

New musical production era: how the value in the musical supply chain has moved.

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Abstract

At the end of the 20th century, Napster had developed a new system to distribute music. Thenceforward the music production, distribution and sales have changed to a digitization era. Artists, recording companies and the retail needed to reinvent their competencies to meet the new behavioral needs of the music consumer.

Keywords: Music Supply Chain, Digitization, Value.

Introduction

This article is the first part of the doctoral thesis that will be based in the new format of the music supply chain from the standpoint of the consumer, artist and music industry. This paper will research the participants of the musical supply chain (music industry, musicians, distributors, retailers and consumers) were affected with music digitization.

A milestone for the change in the consumption pattern of the music was Napster site, which at the end of the twentieth century made possible the exchange of music files easy, quickly, convenient and free.

Since the Napster development, record labels and musicians found themselves cornered with the new music exchange format since physical disks, usually in the form of Compact Disc (CDs) would no longer be necessary for performance their products (music), thereby they lose control over their work product and therefore the physical distribution chain, controlled by record companies would present as a exceeded music exchange model.

On the other hand, some musicians realized that this moment started the “democratization” of information via digital media. No more ties with some record label to record labels are needed by the musicians. With the music digitization, press, distribution and promotion of the artist by a major label is no more necessary; thus the current technology enables anyone to make the whole process of development of music in your own home by using appropriate software.

Nor is it necessary to record more music on physical media with a CD since the digital music can be transmitted from computer to computer, person to person, reducing the need for any artist to be dependent on a label.

Every participant player of a market must be aware that the macro environment and microenvironment are constantly changing. The technological macro environment brought a new production and distribution system for the music industry. Artists and consumers, a priori, had been benefited from technological change, possibly absorbing part of the value chain that was in the hands of the record companies.

Music is prophecy. Its styles and economic organization are ahead of the rest of society because it explores, much faster than material reality can, the entire range of possibilities in a given code. It makes audible the new world that will gradually become visible, that will impose itself and regulate the order of things; it is not only the image of things, but the transcending of the everyday, the herald of the future (Attali, 1984)

Music Digitization

In the 1990s, the arrival of Internet commerce allowed the recording industry's supply chains to work in a brand new distribution model: some Internet sites became known for sale books, videos and CDs on line.

This new way to sell music developed the possibility to earn more money once there was no physical store with many employees to be paid. But an innovation was arriving very fast: Music became available for sale in all formats over the Web, and the music digitization arrived and became a friendly and easy way to reach music. Buyers gained access to a vast array of titles at increasingly lower prices. This posed a serious challenge for the sale of CDs on the Web forcing some online retailers, under pressure from suppliers, to lower CD markups (Hamilton, 2002),

The Web has revolutionized commercial transactions between sellers and buyers. Nowhere has this shift been more evident than in retailing markets, where the Internet has allowed consumers wider access to prices and premiums for many goods and e-services (Rabinovich, 2007).

Today most newly created textual, photographic, audio and video content is available in digital form. Even older content that was not "born digital" can relatively easily be converted to machine-readable formats.

At the same time, the world has become more networked, making it easy to transfer digital content from one person to another. The combination of technological progress in both digitization and computer networking has been a challenge for traditional ways of managing intellectual property (Varian, 2005).

In 1998, the nineteen-year-old college Shawn Fanning developed the site Napster that could locate and transfer files in "real time" using a continuous feedback loop that allowed users of the search engine to display and make accessible their own files on their own, local computers, using music files in MP3 code, enabling the music files exchange in just few minutes without paying for the files (Robinson and Halle, 2002).

In 2001, more than 36 million people constituted the official Napster community, with 640,000 people using the system at any one time consistently, limited only by network resources. Napster drew the ire of the powerful Recording Industry Association of America (RIAA), as well as of prominent recording artists such as Metallica and Dr. Dre (Robinson and Halle, 2002).

The downloading of music from "peer-to-peer" file-sharing networks has increased dramatically since the advent of Napster in 1999. It was estimated that in 2003 three billion MP3 files were downloaded each month (Willcox, 2003).

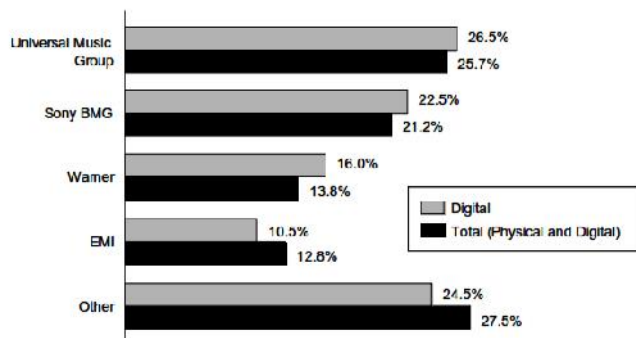
Even with so many legal problems that Napster faced, particularly for pioneering the easiness of exchanging music digitally, part of the population had already incorporated the use of digital music as part of their culture and habits. It would be impossible to remain sluggish in the middle of this movement that changed the way music were exchanged, affecting including the supply chain, as part of these songs did not need one plastic disc and accompanying packaging, much less a physical store full of customers waiting sellers come through your door with money in their pockets.

Many people, behold the number of participants in the Napster, started using the comfort of their home and their computers to consume music, reducing acquisition time, reducing the purchase price, this price was often zero (free) and increasing their music collection. It is also necessary to highlight the evolution of technology and the speed gain on the files exchange in the Internet.

Some bands came forward to the new system of exchanging songs, the most notorious example was the English group Radiohead, which in 2007 released their album *In Rainbows* only in digital format and available on the Internet at the price that the consumer was willing to pay. To their surprise, the average price paid per song was close to the value of a U.S. dollar.

What Radiohead did and how it changed the value within the musical supply chain? Radiohead is a band of 5 Englishmen friends formed in the mid 80's that reached the success with their first album *Pablo Honey*, released in 1993. By 2005, Radiohead had sold over 8 million albums just in the U.S. market; in addition they received some awards in the music industry as the Grammys. In 2007, they decided to present his new album *In Rainbow*, the seventh of their career, only in digital form and to their surprise, the sales were over than one million U.S. dollar in the first month of sales, all aided by Apple's iTunes digital store.

According Elberse and Bergman (2007), the music industry fell by almost 10% from 2006 to 2007, reducing its revenue from USD 32 billion to USD 29 billion, possibly in consequence of changing population habit of music consuming. It's interesting to highlight that the global recorded music industry was dominated by four record companies—Universal Music Group, Sony BMG, Warner, and EMI—which together accounted for almost three-quarters of the physical and digital album sales in 2006.



Source: Adapted from eMarketer, "Recorded Music: Digital Falls Short," November 2007; and Informa Telecoms & Media, "Music and Copyright," July 18, 2007.

Figure 1: The Worldwide Music Industry: Market Shares for Record Labels in 2006:

After being discovered by executives of record companies, artists typically signed long-term contracts—often covering four to six albums—with those companies, which agreed to manufacture, distribute, and promote their music. Record companies also frequently played a role in the production of their artists’ music, but with the advent of digital technology, some artists had taken more control over the production process by self-producing or enlisting producers of their choice (Elberse and Bergman, 2009).

To market a new album, record companies would traditionally select an introductory song from the album, promote it to radio stations, release an accompanying music video to MTV or its kin, and perhaps engage in in-store promotions and advertising in support of the album, but all this system had changed with the technological development of music digitization.

Table 1 Sample Breakdown of the Price of a Physical Album (CD)

Item	Percentage	Dollar Amount
Artist Royalties	15%	\$2.25
Publishing Royalties	5%	\$0.75
Packaging and Manufacturing	5%	\$0.75
Distribution	5%	\$0.75
Marketing and Promotion	15%	\$2.25
Record Company Overhead	20%	\$3.00
Record Company Profit	10%	\$1.50
Retail Overhead	20%	\$2.25
Retail Profit	5%	\$0.75
Retail Price	100%	\$14.99

Source: Adapted from *Wired*, “David Byrne’s Survival Strategies for Emerging Artists—and Megastars,” December 18, 2007; casewriters’ estimates.

Table 2 Sample Breakdown of the Price of a Digital Album Sold on Apple’s iTunes

Item	Percentage	Dollar Amount
Artist’s Share	14%	\$1.40
Record Company’s Share	56%	\$5.60
Apple iTunes’ Share	30%	\$3.00
Retail Price	100%	\$9.99

Source: Adapted from *Wired*, “David Byrne’s Survival Strategies for Emerging Artists—and Megastars,” December 18, 2007; casewriters’ estimates.

On September 30, 2007, Radiohead’s website announced the upcoming release of *In Rainbows* in a fashion unprecedented for a musical of its magnitude. Consumers would have the option of setting their own price for it. No preview tracks or streams of the album were made available on the website, but between September 30 and October 10. When consumers clicked on a question mark next to a blank price box, a message saying “It’s up to you” would display, and a subsequent screen would confirm, “No really, it’s up to you.”

In contrast with the digital download experience of iTunes where users could cherry-pick individual tracks, *In Rainbows* would only be available in its entirety. Radiohead refused to allow its albums to be sold on iTunes for this reason.

Whereas iTunes downloads were equipped with a digital rights management mechanism that limited the number of computers and devices on which the digital file could be played, Radiohead's album in the MP3 file standard had no such restrictions. The average price for the album with 10 songs was close to USD 10.00. *In Rainbows* achieved the first position as most sold album in United Kingdom, France and USA.

Theoretical References: Innovation and Musical Supply Chain

Innovative companies tend to allow their procedures and routines extend beyond the boundaries of the organization. Both flexibility and the communication activities are part of the supply chain and logistics company (Pitt and Clark, 1999).

Planning is important in the innovative process to identify potential risks and define possible contingency plans. Thus one can anticipate potential problems, softening, throughout the development of their solution, reducing potential difficulties (Pitt and Clark, 1999).

New technologies that affected the music supply chain, especially the digitization of music formats through easy sharing files, generated the crisis brought on physical music market.

Largely, these continuing sales declines of physical music format, observed in the first decade of this century, can be seen as a consequence of the introduction of technological innovations that has transformed the paradigms of current music consumption, providing speed and convenience in file sharing cultural products such as music, books and even movies with the advent of Internet broadband.

The cultural industry, especially the music industry, is still poorly studied, despite its economic importance and the challenges that are being imposed on companies in this sector, especially with regard to the impacts related to new information technologies (Herschmann and Kischinhevsky, 2005).

According Cortes (2008), the emergence of technological innovations at intervals ever smaller, brings different consequences in different economic sectors. The Internet is closely related to this innovative process, as it enables collaboration, cooperation and information sharing between people.

More than a simple tool that seeks to assist the human dialogue, the Internet extrapolates its technological character and creates an environment where knowledge is created and disseminated in an intangible format, creating a social revolution of prior knowledge confined to physical media such as CDs, DVDs and printed books.

According to Anderson (2006), in an era of networked consumers, where everything is digital, the economics of distribution are changing radically, as the Internet absorbs almost everything, changing into shop, theater and diffuser for a fraction of the traditional cost. As a consequence of this new way to use the Internet, arises a market with a focus on differentiation of products and services.

Digital music is the dematerialization of physical vehicles that support music as a CD. The dematerialization of music was afforded by digital technologies hindering control by the recording industry, since the distribution of music became fast and instant, with the cost very close to zero.

Record companies, in their traditional business model, working with well-defined roles within each stage of the production process, began to lose control of the chain and especially the value generated and received by the market and the whole music industry based in the twentieth century model.

Premkumar (2003), introduce us one idea: Music has created opportunities to reengineer the supply chain and improve its efficiency. The music industry is undergoing a tumultuous period, as modern communications technologies create new opportunities as well as significant challenges for established Industry players. The availability of free online music had changed definitively the way how people consume music.

Table 3: Cost breakdown of digital distribution

	Physical Distribution	Record Co./ Retail/ Customer	Record Co./ Customer	Artist/ Customer
Total Cost: \$ 15-18	100%	100%	100%	100%
Retail Cost: \$ 5-6.5	35%	30%	10%	10%
Advertising: \$ 2-4	20%	20%	15%	5%
Distribution: \$ 1-1.5	7%	0%	0%	0%
Manufacturing: \$ 1	5%	0%	0%	0%
Studio: \$ 1	5%	5%	5%	5%
Royalty: \$ 2	12%	12%	12%	12%
Overhead: \$ 2	12%	12%	12%	0%
Record Co. Margin: \$ 0.5	4%	4%	4%	0%
Total:	100%	83%	58%	32%

Source: Adapted from Premkumar Alternative Distribute Strategies for Digital Music.

Different strategies exist to digitally distribute music through the supply chain, which has three major participants: artists, record companies, and retailers. Apart from technological issues, multiple marketing and sociological issues must be addressed to ensure digital distribution is successful. Focusing only on supply chain efficiency may provide a solution that cannot be implemented (Premkumar, 2003).

One factor that will influence the restructuring of the industry is the power dynamic among artists, record companies, retailers, and customers. The music industry is dominated by a handful of four major record companies that control the creation, marketing, and distribution of music, and record companies have considerable power over most artists (Premkumar, 2003).

According De Marchi, 2006, recording new facilities have been promoted by the development of new information technologies, it can be noted the growth of independent music production. That means not only increased the amount of music produced as well as the major labels are no longer the only means of access to the music market.

Companies need to search for differing strategies in the face of the contemporary crisis of the musical economy. The major companies have sought to adapt to the challenges of software formats and Internet distribution systems through litigation, diversifying through multimedia, seeking to add new revenue streams (such as ring tones and merchandising) while promoting transparency so that people can see the value added by labels in the networks of the musical economy (Leyshon and Webb, 2005).

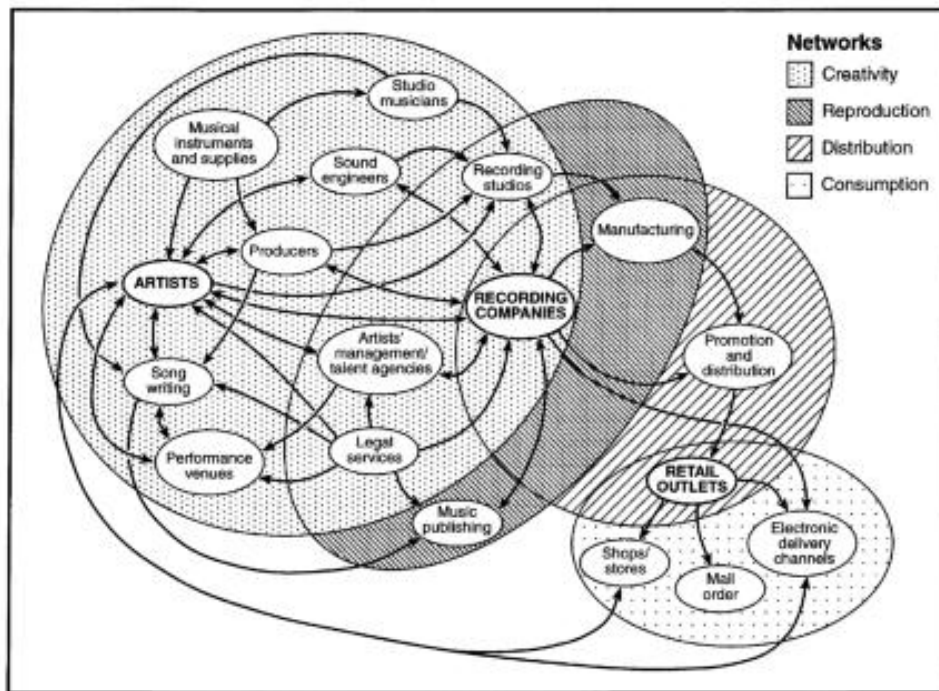


Figure 2: The musical economy as a networked economy. Source: Leyshon and Webb, 2005.

The Internet is changing the way record companies carry out their business activities. Product data and information are increasingly shared electronically, internally and externally. E-mails have become the main form of communication (Graham et al, 2004).

The Internet has not only extended the reach of information but also the richness. Since people started using the Internet they seek help more often from external companies to perform activities. More importantly, the Internet is having a major impact on how music is distributed. Music can be and increasingly is being distributed in digital format through the Internet, both legally and illegally.

In response to the rising demand for digital distribution, and particularly to combat the illegal distributors such as Napster, the major companies tried to establish their own online sales services, but none have been successful (Graham et al, 2004).

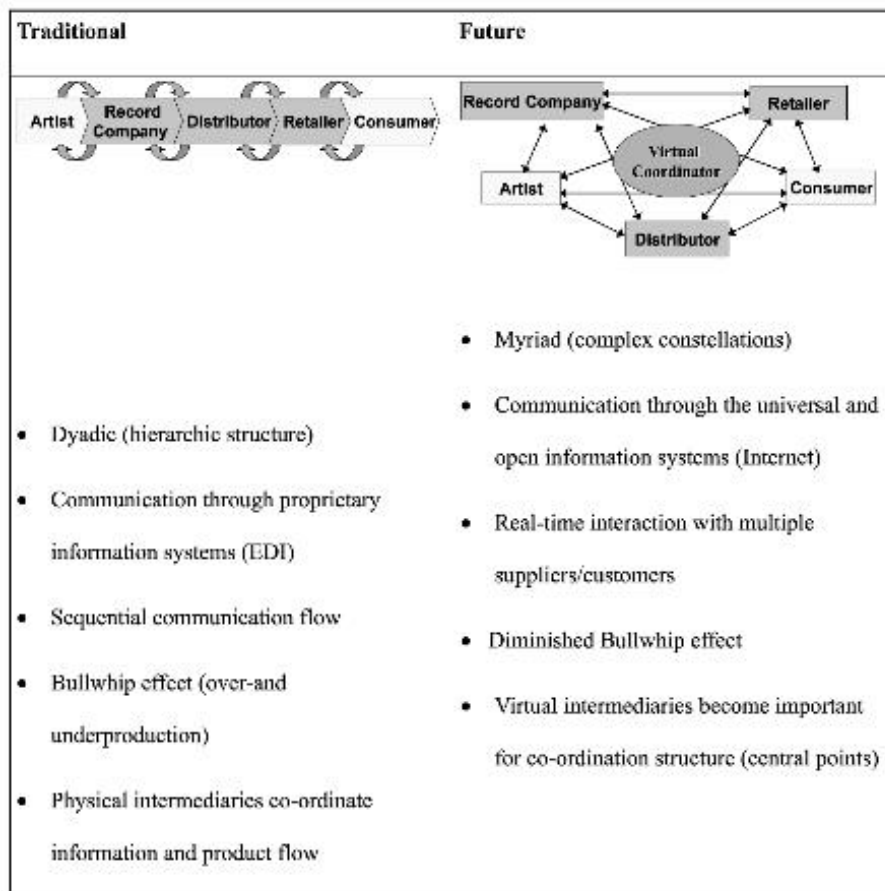


Figure 3: The future musical supply chain. Source: Graham et al, 2004.

Hypothesis

The innovative development in consumer goods companies and services is a feature that enhances the chances of success for companies in the future, short, medium and long term, once seeking to meet the demands and consumer trends.

Each company has its own process of innovations development, ranging from simple concepts to the availability of the release their innovations on store shelves or even a sales site with information and services as like as the music on the Internet.

It is noteworthy that no company should be in the same stagnant innovation system, this system needs to be constantly reviewed and adjusted to give greater impetus to the process of developing new products and services, respecting or following the market preferences and behavior.

The greater the momentum, the greater the possibility of gain speed and responsiveness to market demands, is a demand from consumers, distributors, producers or even a demand from the company itself.

Alongside the music industry had to restructure itself because the business model (production, distribution, promotion and sales) has changed in the last 10-15 years, changing the way consumers interact and seek to acquire music, possibly changing the distribution of value in the supply chain and also the actual music production chain. Hypothesis: the value of music migrated from major labels for artists and for consumers.

Conclusions

The technology and digitization of music brought new formats to listen to and consume music, as well as new platforms that support the distribution of audio at a lower cost, faster and with financial gain for consumers.

Naturally the 4 major labels that had around 75% share of the global music market, which at the beginning of the XXI century came close to \$ 40 billion in annual revenues not stood still awaiting the end of a cycle. They tried to sell audio directly to consumers in stores, but did not realize they had changed the production system and musicians that are recognized worldwide and millions of fans like Radiohead did not need more their services.

The technology also helped the musicians manage to produce and distribute their music without the need for record labels who were also responsible for pressing and distribution of music on physical media.

Meanwhile Apple has managed to develop a profitable model of selling individual songs, a consumer no longer have the need to buy a whole album: iTunes. In parallel with iTunes, Apple also had the benefit of the commercial success of their music players (iPod) and their phones (iPhones) that also play music in an easy and logical to use.

New technological systems certainly offered more freedom for musicians and consumers to engage with the music. Somehow, produce and sell music may have been cheaper, since part of the system, such as the pressing of the CDs, the raw material and the shipping boxes of the CDs, own transport and some physical stores ceased to exist (see the end of the Virgin Records stores).

The big losers were initially the 4 major labels that have lost sales and control over the supply chain, much as a result of their lethargy and inability to quickly adapt to the new system of consumption of music and especially to new consumer habits. The challenge of the next steps of this work is to quantify the gains and losses of value of the “old” supply and production chain and reach to measure how values were assigned in the current musical system.

Limitations and future researches

This article is part of the introduction of the doctoral thesis that I'm developing, providing information, data and observations about the change in people's behavior in the way they consume music. You would notice the change that we had in the last 10-15 years in the music industry, whether in production, distribution, sale and consumption of music.

This work will be developed further and naturally requires a formulation of hypothesis, as well as a quantitative research to assist in the construction of a correlation between the value chain concentrated in major music labels in its business model in the second half of the twentieth century to a new system of production and consumption, potentially reducing costs by eliminating the physical production and distribution, aiming to correlate this new channel with new value relation that fit their participating agents.

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