

Same tune, different words: The creative destruction of the music

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Abstract

In this paper, we experiment and adopt 'new' economic approaches to interrogate some of the fundamental changes and continuities in the music industry 'system' that have been produced as a result of digitalisation. In this experiment, we also include established techniques of media industries' analysis like a value-chain analysis (e.g. Küng, Picard and Towse 2008) and the distinction between audience and users markets, following the seminal work by Picard (1989). However, not only we consider the music industry as composed by three segments: (1) the digitalisation of content production in the music industry stage; (2) the distribution and marketing stage; (3) the delivery and exhibition stage, but we also attempt to provide a map of the increasing variety of activities in each segment. Moreover, we embrace a service activity perspective and pay particular attention to changing relationships between these activities. Our account of the main changes to the music industry relies on evidence derived from the findings of a recent empirical research study of the music industry in Ireland, and in the conclusions we discuss the significance of the effects of unauthorised downloads of music and provide arguments on how the industry could deal with this issue.

Keywords: Music industry; digitalisation; alternative economic theories; complexity, evolutionary economics

Introduction

Evolutionary and Neo-Schumpeterian economists explain that the second part of a 'Techno-economic Paradigm' or 'Great Surge of Economic Development' (GSoED), which are both modern and more articulated notions of a 'Kondratieff wave', is a period of important social transformations. During the first part of a GSoED, new pervasive technologies, technological systems and services that are linked to these new technologies emerge and bring prosperity to the economies that incubate, develop and adopt them. The industries that produce these new technologies and technological systems grow thanks to the support of venture capital (Perez 2004, 2009a). Also, de-regulation and innovations in the financial sector are characteristics of this phase and they are favoured by the positive economic momentum, the opportunities of important gains and the growing power of financial institutions. The availability of capitals coupled with prospects of short term gains, the extreme confidence in new ventures exploiting the new technologies, when, however, these have reached the maturity stage, is at the origin of a major technology and liquidity bubble. It is the collapse of this bubble (or bubbles, if the first is not severe enough for the establishment

of the appropriate radical changes) that marks the beginning of the second stage of a GSoED (Perez 2004, 2009a).

During this 'deployment phase' (as defined by Perez, 2010) governments regain the centre stage and institutional changes become essentials for driving investments from short term to long term opportunities, from the financial sphere to the world of production, for reaping the benefits of technical innovations and, as a result, for bringing economic and social wellbeing (Perez, 2004, 2010; Freeman and Louçã, 2002). The last and fully completed of these deployment phases followed the crisis of the 1930s and led to Keynesianisms and Roosevelt's New Deal in the United States, but also to Fascism and Nazism in Europe (Perez 2004). The next deployment phase is assumed to be the second half of the Information and Communication Technology (ICT) revolution and will shape as a result of the burst of the technology and financial bubbles of the last decade and the consequent periods of crisis. Given that, at least according to neo-Schumpeterian thinking, the history of industrialised economies repeats itself every 50 to 60 years, the stakes of finding the right mix of institutional changes within the next decade are high: these, in fact, bear the potential for the desirable realisation of the Golden Ages of the ICT-fuelled, Great Surge of Economic Development (Perez 2009a, 2010).

Each of the five precedent long waves of economic change was also characterised by its own sets of beliefs on how businesses were changing and driving innovation. Each of these sets of beliefs was clearly influenced by the industries and enterprises that were the success stories of their own times. These sets of beliefs also shape and are shaped by economic theory: during the first industrial revolution Adam Smith (1776) improved the status of the new industrialists as he "shifted the focus of economic inquiry from trade to growth and from agriculture to productive industry" (Freeman and Louçã 2002, 177). On the other hand, Alfred D. Chandler Jr. (1977) used the example of General Motors to define his vision of a modern business administration and to explain the advantages of vertical and horizontal integrations (Usselman 2006). These concepts were formulated during the deployment phase of the fourth GSoED, i.e. the age of oil, automobile and mass production (according to Perez 2010) but they are still used to justify mergers and acquisitions between information industries, which are the enterprises modelling the following and fifth economic and social paradigm (Sparviero 2011).

Therefore, as a new GSoED also shapes new economic thinking, it is not by coincidence that a growing group of scholars, which in recent times has become considerably larger because also inclusive of mainstream economists, now challenges the effectiveness of traditional economic theories as prominent tools for understanding the unfolding economic environment, macroeconomic dynamics, economic history, or complex changes more in general (see Solow 1985, the Economist 2009, the editor of the Real-World Economics Review Blog 2011).

Therefore, what we can learn from Neo-Schumpeterian thinking is that the new theoretical frameworks aiming at explaining how most - if not all - industries and enterprises are currently evolving should learn from the industries and enterprises that have emerged and represented the most important success stories of the last twenty to thirty years. This is because the motive and carrier branches of the ICT revolution, not only produce the semiconductors, computers and telecommunication equipment that are used nowadays in practically every economic activity, but they also lead the way in terms of adapting their organisations and production processes in order to exploit the full potential of these pervasive technologies. Our understanding of how industries and sectors innovate should then start, for example, from studies of modularity and complex systems (e.g. Baldwin and Clark 1997, 2000, Chesbrough, 2005, Ethiraj and Levinthal 2004, Pavitt 2005, Sanchez and Mahoney 1996, Steinmueller 2005) which focus on how the industries that are at the origin of the current and fifth GSoED innovate and shape their business models.

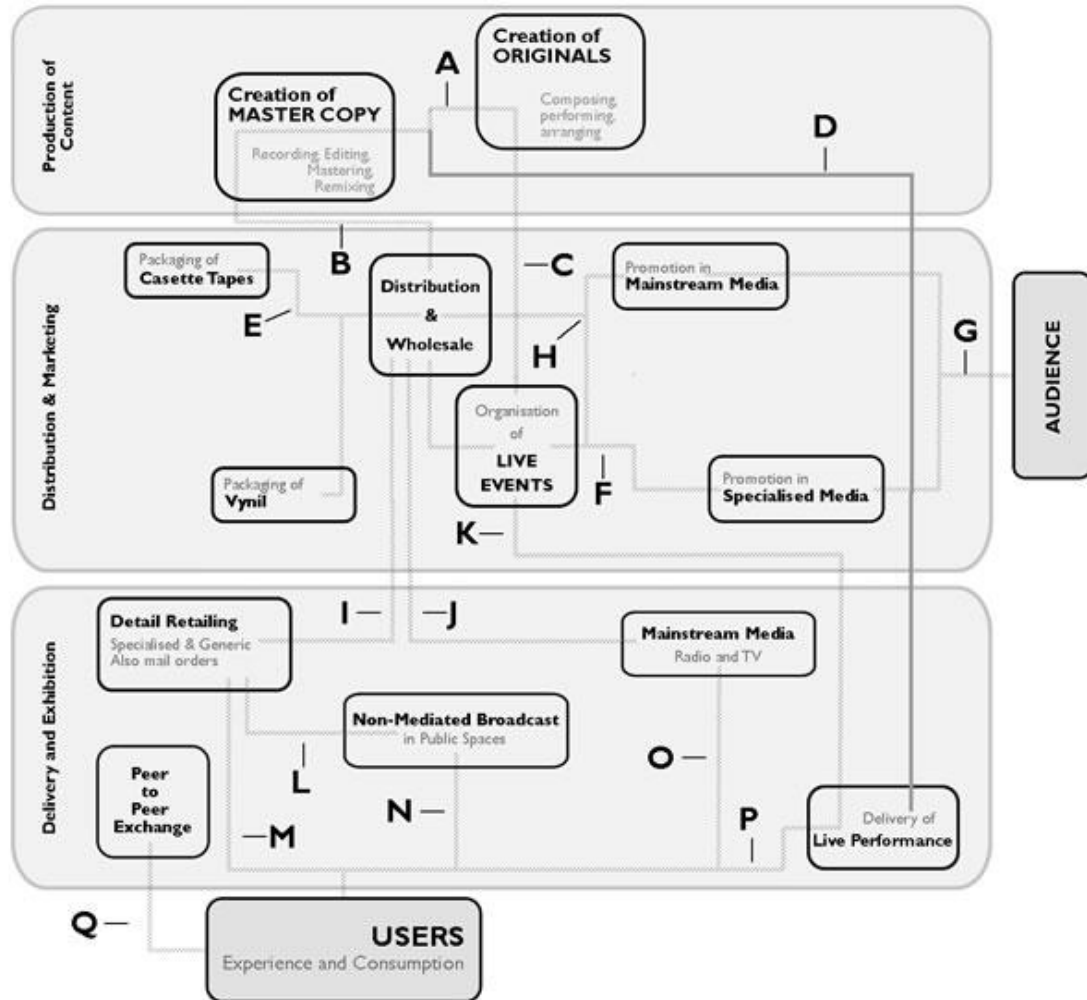
Experimenting with new economic thinking in a creative way seemingly also requires taking a distance from traditional economic theory and its basic assumptions. More importantly, it means thinking beyond our manufacturing and technology-biased analytical apparatus, whose existence is a direct consequence of the dominance of the neoclassical economic framework (Gallouj 2002, 145). As the fabric of today's industrialised economies is mostly made of service activities, our analytical apparatus should be better tuned to understanding services and innovation in general, rather than manufacturing and new technologies. Therefore, we argue the most important lessons to be learnt from scholars focussed on studying innovation in service activities (e.g. Gadrey, Gallouj and Miles) is the necessity to focus on the changing relationships between businesses that are linked in the value-chain of an industry, and between users and consumers. On the one hand, the relationship between producer and consumers (i.e. a manufacturing perspective) takes mostly the form of a trade based on quantities and prices and the results of innovations are mostly visible in the qualities of the object that is the focus of this trade. Therefore, in the case of manufacturing activities, it is the object of the relationship that is the focus of the analysis, rather than the relationship itself. On the other hand, the relationship between providers and users (i.e. a service perspective) is more specific, contingent and can take complex forms. Therefore, in this case, it is also very important to understand how innovations are likely to change this relationship. Examples of these complex and contingent relationships in information industries include service agreements regarding the supply of IT support services and contracts regarding the syndication of broadcasting rights.

Therefore, this paper is about experimenting with these new economic approaches, however, with the specific intent of providing an original account on how the music industry is changing through the adoption of ICTs. In this experiment, we also include established techniques of media industries' analysis like a

value-chain analysis (used, for example, in Küng, Picard and Towse 2008 and United Nations 2008) and the distinction between audience and users markets (following the seminal work by Picard, 1989).

However, in addition to these techniques, the analysis presented here embraces a service-oriented perspective and is informed by theories of complexity economics (e.g. Beinhocker 2007), modularity and political economy of communication. Therefore, first of all, we represent the music industry as a system composed of different activities and each of these activities or sub-system is included in one of the three phases that characterise this value-chain, which are: (1) the production of content, (2) the packaging, marketing and distribution of content, and (3) the delivery and exhibition. In order to study this system, we attempt to map and understand the relationships between the different activities, i.e. the interactions between the systems' components and how these have evolved in combination of the adoption of new technologies. This is achieved by drawing upon a range of qualitative data obtained primarily from forty interviews conducted with key music industry informants and personnel. These interviewees are, predominantly, Irish-based and span the range of music industry subsectors comprising of record industry personnel, music publishers, artist managers, touring agents, live music promoters, record producers, recording artists, music broadcasting management and personnel, music journalists, policy makers and other key informants. In order to describe and analyse the changes brought to this system by the introduction and adoption of new ICTs, we compare our generalised representations of the music industry in the pre-digital and digital eras. Interestingly, these representations also facilitate our analysis of the existing power structures in this system. Moreover, in the conclusions we discuss the significance of the effects of unauthorised downloads of music and provide arguments on how the industry could deal with this issue.

Figure 1: Pre-digital music industry system



Source: authors

The digitalization of content production in the music industry stage

The 'production of content' is the first phase of the music industry system value chain and refers primarily to the actions involved in the creative process, and those processes concerned with producing and storing an original musical works for subsequent retrieval and widespread dissemination. An array of actors is involved in this stage of the system: These include songwriters, composers, performers, arrangers, record

producers, studio engineers, artist managers among others. Music 'texts' are created, performed and stored as original 'master copies'.

The creation of these 'originals' as defined by Hill (1999) - i.e. the first copy and the product of artists - implies activities such as the composition, arrangement and performance of musical works. While, initially, this may have been viewed as a separate stage or process from that of recording, and the capturing of a musical performance on record, the recording process has itself long since become an integral part of the process of musical creativity.

As Latonero (2003) points out, it was not until the late 1800s and the unveiling of Edison's phonograph that technology moved the music experience away from 'live' performance. For the first time in history, a master copy was produced and technology provided for the storage of musical sounds, and their retrieval at a subsequent place and time. To most succinctly serve our purposes here, we will (perhaps somewhat crudely) divide the history of recorded performances into two distinct eras: analogue and digital. While early acoustic and subsequent electrical recordings involved capturing a performance on record, the evolution of multi-track recording as the 'studio-norm' from the 1960s onwards marked the convergence of the creative and recording processes. Multi-tracking – the ability to place multiple recorded tracks in parallel on tape – saw the recording studio become a tool in the creative process. As Goodwin details:

The multi-track tape machine exists because musicians and composers...improvised recording techniques using existing equipment that the manufacturers had not anticipated. The mixing desk, designed to produce the 'best' final mix of a song was reworked in the 1980s as a place where songs could be remixed, deconstructed or perhaps destroyed. (Goodwin, 1992: 95)

So, such technologies, when introduced to the music industries, do not merely mirror the creativity of the artist or serve to determine a path for musical creativity or production techniques. Rather, they serve to provide for fresh possibilities and practices in the overall creative process.

In addition, Musical Instrument Digital Interface (MIDI) evolved during the 1980s to provide the creative artist with such technological features as sequencing and synchronisation. Software packages now enabled creatives to programme and synchronise electronic musical instruments and devices. Now the computer was entering the stage as a creative tool.

Also, many interviewees point to cost reductions in making recordings and the increasing ease with which they can be produced as a primary benefit accruing to artists and 'small operators' from the advent of digitalization. One of the most significant features emerging in the post-digital 'music making' environment is the potential for ever greater numbers of individuals and groups to participate in the creation of music texts. As the digital era has evolved, a process of 'reprofessionalization' has occurred whereby new digital

technologies have made for a blurring of distinctions has occurred between the professional and amateur music maker (Wikstrom, 2010). As digital has increasingly come to displace analogue in the recording process, the proliferation of ever cheaper and easier-to-use technologies, such as sequencing software and samplers removes the necessity for established, professional recording studios and relieves creative artists and performers from the associated financial burden. As such, digital recording technologies make the recording process vastly more accessible and as websites such as MySpace illustrate, the quantity of professionally recorded music has increased exponentially.

Overall, the advent of multi-track recording saw the roles of creative artist, engineer and record producer interweave. Digitalization has accelerated and intensified this process by ensuring that recording studio technology knowledge and practice is no longer the preserve of recording studio professionals. As technologies have evolved, the activities associated with different actors in the production of content phase have been reshaped. The clear(er) lines of demarcation that previously existed between creatives and technicians have converged significantly.

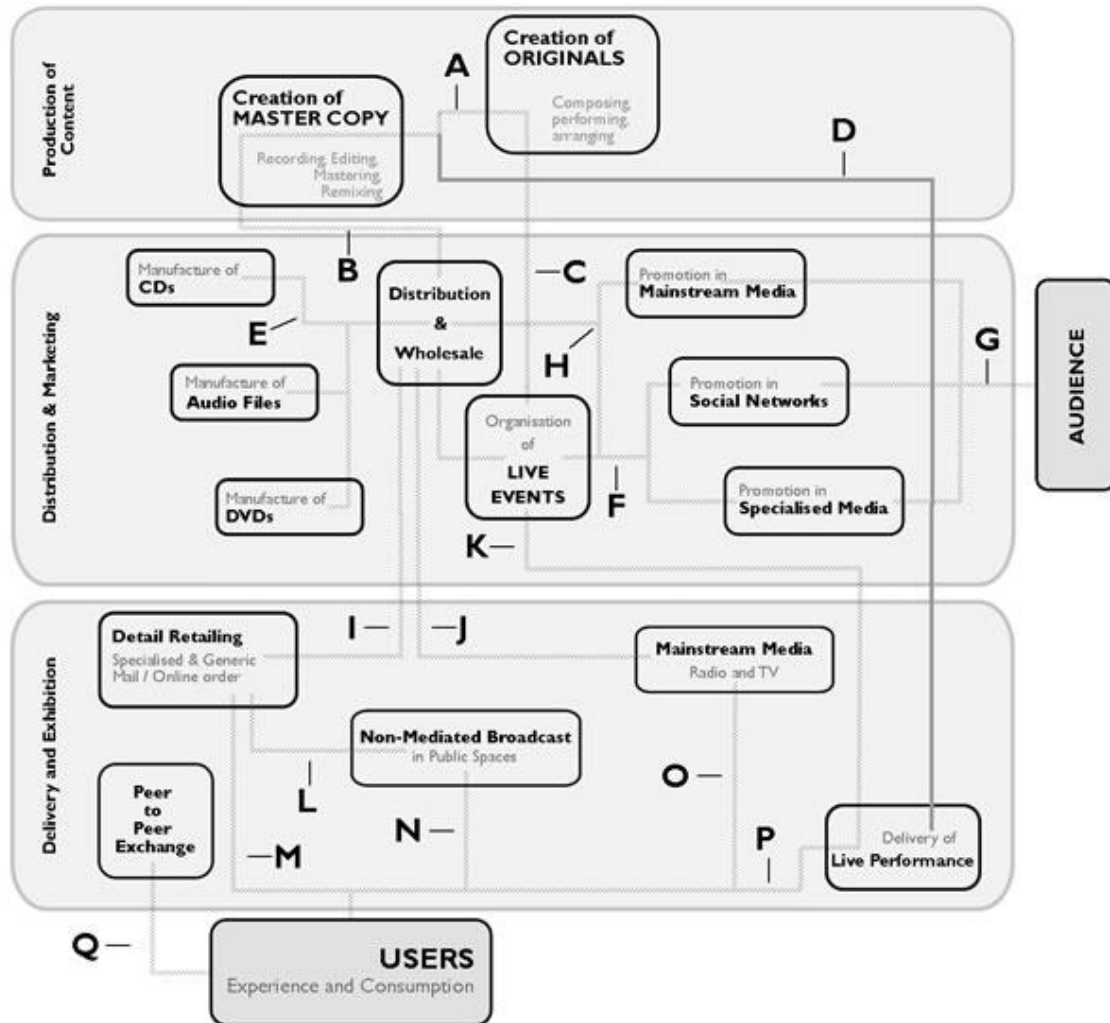
Digital recording platforms, sampling and sequencing have also facilitated the re-configuration of the role of the record producer. While the evolution of multi-track recording placed the record producer closer to the heart of the creative process (see, for example Cunningham, 1999; Wikstrom, 2010), digitalization has cemented the producer as a creative force. Over the decades, the role of the producer has evolved from that of studio engineer, charged with the responsibility of capturing and storing a performance for future retrieval, to an active agent in the creative process, compiling, remixing, structuring and re-structuring the text. To this end, many producers now work purely in the 'post-production' phase of process as master copy remixer. The digital era has witnessed the evolution of the record producer as a brand in his/her own right and, the role of this 'actor' in achieving greatly enhanced profile at end-user level for the recordings that they produce or remix, or perhaps more appropriately, to which they lend their brand. As a number of artists managers and major label executives outlined, hiring the 'right' producer to remix recordings for mass market tastemakers and mass market audience can be crucial to the commercial life of a recording. Often, different 'remix' producers will be hired to remix the same music text for different tastemakers and audiences in an effort to maximize the reach of the recording across the broadest range of music-consumer market sectors possible.

Furthermore, digitalization has facilitated changes in roles and activities beyond the creation and storage of music content itself. For example, the production of a 'visual identity' around artists and recordings is also a constituent element of the production of content phase. Many interviewees highlight how such tasks as photography and design, as well as other related artistic and administrative functions surrounding the production of content phase are now more efficiently executed than in the pre-digital environment. As a

number of independent record label owners/personnel and artist managers indicate, the creation and production of artwork and other tasks that preciously required engaging the services of an 'external' actor can now be executed internally and a greatly reduced costs. Such content can be produced and circulated among 'internal' production crews much more quickly, and can also be modified by the same actors.

The end-game of the 'production of content' phase of the music industry system sees those engaged in the production of a recording deliver final edited versions of recordings to the distributor for manufacture/duplication, dissemination and promotion. This phase also sees the copyright owner of the recorded material contract responsibilities for the manufacture (in the case of physical formats), distribution and marketing of the recording – this may involve a major company acquiring copyright to the material, or as is increasingly the case, acquiring licensing rights to the wholesale distribution of the recorded material. Therefore, the main changes brought about by the digitalization of the first phase of the value chain of the music industry can be summarised as follows: an increase in the number of people involved in the creative process and the broadening of possibilities of producing music recorded with a better technical quality and at a reduced cost. These people are professional artists and producers, who are now more integrated into the creative process, or amateurs that have now access to the same tools used by the professionals. Therefore, overall, digitalization has provided the industry with more choice and quantity of content.

Figure 2: Post-digital music industry system



Source: authors

The distribution and marketing stage

As illustrated in figures 1 and 2, the activities occurring during this phase of the value chain process may be broken into four broad categories: manufacture; distribution and wholesale; media promotion and marketing; and promotion via live events.

Manufacture

Put simply, this refers to the range of formats through which content is duplicated and subsequently distributed.

The pre-digital recorded music industry involved the duplication of recordings from master tapes across analogue formats ranging from vinyl – through its various formats: 78rpm, 45 rpm, 33rpm; to various tape formats – 4-track/8-track cartridge formats from the 1960s to the 1980s, which had limited commercial success, and most notably the cassette tape which, throughout the 1980s, became the most widely adopted format internationally.

The compact disc (CD) – a 'physical' digital format – introduced in the 1980s, became the standard format upon which music was retailed throughout the 1990s. For one major record company interviewee, the record industry received a 'second lease of life' with the advent of the CD and DVD. However, with the advent of the internet and mobile technologies as platforms for the circulation and distribution of music, the range of platforms for the delivery of recorded music has proliferated phenomenally and serves to provide significant new avenues for the exploitation of new and, more importantly, established record industry catalogues.

The new millennium has seen overall recorded music sales plummet with global retail revenues dropping from \$38.7bn in 1999 (Nurse, 2001) to US\$24.3bn in 2010 (IFPI, 2011). Trade values have fallen from US\$27.3bn in 1999 to US\$15.9bn in 2010 (ibid). However, the significant growth of digital sales, rising from US\$0.02bn in 2003 to US\$4.6bn in 2010 (ibid), paints a brighter picture for the major companies who have been reaping the benefits of emerging and proliferating digital formats. A most useful example illustrating the range of formats now available in the post-digital environment is the 2006 album by Justin Timberlake entitled *Future Sex/Love Sounds*. This recording was released in no fewer than 115 products or formats including physical CD, a variety of ringtones, mobile full-track downloads, video, bundled album digital music store downloads and other. It sold a total of 19 million units, only 20% of which were CDs (IFPI, 2008). Thus, the range of formats through which music is carried in its recorded form has proliferated phenomenally with the advent of digital. Significantly, many costs associated with the manufacture and duplication of physical products [e.g. CDs, spindle cases, printing and packaging] are removed or greatly reduced with the advent of digital.

The distribution and wholesale of music

This refers to the mechanism through which the recorded content is transported to music retailers or directly to end users. Individual companies cannot control or pre-determine what is going to be commercially successful. The best that recorded music corporations can do 'is struggle to monopolize

access to recording facilities, promotional outlets, manufacturing arrangements and distribution systems, and be in a position to appropriate the profits' (Negus, 1992: 152). Thus, distribution is the key control stage in the overall music industry value chain.

From the early twentieth century onwards, cultural markets experienced the increasing presence of large corporations, with new technologies such as recorded music, radio, film and television serving to both maintain traditional forms of cultural activity as well as give rise to new ones (Williams, 1981). This, for Williams, was the age of the 'corporate professional', contextualised by the increasing significance of commercial cultural production as the twentieth century progressed. One of the most striking characteristics of this era was the evolution of vertically integrated companies that combined to form oligopolies in individual cultural industries (Garnham, 1990). Since its origins, the music industry has experienced a situation where production and distribution channels fall under the ownership and control of a small number of companies (Chapple and Garofalo, 1977). By 1992, six major multi-national corporations controlled over seventy per cent of the entire world market and approaching eighty per cent of the American market (Negus, 1992). These six have since become four, namely, the Universal Music Group (UMG), E.M.I., the Warner Music Group (WMG) and Sony Music Entertainment. As many interviewees outline, access to the retail level of the process has traditionally been dependent upon securing distribution through one of these major players.

The internet is commonly perceived as carrying the greatest potential disruption to the practices and roles of the established music industry. The key promise of the internet upon its emergence as a medium for mass communication in the early-to-mid 1990s was that it offered the potential for creative artists to bypass the machinery of the established music industry in getting their music texts to a mass audience.

Many authors have addressed the potential of the Internet to enable artists to produce, market and distribute their own work independently. While acknowledging that the digital distribution of music held the potential to serve the interests of the major music corporations, Burnett makes the point that it 'could open a Pandora's box that could ultimately destroy their own control of popular music' (1996: 148). In the latter half of the 1990s, such commentary and analysis pointed to the advent of digital distribution technologies inducing a process of disintermediation - removing the middle layers of distribution channels. It was widely predicted that such a process would ultimately lead to the collapse of the traditional music industry. As Burnett notes:

Producers of music would be able to directly access their public without the machinery of a multi-national corporation mediating this relationship. Costs associated with distribution and retailing would be eliminated. Rather, the rapid diffusion of Internet technologies would mean anyone could potentially enter the market. (Burnett, 2011: 441)

So, the long established chain linking producer to distributor to retailer to end-user is fundamentally threatened by the existence of digital platforms for the distribution of music.

Mainstream media promotion and marketing

Many interviewees detail the range of media promotion outlets utilized by artists and labels over the past three-to-four decades. The core promotional media outlets identified for music in pre-digital times are radio, television, specialized music press and mainstream press. As we will see below, these all remain relevant to a greater or lesser degree in the digital world. In addition, online platforms and social networks provide a range of new 'virtual' spaces for the promotion of artists and music. The remainder of this section will examine each of these sites of promotion in turn.

In terms of its promotion via mainstream and specialized media outlets, the consensus of our interviewees [all Irish-based] is that radio can be seen as the prime promoter of music in pre-digital times. As many major and independent record label interviewees illustrate, exposure via national radio, pirate radio and, post-1980s through the independent commercial radio sector, formed the core objective of their marketing and promotional activities. Evening, 'off-peak' specialized music shows provided ready access to niche audiences/markets; daytime, 'mainstream' exposure on radio meant ready access to the mass market.

A decade and a half after the evolution of the internet as a mass medium for the circulation and promotion of music, the over-whelming perspective gleaned from our interviewees is that radio remains the most effective promoter of music. As one major label interviewee states:

...in our rush to believe in communications revolutions and digital revolutions we can overlook the importance of radio... It has certainly maintained itself in the contemporary music world. (personal interview)

From the early 1990s onwards as radio airtime has increased manifold, so too music airtime on Irish radio has proliferated. From a situation in the 1970s where one public service station existed in the midst of a growing number of pirate broadcasters, there are now four PSB stations and a grand total of fifty-four licensed independent stations delivering content to national, regional, local, community and special interest audiences. As a number of interviewees explain, radio is ubiquitous, thus rendering it the most effective means of accessing both mass and niche audiences. Record 'plugging' to radio producers thus remains a key activity for record company promotions personnel. In the words of one interviewee, a major label executive, 'radio is a pretty crucial thing...without radio, the other intermediaries don't work' (personal interview).

Television remains an important medium for the promotion of music, but crucially, as a primarily 'indirect' as opposed to 'direct' promoter of music and artists. One interviewee, a commissioning editor at RTE –

Ireland's public service broadcast network – outlined how research undertaken by his organization indicates that the teenage audience-base categories formerly regarded as the primary consumers of 'music television' have largely migrated to YouTube and to other online platforms where music videos are streamed.

As an indirect medium of music promotion, where music exists as an attachment to the primary content being broadcast, television is still perceived as being an effective promoter of music. According to major label interviewees, the exposure gained through having recording synchronization on the international distribution of hit TV drama series' such as *The OC*, *Grey's Anatomy* and *Ghost Whisperer* serves to illustrate one of the few areas where television works effectively as promoter of music in the digital age.

Slots on talk shows on national television networks also retain significance and form important targets in the marketing strategies of record companies. Equally, 'talent' shows such as *X Factor* and *American Idol* have evolved as significant promotional and revenue generating entities for music.

Also, as television channels have proliferated, so too have spaces for advertising. The accounts of various interviewees in the fields of music publishing and recording indicate that all four major music labels have become much more aggressive at marketing their content direct to advertising agencies. For example, EMI and Universal provide detailed online synchronisation services. At EMI UK and Ireland, the synchronisation service (www.sync.emirecords.co.uk) provides detailed information on current EMI recording artists, available back catalogue, and a full schedule of forthcoming EMI releases that will be available for licensing to advertisers and film and television production companies. Of the four major labels, UMG's synchronisation service, SynchExpress, provides the most comprehensive and proactive service to prospective licensees. This website details a catalogue of recordings dating from 1923 to present and forthcoming releases on Universal and its various labels. The SynchExpress homepage breaks all of the Universal content into 31 different musical genres. For the benefit of the music supervisor or advertising executive SynchExpress further subdivides the Universal catalogue into no fewer than 109 song categories that are designed to relate to all possible user synchronisation purposes. For example, they offer 'cooking/food songs', 'telephone songs', 'feeling better songs', 'clean/dirty songs', 'female empowerment songs', 'travel/road songs', 'ready songs', 'nature/earth/environment songs', 'sports songs' and 100 other categories of song matched to product or service type.

These developments have in turn given rise to websites detailing and selling downloads from vast databases of songs in adverts have emerged in recent years, like Tesco Digital and www.uktvadverts.com, which also provides links to digital music distributors such as iTunes and amazon.com for numerous entries in its database.

The Decline of the Music Press as a Tool for Promoting New Acts

Many interviewees reflect upon the 1970s and 1980s as a time when access to such specialised music publications was vital, particularly when it came to breaking a new act. They cite the music press as a key mechanism for building an initial fanbase and significantly, for bringing an act to the attention of radio. As one artist manager advances, making the cover of the *NME* and *Melody Maker* was 'a big statement'.

A former Deputy Editor of *The New Musical Express* points to his magazine selling approximately 300,000 copies in the UK market each week during the height of its popularity in the early-mid 1980s. Other magazines cited by interviewees as key sites of promotion for new and emerging acts were *Record Mirror*, *Melody Maker* and *Sounds*. Niche 'hard rock' audience publications such as *Kerrang* and *Metal Hammer* are cited as having been important to promoting acts in that genre.

The general consensus expressed by interviewees is that the significance of the music press has dwindled significantly since the mid-1990s. Consumption of the music press was and remains an activity associated primarily with that section of the market perceived as actively seeking music/new music. This, according to interviewees in the music and music press industries, remains the preserve of a small and ever-decreasing minority of music fans. The main explanation offered for this decline is that many of the 'fans' that were previously end-users of print press publications have now gravitated online and inhabit many of the weblog, online publication and social network spaces such as those outlined above.

Since the mid-1990s *Melody Maker* and *Sounds* have ceased to exist; *Record Mirror* has been assimilated into *Musicweek*; Pop magazines like *Smash Hits* and the hard rock publication *Metal Hammer* have also gone out of business.

Equally, more mainstream publications like *Q* and 'retro' magazines such as *Mojo* continue to retail successfully.

Promotion on Digital platforms, weblogs and online social networks

Online content platforms such as YouTube, MySpace, Vevo and advertising supporting streaming services such as Spiralfrog (before it closed down), We7 and Deezer now act as outlets through which music reaches an audience. Such sites not only provide promotion for music, but simultaneously act as revenue-generating sites for record and music publishing companies courtesy of licensing agreements governing their provision of music content.

Social networking sites have emerged as important 'early stage' promotion outlets for new artists. The range of these outlets available is perhaps best illustrated by one interviewee, and artist manager presently handling a young New York based singer-songwriter. At the time of our interviewee, his artist was being promoted and exposed via a plethora of online sites as part of the process of self-promotion. For example,

social networking sites such as MySpace and Facebook with an interactive user-submitted network of friends where users may post music, videos, blogs, photographs internationally; video-sharing website YouTube; Last.fm, the internet radio website owned by CBS Interactive. Notably, these sites are also inhabited by many of the biggest recording artists in the world and their record labels. YouTube, for example, may be seen as fulfilling many of the functions of dedicated music television channels in the past as it provides a key site for the promotion of music through video.

Other niche/underground sites utilised by the afore-mentioned interviewee to gather 'friends' and hits include Vbs.tv, a New York based online broadcast network that carries news and features on 'underground' music and pop culture; MusicRemedy.com and BandWeblogs.com, sites where artists and users can post songs, videos, photographs, reviews; Stereogum.com, another user-driven site offering free MP3s, video clips and reviews.

In addition prefixmag.com, papermag.com and filter-mag.com are three online daily music magazines offering live reviews, album reviews, links to blogs, and in the case of prefixmag.com, links to video clips and access to free MP3 files. This interviewee also has a presence on such sites as thefourohfive.com, an online music and film magazine containing reviews, interviews, audio-clips and video-clips, as well as promoting and reviewing her live performances on tourfilter.com and songkick.com – songkick.com also provides links to a variety of music-related blogs. The artist in question is also a contributor and 'friend' to a wide variety of weblogs which includes *mog*, *realprettyinblack*, *villagevoice*, *frictionnyc*, and *nylonblogs*.

Overall however, as a number of artist managers and independent label owners indicate, such sites are of limited use. The work primarily as part of a broader 'plot' that includes specialised radio, television, print press promotion and live performance and touring promotion to grow the stature of the artist to a point where major distribution and mainstream media become interested.

Digital games and music promotion

By the middle years of this decade, the digital games industry had evolved to form a significant component of the broader cultural industries with revenues comparable to the box office intakes of the Hollywood film industry and global recorded music industry (Kucklich, 2004; Thomas, 2003). Games have grown to provide not only marketing and promotion for the music content they carry, this content generates licensing revenues for record and music publishing companies via the sale and use of the digital games themselves, and many games generate direct music sales by offering exclusive music and artist related content.

Recent years has seen traditional content owners such as Universal and Warner's move into mobile games courtesy of licensing agreements with games providers. The convergence of content providers with digital games hardware and content providers works to their mutual benefit ultimately bringing profits from both

sectors back under the one roof. Sony is a key example in that it is not only a key player in the music industries, it also produces and supplies the various generation of the Playstation consoles and games.

While almost all games use licensed music, games such as *Song Pro*, *Rock Band*, *Guitar Hero* and *Singing Star* are of particular relevance. *Song Pro* is a cartridge that can download music to be played on a Gameboy console. The *Song Pro* package includes a flash memory card, headphone, music management software and a USB line to enable users to access the internet for music downloads. Song lyrics and artwork can also be downloaded from the *Song Pro* website. The significance of such music-based games is illustrated by statistics released by Microsoft in late 2008 showing that the computer company sells 3.8 million song downloads a month via the Xbox for the games *Rock Band* and *Guitar Hero*. Figures for the previous twelve months indicate music download sales of 45 million tracks. The figures don't take into account song download sales for the same two games on Sony Playstation format. October 2008 also saw Harmonix, the company behind *Rock Band*, gain licensing rights to The Beatles catalogue for use in the game.

In some instances popular back catalogue material by established recording artists is used as a constituent element of the digital game experience – for example artists like Blur on *FIFA Soccer* and Run-DMC and Ozzy Osbourne on *Grand Theft Auto*. In these three examples, all three recording acts are Sony Music artists generating direct recording and music publishing revenues for the company, as well as receiving promotion via their use on Sony Playstation. Equally digital games are used for promoting exclusive material and releases that are only accessible through digital games consoles. For example a limited edition version of *Payable on Death* by the band P.O.D. (issued on the Atlantic label, that is in turn owned by the Warner Music Group) included an accompanying exclusive Sony Playstation 2 DVD that contained music not available on the standard album release. The game *NFL Street* features eleven exclusive previously unreleased tracks by various Sony recording artists that only play on Sony Playstation 2, Microsoft Xbox and Nintendo GameCube consoles.

Other examples of music-digital game cross-promotion include a deal between Universal and Electronic Arts (EA), one of the world's largest producers of digital games, which has been in existence since 2003. The deal sees music recordings owned by Universal's Def Jam label incorporated into EA games. For example, the first version of the game *Vandetta* featured twelve Def Jam recording artists including Method Man, Scar Face, Ghost Killah and others. This game allowed users to play recordings from selected artists in a wrestling ring. This was the chosen method for initially releasing new music by these artists. New singles would only be released in other physical and digital formats, and for radio broadcast, subsequent to being released via the digital games. Snoop Dogg, The Black Eyed Peas, Vanessa Carlton and Marilyn Manson all had new music previewed exclusively through the games. Chicane, Beyond this, The Bare Naked Ladies,

Metallica, Aerosmith, Blink-182, Papa Roach, Apollo 440, Paul Oakenfold, Naughty By Nature and Nelly provide just some examples of artists whose repertoire is currently (or recently was) being used in games. 2009 saw US rock band Motley Crüe release their *Saints of Los Angeles* single exclusively as a downloadable track via the *Rock Band* game on both Xbox and Playstation formats. Furthermore the 2008-09 Motley Crüe US tour was used as a platform for promoting the game. Concert-goers were invited up on stage during the intervals between support acts in order to play the game on a giant screen and compete with each other to become the *Rock Band* champion.

Figure 3: Mapping the relationships between music industry stakeholders

	Provider	User	Description of the relationship
A	The artist(s)	Recording Production Personnel	The artist performs and the performance is put into a reproducible form.
B	Recording Production Personnel	Music Distributor	The recording Production Personnel hired by the music distributor delivers the edited master copies of the originals.
C	The artist	Live Performance Organisers and Producers	The artist and the distributor contract the responsibilities of the organisation of live performances to live performance organisers and producers (agents / promoters / Venue managers and owners /Event crew/Ticket retailers, etc.).
D		Recording Production Personnel	The live performance of the artist is recorded and becomes an original.
E	Manufacturers	Music Distributor	the distributor contract the manufacturers to duplicate originals from the master copies in different forms.
F	Music Distributor	Promotion Outlets managers	The Distributor provides the managers of promotion outlets with information and marketing material about the new release and the artist(s)
G	Promotion Outlets Managers	Audience	Promotion outlets pass on (or edit) information and marketing material and deliver it to their audience.
H	Live Performance Organisers and Producers	Promotion Outlets	The Live Performance Organisers and Producers provide the managers of promotion outlets with information and marketing material about the organisation of live performance events
I	Music Distributor	Detail Retailer	The music distributor sells the detail retailers duplicates of the originals
J		Mainstream Media outlet manager	The Music Distributor provide the Manager of a mainstream media outlet with duplicates of the originals.
K	Live Performance Organisers and Producers	The artist	The Live Performance Organisers and Producers prepare the settings in which the artist will deliver a live performance to users.
L	Detail Retailer	Manager of public spaces	Managers of a public space buy duplicates of the originals from detail retailers
M		Users	Users buy duplicates of the originals from detail retailers
N	Manager of Public Spaces	Users	Users experience the music reproduced by managers of public spaces from their copy of the original
O	Mainstream Media outlet manager	Users	Users experience the music broadcasted by Mainstream Media
P	Artist	Users	Users experience the music performed live by the artist
Q	User	User	Users copy and/or exchange duplicates of the original and/or reproduce the music for other users in private spaces.

Source: authors

At the bottom of the value chain: the Delivery and exhibition stage

The exhibition and delivery of music texts to end users of music may be most succinctly categorized under the following five headings: detail retailing; mainstream media; non-mediated broadcast; peer-to-peer exchange and live performance.

The Transformation of Detail Retailing

Specialised physical retail outlets experienced a boom over the final quarter century of the twenty-first century. As the market for recorded music grew, so too did the retail outlets. Interviewees from the retail sector and record labels outlined the trajectory of international chains such as HMV, Virgin Megastore and Tower Records which, from the 1970s onwards became primary sites for retail consumption of records replacing many smaller independent outlets for recorded music. Equally, national chains such as Golden Discs and other independent record shops continued to flourish. Music was also retailed through 'non-specialised' stores, where recorded music was not the primary stock.

With the advent of digitalization, the 'bricks and mortar' music store has experienced decline in tandem with the fall in physical record sales in recent years. While HMV and a number of independent retail outlets still continue to trade, the past four years has witnessed the closure of a number of prominent specialised recorded music outlets. For example, June 2007 saw independent retail chain Fopp close down all of its 105 outlets across the UK. The same month, HMV announced that its annual profits had been more than halved (*RTE News*, Thursday 28th June 2007). On Christmas Eve 2008 retail chain Zavvi, formerly Virgin Megastores, went into administration. It subsequently closed the majority of its stores throughout January and February 2009 – (HMV purchased 19 of the Zavvi outlets across the UK and Ireland). In February 2009, the High Court in Dublin appointed an examiner to the Golden Disc music retail group, which has 20 stores throughout Ireland. The court heard that Golden Discs was currently insolvent with liabilities of €9.5 million, primarily due to the downturn in sales and increased competition from online sources (*Irish Times*, Tuesday 24th February 2009). Independent Dublin retailer Road Records also closed its doors in Spring 2009.

However, concomitant to the decline of the specialist record store has been the rise of supermarket retailing for recorded music. Supermarket giants such as Walmart in the US and Tesco in Britain and Ireland have gained market share in CDs through low prices. Chains such as Wal-Mart and Best Buy accounted for 65% of all physical recorded music retail purchases in the US in 2008 (Nielsen Soundscan cited in *The New York Times*, January 1st 2009). In recollecting the entry of supermarkets into the spectrum of music retailing in the 1990s, a key record industry trade body representative recollected how music retail chains stocked vegetables on their shelves as an act of protest against their new competition. A number of interviewees point to supermarkets as hastening the decline of specialised music stores by

offering a limited catalogue at significantly lower prices. Some argue that supermarkets carry recorded music as a loss leader as to drive footfall in their stores. Nevertheless, all major label interviewees point to supermarkets as an additional and valuable outlet for their products. Failing to 'do business' with supermarkets would be 'unthinkable', according to one interviewee, given the vast consumer base that is reachable via these retailers.

While physical retailing has declined significantly in recent years, digital platforms for the retail of recorded music have proliferated, as have digital music sales. By 2009, over 500 legal online music services existed worldwide with more than 13 million tracks licensed to the major services (IFPI, 2009). Since the launch of iTunes in October 2003, digital sales have, according to IFPI statistics, grown to account for 20% of overall recorded music sales, globally (IFPI, 2009).

Other well established retail route in the pre-digital era was that of mail order. Mail order retailing of new and second-hand recorded music products has proliferated since the advent of the internet as a medium of mass communication. This is primarily on the back of such sites as amazon.com and play.com. Equally, traditional specialised retail stores such as HMV operate mail order business as well as digital music store models.

The Experience of Music through Broadcast Media and Public Spaces

During the post World War II years, music firmly established itself as a key element of radio programming (see, for example, Scannell and Cardiff, 1991). Radio quickly established itself as a key promoter of recorded music and a 'symbiotic' relationship quickly evolved between both media (Frith, 2001). Rothenbuhler and McCourt (1992) trace a series of studies spanning over forty years (drawing upon Erdelyi, 1940; Wiebe, 1940; Jakobovits, 1966; Fathi and Heath, 1974; Lull and Miller, 1982) all of which found that 'an inverse-U relationship exists between radio airplay / music sales and popularity' (Rothenbuhler and McCourt, 1992: 102).

As with radio, television broadcast time has proliferated in recent decades. Beyond terrestrial, the evolution of cable, satellite and digital forms provided both 'direct' and 'indirect' promotion of music. The latter referring to the synchronizing of recorded music to other television content, generating not only promotion but also licensing revenue for the recording and publishing copyright owners concerned; the former referring to dedicated music broadcasts on television. According to the accounts of a number of major music label informants, the period spanning from the mid-1980s to the mid-1990s marked something of a golden age in the 'direct' promotion of music, primarily via MTV and subsequently VHI – dedicated music video television channels. In the 'production of content' phase, significant emphasis was placed on the creation of music videos to accompany promotional single releases from albums.

Music can also be accessed by the general public in an increasing range of incidental, 'non-mediated' public spaces. These include pubs, restaurants, bars, cafes, hotel lobbies, shops, shopping centres, hairdressers, beauty salons, petrol stations and a variety of public events where music is not the primary subject, but occurs in an incidental manner.

Peer-to-peer exchange

Since the late 1990s the internet has been widely perceived as possessing a particularly disruptive potential in terms of the established music corporations' relationships with (or modes of service delivery to) their final consumers. Théberge (2001) and Bakker (2005) succinctly outline technological developments around the duplication and circulation of music from the latter half of the 1990s onwards that have become a major cause of concern for the industry. Improved file-compression techniques combined with the speed of networks, led to the MP3 format providing for the start-up of a variety of websites that offered a new form of distribution.

The next significant development relates to the Napster software programme. While the MP3.com era saw a relatively low number of MP3 files being downloaded by a minority of internet users, the advent of Napster brought with it a vast increase in the number of people using a centralised database system that enabled users to access music files on their peers' computers. In addition to Napster, the late 1990s witnessed the arrival of numerous other digital music start-ups, all of which held fast to the proposition that online music possessed the potential to diminish the power of the major corporations that controlled the music industry. Following the demise of Napster in the wake of a successful copyright infringement case taken against them by the Recording Industry Association of America (RIAA), sites such as Grokster and Kazaa emerged to fill the void. Their subsequent downfall under foot of copyright litigation saw Limewire and others rise to the fore as key networking sites facilitating free access to and downloading of music.

When asked to consider if change has occurred in the music industry over the past decade, the initial response of almost all interviewees related to the proliferation of peer-to-peer exchange in cyberspace and, what they perceived as the concomitant decline of record sales. For example:

We put the downturn almost exclusively down to peer-to-peer networks and illegal uploading of music. Our estimates are that worldwide there are fourteen illegal downloads per one legitimate download at this stage which is phenomenal. Fourteen illegals for every one legal. (major record label representative)

In January 2009 the International Federation of Phonographic Industries (IFPI), estimated this legal:illegal ratio to be one in twenty, claiming that 95% of all music traffic on the internet related to illicit file-sharing (IFPI, *Digital Music Report 2009*, p.3).

During the course of our interviews, record industry trade body representatives from the IFPI, Irish Recorded Music Association (IRMA), the Association of Independent Music (AIM) and Phonographic Performance Ireland (PPI) advanced a number of specific cases of mass-infringements of copyrights to support their argument that file-sharing is severely damaging their market. According to one interviewee, there are no historical comparisons to the challenges faced by the record industry since the advent of peer-to-peer networks. What makes the plight of the record industry unique in his eyes is the perpetration of *'wholesale theft which is tolerated by society, governments and the media...it is sometimes even seen as virtuous that people are exchanging music for free'* (personal interview).

However, while the term 'peer-to-peer' file-sharing may have entered the public imagination over the past decade, the activities of exchange and sharing in the realm of recorded music have a much longer history. In the pre-digital world, cassette duplication and mix tapes evolved widely from the 1970s. As Drew (2005) notes, 'mix tapers' were using the 'new technology of cassettes' to express 'a lingering discontentment with the inflexibility of music buying and listening options' from the late 1960s onwards. The ability of cassette recorders to enable end-users of music to duplicate vinyl and cassette albums and copy music directly from radio in the 1970s-80s saw the British Phonographic Industry (BPI) pursue the 'home taping is killing music' campaign.

Delivering Live Performances

Equally, artist management will contract responsibility for the organization and production of live performances / promotional tours. This involves a touring agent acquiring the artist's touring rights and in turn selling concerts to promoters in different territories. The promoter hires the venues and contracts out the responsibility for ticket retailing. This routine is a long established norm spanning approximately five decades.

Nevertheless, the live music industry has undergone very significant change throughout the digital era. As global record sales revenues have declined over the past decade, concomitantly, live music industry revenues have grown significantly in the context of the proliferation of live music concerts and growing audiences (PWC, 2009, cited in Winseck, 2011). So, as with the increase in the quantity of recorded music content arising from the accessibility of recording technologies in the digital age, there has also been an increase in the quantity and (economic) value of live music performances, primarily as a strategy to negate the effects of a downturn in record sales revenues on the part of the established music industry. These changes however, do not amount to significant shifts in the activities of key actors, rather they point to the intensification and acceleration of existing processes.

Likewise, live concert performances continue to be recorded and reproduced on DVD and other formats for distribution to a mass audience. The recording of a live concert event for duplication and distribution across video and DVD formats is in itself nothing new. However, one very recent additional aspect to this category of activities that has been facilitated by more recent digital technological innovations relates to the recording of live concert performances for direct sale to the concert-going audience at the event itself. (relationship D in figure 3). A useful example of this is the 2009 *Graffiti Soul* tour by Scottish band Simple Minds. At each of the ten shows on the UK-Irish leg of this tour during November-December 2009, the show was recorded via a mobile recording system from which duplicates were copied onto USB memory sticks for sale to the audience at the end of the night. All of these recordings were subsequently made available for digital and physical distribution via MP3 download, MP3 Player and USB 'Concert Stick' formats directly from the bands own website, and ranging in price from €14.95 to €34.95 depending on the format. This process is enabled by Concert Online – a platform for producing and showcasing live music online – that is operated by German-based company Music Network. Other long-established major acts that have recently adopted the Concert Online platform include Kiss, Elton John and Foreigner. With this process, production costs are minimal, given that there is no hiring of recording and production facilities and crew required, beyond the 'onsite' operation of the relevant software. Equally there is no investment required in marketing and promotion as all sales are made onsite after the event itself, or directly from the artist's website. Thus, while the consumer-base for such products might prove small in relative terms, profit margins on each unit sold are many times higher than those associated with more 'conventional' recordings.

Conclusions

The 'installation' phase of a Great Surge of Economic Development is driven by the Schumpeterian process of creative destruction. This happens when a swarm of technical innovations, initiated by the development of a key factor, are introduced by the motive and carrier branches, combined into new technological systems, and spread to the entire economy. More and non-technical innovation occurs, new industries (i.e. the induced branches) and production patterns emerge, while established ones either evolve, re-organise and adapt to the new 'innovation logic' of the time, or fade out and disappear in competition (Perez 2004, 2009a, 2009b).

As described in this paper, the music industry was heavily transformed by the emergence and the diffusion of new ICTs, i.e. the technical innovations that fuelled the process of creative destruction that characterised the fifth Great Surge of Economic Development. Overall, the production of music has increased as new

technologies provide a better support to professional and amateur creative talents than the old technologies. The increase in music production is also well match by a growth of consumption, as now music is experienced in many different forms and through a variety of devices.

The 'destruction' has indeed been creative: between 1998 and 2010, the yearly of the music industry has increased by over 40% and this positive trend does not seem to have been affected by the economic crisis (see Winseck 2011). However, although overall changes brought positive results some 'old' services are being replaced, therefore some industry segments suffer: Music magazines do not get the same amount of attention from a specialist audience as they did before the mid-1990s, as more consumers are moving to web blogs and databases to get information about new acts and albums. Clearly, websites and databases provide a superior form for this kind of information services, as they provide their readers, not only information, but also the opportunity to experience and purchase music. Traditional record shops are also a segment of the industry that has been negatively affected as a result of the diffusion of online shops and digital downloads.

Moreover, thanks to the information gathered from the interviewees and the literature review, combined with a value chain analysis, we are able to discuss two of the most debated issues regarding the evolution of the music industry. The first of these issues concerns the increasing power of distributors in the music industry value chain. Those techno-centric scholars (e.g. Kelly, 1999; Negroponete, 1995) that earlier put forward the idealistic view that digitalisation/digital distribution was going to lead to disintermediation, did not consider that such a scenario could only be realised with the introduction of specific regulatory changes aiming at giving the owners of small music libraries (whether small independent distributors or artists) the same rights than the owners of large libraries, when accessing promotional outlets and digital distribution. In fact, given that, on the one hand, more content is available to consumers and, on the other hand, content is packaged in several different forms, promotion plays an even bigger role than in the pre-digital era. As our interviews indicate, mainstream media still play the biggest role in presenting new artists to potential users, therefore, the large distributors, which are part of large information-entertainment conglomerates that include television, radio stations and popular online news portals, are more likely to benefit from a privileged access to these channels. Also, particularly in light of their new role of re-sellers of music, the new, independent specialist websites and blogs are likely to pay more attention to famous artists in their news and reviews, so that they can indirectly benefit from the promotional efforts of the large distributors.

Furthermore, although it is true that a new creator of original music has now direct access to mass media such as online video portals and web radios, his or her work is likely to be one of (at least) thousands many others produced by peer unknown artists and receive little attention. Moreover, while the amateur

contributors do not receive any compensation when their music is experienced by users, large distributors have managed to negotiate some kind of royalty payments with all activities present in the last segment of the value chain that provide users with the opportunity to actively (as opposed to passively, as it is the case of mass media) experience music.

The second of these issues, which is always at the top of the music industry's preoccupations, regards the role played by illegal downloads. In its report, the International Federation of the Phonographic Industry (IFPI) pictures illegal downloads as the root of an economic crisis of rather large proportions: "if the digital piracy problem was not tackled, the EU could witness a cumulative loss of 1.2 million jobs across the creative industries by 2015 as a consequence of more than Eur 240 billion (i.e. over 340 billion US dollars) in lost retail revenues over the same period (IFPI, 2011: 17). Moreover, they also claim that this loss of revenue is likely to affect the developing artists, the new acts, rather than the established ones.

However, considering that the current global revenue of the music industry in 2010 was US\$71 billion (see Winseck, 2011), the contribution from the music industry to such a figure is likely to be the unrealistic outcome of some kind of multiplication of the current price of a single or album for the estimated demand of illegal downloads, for which unauthorised users pay zero euro. The claim that illegal downloads mostly affect the new artists is also argumentative and doubtful. As reported the debut albums from new artists appear less frequently in the top spots of music charts than few years ago, particularly in countries like Spain, where illegal downloads are more frequent (see IFPI, 2011).

Equally argumentative, but perhaps more logical, is the counter-argument that new artists have little to lose from a free and large distribution of their work than the established artists. This because such a missed opportunity of financial gain does not have a large impact on their current pattern of income that is generated from selling records, yet it multiplies the chances of generating revenue in the future and from a variety of sources (different forms of packaging for their music, television appearances, live performances, etc...). Moreover, the estimate of potentially missed income reported by the IFPI, although is unlikely to be realistic, provides an important indication: the value that potential new costumers attach to singles and albums is far from the price they would have to pay. There is a large, unexploited demand for music and if the industry is really concerned about the development of new artists, a consistent reduction in the price of records of the less promoted and relatively unknown artists is likely to have an important impact on the sales of their music.

Therefore, the main stakeholders in the music business have still a lot to learn from thirty years of creative destruction. The value chain of the industry has changed: there is more competition at the end of the value chain for users' attention. Users can actively experience the same music in different forms (online video, files, web radios, etc...), therefore the sale of records is destined to produce, proportionally, a smaller value

for the industry than in the pre-digital era. The multiplication of forms of packaging has contributed to move the core value generation up the chain. Instead of being a record selling activity, the music industry is now a business that provides a variety of music experiences to its users; and the more unique is the experience, as it is the case of the live performance, the higher is the price consumers are willing to pay.

Therefore, copyright owners and distributors should lower their expectations of higher margins from the sale of records and in addition to looking for ways to limit the proliferation of unauthorised copies of records, they should look into a better tuning of their price structure and into re-balancing prices depending on form of delivery and the media exposure of the artist. Perhaps, a better strategy would be to differentiate more the price of records between artists and make it proportional to the price that audience is willing to pay for their live performances, i.e. the core activity of the sector. Otherwise, the music industry could follow the steps of other industries that sell services and goods online, and make the price rise along with the quantities bought by the audience. The price of records of relatively unknown artists would remain low until they become famous, while for the famous artists, the low price of the first quantities of albums would reward the hard core fans, who also play an important role in advertising the new products among their peers.

The 'deployment phase' of a Great Surge of Development, which is the phase that follows the bubble(s) and the crisis, is a period of social and institutional rather than technical change. It's a period, as Perez (2009b) defines it, of 'creative construction'. During this period new theories emerge, values change and regulation is likely to become more accepted. It is a period where change is more demand-driven rather than supply-pushed. The music industry's customer base has already given a clear indication on what is expected: more music, better variety and lower prices. So far, however, the music industry response has been to brand the unauthorised use of music files 'illegal' and claim the lack of receipts for their already very wealthy, established artists and their large corporations. Such a narrative does not buy a lot of support particularly in a period of deep economic crisis and claims that 'illegal download' are affecting the poor new artists are unlikely to change this situation. Great benefits, on the other hand, will be drawn by the ones that will adapt and realise that they are no longer music manufacturers, but service providers, which are expected to better tailor their output for different audience segments.

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