



"The race for innovation in the media and content industries: legacy players and newcomers. Lessons from the music and newspaper industries"

Pierre-Jean Benghozi, Elisa Salvador, Jean-Paul Simon

► To cite this version:

Pierre-Jean Benghozi, Elisa Salvador, Jean-Paul Simon. "The race for innovation in the media and content industries: legacy players and newcomers. Lessons from the music and newspaper industries". Bouquillion Philippe and Moreau Francois. Digital Platforms and Cultural Industries, 6, Peter Lang editions, pp.21-40, 2018, ICCA-Cultural industries, artistic creation, digital technology. hal-02091962

HAL Id: hal-02091962

<https://hal.science/hal-02091962>

Submitted on 6 Apr 2019

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

This paper has been accepted for publication as a book chapter of the book *Digital Platforms and Cultural Industries*, edited by Bouquillion Philippe and Moreau Francois, 2018.

It can be cited as follows:

Benghozi P.-J., Salvador E., Simon J.-P. (2018), "The race for innovation in the media and content industries: legacy players and newcomers. Lessons from the music and newspaper industries", in Digital Platforms and Cultural Industries, edited by Bouquillion Philippe and Moreau Francois, ICCA-Cultural industries, artistic creation, digital technology, vol. 6, pp. 21-40, Peter Lang editions.

**“The race for innovation in the media and content industries: legacy
players and newcomers.
Lessons from the music and newspaper industries”**

*** Pierre-Jean Benghozi, **Elisa Salvador, *** Jean-Paul Simon**

*** Benghozi Pierre-Jean:** Research Director CNRS and Professor at the **Ecole Polytechnique, Paris, France**, (I3-CRG, Ecole Polytechnique, CNRS, Université Paris-Saclay);

**** Salvador Elisa:** Assistant Professor at ESSCA School of Management, Paris, France and Associate Researcher at I3-CRG, Ecole Polytechnique, CNRS, Université Paris-Saclay, e-mail: Elisa.SALVADOR@essca.fr, phone +33141862001, *corresponding author*;

***** Simon Jean-Paul:** JPS Public Policy Consulting, Seville, Spain.

Keywords: creative industries; music industry; new middlemen, publishing industry; intermediaries; R&D and innovation.

Abstract: Cultural and creative industries (CCIs) are usually associated to “creativity” while high-tech industries are usually linked to “innovation”. This distinction determines a sort of forgetfulness of the fact that also CCIs rely always on various series of updated technologies. As a consequence, the issue of innovation in CCIs is seldom dealt with. Nonetheless, one can wonder how do these industries really innovate and how they compete with powerful new competitors from the information technology (IT) world. This is the aim of this article focused on the music recording and the newspaper publishing industries. It explores how these industries are coping with subsequent waves of technologies. Recent findings provide a fresh understanding of the place and the very nature of innovation in these industries that, in fact, do not boil down to simply creating new contents. Instead, economic dynamics have recently been opened showing that CCIs are based on regular capacity for innovations which are nevertheless deployed in very different ways. The paper blends a general outlook that sets the scene of the transformations each industry went through with some selected case studies so as to highlight some innovative elements in every subsector. These case studies are followed by an analysis of the new players that build their position from technical intermediation functions. It reveals how “intermediaries”

support the emergence of a new digital ecosystem around computing and software activities, information processing and new communication interactions.

Benghozi Pierre-Jean is Research Director at the National Centre for Scientific Research (CNRS) and professor at Ecole polytechnique (Paris). He developed, since the early eighties, a pioneering research group on Information Technology, Telecommunications, Media and Culture. Co-Chairman of AIMAC, the largest international Conference for Art and Culture Management, he is also board member of scientific committees in highest French institutions, international scientific conferences and academic journals. His competencies made him appointed commissioner and member of the executive board of the French national regulatory authority for electronic communications (ARCEP).

Salvador Elisa holds an international PhD in Institutions, Economics & Law from the University of Turin (Italy). She has worked for the Italian National Research Council (CNR) on several projects focused on innovation policies. She won the CNR award ‘Promotion of Research 2005’ for her project “The financing of research spin-offs: an analysis of the Italian case”. She has recently collaborated with the Polytechnic of Turin and with the ESCP-Europe Business School, she has been researcher at Ecole polytechnique, Paris (2012-2015) and she has been adjunct Professor at Iéseg School of Management, Economics and International Business Economics tracks (2014-2016). She is currently assistant professor at ESSCA School of Management, Management and Corporate Environment Department, and associate researcher at Ecole polytechnique, Management Research Center.

Simon Jean-Paul runs his consulting firm specialised in media/telecom law regulation and strategy. He held various positions in the telecom industry, worked as a senior scientist at the Institute for Prospective Technological Studies (IPTS), European Commission, Directorate-General JRC. He holds a PhD in Philosophy and is a graduate (MBA) from the Ecole des Hautes Etudes Commerciales. He has written several books and articles on communications and public policy. He is a frequent speaker on telecommunications and media in Asia, Europe and the USA.

Introduction

Cultural and creative industries (CCIs) are usually associated to “creativity” while high-tech industries are usually linked to “innovation”. This distinction determines a sort of forgetfulness of the fact that also CCIs rely always on various series of updated technologies. As a consequence, the issue of innovation in CCIs is seldom dealt with. Nonetheless, one can wonder how do these industries really innovate and how they compete with powerful new competitors from the information technology (IT) world. This is exactly the aim of this article focused on two selected CCIs: the music recording and the newspaper publishing industries.

This article follows a series of reports¹ looking at the contrasted cases of the subsectors of the CCIs to explore how these industries are coping with subsequent waves of technologies. In the last decades, all these industries underwent significant transformations of their production processes (digital recording, computerized editing of films, desktop publishing), not to mention the transformation due to the introduction and development of computers within the firms (business processes).

The findings raised by recent reports and studies provide a fresh understanding of the place and the very nature of innovation in these industries, that, in fact, do not boil down to simply creating new contents. Instead, economic dynamics have recently been opened in CCIs which show that their industries are based on regular capacity for innovations but which are nevertheless deployed in very different ways.

The paper blends, a general outlook that sets the scene of the transformations each industry went through with some selected case studies companies so as to highlight some innovative elements in every subsector. Each of the two first sections therefore offers a brief historical background, followed by an updated specific case-study focusing on some specific facet of innovation.

The movements observed in all these areas call for the emergence of new players building their position from technical intermediation functions. These “intermediaries” support the emergence of a new digital ecosystem, around computing and software activities, information processing and new communication interactions with a new allocation of tasks and beyond, with the rise of new forms of industrial partnerships and customer relations (Benghozi, Salvador, 2014; Corallo et al. 2007). The third section specifically deals with these new intermediaries. Some concluding remarks follow in section 5.

¹ This article is based on Benghozi P.-J., Salvador E., Simon J.-P. (2015) “Models of ICT Innovation. A Focus on the Cinema Sector”, ed. by Bogdanowicz M., European Commission, JRC Science and Policy Report, JRC95536, EUR 27234 EN, ISBN 978-92-79-48170-3 (PDF), ISSN 1831-9424 (online), doi:10.2791/041301, pp. 1-144. It attempts to track the various forms of innovation, R&D or non-R&D based within an environment disrupted by digitization and characterized by fast evolving relationships between players, legacy players and new entrants. The full report is freely available at: <http://is.jrc.ec.europa.eu/pages/ISG/EURIPIDIS/documents/JRC95536.pdf>

Other examples and case studies are to be found in this report. Furthermore, case studies about the cinema and video games industries are available in the forthcoming article: Benghozi et al. “The race for innovation in the media and content industries: legacy players and newcomers. Lessons from the videogames and cinema industries”, Special Issue of the Journal of Arts Management, Law and Society: Digital Cultural Policies in comparison, 2017. The cinema and book publishing industries have also been dealt through previous articles (cf. Simon et al., 2015; Benghozi, Salvador, 2015, 2016).

1. Music recording industry: a difficult adjustment to the last technical wave

The music industry provides an interesting case of more than one century old field. The digital revolution has rapidly had a severe effect in the music and cinema industries, where several changes happened in a brief time (Hadida, Paris, 2014; Blanc, Huault, 2014). As a consequence, in the music and film sectors, physical supports have been changing several times over the last decades.

1.1 A brief historical background

Until the 2000s, the history of the music industry had been mostly marked by technological breakthroughs that boosted sales. However, the arrival of the ICTs and the Internet brought a profound disruption of its business model and production processes.

Technological innovations

The music industry went through a succession of cost-reductions with reel-to-reel tape (late 40ies), DAT (mid-80ies), Pro-Tools & Garage band (Apple's pre-installed tool). Barriers to entry for recording have been falling dramatically as music can now be recorded for little to no costs on a computer or tablet or in a small studio. Musicians do not have to meet physically any more in a rented professional studio, they can transfer their musical files over the Internet (Simon, 2016a, b).

For the music recording industry, the advent of digitization in the eighties was a breath of fresh air: the success of the CD was such that all fans were driven to renew their music libraries. As a consequence, the entire music industry enjoyed an extraordinary expansion. Replacing the standard vinyl album in the 80ies and enabled by the technical evolution of recording technologies, the CD represented the symbol of music as a commodity.

Like the secular printed book in the publishing industry, the CD in the music industry is perceived by buyers as a "persistent object". *"CDs are part of a more complex technological system, they are well adapted to distribution, their sound quality is as high as expected by most consumers and they are a reliable and persistent storage for music. The values around CDs are related to these material qualities and CDs have been used as a key object of the recorded music industry during more than a glorious decade"* (Blanc, Huault, 2014: 17).

Likewise, the industry tried several times to reproduce this phenomenon by multiplying technological innovations that were supposed to improve the quality and portability of music. But all these attempts were unsuccessful: the digital audio cassette Philips was a failure, the Sony Mini Disc remained very marginal.

Business model innovations

The expectations raised by new digital technologies faded away just as quickly for two important reasons. The first is that the preliminary wave of CD technology also marked the beginning of the era of digitization, reproducibility and the threat of potentially devastating infringements to copyright, according to the industry. The second stems from the network economy that pairs the dematerialization of recorded music with the development of the Internet: it opens a revolution in business models on an unexpected scale.

The second digital revolution produced a switch from CDs to digital files while shaking the market structure of the industry. However, as expressed by Blanc and Huault (2014: 18), the

consequence of the emergence of virtual stores, such as iTunes, has been that *“files have become the mirrors of CDs, associated with a picture on a record sleeve, an artist, the title of the music, and thus associated with an artwork and an author”*.

As stressed by Leurdijk et al. (2014: 141), in the music industry, record companies were late to respond to the opportunities and threats of increased Internet use and advanced equipment in private homes. Along the same line of argument, Blanc and Huault (2014: 19) state: *“The Internet is perceived as a potential threat that must be turned into a method to promote artists and not just to diffuse their work for free. This statement reflects a conservative view stating that the Internet should be used to develop the existing business model rather than to radically change it”*.

Consequently, disruptive initiatives of distribution (downloading, streaming) initiated by newcomers on the Internet, such as Apple, Amazon, Spotify, generated a revolution in business models and an important growth in (global) audience reach, but far from stimulating the traditional market for recorded music, these initiatives disrupted its economy and its structure (Benghozi, Paris, 2001). Central to the still resulting conflicts between the traditional players and the newcomers is the issue of royalties and the fair retribution of each party (artist, publisher, distributor), this unsolved aspect putting at risk value creation (scaling does not work) and the sustainability of the broadened and diversified audience.

Content innovations

Traditionally, artists earned their income from live music performances, but in addition, from the beginning of the 20th century on, income from recordings came to play a major role. Nowadays, music is a case of an historical upturn (Cameron, Bazelon, 2011) where revenues are again coming from performances and related rights rather than from royalties redistributed by music recording companies. Experience has always been a part of music, the music industry business is moving away from selling CDs toward the performance process. Artists concentrate on tours rather than touring to promote the CDs as they used to. To deal with this trend toward more reliance on live performances, record companies offer now a more comprehensive portfolio of services, from recordings, to live performances, merchandising and the rights for online services, radio plays, use of music in films, games and TV series, the so-called “360 degrees deals” to artists. Nevertheless, new intermediaries like Live Nation and AEG are competing with record companies for that kind of deals with artists.

Consumers’ habits are changing and, essentially, *“peer-to-peer music downloads both complement CD album purchases when downloads are used to ‘sample’ before purchase, and substitute for them when music albums are perceived to be overpriced”* (Hadida, Paris, 2014: 84).

1.2 The case of Spotify (Sweden)

Spotify was founded in 2006 by Stockholm born Daniel Ek and Martin Lorentzon and launched for public access in October 2008. Spotify is a Swedish streaming digital music service, now headquartered in London, offering on-demand access to a library of over 20 million tracks offering, as an alternative to downloads. Spotify offers unlimited access to this library for \$10, €10 or £10 a month. The company also offers free trial subscriptions, supported in part by advertising, in an attempt to attract users to the service and convert them into paying customers. Spotify is currently available in 58 markets, with over 60 million active users, and over 15 million paying subscribers. In December 2013 the company made its

service available for free on mobile and tablet. The music service created over 1.5 billion playlists so far and is adding over 20,000 songs per day. Over 30 million songs are available. In 2015, Spotify introduced Discover Weekly, a playlist that appears in the app every Monday and uses the classic “*people who like that, also like this*” logic. The service turned out to be one of the most successful, reaching, as of 2016, 40 million users and 5 billion tracks streamed (Popper, 2016).

Since its launch in Sweden in 2008, Spotify has driven more than a billion US dollars to rights holders. Spotify claims to be already the second biggest source of digital music revenue for labels in Europe (IFPI, 2011: 12) and “*the biggest and most successful music streaming service of its kind globally*” (company website, 2014).

In 2011, the company inked a partnership with Facebook that boosted its number of users. In 2012, Spotify's revenue grew to 1.95 billion euros in 2015, up from €187.83 million in 2011. (Statista, 2017). However, this growth does not translate into profit so far; since its foundation, the social network accumulated a net loss of 567 million euros. Scale does not seem to work anymore as the magic recipe: advertising based free subscriptions are expensive for Spotify since they trigger fees to be paid to music rights holders whenever a track is streamed. The contracts are structured in such a way that about 70% of its revenue goes to royalties; any other costs of business have to be covered by what remains (Brustein, 2014: 1). The question is then what is the threshold to reach for that 30% cut to generate enough revenues to pay the bills and post a profit.

However, some experts are sceptical about its potential profitability. The report released in 2013 by Generator Research stated: “*Our analysis is that no current music subscription service—including marquee brands like Pandora, Spotify, and Rhapsody—can ever be profitable, even if they execute perfectly*” (Brustein, 2014: 1). This pessimism may be grounded as the new company does not have the bargaining power of Apple or Amazon to change the contractual conditions for royalties. The conservative behaviour of the music recording companies has been reinforced as they faced substantial revenue losses in subsequent years, until 2012 when they benefited from a slight increase, the first since 1999 (IFPI, 2013: 6).

As stressed by Leurdjik and Nieuwenhuis (2012: 93), the main strategic challenge for Spotify is to reach the point where it will become a profitable business, by building and securing a strong customer base, in combination with closing profitable license deals with all major music labels so as to derive the most of the economies of scale (a large music catalogue and consumer base). Nevertheless, Spotify is leading worldwide in terms of active users, downloads and revenues if not profitability (AppAnnie, 2015).

In its presentation the company explains that its “dream” is “*to make all the world's music available instantly to everyone, wherever and whenever they want it*”, making it “*easier than ever to discover, manage and share music*”..., “*while making sure that artists get a fair deal*”. However, streaming has been controversial among musicians from the beginning according to Brustein (2014: 2), some artists even refusing to make new music available through streaming services as they deem the revenues far too low compared to other sources. This has also been the initial reaction of the recording industry that was getting more from downloads on iTunes than the proposed royalty per streamed song.

The business model that the Swedish start-up was aiming to develop (combining free and pay subscription, offering itemized music and playlists) may have one element missing to become successful as long as one element of the equation is constant: the royalty fee. The music industry is not highly flexible when dealing with this issue and is clinging to past business plans. Therefore, it runs the risk of shooting itself in the feet, suppressing a growing stream of revenues, taking into account that the gone customers may not come back at all.

2 Newspaper publishing industry: “destabilized” by the abundance of content

Like the other CCIs, the newspaper publishing industry is undergoing major changes as well. In recent years, the diffusion of the ICTs have fostered the multiplication of organizational patterns and forms of competition between traditional newspapers and new information providers, pure players or players from the IT sector.

2.1 A brief historical background

The press sector remained almost unchanged for a while. The only changes in the past had indeed impacted the printing technologies and editing but without questioning the model of newsprint. Therefore, the arrival of the Internet has been particularly destabilizing as it questioned the sustainability of printed newspapers, as well as the very status of information challenged by social networks and the new reading practices. The case is interesting because digital developments are based above all, in this case, on deconstructing the traditional models of content aggregation.

The newspaper publishing industry is now faced with the search of a sustainable solution to adapt itself to the digital revolution. In particular, newspapers must cope with the competition of new forms of information production that disrupt the flow of revenues they were getting from readership, such as advertising.

Technological innovation

Internet and the ICTs supported new configurations: alternative online distribution, new actors, new services, and new forms of producing information. It called for new strategies and required new ways to build competitive positions. In the traditional newspaper industries, producing quality news involves six main functions: administration, formatting and layout design, content writing, titling and distribution. The integration of new technologies- such as layout tools and electronic correction, offset and typesetting- have always predetermined organizational forms used by publishers and enabled the variety of the press. By adopting more or less decentralized organizations, the publishers of the mainstream press adapt their cost structures by choosing to outsource or not the main functions such as writing, printing and distribution, and sale of advertising space. In the same line, the publishers choose their models of income generation among free newspapers funded entirely by advertising or alternative monetization models of their content.

Business model innovation

ICTs enable the multiplication of organizational patterns and forms of competition between traditional newspapers and new information providers. The range of organizations is accompanied by the emergence of new players - digital platforms - corresponding to as many different and multiple business models. In creative industries more than in traditional industrial sectors, the ability to develop new services and structuring new business models is the new joint that may operate between technological information media on the one hand, new forms of content delivery on the other hand. The arrival on the market place of technology

suppliers to deliver the contents, internet service providers (ISPs)² or OTTs³, not only brought a rebalancing, but it upset the business models and architecture of the newspaper industry: dematerialization of media and flat-rate purchases are free tips emerged out of an iceberg.

According to Leurdijk and Nieuwenhuis (2014: 147), throughout the 20th century, the newspaper market was dominated by media conglomerates owning newspaper chains. A process of increased concentration and consolidation in the international newspaper industry took place during the second half of the 20th century. The newspaper sector became a mature sector, strongly linked to geographical location.

Nonetheless, an analysis of selected German case-studies highlighted that the newspaper industry until now *“has not been able to profit from digitalization on a major scale”* because the newspaper publishers *“transferred a failing strategic pattern from the print business to the digital business in order to revive the advertising–circulation spiral”* (Rothmann, Koch, 2014: 67 and 81). The case of the Finnish group Sanoma (Box 1) illustrates the difficulties to define the right strategy even when being proactive in the new field of on-line services.

Box 1: The Sanoma Group

In the EU, the Sanoma group provides an interesting case both of diversification and pioneering on line services (Leurdijk et al., 2012: 95-105), some of the subsidiaries like Nu.nl in the Netherlands, bought in 2005, are leaders on their domestic market, with a very successful mobile website. The company claimed to be amongst the largest media and learning companies in Europe, with over 10,000 professional employees as of 2013, and key markets in Finland, The Netherlands, Belgium and Central and Eastern Europe (Sanoma website, 2014). Sanoma Corporation was founded in 1860 as a textbook publisher. Sanoma has a long history of acquisitions and mergers and of launching and divesting activities. Sanoma Corporation started expanding into the news publishing business in 1890 when acquiring the newspaper “Päivälehti”, now “Helsingin Sanomat” (Leurdijk et al., 2012: 95).

The Sanoma Group comprised six Strategic Business Units in 2013: Sanoma News, Sanoma Media Belgium, Sanoma Media Finland, Sanoma Media Netherlands, Sanoma Media Russia & CEE and Sanoma Learning. In 2013, their revenues were split between three segments: media (magazines, custom media, events, websites, mobile sites, apps and TV operations), news (leading newspaper publisher in Finland and a digital media producer) and learning (learning materials and solutions). In 2015, it was split between three business units: Media Bene (Belgium and Netherlands), Media Finland, Learning and “Other companies (including Russia). However, in spite of its proactive strategy, Sanoma’s net sales decreased from 2,378 billion euros in 2011 to 1,716.6 billion euros in 2015. During the same period the number of employees went down from 10 960 to 6 116. The company has been making losses (EUR -123.6 million in 2015).. Such a decrease is mainly due to the continued deterioration in advertising markets and single copy sales. Besides, the digital segment of the sales is still lower than the sales from print.

Source: Annual Report (2013, 2015), www.sanoma.com/en/who-we-are, Leurdijk et al. (2012)

However, other legacy groups managed the digital shift with very positive results. This is the case of the South African group Napster and of the Norwegian media group Schibsted (Box 2). Both originated from the print media, the publishing company Schibsteds Forlag was founded in 1839, and Naspers (named “Die Nasionale Pers”, Afrikaans for the “National Press”), started as a printer and publisher of newspapers and magazines in 1915 in Cape Town. Both groups started to diversify in the 80s (Naspers into broadcasting) and 90s (Schibsteds buying international papers outside Norway). Both groups are now leading global e-commerce companies. Naspers counts itself as the world’s third-largest player in e-

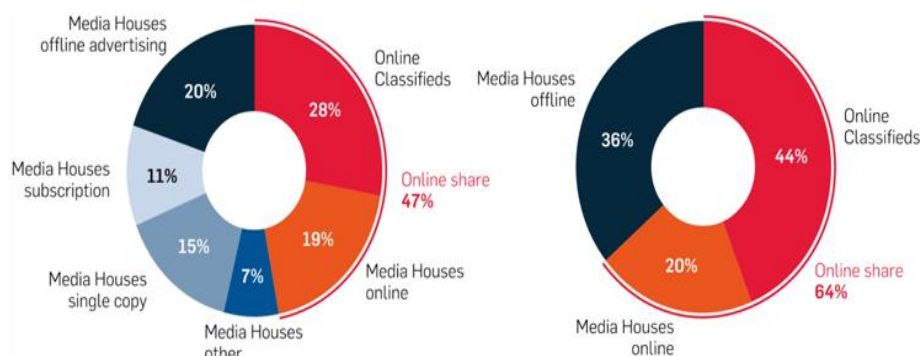
² ISP: Internet service provider.

³ OTT: over-the-top. In the fields of broadcasting and content delivery, OTT content means online delivery of video and audio as part of the Internet “best effort” without any intervention from ISPs if not connectivity.

commerce after Alibaba and Amazon by desktop Internet visitors, citing comScore data. The two companies established a joint-venture for e-commerce at the end of 2014.

Box 2: Out of Norway: Schibsted

In 1839 Christian Michael Schibsted founded the publishing company Schibsteds Forlag and in 1860 he started publishing Christiania Adresseblad, from 1885 known as Aftenposten. In 1989, Schibsted went from being a family-owned company to a corporation, and was listed on Oslo Stock Exchange in 1992. In the 1990s and 2000s Schibsted bought a number of international newspapers. The company describes itself as a global media group operating on 5 continents, in more than 40 markets with more than one billion people combined, and hubs in Barcelona, Oslo, Rio, Singapore and Stockholm. Schibsted's present activities are related to media products in the field of newspapers, online classifieds, publishing, multimedia and mobile services.



Revenue split EBITDA split (share excl. HQ and other operations) Source Schibsted 2013.

In 2015, operating revenues were 15,117 billion NOK (€1,676 billion), operating profit 2,161 billion NOK. The only share of the revenue reached almost 50% in 2013 and over 60% of the EBITDA⁴.

Schibsted Media Group is an international media group with 6900 employees in 30 countries. In addition to Norway, the company is also a major player on the Swedish market and operates in further 14 European countries (Denmark, Finland, Ireland, Belgium, France, Spain, Portugal, Austria, Italy, Switzerland, Hungary, Romania, Greece and Belarus), eight countries in Asia and the Pacific (India, Singapore, Philippines, Malaysia, Vietnam, Indonesia, China and New Zealand), 12 countries in Latin America (Mexico, Dominican Republic, Guatemala, Costa Rica, Colombia, Venezuela, Peru, Bolivia, Chile, Brazil, Uruguay and Argentina) as well as five African countries (Morocco, Algeria, Tunisia, Egypt, and Nigeria). In the majority of these countries are run only online-based businesses.

The group is currently organized into Online Classifieds (5.64 billion NOK, the company owns Leboncoin.fr), Schibsted Media House Norway (5,687 billion NOK), Sweden Schibsted Media House (3,893 billion NOK). The group has mainly grown through acquisitions since the IPO in 1992, when Schibsted was purely a Norwegian group, which consisted of wholly owned operations Aftenposten, Verdens Gang and Schibsted Trykk and minority stakes in six regional and local newspapers in Norway. Schibsted Classified Media (SCM) operates most of Schibsted's online classifieds business. SCM have operations in several mature markets in Western Europe and in growing markets in Asia, Eastern Europe and Latin America. The company claims being building a “world class digital Media houses that will shape the media landscape for years to come” and becoming “a truly technology-based company”.

Source: Annual Reports (2013, 2014, 2015), <http://www.schibsted.com/en/About-Schibsted/>

Taking the proactive route does not appear easy, “The Guardian” adopted as well a “digital first” strategy which lead the UK newspaper to compensate, for the first time in 2012, their

⁴ Operating profit + depreciation, amortisation and impairments

losses on the print market with revenues from the digital edition (Henley, 2014: 169). In 2013, audience rose with around 5 million print copies but over 29 million unique visitors per month, the “*New York Times*” “*is now predominantly digital*”, according to Filloux (2014) who, however, specifies that “*most of its revenue still comes from print*”.

Content innovation

Despite a multiplicity of organizational patterns, one aspect remains common: the traditional press is based on an aggregation of content and multiple activities in a unique package that is the newsprint. ICTs also affect this core function because the very notion of copy disappears with the electronic media. Investments required to produce thousands of newsprints are replaced by investments in software solutions and qualified staff to the online edition: customer relationship is easier but of a different nature, the cost of distribution and storage is almost zero; the update of information is continuous; hierarchical procedures, proofreading and verification by content editors are increasingly under the control of journalists themselves, collective production of content based on original forms of participation is taking place.

This industry has been deeply impacted by the Internet revolution at a time when the well-established newspaper business models were already under several challenges. Indeed, the erosion of readership started decades ago and nowadays the fast decline of newspapers revenues does not appear to be slowing down. Newspaper publishers responded in a variety of ways to the changed market conditions of the last two decades: free newspapers, Sunday newspapers, other new print products, and quality in print with new printing presses (Leurdijk, Nieuwenhuis, 2014: 158-159).

Besides, the newspaper industry is deeply “destabilized” by the abundance of content with varied arrangements. This overload challenges the traditional modes of remuneration of editors, distributors and journalists (Benghozi, Lyubareva, 2014). The effect is all the more powerful than this online offer outcompetes, for different reasons, the emergence of some radically new free proposals in traditional circuits, supported by innovations in the traditional printing technologies.

Various weblogs have grown into important players on the news market – for example, the US Huffington Post and the South Korean OhMyNews. European examples are Agoravox, Baksheesh, Street 89 and Mediapart (France), Readers Edition, Opinio (Germany), You Reporter (Italy), Nyhetsverket (Sweden) and Nu.jij (part of Nu.nl, the Netherlands). These newcomers are trying to make the best out of the participatory nature of the Internet, they are pioneering new ways to open up a dialogue with their readers.

Some newspapers like “*The Guardian*”, “*Wall Street Journal*”, and “*New York Times*” have been quite successful with the introduction of on-line news. More broadly, newspapers publishers intensified efforts to deliver news on line, and more quickly to bring out tablet-based apps throughout 2011 (Pew, 2013). These successful legacy players have been first and foremost building on their valuable brand so as to innovate as well in the way they are dealing with their customers. For instance under the motto of “open journalism”, “*The Guardian*” sought establishing new forms of relationships with their readers while training their professional journalists to new techniques such as “liveblogging”, video, data journalism (Henley, 2014: 170).

In addition, their evolution towards multimedia content sites raises the question of new upcoming frontiers of the industry.

2.2. The case of “Vice”

Vice started in 1994 in Montreal as the “*Voice of Montreal*”, with government funding, as some community service. The name was changed to “Vice” in 1996 as a niche music magazine. Vice originally founded its website as Viceland.com in 1996. In 2007, VBS.tv began to prioritize videos over print, and had a number of shows for free such as “The Vice Guide to Travel”. In 2011, both Viceland.com and VBS.tv were combined into VICE.com. The website has expanded and diversified to include a network of online video channels, including TheCreatorsProject.com, Motherboard.tv and Fightland.com, Noisey.com and Thu.mp. The company owns a film production company, a record label, and a publishing imprint.

According to Garrahan (2012), the co-founder Shane Smith was quick to realise that video would drive advertising on the Internet. The strategy was to build a global platform. In 2013, 21st Century Fox group acquired a 5% stake in Vice Media in a deal that valued it at \$1.4bn.

In 2016, the company has become an international brand with staff into 36 countries, an ever-expanding nebula of immersive investigative journalism. It turned it into a multiplatform brand, operating a global network of digital channels covering news, sport, technology and music. Vice has a news show on Time Warner’s HBO network, a branding agency that has produced campaigns for clients such as Vodafone and Nike, and production facilities that churn out 70 original news-driven video series.

On the other hand, the “*Vice*” story illustrates how to build a global platform out of a print music magazine, prioritizing video over print while at the same keeping the print business running successfully.

3. Powerful and specialised new technological suppliers as middlemen⁵

Following the Internet and ICTs revolution, new IT players emerge and offer unprecedented solutions for aggregating and distributing content, designing original terms of marketing and transaction adapted to this new framework (free subscriptions, micro-payments, virtual goods). These new actors are known as intermediaries performing a role of middlemen (Laur et al., 2012). The Internet revolution with the diffusion of online platforms and the dematerialization of reproduction has encouraged the experimentation of new forms of intermediation. This evolution towards new forms of intermediation is the main engine of the reorganization of CCIs and technological infrastructure plays a key role in the success of these new cultural intermediaries (Benghozi, Paris, 2014). The literature is focusing more and more on the role of these intermediaries in CCIs⁶.

In fact, the weight of the technology is also the weight of intermediaries and economic actors supporting and supported by the ICTs: one can think about examples like Google, Amazon, Apple or other ISPs. Their importance is more and more growing and explains their ability to quickly reach a pivotal place in the landscape of culture. To this goal, these newcomers use technological innovations imposing new economic models which strongly upset the traditional sectorial equilibria.

⁵ The “middlemen” role has been particularly investigated in the cinema industry in Simon et al. (2015).

⁶ *Regional Studies* has even recently dedicated a Special Issue to “*Intermediaries and the Creative Economy*” (2015).

These new players display specific value networks, including numerous technical intermediaries in contrast with past linear value chains. The very notion of a linear value chain in each industry fades away. The outputs (books, CDs, films, videogames) result from new cooperation models between several actors (aggregators, distributors, technology providers) with different professional specialisations. Technological strategic partnerships trigger the re-arrangement of CCIs' business ecosystems. In other words, the value chain has been drastically altered by digitisation and it is getting more complex, going from creation/production to consumption.

Contrary to what is often claimed by legacy players, these newcomers do invest but their agenda and strategic goals differ from the goals of incumbents. In spite of the trend of legacy players to further reduce their costs to face their decline of revenues, the new digital natives are investing in expensive quality global coverage of news (Pew 2014: 5).

Furthermore, IT players are bringing new kind of expertise and talents but are keener to explore and set new forms of interactions with their customers that legacy players were either reluctant or unable to develop, mainly because of lack of technical expertise. They also pioneer the use of data mining for compiling viewers' recommendations (Amazon, Netflix, Pandora, Spotify, Zynga).

In this context, Amazon is a key example: the company is making the best out of the sophisticated supply chain and ecosystem it has set up (recommendations, tools for self-publishing, on demand publishing, 14 imprints under the flagship of Amazon Publishing, a leading community of readers, Goodreads) around its Kindle since 2007 and then around its Fire since 2014.

Nonetheless, there are also specialized technological suppliers (STSs) that usually attract less attention but are anyway well involved in the media and content value network. This is the case of STSs that are building their positions focusing on their technological expertise: they use this specific knowledge to serve the creative dimension of media production and cultural works. It can be said that digitisation opens up opportunities for an array of companies, mostly software companies. Smaller or independent sector players seize the opportunity to achieve more competitive positions in the value network. They develop new forms of cooperation. It has to be underlined that these companies are new companies that grew with digitization and the deployment of the Internet.

For instance, Akamai was founded in 1998 to use advanced computing techniques to deliver a streamlined web experience to the end user. The company thus appears as a key actor for the massive and international distribution of online content, occupying a position of intermediary totally unprecedented until then in the CCIs. Now, their customers include the top 30 media and entertainment companies. With over 170,000 servers in 92 countries within over 1,200 networks, Akamai is the leading provider of cloud services for delivering, optimizing and securing online content and business applications for large media companies, ranking ahead of AmazonCloudFront (Benghozi, Simon, 2016).

These new specialized technological suppliers are usually medium-sized companies with sophisticated ICT skills overall. Notwithstanding, they are active and specialized in only a small number of technical areas. They hold a growth model that provides particular attention to very specific operations - rather unusual in the media industry – like the management of

assets, patenting activities, and innovative technological spill-overs to other industries. These companies are playing the rather recent role of "new middlemen" liaising between the different layers of the ICT ecosystem. A new digital ecosystem that has been growing, although unevenly, enabling the creation of an array of new firms, middlemen and pure players.

4. Conclusions

As stressed by Leurdijk et al (2014: 141), in the music industry, the record companies were late to respond to the opportunities and threats of increased Internet use and advanced equipment in private homes.

Consequently, disruptive initiatives of distribution (downloading, streaming) initiated by newcomers on the Internet, such as the one illustrated with Spotify, generated a revolution in business models and an important growth in (global) audience reach. Nonetheless, far from stimulating the traditional market for recorded music, these initiatives disrupted its economy and its structure (Benghozi, Paris, 2001). Central to the still resulting conflicts between the traditional players and the newcomers is the issue of royalties and the fair retribution of each party (artist, publisher, distributor), this unsolved aspect putting at risk value creation (scaling does not work) and the sustainability of the broadened and diversified audience.

The music industry had demonstrated in the past its ability to control successive waves of technology and their integration in the value chain of technology providers (Sony, Philips, RCA). Yet, it found itself facing a new configuration with the arrival of the Internet. The industry could not build on its former experience as the latest technology wave has not been inserted in the traditional value chain of the music sector. It has instead resulted in radically new forms of consumption, as well as new forms of relationship with original equipment manufacturers and telecom players.

Similarly, the ICTs have impacted the core function of newspapers as the very notion of copy disappears with the electronic media at a time when the well-established newspaper business models were under several challenges (the erosion of readership started decades ago). As noted, for newspaper taking the proactive route to grapple with the new technologies does not appear easy. Some companies are faring much better than others building on their strong brand like the *Wall Street Journal* or diversifying successfully like Naspers or Schibsted.

However, the cases of the music and newspaper industries reveal that because of initial defensive or conservative behaviour from some legacy players and taking into account that the Internet has been used to develop the existing business model rather than to (radically) change it, much of the initiative has been left to these newcomers that are more agile for identifying opportunities in a new environment. This may mean as well that innovation is left to these challengers at risk of further disrupting the traditional industry. This has been the case as well in the book publishing industry where leading companies did not play a pivotal role, for instance for the introduction of eBooks (Benghozi, Salvador, 2015, 2016).

References:

AppAnnie (2015), *Mobile Music Streaming: Driving the Next Digital Revolution*. <https://www.appannie.com/>

Benghozi, P.-J., Paris, T., (2001). "L'Industrie de la musique à l'âge d'internet : nouveaux enjeux, nouveaux modèles, nouvelles stratégies." *Gestion* 2000 Avril - Juin 2001.

Benghozi P.-J., Paris T. (2014), «L'économie culturelle à l'heure du numérique : une révolution de l'intermédiation », in La culture et ses intermédiaires. Dans les arts, le numérique et les industries créatives, edited by Laurent Jeanpierre, Olivier Roueff, éditions des archives contemporaines, pp. 155-168.

Benghozi P.J, Lyubareva, I., (2014), "When Organizations in the Cultural Industries Seek New Business Models: A Case Study of the French Online Press", *International Journal of Arts Management*, Volume 16, No 3, pp. 6-19.

Benghozi P.-J., Salvador E. (2014) "Are traditional industrial partnerships so strategic for research spinoff development? Some evidence from the Italian case", *Entrepreneurship&Regional Development: an International Journal*, vol. 26 (1-2): 47-79.

Benghozi P.-J., Salvador E., Simon J.-P. (2015) "Models of ICT Innovation. A Focus on the Cinema Sector", edited by Bogdanowicz M., European Commission, JRC Science and Policy Report, JRC95536, EUR 27234 EN, ISBN 978-92-79-48170-3 (PDF), ISSN 1831-9424 (online), doi:10.2791/041301, pp. 1-144, available at:<http://is.jrc.ec.europa.eu/pages/ISG/EURIPIDIS/documents/JRC95536.pdf>

Benghozi P.-J., Salvador E., Simon J.-P. (2017) "The race for innovation in the media and content industries: Legacy players and newcomers. Lessons from the video game and cinema industries", Special Issue of the Journal of Arts Management, Law and Society: Digital Cultural Policies in comparison, eds. By Roberge J., Chantepie P. forthcoming.

Benghozi P.-J., Salvador E. (2016) "Investment strategies in the value chain of the book publishing sector: how and where the R&D somehow matter in creative industries?", *Technology Analysis&Strategic Management*, vol. 28, n. 5, pp. 568-582;

Benghozi P.-J., Salvador E. (2015) "Technological competition: a path towards commoditization or differentiation? Some evidence from a comparison of e-book readers", *Systèmes d'Information et Management (SIM)*, vol. 20, n. 3, pp. 97-135;

Benghozi, P.J, Simon, J.P., (2016) "Out of the Blue: The Rise of CDN Networks", *Communications & Strategies*, n°. 101 - 1st quarter 2016., pp.107-128.

Blanc A., Huault I. (2014), "Against the digital revolution? Institutional maintenance and artefacts within the French recorded music industry", *Technological Forecasting & Social Change*, vol. 83, pp. 10-23.

Brustein, J. (2014), "Spotify Hits 10 Million Paid Users. Now Can It Make Money? "?, *Bloomberg Business Week*, Available: www.businessweek.com/articles/2014-05-21/why-spotify-and-the-streaming-music-industry-cant-make-money#p1

Cameron, L., Bazelon, C., (2011), "The impact of digitization on business models in copyright driven industries: a review of economic issues", Brattle Group paper prepared for the US National Research Council, available at: www.brattle.com/documents/UploadLibrary/Upload951.pdf

Corallo A., Passiante G., Prencipe A. 2007, *The Digital Business Ecosystem*, Cheltenham, UK, Edward Elgar Publishing.

Filloux, F. (2014), « The New York Times KPI's ». www.mondaynote.com/2014/05/25/the-new-york-times-kpis/

Garrahan, M. (2012), "Lunch with the FT: Shane Smith", *Financial Times*, December 28, 2012. www.ft.com/intl/cms/s/2/61c51d64-4a9c-11e2-968a-00144feab49a.html#axzz34cbvKDhR

Hadida A. L., Paris T. (2014), "Managerial cognition and the value chain in the digital music industry", *Technological Forecasting & Social Change*, vol. 83, pp. 84-97.

Henley, J. (2014), "L'exemple de "The Guardian"", in Charon, J.,M., Papet, J., (2014), *Le journalisme en questions*, Paris, L'Harmattan-Ina Editions, pp 169-171.

IFPI, (2011). IFPI Digital Music Report. <http://www.ifpi.org/content/library/DMR2011.pdf>

IFPI, (2013). IFPI Digital Music Report <http://www.ifpi.org/content/library/DMR2013.pdf>

Laur I., Klofsten M., Bienkowska D. (2012), “Catching Regional Development Dreams: A Study of Cluster Initiatives as Intermediaries”, *European Planning Studies* Vol. 20, No. 11, pp. 1909-1921.

Leurdijk, A., Nieuwenhuis, O., (2012), *The Music Industry*. Available at : <http://ipts.jrc.ec.europa.eu/publications/pub.cfm?id=5022>

Leurdijk, A., Slot, M., Nieuwenhuis, O., (2012), *The Newspaper Publishing Industry*. Available at: <http://ipts.jrc.ec.europa.eu/publications/>.

Leurdijk, A., Nieuwenhuis, O., Poel, M., (2014), “The music industry”, in De Prato, G., Sanz, E., Simon, J.P, (ed.) (2014), *Digital Media Worlds; The new media economy*, Oxford, Palgrave, pp. 133-146.

Leurdijk, A., Nieuwenhuis, O., (2014), “The newspaper industry”, in De Prato, G., Sanz, E., Simon, J.P, (ed.) (2014), *Digital Media Worlds; The new media economy*, Oxford, Palgrave, pp. 147-162.

Pew (2013), “Newspapers Turning Ideas Into Dollars. Four Revenue Success Stories”. Available at: www.journalism.org/2013/02/11/newspapers-turning-ideas-dollars/

Pew (2014), *State of the News Media 2014*. Available at: www.journalism.org/packages/state-of-the-news-media-2014/

Popper, B., (2016), “Spotify's Discover Weekly reaches 40 million users and 5 billion tracks streamed “. <http://www.theverge.com/2016/5/25/11765472/spotify-s-discover-weekly-40-million-users-5-billion-streams>

Rothmann W., Koch J. (2014), “Creativity in strategic lock-ins: The newspaper industry and the digital revolution”, *Technological Forecasting & Social Change*, vol. 83, pp. 66-83.

Simon, J.P., (2016a), *How to catch a Unicorn. An exploration of the universe of tech companies with high market capitalisation*. EC JRC IPTS, <https://ec.europa.eu/jrc/en/publication/how-catch-unicorn-exploration-universe-tech-companies-high-market-capitalisation?search>
<https://ec.europa.eu/jrc/en/publication/how-catch-unicorn-case-studies?search>

Simon, J.P., (2016b), “User generated content. Users, community of users and firms: toward new sources of co-innovation?”, Info, forthcoming.

Simon J.-P., Benghozi P.-J., Salvador E. (2015), “The new middlemen of the digital age: the case of cinema”, *info*, vol. 17, n. 6, pp. 97-115.

Statista (2017). “Spotify's revenue and net income/loss from 2008 to 2015 (in million euros)”. <http://www.statista.com/statistics/244990/spotify-s-revenue-and-net-income/>

Company websites (Last consultation, January 2017)

Akamai: www.akamai.com/html/about/index.html

Naspers: www.naspers.com

Netflix:

<https://pr.netflix.com/WebClient/loginPageSalesNetWorksAction.do?contentGroupId=10477&contentGroup=Company+Timeline>

Sanoma: www.sanoma.com/en/who-we-are

Schibsted: www.schibsted.com

Spotify: www.spotify.com

Vice: <http://vice.com/>