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File-sharing - A threat to intellectual property rights, or is the music industry just taking us for a spin?

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FILE-SHARING – A THREAT TO INTELLECTUAL PROPERTY RIGHTS, OR IS THE MUSIC INDUSTRY JUST TAKING US FOR A SPIN?

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Abstract

File-sharing has become synonym with the "digital economy" where large music conglomerates as well as certain artist voice strong concern over the impact on their bottom line. This research analyzes the music industry, which has been heavily impacted by a major technological shift i.e. the invention, and rollout, of the Internet. We look to the technological shift that has enabled the downloading phenomenon, as well as analyze the uniqueness of the music industries situation. By comparing the book publishing industry as well as the software industry, which are arguably also influenced by intellectual property rights and plagiarism, we try to find similarities as well as dissimilarities with the music industry. We find that the music industry has used alliances as well as Mergers and Acquisitions in order to consolidate their positions in an attempt to slow down change. There is no consensus on the exact extent of ill effects of filesharing. We point to an unwillingness to achieve convergence of purpose between the IT-community and the much of the music industry. Finally we point to the historical fact that consumers always get what they want in the end, which should indicate a need to find a viable e-commerce solution.

Keywords: Music Industry, piracy, Intellectual property rights, alliances, Internet

1 INTRODUCTION

A lot of public attention has been focused at the economic impact on the music and film industry by filesharing. If we have not tried it out ourselves, most of us know of someone that has tried downloading. What has enabled this change is the more profound technological change that the spread of the Internet has brought about.

Drucker (1994) discusses how a company's business is based on a number of assumptions. These assumptions relate to market, customer, technology and strengths and weaknesses in them. The assumptions that companies have on the three topics must correlate with reality as well as with what the companies' core business is. Drucker (ibid.) argues that the changing external environment forces the company to always question its business assumptions and this is something that we argue that the music industry has failed to do.

One way of understanding what Drucker refers to as the external environment (macro-environment) is what in market analysis terms are called 'PEST'-factors; referring to Political, Economic, Social and Technological (cf. Armstrong, 2006), the Internet is an example of such a technological change.

The rise of the 'digital economy' or 'new economy' came about during the 1990's. Scholars like Tapscott (1996), Brynjolfsson & Kahin (2000) have used the term to denote an era where IT is assumed to have revolutionary impact on society. Rayport & Sivokla (1995) suggested that IT is an enabler to endless replication of transactions. Tapscott (1996) suggest that in the digital economy old rules, norms, and customs will no longer apply and this will cause both relationships as well as economic activity to change and in some cases be even inappropriate.

These are all 'voices' from the past decade; today we know differently. The dot-com era, in most cases, did not deliver the share-holder value promised, several companies went bankrupt, the much often referred 'easiness' of the Internet actually gave rise to challenges not projected in the past. But at the same time, there has been an ever-increasing spread of Internet nodes, which in turn gives rise to an exponential increase in interconnectivity across the world.

According to the Internet World Stats (2007) there were 1,244 Billion users of the Internet per September 30, 2007; which results in a world penetration of nearly 20%. The Internet penetration displays the highest numbers in North America (70%), Australia (55%) and Europe (42%). Hence, downloading is by and large a phenomenon represented by the demand of the Western-oriented societies, due to its relatively large penetration.

The possibility for connectivity to a great number of people as a consequence of the compression of geographical distances due to the Internet, the speed of change as well as the need for change has also increased because of the flexible nature of the new system.

Returning now to the music industry we are interested in how this industry is changing compared to other, but similar, industries. Can it be the case that other industries are experiencing the same kind of claimed sales drop as the music industry, or put more as a general question: what is unique with the music industry?

1.1 Purpose

The purpose of the paper is as follows:

> *To describe and analyze an industry affected by modern piracy mediated by a major technological shift in form of Internet technology.*

The industry at hand is the music industry. And in order to reach this purpose, we are interested in answering the following questions:

- What is the technological shift that has enabled the piracy phenomenon?
- What is unique with what is happening in the music industry?
- Are similar industries experiencing the same kind of transformation?
- Analyze the differences by contrasting the music industry with these references industries.
- And finally, what are the future implications for the music industry?

1.2 Structure of the paper

The approach to the topic is critical realism and a mix of qualitative and quantitative methods. In section 2 the mediating technology change and related phenomena is described. In section 3 the analysis of the music industry presented. Followed by section 4 where possible future directions for the music industry are elaborated upon. Finally, section 5 presents our concluding remarks.

2 TECHNOLOGY CHANGE: INTERNET

The Internet as we know it is a worldwide network, that is built on, or by, a multitude of interconnected computer networks that are for the most part publicly accessible. All the computers on this network share the same common language of communication, namely Internet Protocol (IP). The different networks are built up from businesses, academia, government and other players, who together move information such as mail, chat, music, documents, file transfers and interconnected web pages, which all together form the World Wide Web (www). The Internet Protocol can be said to be the backbone, or rulebook, of the WWW. The authors of this article are especially interested in if, and how, file-transfers or more accurately file sharing has affected the music industry.

The company most often "accused" of starting the file-sharing craze is Napster. This was a Peer-to-Peer (P2P)[1] service, that in reality paved the way for other similar programs such as Kazaa, Morpheus, DC++, BitTorrent and many more that are still operating today even though the original Napster was closed down as early as July of 2001.

2.1 The music industry

The music industry as such is a $35 billion industry world wide (IFPI 2004a). Music plays, and has played, an important part in our everyday life. As a reference, the software industry was worth $380 billion according to Software Magazine (2006). Yet, music matters greatly in our everyday life. Music is available in your phone, in most stores, as background when you see a movie, in the car, as a leisure activity and so forth.

Currently there are four big players – in the music industry, representing between 70-75 % of the total market. Sony BMG is the result from a merger between the music division of Sony and BMG in 2005[2]. Sony owns 50% of the shares and Bertelsmann Group the other 50%. The three other players are Universal Music Group (owned by French Vivendi), Warner and EMI.

In an attempt to get a more detailed and exact understanding of the music industry sales, the annual reports from the five companies were examined. The purpose of the comparison (table 1) is to see how

[1] P2P file sharing is distinct from file trading in that downloading files from a P2P network does not require uploading, although some networks either provide incentives for uploading such as credits or forcing the sharing of files being currently downloaded.

[2] References to the big five, refers to the pre-SONY BMG period.

sales have been affected in each of the individual cases. Therefore, the sales numbers have not been adjusted to a common currency.

In four out of five cases the sales have dropped. Comments from senior management from these companies suggest that some of the lost sales of physical music have been replaced by digital sales, but not to the extent that it makes up for the lost sales on the physical side. Consequently, a more general remark about the industry is that the market as such is shrinking.

Table 1 Sales comparison – The Big Four/Five

Year	2000	2001	2002	2003	2004	2005	2006	Sales comment
Company								
Sony Music	707 ''' ¥	612 ''' ¥	643 ''' ¥	636 ''' ¥	560 ''' ¥	N/A	N/A	Sales dropping
EMI (Rec. Music)	2 033 '' £	2 282 '' £	2 029 '' £	1 774 '' £	1 723 '' £	1 542 '' £	1 378 '' £	Sales dropping
UMG (Music)	N/A	N/A	6 276 '' €	4 974 '' €	4 819 '' €	4 893 '' €	4 955 '' €	Sales dropping (cf. 2002)
BMG (Music division)	N/A	2 982 '' €	2 714 '' €	2 712 '' €	2 547 '' €	2 128 '' €	2 017 '' €	Sales dropping
Warner (Rec. Music)	N/A	N/A	N/A	N/A	2859 '' $	2924 '' $	3005 '' $	Sales increasing

The prime reason for dropped sales are new distribution forms using the Internet and mobile phones. The Internet functions as an enabler as well as a threat simultaneously. Digital pirates constitute a threat, but also industrial piracy, e.g. counterfeiting where illegal physical copies of CDs are made; often in smaller industrial 'labs'. This problem is not very widespread in the Western Countries, but more often reported from Latin America and Asia.

Looking then into more detail to some of the remarks from top management of the largest companies:

Piracy, both organized and casual, continues to take a large proportion of potential earnings from the pockets of our shareholders and artists. Protecting our intellectual property remains a top priority for EMI. (Annual Report 2006, EMI, p. 3)

The industry and UMG are increasing their anti-piracy activities with a multipronged approach focusing on legal action, including participation in industry legislative efforts, public relations and education, and technical countermeasures while offering consumers new products and services. (Annual Report 2006, Universal Music Group, p. 46)

SMEI is also continuing its work with the Recording Industry Association of America (RIAA) and the International Federation of the Phonographic Industry (IFPI) on the industry's anti-piracy efforts, and has led the industry in the development of an innovative initiative known as the Campus Action Network (CAN). CAN is designed to help colleges and universities across the country launch legal online music services and combat illegal filesharing on campus. (Annual Report 2004, Sony, p. 50)

Judging from the comments in the annual reports, file-sharing is a top-management concern. It is also a kind of battle that needs to be fought on several arenas, e.g. through education as well as by lobbying through the different national legal systems.

However, looking purely at the music industry it can be concluded that piracy has affected their business to a significant extent, which confirms the conclusions by Peitz and Waelbrock (2006), Liebowitz (2004) and the music industry as well. Consequently, it makes sense to say that the music

industry reacts to lost sales by pursuing both the offenders and also changes the way they make their money, i.e. re-configuring their business model.

2.2 Drivers for alliance building

The software industry is potentially threatened by the risk of piracy related to use of software that is not licensed to the user. Being a digital kind of product it lends itself to be easily distributed through the Internet. The interesting case of the book publishing industry is that it reassembles the music industry in certain important aspects. One of the important features of the book publishing industry is the ownership, i.e. TimeWarner and Bertelsmann Group both stand behind two of the world's largest publishing houses; DC Comics and Random House.

2.2.1 The book publishing industry

According to Hunt (2007) one of the first recorded uses of piracy on intellectual property rights was in 1701 when Daniel Dafoe published the poem "The true born Englishman" which was promptly copied and sold in the streets of London without Dafoe's permission. Although the first copyright act appears first in 1709 this could be regarded as a copyright infringement.

The interesting thing about this was that Dafoe himself was not very upset by the plagiarism, since the wide circulation of his work had made him famous and enabled him to sell more of his coming works. In this case there were definitive gains from the circulation of the material.

Another example where the gains have not been so evident is the Harry Potter books. According to March (2007) legitimate book sales in India where down an estimated 50% due to pirate prints. In China there where "new" sequels being released in 2002 where the content was made up from other books where the character names had been swapped to match with Harry Potter characters. J.K. Rowlings lawyers have pursued all known cases of copyright infringements. The interesting aspect here is that the publishing industry probably has tried to stem the flow of piracy longer than any other business, where new technology has continually threatened the industry of more than 300 years and yet they are still here even though there are still pirate prints around.

Having gone through the annual reports dating back to 2002 for the book publishing industry for the 4 biggest book publishers of English-speaking books, i.e. HarperCollins, Penguin, Random House and Simon & Schuster, we can conclude that the none of these annual reports comments upon being effected by illegal downloading through the Internet; nor are there any reports on dropped sales as a consequence of file-sharing.

2.2.2 The software industry

In 2004 the director of research at IDC John Gantz claimed (in Locklear, 2004) that the piracy loss figures that are reported by the software industry are highly misleading. According to their study, done on the behest of the "Business Software Alliance" (BSA), only one out of ten unauthorized copies of software is really a lost sale. The correct term to be used when discussing loss figures should be "retail value of pirate software" according to John Gantz, since many of the copies out there are in developing nations where the users just can not afford to buy it.

According to Davis (2007) this is something that was backed by Romania's president Traian Basescu, who claimed that "*piracy rocks*" no later than in February of 2007. He went on to thank Bill Gates for opening a new global technology support centre in Bucharest, which ironically was possible due in large measure to the widespread piracy in the country, which has enabled the employees to be familiar with the wares they need to give support on. According to the president "*Piracy helped the young generation discover computers. It set off the development of the IT industry in Romania*."

Hunt (2007) points out that Jeff Raikes, president of Microsoft's business group has admitted to the fact that pirated Windows is easily the best marketing tool they have ever had and was quoted to saying: "*If they're going to pirate somebody, we want it to be us rather than somebody else.*"

Similarly for the software industry, the annual reports of Microsoft and Adobe were examined back to 2002. Microsoft's operating system and its Office suite are common products subject to illegal downloading. Adobe is the software house that develops some of the most important tools for the graphic- and image industry and the suite of applications offered by Adobe are often subject to downloading and copyright breaches.

We may not be able to protect our intellectual property rights against piracy, infringement of our patents by third parties, or declining legal protection for intellectual property. We defend our intellectual property rights and combat unlicensed copying and use of software and intellectual property rights through a variety of techniques. (Microsoft, Annual Report 2006, p. 15)

Although we defend our intellectual property rights and combat unlicensed copying and use of software and intellectual property rights through a variety of techniques, preventing unauthorized use or infringement of our rights is inherently difficult. (Adobe, Annual Report 2006, p. 34)

Piracy is seen, both by Microsoft and Adobe, as just one type of threat among many others, and also a threat that they acknowledge being difficult to fight. That is a different view than the one conveyed by the music industry. On the other hand and as indicated by table 2, neither Microsoft nor Adobe has suffered any drops in their sales since 2002.

Table 2 Sales figures Adobe and Microsoft

Year/Company	2002	2003	2004	2005	2006	2007
Adobe	1,165 '' $	1,295 '' $	1,667 '' $	1,966 '' $	2,575 '' $	3,158 '' $
Microsoft	28,365 '' $	32,187 '' $	36,835 '' $	39,788 '' $	44,282 '' $	51,122 '' $

2.3 Intermediary conclusion

The music industry has experienced a considerable drop in sales

Addressing the piracy and illegal downloading as the main threat has been a central issue to the top management of the music industry when communicating with the shareholders.

The book publishing industry does not actively recognize downloading as a strategic threat to their operations and sales.

The software industry is affected by piracy of different kinds. However, a more complex pattern of more general business threats exist in that industry.

3 ANALYSIS OF THE MUSIC INDUSTRY

As indicated above, it can be stated that the music industry informs their share-holders about the effects of illegal downloading. Neither the book publishing industry nor the software industry makes such a strong case about piracy to their shareholders. How are we to make sense out of the differences observed between the different industries?

Departing from the five forces-model suggested by Porter (1980) a division is made about several competing forces that needs to be taken into consideration when analyzing an industry; the supplier's bargaining power, bargaining power of the customers, internal competition, threat of substitute products and, finally, the threat of new entrants.

Looking into more details to the category of *threat from substitute products* where switching costs become a central theme; the possible migration from one product to another in this case is relatively low when it comes to music due to the 'low-cognitive' nature of the product. Music and films are 'consumed' in a less complex manner than for example books and software, which creates a situation of low switching costs as regards substitute products. However, music works complementary to movies, mobile phones, MP3-players etc. and that is where the future revenue streams exist in the future. The quotation from the EMI Annual Report of 2006 confirms this view:

We continued to broaden our digital distribution channels globally by entering into agreements with partners who will make our music available on their platforms. During the year, we entered into partnerships including: a multi-territory deal with Apple; regional partnerships with MTV, Yahoo, Last.fm and Sony; and national agreements with Amazon in the US, Baidu in China, Napster in Germany and Playlouder and BT Vision in the UK. (EMI, Annual Report 2006, pp. 18-19)

Although piracy holds a threat to the software industry as well as the book publishing industry the nature of the products is somewhat different, e.g. a piece of software or book has an overall longer 'consumption durability' that makes them less vulnerable to the effects of piracy. There are exceptions of course but a large amount of today's music have short 'consumption durability'. This is has worked against the music industry in the sense that, for instance, music is consumed once or many times over the radio, where the music is free to the consumer and on top of this it is legal to record the radio music and listen to again i.e. there is already a low threshold towards using the music freely.

3.1 Bargaining power of suppliers

Assuming that artists are as numerous and fragmented in the music industry as in the book publishing industry; the software industry is somewhat different in the sense that in what is referred to as the 'industry' the companies are not only intermediaries between the artist and the consumers, but rather both the artist and the intermediary at the same time. Hence, the upstream threat visible in the music industry, where artist may take over responsibilities that the music industry served in the past, is not present in the same way in the software industry. Although a reservation here should be made about conflicts with patent holders to base technology used in assembled end-user software or technology. The typical large software house controls more of the value-creating process.

The music industry has lived strongly on the asymmetrical power relationship that exists between the industry and the music creators. One could even claim that it has a strong institutional character where bands artists long to be 'signed' to a large record company or label. Having been the cash cow for decades, the relationship is being questioned by the music creators to a larger extent.

3.2 Bargaining power of customers

In the case of the industry software, end-users are often corporations and consumers. The existence of a clear corporate customer works to the software industry's benefit. Copyright protection can be more easily upheld in the case of a corporate counterpart. A more detailed documentation of the customer together with legal accounting principles works to the software industry's benefit. The wide demand from both consumers and corporations also makes the end-user fragmented in many instances, which favors the industry.

The fact that there is a limited amount of available alternatives of operating systems and the bundling with the office suite of MS Office has rendered Microsoft a very strong bargaining position vis-à-vis its customers.

The music industry and the book publishing industry on the other hand have potentially much less loyal customer base than the software industry. Customers can easily change their consumption patterns by putting their next potential spending on a different kind of entertainment media than music, e.g. movies, Internet, TV or even illegal downloading.

3.3 Internal competition

All industries studied are subject to internal competition. But what is more interesting to see is the internal cooperation in the music industry, where forces are joined in order to limit illegal downloading.

Both the music publishing industry and the book publishing are somewhat similar; 'Imprints' is the corresponding term to the music industry's 'record labels' and many of the larger publishing houses maintain a large number of imprints.

3.4 Threat of new entrants

Of the three industries studied the software industry is probably the one that has the lowest barriers of entry. One example of this is the open source-movement driven by Linux as a kind of prime example on an operating systems that threatens the market position of Microsoft Windows. Getting access to established sales channels of books and music is a difficult task compared to how easily software can be distributed through the Internet.

3.5 Summary of findings

Concluding the industry analysis, the following points can be made:

In the past, the music industry has thrived on the relationship between the music industry and the suppliers of music, i.e. the artists, but also on controlling the distribution forms to their customers.

New technology-enabled distribution forms have loosened the music industry's control of the distribution and also enabled illegal downloading.

Artists see possibilities of by-passing the music distributors.

Music and songs per se, are easily consumed and subject to low switching costs to complementary means of entertainment in comparison to the publishing industry and the software industry.

4 FUTURE DIRECTIONS FOR THE MUSIC INDUSTRY

As discussed earlier, the use of Music is something that affects all of us whether or not we listen to this music of our iPod, a CD or sitting in the outback listening to a Didgeridoo. Because of this widespread use of music the industry as such is well adapted at alliance building as well as M&As, which have been used to form partnerships and alliances worldwide. Lorange and Roos et al. (1992) describe how alliances can be used offensively, by creating or accessing markets in order to define and/or set industry standards, or defensively in order to protect current market positions, gaining economies of scale or sharing financial risks.

It would seem as if the music industry to date has used alliances and M&A to consolidate their position on the market, being unwilling to change and adapt. Considering that it is very hard to research the total number of music sales today, since we have music in phones, computers, and shopping malls as well as on CDs and in Movies, it is hard to pay heed to talks about the industry being on the verge of collapse. Rather there is an issue of an unwillingness to change and adapt to the new rules of engagement that the Internet and electronic sales have brought to the negotiating table.

4.1 Other values from file-sharing?

Oberholtzer-Gee et al. (2007) debate the promotional value power of file-sharing, but other authors such as Hunt (2007), Locklear (2004), SIIA (2007), and Wilen (2007) also carry discussions in and around this area. The music industry's point of view has been that all forms of file-sharing hurt their sales, but there has been proof of other views, most recently Radiohead released its new album only on line and let their audience decide the price they are willing to pay. This is interesting since Radiohead was also one of the first bands to take a different view of file-sharing. In 2000 their album Kid A came into circulation on the internet before it was actually released as a CD, but contrary to regular beliefs and opinions of file-sharing the result for Radiohead was to hit the #1 spot on the billboard 200 sales chart its very first week in real circulation.

4.2 A changing landscape

It seems as if many artists as well as musicians of today actually embrace the Internet as a tool and platform they can use both to create and sell their work, and more importantly it is a very powerful channel for promotion. According to Madden (2004) the big issue is the actual impact of the *free* file-sharing and the effect this has on copyright issues.

There is no doubt that illegal downloading of files has become more common as the Internet diffusion has grown. The ongoing debate seems to be centered on copyright issues in the music industry and whether or not file-sharing has helped or hindered sales of CDs. Most studies – including ours – and academic articles show that file sharing affects CD sales in a negative way. Peitz & Waelbroeck (2006) argue that the possibility to download songs and text at any time from anywhere over the Internet on the one hand increases the value of the product, but on the other hand that rights management tools, e.g. DRM-protection, can restrict and even lock the use of the digital media.

This unwillingness to achieve convergence of purpose between much of the music industry and the IT community is maybe what lies at the heart of the problem. There are 4 conglomerates, who control and own much of the music labels. EMI, Sony BMG, Time Warner and Vivendi Universal controlled 84% of the US market and 79% of the European music market in 2002. The fact that some of them also have a diversified product portfolio seen from a corporate view, i.e. they control many other parts of the different verticals of the industry, such as hardware for playing different media, e.g. CD, DVD, projectors etc. creates a situation of almost total control. The typical scenario when you have an oligopoly is to have an unwillingness and resistance to change, or even to participate in any form of partnerships outside of the small group (LINFO, 2006).

According to Dr Jo Bryce, University of Central Lancashire "The purchase of counterfeit goods or illegal downloading are seen as normal leisure practices" In the same article by Hermedia (2005) "Teenagers are being tactical spenders," said Dr Bryce. "The money saved lets them spend more on mobile phones, going to the cinema or eating out." This is an interesting observation, since it would insinuate that the money that is not taken in on selling an actual record is taken in from movies or by downloading ring-tones to the mobile phone both of which are markets that are heavily controlled by many of the same players that control the music scene.

5 CONCLUDING REMARKS

It would seem as if the "pirates" are here to stay and the best way to handle this is to embrace the change. History has shown that the consumers always get what they want in the end. Consider the upheaval the film industry had towards VCRs when they first came to market or the music industries cry when cassette tapes where introduced. Over the years we have seen a number of new technologies being introduced in the music industry as well as the movie industry and most of the time there have been problems and downturn in sales of the current predominant media channel. It would be

interesting to do a study of the dips in sales after external events affect the sales of an industry, i.e. how were sales affected after the Disco era was over? How were LP sales affected by CDs, How were CDs affected by DVDs and maybe mp3s? How was cinema attendance affected by Cable TV? The list goes on and on.

We arrive back to the statement of complexity. The new market is extremely complex where the big musical giants are also the big movie giants, but also giants in producing hardware for both markets. When you are both vertically and horizontally integrated it is had to know where one market ends and another begins and the real overall loss or gain of the full market is something probably only the big four themselves can truthfully answer.

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