Significant advances have affected the digital media, especially traditional models of production and consumption. These advances have forced some major restructuring within these industries in the context of dramatic changes in demand patterns.

As a result, there has been a proliferation of strategies and bets on the evolution of the market. These are driven by a growing number of players, including new entrants from other industries (Information and Telecommunications Technologies), which contribute to a multiplication of competing business models based on different, often clashing business cultures. The different industry layers (technological infrastructures, distribution and intermediaries, and content) are being (re)articulated within a new “ecosystem” while value chains are being restructured in a global market characterised by the strong growth of emerging markets like Asia.

Despite the highly specific nature of each of the Media and Content Industries, in which production cost functions and features vary considerably, the digital shift is nevertheless bringing some common threats and opportunities.

## **An Overview of the Research**

This brief covers the findings of nine studies initiated by IPTS on the "Statistical, ecosystems and competitiveness analysis of the Media and Content Industries"(MCI). This set of studies had two objectives:

1. To gather the official quantitative statistical data about the Media and Content Industries
2. To offer an industrial and economic analysis of the impacts of the digital shift for the six Media and Content Industries.

The past and current ecosystems of each of these industry case studies is investigated, looking beyond value chains or major actors to those aspects that are relevant to the understanding of the transformations themselves: emerging challengers, past and new threats and ways of responding, new business models, major investments, major failures or successes and their causes, technological changes affecting the industry, radical innovations if any, etc.

The six case studies (each has a report) are summarised in a synthesis report which includes some additional features. This report underlines the specific dynamics at work within the media and content industries after a succession of disruptive technological waves. It is complemented by a more detailed report on copyright issues.

The Reports:

1. The Book Publishing Industry (2012). Authors: G. De Prato, J.-P. Simon
2. Born digital, Grown digital: the European Videogames industry (2010). Authors: G. de Prato, C. Feijóo, D. Nepelski, M. Bogdanowicz, J.-P. Simon.
3. European Television in the New Media Landscape (2012). Author: E. Sanz. Editors: M. Bogdanowicz, J.-P. Simon
4. The Film Sector (2012). Authors: S. De Vinck, S. Lindmark. Editor: J.-P. Simon.
5. The Music Industry (2012). Authors: A. Leurdijk, O. Nieuwenhuis. Editor: J.-P. Simon.
6. The Newspaper Publishing Industry (2012). Authors: A. Leurdijk, M. Slot, O. Nieuwenhuis. Editor: J.-P. Simon.
7. The media and content industries: A quantitative overview (2012). Authors: A. Leurdijk, S. de Munck, T. van den Broek, A. van der Plas, W. Manshanden, E. Rietveld. Editor: J.-P. Simon.
8. The Dynamics of the Media and Content Industries: A Synthesis (2012). Author: J.-P. Simon
9. Changing Modes of Asset Management: IPR and Copyright in the Digital Age. A Complementary Report (2012). Author: J.-P. Simon.

*All reports are available at: <http://is.jrc.ec.europa.eu/pages/ISG/MCI.html>.*

## I. The Media and Content Industries (MCI): Some Figures

The Media and Content Industries, whose role in our societies is well acknowledged, are facing a wave of technological evolutions. However, these industries have not yet managed to find ways of reversing the historical decline their revenues have suffered.

### **Key finding 1: The MCI are a significant contributor to the EU economy**

This set of industries covers a wide scope of activities: book publishing, broadcasting, cinema, music, newspapers, and videogames. Together with cultural activities, they reach a significant economic size, contributing some 213 billion Euros value added in 2007, see (Table 1),<sup>1</sup> or around 2-3% of the EU GDP with an annual average growth rate of 2.6% over the period 1995-2007. Most of this value added was produced in the EU 6:<sup>2</sup> 112.4 out of the total 213 billion Euros. However, as the NACE/ISIC classification is being used for statistical purposes, it is important to underline the dominance of the “recreational, cultural and sporting activities” within this category over MCI-relevant activities such as film, broadcasting, video, etc.

**Table 1: Value added 2007 (x billion, overall economy, MCI, Europe)<sup>1</sup>**

<i>Value added, absolute</i>	EU27	EU 6	EU 9	EU15	EU new
			<i>Billion EUR</i>		
<b>Total EU27 economy</b>	9312.9	5339.9	3425.4	8765.4	547.6
<b>Total MCI</b>	<b>213.2</b>	<b>112.4</b>	<b>89.2</b>	<b>201.6</b>	<b>11.6</b>
Publishing, printing, reproduction of recorded media	43.0	21.8	19.2	41.0	2.0
Publishing of books	10.8	6.1	4.0	10.2	0.7
Publishing of newspapers	15.9	8.1	7.1	15.2	0.7
Publishing of journals and periodicals	13.5	6.4	6.7	13.1	0.5
Publishing of sound recordings	0.9	0.5	0.4	0.9	0.0
Other publishing	1.8	0.6	1.1	1.7	0.1
Recreational, cultural and sporting activities	170.2	90.6	70.0	160.6	9.6

*Source:* The media and content industries. A quantitative overview (2012). Authors: A. Leurdijk, S. de Munck, T. van den Broek, A. van der Plas, W. Manshanden, E. Rietveld

<sup>1</sup> The data presented here complies with the ISIC rev 3.1 categorization of the MCI. Eurostat data is based on the European NACE classification for economic activities (commercial and non-commercial), which in turn is based on the international ISIC classification for economic activities of the United Nations. The data presented here complies with the ISIC rev 3.1 categorization of the MCI. It comprises:

- Printing, publishing and reproduction of recorded media industry (category 221), which consists of publishing of books, brochures and other publications, publishing of newspapers, journals and periodicals, publishing of newspapers, publishing of sound recordings and other publishing
- Recreational, cultural and sporting industry (category 92), including motion picture and video activities, radio and television activities, other entertainment activities , together with news agency activities, library, archives, museums and other cultural activities , sporting activities and other recreational activities .

Data on recreational, cultural and sporting industry at a disaggregated level (3- and 4-digits) is not available in the Eurostat Structural Business Statistics (SBS) database.

<sup>2</sup> To take into account the different paths of development for countries, depending on their joining of the EU, data is provided for all 27 European countries, the initial 6 countries (Belgium, Germany, France, Italy, Luxemburg and the Netherlands), the subsequent 9 (Denmark, Ireland, the United Kingdom, Finland, Greece, Austria, Portugal, Spain, and Sweden), the total for the initial 15 Member States and the additional countries that joined after April 2004 (EU new: Bulgaria, Cyprus, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovenia, Slovakia, Czech republic).

The MCI share of the overall economy is more or less equal across Europe. Table 2 shows the share of MCI in the total EU economy, “publishing, printing and reproduction of recorded media” as share of MCI, and the five subsectors’ respective shares of “publishing, printing, reproduction of recorded media”.

**Table 2 Distribution of Value added of MCI and share of entire economy, 2007**

	EU27	EU 6	EU 9	EU15	EU new
<b>Total MCI as share of entire economy</b>	<b>2.3</b>	<b>2.1</b>	<b>2.6</b>	<b>2.3</b>	<b>2.1</b>
Publishing, printing, reproduction of recorded media as share of MCI	20	19	22	20	17
Publishing of books	25	28	21	25	34
Publishing of newspapers	37	37	37	37	36
Publishing of journals and periodicals	32	29	35	32	24
Publishing of sound recordings	2	2	2	2	2
Other publishing	4	3	6	4	4
Recreational, cultural and sporting activities	80	81	78	80	83

*Source:* The media and content industries: A quantitative overview (2012). Authors: A. Leurdijk, S. de Munck, T. van den Broek, A. van der Plas, W. Manshanden, E. Rietveld

Based on 2008 data, only approximately 10% to 20% of the 10.8 million employees of the recreational, cultural and sporting activities sector can be attributed to MCI-relevant activities i.e. film, broadcasting, video. Applying this percentage to the above 2007 data, the recreational, cultural and sporting activities sub-sector would represent around 64% of total employment in the MCI sector, while the publishing sector would represent 36%. In total, the MCI would employ around 2.5 million people across Europe, i.e. 1.5% of the EU27 total employment. Of those 2.5 million employees, the publishing industry would have the smaller share, with around 850,000 employees in the EU27.

The European publishing industry encompasses a large number of companies (83,472). The largest sub-sectors in terms of number of companies are book publishing (38%) and the publishing of journals and periodicals (23%), which includes magazines. Book and newspaper publishing seem to be the two most capital-intensive sub-sectors, with a relatively high labour productivity of respectively 53.800 EUR and 52.600 EUR compared to an average labour productivity in the EU economy as a whole of 41.100 EUR. In terms of number of undertakings, there are fewer undertakings in the US than in the EU27. This might be explained by the fact that the US is a single market legally, economically and culturally, which creates potential for economies of scale and scope.

More recent and disaggregated data are available from unofficial data sources such as trade associations, and consultancies: these can be found in the case studies reports.

**Key finding 2: traditional MCI revenues decline is not compensated by still low digital ones**

Referred to in specialised literature as the global “Telecom, Media and Technology” (TMT) ecosystem, the total industrial ecosystem that now integrates the MCI (i.e. network operations, hardware, IT services and software, content and intermediation) grew globally at an overall rate of 8.4%<sup>3</sup> from 2006 onwards, to reach US\$ 1.207 billion in 2010, despite a 2% decline in 2009 (Booz&co, 2011). Within this ecosystem, the growth rate is rather unevenly distributed with the intermediation sector showing a 17% growth rate while the media and content sector as a whole has grown by a mere 4.9%.

This overall growth is mainly due to the contribution of emerging markets (Brazil and China being the fastest growing). These markets are playing and will continue to play a growing role. They are developing at the rate of 12.6% and their overall share of the global market has increased from 20 to 24% during this period (Booz&co, 2011). While emerging markets grow, mature media markets (EMEA, US) are declining.

Among the media and content industries, growth is even more unevenly spread. Indeed, the global growth of the sector forecast by specialised consultancies is modest at best and unequally distributed between regions and also between segments. The videogames industry is growing steadily. Broadcasting remains a profitable business. The global ‘music’ industry revenues rose from US\$ 51.2 billion to US\$ 74.1 billion between 1998 and 2010, but its recorded segment was badly hit: down from US\$ 33.5 billion in 2006 to US\$ 25.4 billion in 2009.<sup>4</sup> Newspapers revenues fell over the same period, from US\$ 185.6 billion to US\$ 159.6 billion and also revenues for magazines, from US\$ 81.5 billion to US\$ 72.6 billion. The fast decline of newspapers revenues does not appear to be slowing down, as a compound rate of -1.5% is forecasted for the period 2011-2015 (PWC, 2011). The magazines subsector, however, seems to be recovering and a moderate growth of 3% is forecasted for 2015. One can assume that the figures are even more dramatic for mature markets as the average data presented here includes growing spending in emerging economies (e.g. India).

***Digital Media in Asia***

*From a regional viewpoint, it is worth noting that Asia is leading in terms of digital sales: the share of digital sales reached 85% of the total music revenues in South Korea. Japan is an interesting case with 65% of Japanese mangas on mobile in digital format. Three of the four largest world markets for video games are located in Asia-Pacific: of the four, the US leads ahead of Japan, China and South Korea in that order.. The fastest growing social networks are Chinese: Tencent<sup>5</sup> and Baidu (In-Stat, 2010). By the same token, in 2010, cinema admissions were going down in mature markets such as the US (-5.2%) and the EU (- 1.6%) but up in growth markets such as India, China, and Russia. India is the largest market in terms of admissions with nearly 3 billion (2009), far ahead of both the US (2010: 1, 341 billion) and the EU (2010: nearly 1 billion).<sup>6</sup>*

<sup>3</sup> CAGR.

<sup>4</sup> Source: PWC, 2011. Global retail value of ‘recorded’ music sales dropped from \$38.7 billion in 1999 to \$26.5 billion in 2008.

<sup>5</sup> The Chinese site overtook Facebook reaching 637 millions active monthly users as of 2010.

<sup>6</sup> The Chinese market is still small (264 million) but likely to grow.

Source: Florence Hartmann, EAO, presentation at the IPTS MCI May 2011 workshop: [http://is.jrc.ec.europa.eu/pages/ISG/documents/FHSEVILLA\\_2011\\_Digital\\_transition\\_final.pdf](http://is.jrc.ec.europa.eu/pages/ISG/documents/FHSEVILLA_2011_Digital_transition_final.pdf)



The digital share of media and content industry revenues is growing steadily, though it remains modest, not to say low, for most of these industries. Consequently, historically declining revenues are not compensated by still very low digital ones.

### **Low digital revenues**

*In the EU, less than 2% of total book revenues come from e-books even in the fastest growing market, the UK. Revenues from new streams of activity (such as interactivity of the leading European commercial television groups) are small or nonexistent (European Audiovisual Observatory, 2010). Online revenues (VOD online and SVOD) are growing but revenues from VOD and SVOD accounted for less than 1% of the total European audiovisual market in 2010. In the US, since about 2000, online video streaming has become widespread, but its overall proportion of all TV viewing remains under 2% (Waterman & al, 2012), with a revenue share of only 1.5%<sup>7</sup> in 2010.*

*The music industry, is an exception but only in the US (where the digital share of the recorded market is 43%) and South Korea (85%). This share is only 13% in the EU (IFPI, 2010). The videogames industry is another exception due to its digital birth: mobile and online are forecasted to reach 50% of the global revenues in 2015 (PWC, 2011). Online distribution of physical products (such as books) is not a major distribution channel: retailers (small and big) still constitute the main channel, on both sides of the Atlantic. The exception is again music, especially in the US and the UK, where retailers and retail chains are closing down.*

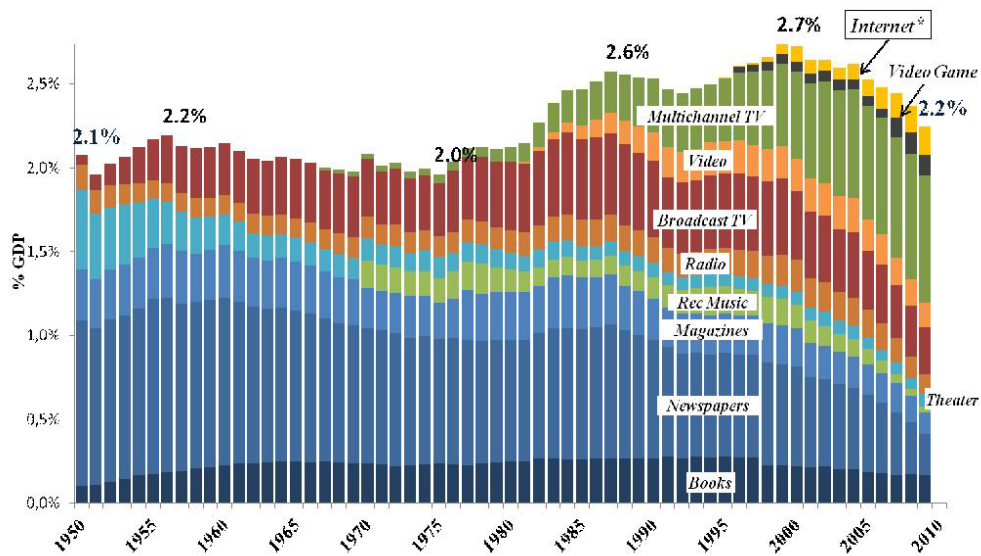
There is hope that these trends will change. Historically, in the US, media industries like broadcasting have benefited greatly from the introduction of new technologies over the last four decades. Revenues from the distribution of films in the US followed a similar pattern, with the introduction of each new technology triggering additional streams or revenues (broadcasting, cable, pay TV, DVD...).

A closer look at the long-term evolution over a sixty year period of professionally-produced commercial media revenues in the US shows that revenues measured as a percentage of the US GDP went up until 2000, then reached a plateau and decreased thereafter to return in 2010 to the 1950 level (Waterman, 2011). Revenues have been consistently falling (or flattening) since, especially in the newspaper and music segments, and revenues from the Internet or from the newest segment of the media, videogames, have not compensated for the decline so far.

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<sup>7</sup> Adding on line TV sales (0.2%), on line video subscription (0.8%) and online TV advertising (0.3%: Hulu and TV.com).

**Figure 1: Total revenue of US commercial media as % of GDP, 1950-2010**



Source: D. Waterman, presentation at the 1<sup>st</sup> IPTS MCI workshop, 2011. Based on US census, trade associations and author estimations.

Unfortunately, no similar data are available for the EU market.<sup>8</sup> It is possible, however, to compare the average growth of value added for newspaper publishing, books, and recorded music in the six largest EU markets between 1995 and 2007: a similar pattern of (recent) decline is revealed.

In this context, European companies have achieved a stronger position in publishing than US companies with a small number of very large players being world leaders. Of the overall media and entertainment market, the book segment is the only one where EU companies (Bertelsman, Hachette, Pearson, Wolters Kluwer) are leaders. In the videogames industry, European players, which are absent in the console hardware segment, supply a large share of the world's middleware needs. European middleware providers even dominate the important South Korean market (EGDF, 2011). Europe hosts a large number of game developers' studios, often the creators of major market successes. On the other hand, the audiovisual (film, TV) and the music industries are dominated by US companies. All in all, however, the trade balance for the European MCI was negative in 2007, with a total trade deficit of 1.291 million Euros.<sup>9</sup>

Therefore, questions about the extent to which potential new sources of revenues will compensate for declining revenues remain unanswered. Revenues have been falling or flattening for quite some time in the media and content industries for many reasons: global competition, changing patterns of consumption, generational effects, varying willingness to pay, increased competition. The decline does not coincide with the digital shift, which in most cases started earlier. However, neither the digital shift nor the economic crisis has helped improve the situation, especially for the industries that rely most on advertising revenues.

<sup>8</sup> See for the availability of data: The media and content industries. A quantitative overview (2012). Authors: A. Leurdijk, S. de Munck, T. van den Broek, A. van der Plas, W. Manshanden, E. Rietveld

<sup>9</sup> Source: Idem

## II. Digital Shifts: their Impact on the MCI

With the digital shift, the Media and Content Industries are facing the competing activities of network operators and IT companies in the new industrial ecosystem where they have lost much of their control over distribution and the final consumer. However, monetising consumption and enabling content creation may call for collaborative schemes among all industrial players to define new business models and pricing, as well as to achieve the fair redistribution of revenues among all.

### ***Key finding 3: Three drastic transformations affect the Media and Content industries***

#### *Transformation 1: A new industry structure*

Sectors (such as Content and Media, Telecommunications, Information Technologies) that had been separated before are intermingling progressively, creating a new industrial ecosystem that forces different types of companies, with different business cultures and performance to compete and collaborate. This emerging global ecosystem features new interdependent relations between the highly profitable Information Technologies (IT) companies, network providers with declining revenues and MCI companies with often rather tight margins (though some are also highly profitable). In this global ecosystem, the relative economic size of the MCI component, although it is evolving over time, remains small (less than 7% of the total in 2010, Booz&Co, 2011) compared to its industrial IT counterpart, the legacy telecom players (network operation and service with over 40% of the total.). The most recent entrants to the ecosystem from the IT world, for example intermediation and IT services and software have 24%,<sup>10</sup> manufacturers have 28%<sup>11</sup>.

In the “old” world, each of these sectors focused on its core business and managed its own assets accordingly. Typically, telecom providers provided services to all segments (residential and business), media companies bought the services they needed to reach their final customers (some production services, agents, wholesaling, logistics, transmission/distribution, and retail), IT companies provided hardware and software.

In the new industrial ecosystem, however, each segment is competing with all the others for the final consumers under its own business model. All the players are fighting to become the primary gateways for content access, navigation and provision. Acting as intermediation agents, the new players provide, or will provide, content aggregation and distribution, and advertising management. Moreover, some will provide additional services that may compete with other services provided by legacy players, often removing revenues that subsidized the production of contents (such as the revenues from classified ads and advertising with newspapers).

The publisher/ aggregator segment of legacy media and content industries, which was largely made up of integrated firms (production/ publishing/ distribution-retail), dominated the traditional value chain. The traditional, oligopolistic and vertically-integrated market of the media industry is now being challenged, as the industry moves towards a new value chain<sup>12</sup> with many different participants and some overlapping roles.

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<sup>10</sup> Amazon, eBay, Google, Microsoft, Yahoo...

<sup>11</sup> Like Apple

<sup>12</sup> Value chain describes usually the process of production, distribution and consumption between the various players involved in an industry, in the media and content industries it covers specifically the creation/

### *Transformation 2: Downstream domination*

Integrated media companies used to control distribution (wholesale and often retail). A significant change in the dynamics of the sector is taking place, shifting the balance of power downstream away from the upstream: i.e. away from the “production” side of the media toward the distribution side. In other words, two different kinds of economics are colliding: the economics of upstream production of cultural goods and the economics of downstream distribution of digital goods and services.

This move toward a greater control from the downstream players is a feature of more mature markets where the marketing/ distribution takes backward control over production (engineers, artists). This is illustrated by the emergence and domination of large retailers such as Carrefour since the late 60s, and more recently, the Walmart phenomenon. Large retailers (in the MCI industries, “new entrants” such as Telecom operators and IT companies) tend to impose their own conditions on their suppliers. Downstream players, such as Apple or Walmart<sup>13</sup> can operate at a loss on the sales of these goods and encourage people to purchase other products (such as iPods) in their stores, as Amazon did with books (with e-books and its Kindle reader), thereby further squeezing publishers’ already narrow margins. Even if content of all kinds is clearly a strategic asset for these new entrants it does not provide the bulk of their revenues.<sup>14</sup> For most of these Telecom and IT players, content is just another important application within a broader strategy focused more on their own specific assets.

### *Transformation 3: The rise of prosumerism*

The first digital innovations of the 80s and 90s were not as disruptive for MCI as those of today. They did not affect distribution, and hence they did not directly influence customer behaviour or the management of commercial customer relationships.

Today, consumers are moving away from the physical product to its digital version as they can now access the product as a service anywhere, anytime. The huge memory of portable devices (mobile, USB key, hard disk) and new connectivity and storage opportunities (cloud) enable consumers to plug into their “playlist” wherever they go (at home, at work, travelling...). Also, consumers are seeking and accessing customized items rather than a legacy bundle: an article rather than a newspaper, a tune rather than a DVD, a film rather than a cable network, catch-up TV rather than linear TV.

New forms of interpersonal communication (instant messaging, chatting...) are emerging and new kinds of contents are being added to or are enriching the legacy ones. The status of ownership of a media product has been transformed (management of access rather than ownership of the physical product). New ways of sharing are also emerging with social networks. New cross-media products and services, with numerous combinations have become possible. Consumer consumption has a wider scope with the exponential growth of available contents and access capacities.

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production, the publishing/ aggregation, manufacturing, distribution and/or exhibition/reception/ transmission, consumption/participation.

<sup>13</sup> Walmart offers its own online video service: Vudu, a pay-per-view (PPV) streaming to computer or Vudu-equipped devices.

<sup>14</sup> Apple with global revenues of 57 billion US \$ derived only 4.9 billion US \$ from all types of contents in 2010.

Consumers are being empowered to interact with content in new ways: they can, for example, produce content (user-generated contents). This blurs the borders between professional and amateurs in a new digital environment where the respective roles of producers and consumers tend to overlap at least to some extent (co-creation, co-funding, crowdsourcing).

Finally, digital consumption offers a unique opportunity to observe, control and capture consumers. It is a major asset for those companies which have direct access to the final consumer. It is also the object of considerable controversy as regards the legitimate use of the automatically collected data and its exploitation, raising issues of privacy and data protection.

In this context of multidimensional demand, empowerment and enhanced consumer welfare (diversity, choice, pricing, etc.) counterbalanced by consumer data collection, profiling and control, future patterns of behaviour remain uncertain and often customers' expectations (in terms of tastes, ownership, privacy or data protection for instance) may be at odds with those of the industry. So far, the industry has not found out how to monetize this new wave of consumption, nor has it found out how to redistribute the benefits in a fair and sustainable way.

#### ***Key finding 4: Three successive transformational waves***

The upheaval of the MCI industries initially came from outside - from the telecom industry, which was looking for new streams of revenues to mitigate losses in its more traditional revenues from fixed networks (voice telephony). During a first phase, in the 90s, telecom operators started offering other services when deploying their broadband networks (ADSL), adding data and video services in bundles (triple or quadruple play) to voice telecommunications and access.

In a second phase, after 2000, IT companies (search engines, e-dealers like Amazon and eBay, then social networks and manufacturers like Apple) took the lead in the digital shift of the MCI industries. This second phase disrupted the legacy model in two ways. First, the switch to digital distribution drastically reduced the need for physical logistics. A whole chunk of former business has shrunk, disappeared or will disappear: i.e. physical goods (CDs, DVDs, books), part of the legacy logistics (trucks...), and retailers. Second, the new players granted access to their distribution platforms on their own terms (sharing of revenues, prescribed retail prices, type of sales), circumventing the traditional industry through their direct access to the consumer (re-intermediation). These new intermediaries have become very powerful as they are now the main access providers in a global market where scale matters.

However, *a third phase is currently opening up: legacy media players* are establishing new relationships, and signing commercial agreements with new entrants to *become more proactive players in the 'apps'<sup>15</sup> age*, each concentrating further on its own specific assets. The Internet is no longer seen as a threat but as an opportunity for new streams of revenues with new programmes, new services, new distribution channels and new devices. Today, we are moving toward a five-screen world: TVs, PCs, game consoles, connected TVs and mobiles (be they smartphones or tablets) and these will be interconnected. The smartphones phenomenon not only contributed to the upgrading of devices but it also changed the way customers use their mobile phones, e.g. by shifting the patterns of use

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<sup>15</sup> "Apps" is used for application software developed for specific purposes e.g. "mobile app".

toward the Internet.<sup>16</sup> The deployment of broadband networks is and will continue to be a major enabler of the growth of new services and markets.

The MCI industries are still adapting to successive technological evolutions within the digital shift, and nobody can forecast with any certainty what the next wave of this adaptation will bring. As in all such evolutions, some players will benefit, while others will lose or even disappear.

***Key finding 5: Changing markets structures are ushering innovative business models***

The three major transformations described above (Key finding 3) – new industrial ecosystem, shift of control towards the downstream and “prosumerism” – have favoured changes in market structures and the emergence of new business models.

On the one hand, the digital shift and in particular the use of Internet allows the producer to generate direct sales. This is seen as a step towards “disintermediation”. It offers content creators the opportunity to directly distribute their contents on the market. However, while direct provision is beneficial for some, it may not be the ultimate solution for all, especially for smaller companies or companies without strong brand names, as increased marketing costs are likely to follow.

On the other hand, the entry of Telecom and IT players in the distribution of contents generates a move towards “re-intermediation”. Legacy players which distribute through the new gatekeepers often have to work under conditions imposed on them. For the content industries, becoming wholesalers of contents rather than direct distributors to customers creates tensions as retail is no longer under their control. Their position is all the more uncertain as the new entrants can offer contents in various kinds of bundles, pushing their own products or services first.

The digital shift also affects the cost structure. Many costs of the industry are being re-allocated, and cost structures are changing. Some costs are disappearing: e.g. manufacturing of the physical good, physical transportation, storage. Some costs remain unaffected (creation/ development, editorial process, marketing and sales<sup>17</sup>) while others are shifting. For example, part of the production costs of music is shifting with the emergence of “homestudios”.<sup>18</sup> Promotion costs are shifting too, with the surge of blogs and other tools, for instance. New costs are appearing mostly on the software side of the equation (security, rights management...), bringing along a growing segment of enabling technology providers (web hosting, content delivery networks, billing). With a digital good, the entire value chain can be digitised. It becomes homogenous, with no physical disruption due to the production, storing, or distribution of the good.

All in all, the real costs in the various segments of a partly online industry are still unclear and difficult to gauge properly. It is certain, however, that the shift will be characterised by tremendous decreases in the price of media distribution and information. In addition, these new technologies are likely to bring further broad gains through flexible pricing, low delivery costs and virtually unlimited capacity (server-based and cloud applications), as well as higher efficiency.

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<sup>16</sup> Or even allowing access to the Internet in emerging economies with a low fixed line penetration.

<sup>17</sup> In the case of music, marketing and promotion also have a large share in the total costs: 28% in 2009. See: The Music Industry (2012). Authors: A. Leurdijk, O. Nieuwenhuis.

<sup>18</sup> Traditional studios are closing, id music report.

This radically changed cost structure paves the way for innovative business models, which offer the whole of the industry, legacy and new players alike, an opportunity to monetise sales and collect the needed revenues sustainably and fairly.

During the first trials of online distribution, the "natural" tendency was to duplicate the legacy business models from the analogue/physical world in the digital world. Then, it became possible to introduce new services, new items, and new forms of advertising. This is an evolution toward a service model, where the consumer is buying a service which happens to be linked to editorial content, rather than buying a media product per se.

Further, new business models introduced by new entrants from other sectors or "pure players"<sup>19</sup> have been slowly adopted by traditional media companies. Online distribution offers novel ways to monetize contents and to test the willingness to pay of consumers as illustrated by the videogames industry. This industry saw the birth of the virtual item model: under the "Freemium" business model, the content is made available for free online, while some customers may be willing to buy (virtual) items.<sup>20</sup> This is an innovative use of a two-sided market<sup>21</sup> with segmented pricing (or non-pricing scheme): most customers will get free services, supported by those who are willing to pay. Some other business models are built upon user-generated contents (UGC), for instance commercial distribution platforms for amateur or semi-professional content, where users can upload their content and offer it for a fee or free-of-charge. Innovative non-commercial models are also to be found: for example Wikipedia which is maintained by a community; or other examples which are sponsored by voluntary contributions paid by fans to be connected to artists.

This array of innovative business models will offer new ways to monetize the service(s). However, we are not there yet and the sustainability of most business models has yet to be demonstrated.

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<sup>19</sup> In the e-business jargon, a pure play(er) is an entity originating from and doing business through "purely" the Internet; with no physical store (brick and mortar) where customers can shop. Examples: Spotify, Netflix, Hulu, Huffington Post...

<sup>20</sup> Basically any item related to the game and its environment can be sold as virtual.

<sup>21</sup> A two-sided market combines various elements: the existence of two or more groups using the service, with different prices (asymmetric pricing), the existence of crossed network externalities between these groups (a group being all the more attracted by the platform that the participation of the other group is important). The main examples are: dating clubs, credit cards, BtoC, BtoB intermediaries, search engines, operating systems, smartphones, newspapers, TV, video games, yellow pages and shopping malls. A media bundles contents and advertising, the consumers will pay (or not) for the contents, the advertisers pay for the attention of the consumers.

### III. Reviewing Policies

Public intervention and policies are a historical feature of the MCI industries (with public support, IPR regulation, freedom of expression, cultural diversity, etc.) as the production of these merit goods generates further externalities for society as a whole (cultural, societal...). The digital shift opens up new questions about such policies, about novel ways to implement them, and about their effectiveness in a digital world. At the same time, it creates space for policies which enable the transition toward these digital media world(s).

#### ***Towards public intervention?***

From an economic viewpoint the core question is: do these new forms of distribution contribute to increased media production, more diversity and enhanced consumer and producer surplus?<sup>22</sup> If the answer is negative, then the question may become: how can production and consumption of content and media goods and services be supported in a sustainable way? This raises the issue of public intervention which is a common feature in most of these industries.

Cultural goods are considered of special value to society, and for this reason, they deserve to be treated differently from other tradable commodities. This often justifies public intervention beyond the mere correction of an imperfect market and market failures. Governments intervene directly (e.g. subsidies for the cinema in France, or zero VAT on books in the UK) or indirectly (various tax breaks, reduced postal rates for the distribution of newspaper or books).

This issue of public intervention has generated hot debate, often confused and confusing, and plagued with entrenched positions. Measures to support the legacy players are usually implemented through a tax (typically hardware-based levies) on some segments of the industry (the growing segment) to fund another one (a declining or more troubled segment), a rather distortive approach with potentially negative effects on new markets. The outputs of such measures are usually difficult to assess properly: in the case of copyright levies, their effectiveness has been questioned.

In addition, industrial policies which were meant to prop up legacy players have not had an impressive track record. It is thought, however, that the fixed price policy for books has successfully maintained the network of retailers in the countries where it was implemented.<sup>23</sup> This may be linked to the fact that the major EU book markets like France, Germany and Spain are “*markets of bookshops*”.<sup>24</sup> Such structural factors cannot be overlooked.

However, it does not follow that policies designed for the physical world will be effective in a digital world, as was assumed when the same policies were applied to e-books. Distribution is very different in a digital world from physical distribution and these supply-side policies may have reached their limits. In an emerging market, it would be unwise to freeze the game: policy maker must be able to justify any policies that interfere with market mechanisms. Therefore, it is still necessary to clearly identify market deficiencies as a prerequisite to selecting adequate remedies on a case-by-case basis. Before considering

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<sup>22</sup> A difficult side of the issue is how to find the proper indicators to answer to these questions in the absence of reliable data.

<sup>23</sup> See: The Book Publishing Industry . Authors: G.de Prato, J.-P. Simon.

<sup>24</sup> F .Benhamou, “*La France est un marché de librairies*”, presentation at the Jornadas del libro digital, Sevilla May 17, 2012, “*L'économie du livre confrontée au numérique: le cas de la France*”?



any intervention, one should carefully look at how these digital markets work. In an efficient market, the production of such goods should eventually find adequate financial resources.

### ***Global/ multi-domestic/ local: where does the EU stands?***

The digital media world is also becoming more global with emerging regions like Asia, which lead in some markets. At the same time, the domination of US companies is also increasing in both the audiovisual and the IT sectors. Digital shift for distribution brings cost savings which also seem to favour US companies on the content side: allowing, for instance, Hollywood to strengthen its economies of scale and blockbuster strategies. In addition, the same holds on the distribution side, allowing companies like Amazon or Google to dominate in some segments, raising concerns about an extension of this domination to other segments. However, any abuse of a dominant position could be addressed by competition law and would not necessarily have to be dealt with ex ante.

The EU media markets display some peculiarities which raise issues for the completion of the single market. For instance, the level of demand in one EU country for TV or video originating from another is low (EC, Enders, Plum, 2012). The proportion of European TV fiction broadcasted by European TV channels was only 40% and for films the single European market seems to work best for European subsidiaries of US firms. In fact, there is no single market as such, because the US films or national films have the largest share in the domestic markets: *“the common European film market remains Hollywood-oriented”*.<sup>25</sup> Most of the national films and TV series do not cross borders.

Equally, local music has an important share in its domestic market, but does not cross borders either. Therefore, companies will logically develop multi-domestic strategies based on their knowledge of local markets. The use of the territoriality of rights<sup>26</sup> is one of the strategies but not the only one. Reformatting content locally is another,<sup>27</sup> as are local storefronts. Although the easing out of the clearance of rights<sup>28</sup> is a welcome move, multi-territory licensing for online distribution of audiovisual works in the European Union may not be the panacea which will make up for the lack of demand for non-national works. Companies will licence, first and foremost, attractive international contents (Plum, 2012), mostly from the US.

Other measures such as the harmonization of reduced VAT for digital goods seem to be lacking or difficult to achieve at EU level, triggering tax shopping by US companies to establish themselves in the country offering the most attractive tax regimes. The European Commission has flagged this lack of fiscal harmonisation as a barrier to intra-EU trade (EC, 2011).<sup>29</sup>

### ***Digital media worlds of “co-opetition”***

In an online world, numerous services will be bundled together, to bring in secondary and additional revenues. Some of these services will be provided by new entrants and suppliers. App stores can offer brokerage services, or indirect marketing (like newspapers used to do) for instance. New entrants such as telcos could offer billing services. As a consequence,

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<sup>25</sup> See: The Film Sector. Authors: S. De Vinck, S. Lindmark. .

<sup>26</sup> The principle of territoriality, which is a key concept in intellectual property.

<sup>27</sup> See: European Television in the New Media Landscape. Author: E. Sanz.

<sup>28</sup> Obtaining a right from a rightsholder, often through a permission letter or a financial transaction.

<sup>29</sup> "Towards a simpler, more robust and efficient VAT system tailored to the single market", COM (2011) 851 final.

economies of scale will matter more and more, and major media firms may morph into coordinators, integrators, and financiers for the specialist firms.

Achieving stable relationships within a given “world” or ecosystem is vital for the system to function well. In the current wave of the digital shift, there is a need to support the network of cooperation between the different players. New forms of “co-opetition” are likely to emerge between vertical ecosystems as there are clearly limits to the management of heterogeneous and overlapping activities, making effective integration problematic. Policy makers can help as brokers to facilitate both cooperation and fair competition. Within this context, EU policy can create the conditions of a fair negotiation for a meaningful and efficient presence of European (digital) content companies,<sup>30</sup> playing their part in the many stages of the revamped value chain, from the early stages of creation to consumer management.

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<sup>30</sup> See for instance, the Commission Communication COM (2012)537 of September, 2012, “*Promoting cultural and creative sectors for growth and jobs in the EU*,” available at: <http://ec.europa.eu/culture/our-policy-development/documents/communication-sept2012.pdf>

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#### Abstract

This policy brief offers a structured review of the major transformations the MCI industries have been going through. It provides some insights into the policy questions these transformations are raising. New ways of implementing policies are suggested and their effectiveness in a digital world is discussed. The first section gives some figures showing the significance of the MCI industries. The second section follows the digital shifts and its impact. The third section reviews the policies.

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