

Electronic Music Distribution: Players, Stakes, and the Public Interest

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Chapter 1

Introduction

Forrester Research predicts that sales from electronic distribution of music will reach \$1.1 billion, or 16 percent of total online music sales in the US by 2003. This figure represents 7.1 percent of total projected music industry sales of \$15.4 billion.¹ The route toward the realization of this figure will alter the overall character of the music industry. As the Internet becomes a larger player in the music business, the market will push the industry to reshape many of its previous business models as they relate to artists, manufacturing, production, retailing, and consumer habits. Concurrently, there will be a push from the music industry toward greater regulation of electronic means for online transactions involving music. Market forces involved with implementing new computer distribution models in the music industry will lead to a more efficient and egalitarian industry structure.

This paper serves to analyze how the introduction of electronic music distribution will reshape music industry relationships. As much of the technology discussed is still in its early stages of development and deployment, it is important to understand the potentials of these technologies, even if they have not yet produced any tangible industry changes. To this end, special attention is paid to various competing computer-mediated distribution models, various organizational and state interests, and possible pitfalls. The most important factor examined, however, are those who decide, with their capital, what the future of the music industry will look like—consumers.

Changes in technology will affect each actor in the music industry model. Companies responsible for manufacturing, licensing, and retail will see a major

reorganization in the industry landscape. Various types of artists, large and small, and of different genres, will be affected in different ways. Actors will also have to deal with the potential problems related to counterfeit hardcopy music media and networked music piracy. In the near future, it will be crucial for the music industry to understand each of the problems and possibilities associated with electronic distribution.

¹ Hardie, Mark E. *Virtual Music Rocks*. The Forrester Report. March 1999. 7.

Chapter 2

Computer-Mediated Music Distribution

Although the retail channel has only existed for a few years, e-commerce involving music is already a major force in music distribution. The high degree of development is facilitated by the inherent characteristics of music that lend well toward electronic retail include:

- music is a commodity well-known by consumers,
- music is relatively inexpensive so easily purchased on a whim,
- there are large varieties of music, and thus there is mass appeal, (and)
- music is easy to distribute digitally or in hardcopy.

Internet-aided distribution of music to the public takes two major forms. These include e-commerce sales of hard-copy CDs or cassettes conducted over the Internet and shipped via a package delivery service, and the sale of purely digital media delivered over the Internet as a computer file. While the core end product, an audio recording, produces similar value to the consumer as music in both instances, the two call for notably different business models. Currently, the vast majority of Internet music sales involve hard-copy media. Web sites allow customers to purchase CDs or cassettes that the retailer ships, in hardcopy, to the buyer or a third party by a package delivery service.

Electronic music distribution is the transmission of music over computer networks in the form of electronic signals. Instead of distributing music in a tangible media, it is communicated in an intangible medium. Consumers download an individual song to their computer's hard drive memory, or listen to the composition as they download it without saving it to their hard drive, after purchasing it through an online transaction.

The massive unauthorized dissemination of compressed digital recordings, such as those in MPEG-1 Layer III, or MP3, compressed format proves that people find value in the electronic mode of obtaining and storing music. The questions remain, however, as to whether those downloading MP3's are potential consumers and whether the demand for "free" music translates into an indication that the market at large is willing to pay for downloaded music. As the music industry works to develop legitimate electronic distribution models, it will be important for them to use MP3 as an example.

Current Industry Leaders

The major players in the direct retail sale of major-label CDs over the Internet include the sites CDnow and Music Boulevard, whose parent companies recently merged to give them a combined estimated 45 percent share of the online music market, and Amazon.com.² A large part of the success of these companies lies in their abilities to sell to the average Internet user with limited computer skills. The consumer has the ability to utilize site search engines to find albums that fit their tastes and can often listen to samples of songs on the album online prior to completing their purchase. Album prices, including shipping, are often cheaper than those found in brick-and-mortar stores. Once the transaction is completed, the retailer ships the merchandise using the consumer's preferred shipping method. The purchase process is also simple and fast. When a previous customer uses an e-commerce site, saved customer data is immediately loaded and presented. The purchaser must merely select the items for purchase and confirm their user information.

² Ragas, Matthew. "Is Amazon Caught in a Squeeze Play?" *Red Herring Online*. 12 October 1998.

Music clubs, which have traditionally sold recordings through the mail, have also begun to use e-commerce to sell using a variation on their club model, but with catalogs published online and sales conducted over the Internet. The major companies, BMG and Columbia House, are currently using the Internet as another mode for the consumer to participate in their club programs and as a marketing tool. For the most part, these sites are currently tangential to the companies' traditional selling methodology. With BMGMusicService.com, for example, the user can order online, but payment can only make payment through postal mail, by check or money order.

Liquid Audio is one of the major companies providing direct downloads of songs purchased through the Web. The fact that it has seen 25 percent increases in digital download sales every month of 1998 indicates that its business model draws customers.³ Consumers can buy and download songs, usually priced at 99 cents each, to their computers. Users can listen to the songs, encoded using Dolby AC-3 compression, on their computers and are encouraged to save them to a recordable CD using a CD-R drive. N2K handles purchases of Liquid Audio recordings. While the music is simple to download and CD-quality, record labels have been reluctant to sell their titles through this medium since they fear that their copyrights may be violated. Users can easily copy and share downloaded music when it is already stored in digital format on their computers. Furthermore, with most consumers still using modems that transmit data over conventional twisted-pair telephone wiring with relatively low bandwidth, it often takes most potential customers significantly more than ten minutes to download a song. At current modem speeds, it could easily take hours to download an entire album.

³ Reece, Doug. "Digital Distribution Making Inroads." *Billboard*. 22 August 1998.

Alternative Sales Models

An alternative pay model for sales of downloaded music involves services that allow musicians to sell directly to the public. Optimally, this model lets artists' own fan bases underwrite the artist instead of a record company, a potentially appealing prospect for many musicians. Theoretically, once the artist has established that there is a market for their recordings, they are able to use this as a bargaining tool in negotiations with record companies. Seventies musician Todd Rundgren currently operates a site that, for an annual fee, provides access to resources such as the musician's works in progress, his writings, and "Webcasts" of live performances. In order for this type of a system to function properly, the artists must be able to develop a fan base. This is one of the major functions of a traditional record company, and one that, at this stage of development, is not easily carried out solely by a Web site.

Sony Music Online has developed the first pay-per-listen online jukebox. This tool allows customers to pay by the song for access to several hundred songs in the Sony catalog. After paying for a number of songs, users can listen to the compositions on demand for a 24-hour period. The music is streamed, or downloaded concurrently as the user listens. With today's technology and bandwidth limitations, this does not allow for quality much above that of FM radio. Due to the lesser quality, Sony does not feel that many users will record the songs for later listening.⁴ However, in the past it has usually been the case that when consumers pay for a product such as music, they would like to retain a permanent copy. This has been the case, for example, with pay-per-view cable movies, which consumers often videotape while viewing even though videotape copies.

⁴ Reece, Doug. "Music Firms Using New Media to Alter Trade Biz Models." *Billboard*. 14 November, 1998.

If users record copies of the songs that they pay for Sony to stream to them, they could potentially recreate an entire album for only \$2.50.

Companies attempting to burn custom CDs for consumers have, so far, not been profitable. MP3.com, for example, offers legitimate MP3 downloads as well as custom-CDs delivered in hardcopy to consumers. Customers can select whatever tracks they would like to include on their CD from the Web site and have the CD burned and shipped to them. Major record labels are reluctant to allow consumers to pick and choose which songs they would like to purchase, however, since this yields a lower profit margin as compared to album sales. If there is potential that a consumer may buy the whole album instead of merely a single song, the company loses much potential profit. Therefore, most of the titles currently available are from older albums and artists who are not well established.

The Dutch music licensing agency, Buma/Stemra, is currently testing a plan to allow people and companies to post commercial music on the Internet in exchange for paying a monthly fee. Under the plan, the server must be in Holland, the Web site administrator must have a license with Buma/Stemra, and the administrator must pay a monthly fee of the equivalent of \$5 or \$50 depending on the amount of music available on the site. Site administrators, in turn, cannot charge for the music and there are quality restrictions for music greater than 30 seconds in length.⁵ This innovative plan only produces a small, though steady, revenue stream through the licensing agency to artists. However, the agency is likely testing whether publishing music online in the format dictated will provide increased exposure that will stimulate traditional music sales.

⁵ Buma/Stemra Web Site. Internet: <http://www.buma.nl/>.

Blueprints for Retail Success

Even with all of these varying retail models, none of the models, or individual companies, has yet seen much profit. While some models do seem better at gaining revenue than others, the industry remains immature as technologies are not yet fully developed. In addition, many players' uncertainty has led them to refrain from investing the greater amounts of capital necessary to push their development ahead at a faster pace. As e-commerce involving music does progress, however, we will see that those models that make the best use of the Internet's advantages over brick-and-mortar stores will be the ones that remain. These advantages include:

- I. customizability,
- II. speed to consumer,
- III. higher inventory turnover, (and)
- IV. higher sales to employee ratio.

I. Customizability

An Internet user's shopping experience can be custom tailored to that users needs and desires. Using specialized software, an e-commerce site can analyze customer information, including past buying habits, and make recommendations based upon this data. The front page of the Web site that the user first sees can immediately present these recommendations. One of the first commerce sites successful at this type of one-to-one marketing was online bookseller Amazon.com using a system known as "collaborative-filtering technology". This marketing strategy has proven successful at getting repeat customers, who require much lower marketing costs than those associated with drawing first-time buyers. Music retailers can also implement this type of software.

II. Speed to Consumer

E-commerce consumers demand that the products they purchase are available to them quickly. Brick-and-mortar stores can promise faster service when items are held in their stock. However, when items are unavailable immediately, online retailers often have a speed advantage. They have much larger warehouses and well-developed means of getting non-warehoused items from distributors. Once in their possession, the speed to consumer usually only entails one to a few days.

When a retailer ships to the consumer via parcel post, a few factors can affect speed. These include inventory size, proximity to distributors, and speed of package delivery service in getting the music to the buyer. Those firms that best optimize these factors will enjoy greater success. The current major online retailers realize the importance of the time it takes to reach the consumer. Often, they will upgrade the shipping method to the customer free of charge in an effort to increase customer satisfaction.

Electronic distribution methods are definitely the fastest way of getting music to the e-commerce customer. They allow the user to possess audio recordings in only as long as the duration of the download process. While bandwidth is still a scarcity and download times for quality recordings remain high, those electronic distribution retailers that use the best compression methods and have the fastest server computers—while successfully negotiating contracts with copyright holders—will be the most successful. As the public gains access to faster network connections, however, the time it takes to download digital music will decrease.

III. Higher Inventory Turnover

Web sales companies, especially those involved in selling physical media, experience increasing returns to scale. That is, as the firms get larger, they are able to finance the maintenance of a larger inventory and that inventory will experience higher turnover. It is to a firm's advantage to hold items in inventory for a shortened period since the retailer loses interest as the merchandise sits in stock. Physical stores must stock a great deal of inventory that they do not sell quickly so that they can offer customers an adequate selection of albums. For as long as the duration between the time when the store pays for those items and the time when the store sells the items to the customer, they are losing interest. Online stores, with larger customer bases, and thus higher inventory turnover, often receive payment from customers through credit cards before they even must pay for their own inventory. Thus, they gain usage of interest-free money for a considerable amount of time. When volume is high, this float can create very substantial amounts of cash.

Sales of purely digital albums, on the other hand, may not accrue this type of float cash for retailers. Initially, music copyright holders may not seek payment for the sale of their recordings immediately. However, it is likely that the situation will change quickly as the industry develops. Then, those holding the rights to the music will demand payment from retailers upon sale of the data. With electronic distribution and electronic payment systems, it will be increasingly simple to transfer the funds. Thus, the improved cash position that retailers of physical media were able to command is lost.

IV. Higher Sales to Employee Ratio

Another major advantage that online merchants have over brick-and-mortar establishments is their ability to serve more customers using fewer staff. Physical stores often need a great deal of support staff to conduct business including inventory control personnel, cash register operators, customer support, security personnel, and management. While e-commerce sites do need to employ customer service representatives, computer programmers, management, and others, they do not require as many employees per completed sale as do physical stores. This is due to the fact that, other than customer service representatives, employee need is not highly sensitive to sales volume. Salary expense is a significant cost for traditional retailers. Therefore, at higher volume, e-commerce sites have a major cost advantage.

Toward Market Segmentation

One area where online retailers are currently at a disadvantage, in terms of both salary expense and general cost is in their marketing function. Costs associated with marketing are the major factor keeping current online music retailers from producing profits. The major players in the online music retailing arena have been spending very large portions of their budgets on marketing expenses. However, all online firms are still in stages of infancy relative to their brick-and-mortar counterparts. As they begin to mature, and attain greater customer bases, marketing costs will begin to drop.

The costs may still be substantial, however. For traditional retailers, the physical location is a marketing tool in itself. Brick-and-mortar retailers generate a large portion of sales when passersby notice the retailer and decide to enter. Translating this phenomenon to the online world remains a challenge. Those retailers that are able to

effectively use online media for advertising, and use innovative and more cost effective forms of other advertising will likely be profitable sooner. Until now, Internet marketing has not been very successful, producing only small returns on investment. However, with time, and probably with increased bandwidth and improved software, online marketers will be able to improve their focus and increase the effectiveness of their advertising.

Market segmentation will become increasingly necessary as competition for consumers intensifies among retailers. As John MacDonald and Jim Tobin have described future scenarios of online advertising, by zeroing in on individual consumers, marketers will be able to perform “surgical strikes” instead of “carpet bombing”.⁶ Consumer data warehouses, either independent or run by retailers, will use software to predict what products and types of advertising will be useful to what consumers. As technology improves, segmentation will become more accurate and individualized. Software will understand potential consumer behavior and thought processes in terms of their past behavior, and data based on other consumers.

The Appeal of Traditional Retailers

It is questionable as to what extent the appeal of shopping for music in a physical store will remain appealing to e-commerce-enabled consumers. With the moderate success—and threat—of online retailers, brick-and-mortar retailers emphasize the more personalized customer service and value-added items that they can offer in their own stores such as recommendations. It is true that in many instances, more personalized and interactive service can be offered when human contact is involved. However, it is extremely simple to read many reviews of commodities such as albums online from

different sources, provided both by the retailer and by third-parties. As software improves, increasingly interactive and knowledgeable virtual assistants will be able to help consumers as they try to find music that suits their tastes.

⁶ MacDonald, John, and Jim Tobin. 1998. "Customer Empowerment in the Digital Economy," in Tapscott, Don, Alex Lowy, and David Ticoll eds., *Blueprint to the Digital Economy*, p. 205. New York: McGraw-Hill.

Chapter 3

Going Digital

Almost exclusively, businesses and people previously outside of the music industry pioneered new methods of selling music using the Internet. Neither major labels nor brick-and-mortar retailers have yet generated much online direct sales volume.

While the traditional music industry players did not have experience conducting sales over the Internet, they did have access to distribution channels and general industry knowledge that would have given them possible competitive advantages. Therefore, the industry's initial lack of participation exhibits its general aversion and resistance to this type of a change in its business model. While some of the major labels and traditional retailers are now directly involved in the sales of music via e-commerce channels, only a very small percentage of online music sales are generated by these efforts.

Meanwhile, the new Internet sales channel has proven lucrative to other players. While little profit has yet been garnered via the new models, market indications show that there is substantial investor interest and that profitability will likely come soon. While the music industry is apprehensive about the implications of the new sales model, its actions have illustrated that it does not want to be left without some role. They seem to have realized the inevitability of electronic music distribution. To this end, industry players are aggressively working with technology groups and firms in efforts to develop possible standards and hardware for electronic music distribution.

Jupiter Communications has predicted that sales from electronic music distribution of music would only reach \$30 million, or 2.2 percent, of total online music

sales in the US by 2002.⁷ It is difficult to ascertain the accuracy of this estimate however. Forrester Research has estimated that digital download sales will amount to \$552 million by 2002, and \$1.1 billion by 2003. Regardless, the number of firms in the electronic distribution portion of the industry and the financial investments involved indicate that there is, at the least, a large amount of investor interest in its potential. Therefore, in the future, possibly a few more years into the next century, purely digital media will become a viable alternative for consumers to the traditional forms of music.

Electronic distribution introduces both new possibilities and new problems for businesses working with music. All parties will be able to distribute music more efficiently using electronic distribution. This includes both authorized parties and pirates. While efficiency can be a major advantage to sellers, there are additional advantages and disadvantages to purely digital music.

Advantages to Industry Stakeholders

Industry analysts assert that the music industry will gain a significant portion of future profits through electronic distribution. Nevertheless, estimates of the proliferation of electronic music distribution vary greatly between experts and studies. There may be a great potential for electronic music distribution, and if the music industry exploits its advantages—while avoiding the hurdles—its adoption could be a major boon to various sectors and actors within music industry.

There are major potential advantages to the promotion of the sale of purely digital music. Current industry players must understand the positive attributes and effects of

⁷ “Poor Prospects for Digital Distribution of Music.” *New Media Age*. 23 July 1998. 14.

electronic music distribution in order to effectively produce profits through this channel.

These include:

- I. increased efficiency,
- II. value-added features, (and)
- III. less established artist advantage.

I. Increased Efficiency

Purely digital music is well suited to sales over computer networks. Unlike hardcopy music, there is no physical component to digital media. Retailers can copy the music from storage on a central computer to a purchaser's computer storage without incurring any shipping costs other than the cost of the computers' connections to the network. In this type of a model, the consumers usually bear the cost of their own storage medium. However, the consumer usually has flexibility in deciding how the music is stored. Options include audio CDs, CD-ROM, hard disk, and portable devices with flash memory, such as Diamond's Rio, which is a device designed solely for playing music in MP3 format. In the next few years, new memory devices, such as IBM's "microdrive" promise to allow for portable storage devices with increasingly higher capacities in smaller sizes.⁸

II. Value-Added Features

In order to more successfully merchandize music in purely digital form, marketers must capitalize on the attributes of digital media to overcome those advantages to physical media. With purely digital media, it is possible to include items such as video and interactive software along with music. While Dillon finds that direct reading is

⁸ "More Flash-Memory Recorders Due." *Consumer Electronics*. 21 September 1998.

generally slower from a computer screen than from paper, he cites advantages to computer reading, including easier manipulation (scrolling as opposed to turning pages) and simplified navigation.⁹ Finding out additional information about artists is also simplified as searching and browsing tools can be added to software providing artist and album information or extra entertainment products.

In the past, producers have included computer-readable value-added items such as music videos on selected music CDs. However, they have not been commercially successful. It is much more plausible that software included with music will be commercially successful when the media is sold in purely digital form. When the media has no physical counterpart, consumers will likely need to use a computer in order to download and process the music. Therefore, it will not be a large jump from listening to the music to using any additional products provided.

III. Less Established Artist Advantage

The increased sale of purely digital music serves as a greater advantage to less established artists. While the efficiencies introduced by the electronic music distribution could help all types of artists, those artists that are less established will likely benefit to a greater degree. Historically, in order to become a commercially successful artist with a large base of consumers buying the artist needs record company backing. A large amount of capital is necessary to “launch” an artist. The three major record company functions—production, manufacturing, and distribution—require capital investments that very few artists could make on their own.

⁹ Dillon, Andrew.

Those artists that are well-established can use their past success as additional bargaining power to negotiate favorable royalty terms. However, when a record company enters an agreement to represent smaller artists, they are taking on additional risk as they are less certain that the artist will be commercially successful. In exchange for the record company taking this risk, the artist does not achieve as high a royalty percentage as those artists that require less risk do. The average royalty for a beginning pop/rock artist is 12 to 13 percent of the retail sale price, with 2 to 3 percent of that going to the producer. For well-known artists, the minimum royalty is 14 to 15 percent, but it is often 17 to 20 percent, with 4 percent going to the producer.¹⁰

When music is distributed digitally, with lower fixed costs to distribution, artists will have increased bargaining power. As artists at all levels begin to gain easier access to distribution channels, they will be able to demand better contract terms from record companies. The nature of record companies will change. Production costs will remain constant. However, they will begin to devote higher portions of their resources to marketing and promotional functions.

Choosing to market artists with established fan bases are much less risky business ventures. These artists will not have as much trouble selling music without the help of record company marketing power and therefore, will be able to demand a higher royalty percentage. As an analogy to athletes, musicians with established fan bases would become similar to “free-agents”. There are artists today who possess the bargaining clout necessary to enter single-album contracts with major record labels. This is currently unheard of for artists who are not established. With lower fixed distribution costs, record

¹⁰ *Copyright & Home Copying: Technology Challenges the Law.* 104.

labels do not need to make as much of an investment in artists. Therefore, it will be easier for an artist to remain relatively independent, as a free-agent.

Risk for Industry Stakeholders

Bringing the sale of music on physical media, such as CDs, to the Internet is a relatively clear jump to make from traditional model of brick-and-mortar retail outlets. This new retail model will force numerous changes in music industry structure, but like nearly any other physical commodity sold over the Internet, actually forming the model was principally an exercise in marketing, programming software code, and forming distribution channels. However, the networked sale of digital media is an entirely new concept with more invasive implications for the music industry. The music industry and traditional retailers, therefore, show extreme caution in consideration of digital sales.

The networked sale of digitized music has the potential to enact many changes in the music industry. There are a few major reasons why current industry segments are worried about the effects of its potential prevalence. These include:

- I. industry cost and payment relationships are likely to change,
- II. intrinsic advantages to owning physical media are lost,
- III. change in album orientation,
- IV. loss of major artists' market share,
- V. direct negative effects on some music industry sectors, (and)
- VI. decreased control over intellectual property.

I. Industry Cost and Payment Relationships

One of the established music industry's greatest fears is that due to changes brought about in the distribution of music, the overall cost and payment relationship between industry sectors and artists will change to their disadvantage. The potential for change lies primarily in the current domination of the recording industry by a few key players. Only a handful of firms sell an overwhelming portion of the music sold in the US. Six record labels, known as the "majors", account for an overwhelming majority of US sales. The majors include Sony Music, EMI, Universal Music Group, Bertelsmann Music Group, and Warner Music. In 1997, Sony and Warner alone accounted for 36 percent of the US market sales.¹¹ As sales of purely digital music become more prevalent, the industry fears it will lose some of the power it currently possesses.

The cost to produce, market, and sell music to a mainstream consumer base is currently prohibitively high for the majority of artists. Currently, to merchandize albums with high potential for commercial success, a large amount of capital must be expended on items such as advertising and general promotion activities, and provision of promotional copies and copies for radio stations. Advertising to consumers, through various media channels also requires substantial resources.

In order to convince retail outlets to carry the album, the outlets must have some degree of confidence that the album will sell and that consumer demand is present. When a traditional retail outlet decides to carry an item, it is aware that the album will occupy a portion of the store's real estate, which is limited by the size of the store. Due to real

¹¹ Robertson, Michael. "Why the Music Industry is to Blame for MP3 Piracy." *MP3.com*. Internet: <http://mp3.com/news/014.html>.

estate limitations, the store can only carry a certain number of albums. Each album, or copy of an album, precludes another from being held in inventory.

The ability to sell music in purely digital form empowers artists to cut this cost structure and will enable more artists, with fewer resources, to sell their work. When retailers begin to sell increasingly larger quantities of music directly over the Internet, a large portion of advertising will migrate to Internet channels as well. While substantial budgets will still be required for marketing, the Internet would reduce these budgets. By conducting direct advertising over the Internet, costs would be cut as ads are more directly targeted at potential consumers. This is possible since the Internet allows for narrow-casting of advertising. Advertisers pay to show their ads selectively to the types of consumers who are more likely to purchase the music. Consumers can be selected using data from their previous purchase patterns, and areas of interest they have selected either actively or passively through their Internet browsing activities. Thus, the role of record labels, as presently advantaged by their industry clout, will be diminished.

The ability of some firms and artists to sell music to consumers in digital form over the Internet greatly reduces their costs. If record companies do not distribute their music digitally, they will be at a cost disadvantage and may be forced to lower their profit margins. The cost of producing promotional and radio station copies of music will also be dramatically reduced. Instead of manufacturing numerous CDs, promoters could give parties who are to receive a copy of the music a virtual pass to download the music digitally. Thus, less successful musicians will have the resources necessary to distribute their music to a wider audience. Currently established music industry firms would have

to lower their costs and change their business models in order to compete with the newly enabled artists.

II. Physical Media Ownership

When one “owns” any music, they actually merely own the right to do limited things with the music as intellectual property. However, the ownership of music in physical form implies more than the ability to listen to the music encoded on the disc or cassette. In addition to holding music, the media is also valuable to both consumers and artists as physical objects. Owning music on a physical disc, accompanied with artwork and text on the liner notes, jewel case, the media itself, or other packaging, gives the user senses that the product in sales of purely digital music cannot duplicate. As someone participating in a MP3.com message board wrote, “I, the consumer, want something I can HOLD IN MY HAND. Consciously, I know I'm getting the same thing, but deep down, I want that CD. If I don't get that, then I want a price break.”¹²

Owning a physical object, as opposed to one that is purely digital may give the holder a greater sense of ownership. While one may have the same rights to the intellectual property that is the core product, the fact that one owns a physical item has properties that lead to different, and arguably more beneficial, feelings toward the product. These feelings include a greater identification with the artist and their work, a better understanding of the artist in general, and generally, more of a feeling of having a stake in the artist’s success and future. This leads to a more loyal fan base that helps the artist to be successful, both economically and in terms of spreading their music and ideas.

When one owns a physical object, the owner and their acquaintances often consider that object a status symbol. This is especially true for music. Music is a

commodity that expresses a great deal about its owner. Different types of music, and various artists imply different things about their owners. For example, there has long been a certain cachet associated with the ownership of rare and unusual musical examples. While these pieces and albums still could be possessed in purely digital form, the owner feels more of a sense of self-satisfaction and pride when that music can be owned and shown to others along with packaging and the art actually on the album, if it is present.

Levy argues that the consumer is not functionally oriented and that consumer behavior is affected significantly by the symbols encountered in the identification of goods in the marketplace.¹³ This argument led to research concerning the potential influence of consumers' self-concepts in consumer behavior. Thus, a number of self-concept models were formulated. Grubb and Grathwohl specified that:

1. Self-concept is of value to the individual, and behavior will be directed toward the protection and enhancement of self-concept.
2. The purchase, display, and use of goods communicates symbolic meaning to the individual and to others.
3. The consuming behavior of an individual will be directed toward enhancing self-concept through the consumption of goods as symbols.¹⁴

When concerned with sales of music, self-concept is especially important. For most buyers and listeners, the primary purposes of listening to music are to generally enjoy oneself, to entertain others, and to alter one's mood. However, consumers also consider

¹² MP3.com Bulletin Board. Internet: <http://bboard.mp3.com>.

¹³ Levy, Sidney J. "Symbols for Sales." *Harvard Business Review*. 1959, 37(4), 117-124.

¹⁴ Grubb, Edward L. and Harrison L. Grathwohl. "Consumer Self-Concept, Symbolism, and Market Behavior: A Theoretical Approach." *Journal of Marketing*. 1967, 31 (October), 22-27.

the direct result of the purchase—to have that album in one’s collection—an important aspect of the purchase.

Recently music industry players, electronics manufacturers, and software firms have begun to announce numerous ventures and plans that aim to shape the future of electronic music distribution. With each announcement, there seems to be a claim that the results of the project concerned will have great impacts on the firms and industries involved. These communications, and the excitement that they generate, indicate the intense interest in the course that the development of electronic music distribution will take. While venture participants often hope to gain direct profits from their activities, they also seem to want to learn more about the nature of consumer behavior as it relates to digital distribution.

One joint venture of particular importance is the Madison Project. In an effort to assess the implications and issues surrounding a system for purchasing music through electronic distribution, BMG, EMI, IBM, Sony Music, Universal Music, and Warner Music are currently working together in the Madison Project. The group of companies has developed a six-month-long practical study that uses technology developed primarily by IBM called the Electronic Music Management System. The test service allows 1,000 consumers in San Diego, California with cable modem Internet access to purchase and download music albums over the Internet.¹⁵

Waldman states that the importance of this initiative stems from the fact that consumers are receiving the same exact music, in the same album format, but distributed electronically. He stresses that one of the most important findings for the study will be

¹⁵ “IBM and Major Record Companies to Test Internet Music Distribution.” IBM Website. Internet: <http://www.ibm.com>.

those concerning consumers' reactions to not owning a professionally printed CD and jewel case labels. Consumers will receive software to print downloaded labels, but quality will not be the same as that of the material packaged with store-bought CDs. While Waldman admits that the sample size for the project is too small to produce findings that can be extrapolated to indicate national consumer preferences, he asserts that the Madison Project is a landmark study in that it is the first to be of a highly practical nature.¹⁶

Beyond the value to owners of physical media in an abstract sense, the items that accompany the physical media also serve more concrete purposes. The packaging and booklets that accompany the media often provide lyrics, general information, pictures of the artists, track listings, and dedications. While these types of material, and even more, can be provided in digital form, there is a value to owning the material in physical form. This value is similar to the value of owning the hardcopy of a book, rather than reading it off a computer screen. As Dillon concludes, one reading from a computer screen must contend with increased fatigue and decreased reading speed. In addition, there is a general societal preference for reading from paper.¹⁷ Furthermore, computers are not always available for reading or viewing these types of material. While the consumer can encode music onto physical media such as a CD, other materials included will not be as easily, effectively, and conveniently converted into portable and physical formats.

¹⁶ Waldman, J. David, Vice President, New Technology & Business Development, Sony Music Entertainment Inc. Interview. 12 April 1999.

¹⁷ Dillon, Andrew. "Reading from Paper versus Screens: A Critical Review of the Empirical Literature." *Ergonomics*. 1992, 35(10), 1297-1326.

III. Album Orientation

Historically, record companies have sold most musical compositions as part of entire albums. While singles and multi-artist compilations have long made up a portion of sales. When companies sell singles or include artists on compilations, they realize that in some instances, consumers would have purchased the entire album had the song not been available individually. Currently, the dollar value of shipments of singles to retailers has made up only 3.6 percent of the total dollar value of recordings shipped during the first half of 1998. While manufacturers shipped \$5.71 billion worth of full albums (at suggested list price), they shipped only \$205 million worth of singles.¹⁸ As electronic distribution becomes more widespread, more single songs will become available individually. This will drive the price of these single songs up since relative amounts of revenue from album sales will decrease. Because of the shift, all portions of the recording industry will put greater emphasis upon individual songs.

Market attention has been shifting from traditional album format to single songs even before the widespread use of electronic distribution. During the past few years, there has been an increase in the number of compilation and soundtrack projects. As Paul Stark, co-founder of Twin/Tone Records asserts, “besides being twice as many each year, they are also selling more copies each.”¹⁹ Thus, this impact of digital distribution will be complementing a market trend already present.

Due to the emphasis shift toward individual songs, record companies will have less incentive to promote artists. Rather, they will divert their resources toward attempting to promote individual songs. Artists will also expend more effort in

¹⁸ “1998 RIAA Midyear Statistics.” Internet: <http://www.riaa.com/98ships.htm>

¹⁹ Stark, Paul. “The Future of the Music Industry is in Electronic Delivery.” Internet: <http://www.tt.net/diatribes/stark1.html>

attempting to ensure the success, both financial and artistic, of individual compositions rather than albums. This change has the potential to alter the landscape of music marketing drastically.

Though songs will be more readily available for individual purchase, this does not suggest that albums will leave the retail scene. Albums have an artistic value when taken in their entirety that consumers enjoy and demand. Artists usually create albums for listener appreciation in their entirety. Furthermore, as explained earlier, sales of entire albums generally produce greater profits for the record industry than individual songs.

IV. Major Artist Market Share Loss

As networked digital sales lower the barriers to entry into the mainstream music market, musicians with smaller budgets will find it simpler to sell their music to larger audiences. Consequently, previously well-established artists with heavy music industry backing will lose a portion of their market share to newly empowered artists. There are differences in opinion regarding the price elasticity of demand in the music industry. That is, the degree to which consumers will buy additional music if there is a change in price (as more albums are available). Demand is not fully elastic. Therefore, it is likely that new artists will take sales from established artists. Regardless, the additional available merchandise will affect the established artists' access to finite resources such as concert venues and radio airtime as increasing numbers of artists vie for them.

Changes in artist market share will not be equivalent across music genres. Electronic music distribution favors certain genres to greater extents than others. Generally, albums that previously did not yield enough sales to merit holding them as stock in retail outlets will be more readily available to the public since the real estate

required by the online companies will be much less expensive. The industry is noticing this phenomenon even when most online music sales are of music in hardcopy format. However, as companies move toward digital distribution, it will cost even less to hold obscure albums and items that generate very few sales. Genres with low proportions of sales volume historically have gotten less shelf space at brick-and-mortar retail outlets since they are less profitable to keep in inventory. While there are sizeable customer bases for less popular genres, the customers are widely spread geographically, making it unprofitable for the products to be sold traditional retail channels. Already, these genres represent a greater proportion of online CD sales. This is since online retail outlets are able to keep much larger inventories due to much larger customer bases and lower real estate costs. N2K's musicblvd.com for example, has noticed that jazz albums make up eighteen percent of its music sales on the Web, while they comprise only three percent of all music retail sales.²⁰

V. Direct Negative Effects on Music Industry Sectors

Increased electronic music distribution will have some direct negative effects on various industry sectors. As more music sales become digital, those businesses associated primarily with hardcopy sales will experience unfavorable repercussions since the need for their services will be reduced. However, if these businesses are able to foresee the industry's trajectory, they will be able to change their business models in efforts to prevent market losses or even promote gains.

Brick-and-mortar retailers will obviously experience negative effects due to increased electronic music distribution. Consumers that purchase their music in purely

²⁰ Ferranti, Mike. "Recording Industry Braces for Internet's Impact." *IDG News Service*. 24 June 1997.

digital format will have less need to purchase any music from traditional sources. As a result, these retailers will sell fewer units of albums and music. Those retailers that will be most successful may be those that are able to shift their product offerings toward music accessories and hardware that makes use of new distribution models.

Firms that encode audio onto physical media will also lose a portion of their traditional business. Consumers who download digital music will not need to purchase that music already “burned” onto a CD. Instead, they can play the music using their computer, upload it to their own portable device, or encode it onto media such as a CD recordable themselves. Businesses that are in danger of decreased sales due to lower consumer demand should consider attempting to adapt, possibly by developing products such as custom encoding onto physical media.

VI. Intellectual Property Issues

One of the largest dangers for the music industry, particularly artists and record labels, is the potential loss of control over their intellectual property—recorded audio. Intellectual property refers to a unique embodiment or representation of expression that is invested in an artistic, scientific, or intellectual work. While the physical media represents a form of personal property, the music imbedded on the media represents intellectual property. Since the introduction of recorded audio into the in the early twentieth century, it has been possible to produce unauthorized copies of the audio onto other media. With the introduction of the recordable CD, the first commercially successful, mass-marketed digital audio media format, people were able to make perfect copies of music albums. The ability to make perfect duplicates of digital recordings makes copying music much more attractive to the general population.

While unauthorized copying has been a problem in the past, in both analog and digital formats, the extent to which people make unauthorized copies will grow with electronic music distribution. Using computers, people can easily copy and move the music, which is already encoded into binary form and stored in computer memory. Since the music never has to be converted into an analog format, there is minimal quality degradation. People can perform similar activities today using the CD digital format, but current network bandwidth limitations and relatively expensive and difficult-to-use hardware and software make it less prevalent. As computers are used more in listening and purchasing activities, a broader base of consumers will be accustomed to using computers as part of their listening habits. Companies will develop more user-friendly and affordable software and hardware to aid them.

Trends and expert predictions indicate that both computing power and bandwidth will increase in the future. As this occurs, it will become easier for consumers to use this power and connectivity to share and use copyrighted material. In the past, it was relatively simple for copyright holders to keep track of their recordings. Quality equipment for copying was expensive and difficult to use. However, keeping track of the copyrighted material has and will become more difficult. As this occurs, consumers will likely share the material with less regard for the copyright, potentially costing lost profits to those who normally benefit from the sale of the recordings. The legal environment surrounding intellectual property issues and music will be discussed in Chapter 4.

Chapter 4

Audio Piracy

People can copy digitized music with very little, or no, loss in quality. This is unlike music stored and copied in analog formats, which degrades in quality with each successive generation. Due to this attribute, the recording industry views digital music formats as potential threats to their business. It is questionable, however, as to how important quality differences barely audible to most consumers are in making decisions concerning music piracy. There are other advantages to pirates' use of digital distribution. Networked communication, including the Internet allows people to quickly and easily transfer digital data across any distance and to infinitely many locations. Therefore, perfect unauthorized copies of copyrighted audio media can effortlessly be made and distributed.

As discussed in Chapter 3, intellectual property issues are major concerns for music industry players considering the use of digital distribution to sell copyrighted music that they control. The record industry asserts that the presence of piracy has had a negative impact their profits a great deal. One of the RIAA's major responsibilities is to work to lessen the impact and number of incidences of pirated music. To this end, they bring legal action against music pirates, assist authorities in identifying pirates and shutting down their operations (both hardcopy and digital), and launch programs to educate the public on piracy. The RIAA also pushes their viewpoint on intellectual property issues to lawmakers and the judicial system. Authorities in the US have helped to lessen piracy. In 1998, the RIAA reported that 799,405 units of pirated hardcopy media were seized. Furthermore, there were 98 search warrants and consent searches,

324 arrests and indictments, 199 sight seizures (without the necessity of a search warrant), and 204 guilty pleas or convictions.²¹

It is extremely difficult to measure the actual effects that the unauthorized spread of digital music has had on the music industry. Music industry groups, such as the RIAA, have placed estimates on the value of the intellectual property that “pirates” have copied. However, due to the diffusive nature of digital media, it is difficult to produce estimates of great accuracy. The record industry has recognized the problem of pirated music as severe and has begun to attempt to lessen its effects. Meanwhile, technology firms have seen the need for new hardware and software and have started developing various proposed solutions to the record industry’s problems.

Hardcopy Piracy

People have practiced music piracy involving all types of music media, including LPs, audiocassettes, and CDs. As technology has improved, recording equipment has become more affordable and advanced, and markets for pirated media have developed, piracy has become more widespread. Even with the increasing threat of digital piracy, hardcopy piracy will likely remain a detriment to the industry.

Many of the studies that attempt to estimate the effects of the unauthorized copying of hardcopy music seem somewhat biased. Two major industry organizations, the Recording Industry Association of America (RIAA) and the Home Recording Rights Coalition (HRRC), have produced key studies. The RIAA’s member companies create, manufacture, and/or distribute approximately ninety percent of all legitimate sound recordings produced and sold in the U.S. Meanwhile, the HRRC is a coalition of

²¹ Recording Industry Association of America. *1998 Anti-Piracy Statistics*.

consumers, consumer groups, trade associations, retailers, and consumer electronics manufacturers whose members are dedicated to preserving consumers' rights to purchase and utilize home audio and video recording products for noncommercial purposes. The studies completed by the RIAA and HRRC clearly support each organization's interests. Other industry and external actors have also produced studies with similar foci. It is important to examine various examples of studies on hardcopy music copying in order to formulate a nonbiased opinion on its effects.

The U.S. Congress Office of Technology Assessment (OTA) published a report in 1986 that details the results of a number of surveys conducted by various organizations involved in the music industry. This report, which evaluates the impact of information technologies in general on the intellectual property system, is entitled *Intellectual Property Rights in an Age of Electronics and Information*. The OTA was created in 1972 to serve as a resource for Congressional members and staff confronting technological issues in crafting public policy. While Congress disbanded the OTA in 1995, its reports serve as legacies. The OTA report describes the following six surveys.²²

A 1983 Study sponsored solely by the RIAA found that more than two-fifths of home taping was in place of the purchase of prerecorded records and tapes. The researchers postulated that these findings would translate into lost sales of approximately 32 percent, or about \$1 billion out of a total of \$3.2 billion in actual sales. The 1986 OTA report summarized the findings with the following statements.

Approximately 50 percent of taped, borrowed records or tapes “would have generated” purchases of originals, if no taping had occurred.

²² *Intellectual Property Rights in an Age of Electronics and Information*. U.S. Congress, Office of Technology Assessment. April 1986, OTA-CIT-302.

Of taping from owned records, 42 percent “would have resulted” in purchases of additional records and tapes, if no taping had occurred.

Of all off-air taping, 40 percent “would have generated” record and tape purchases.

The RIAA and the National Music Publishers Association cosponsored a study on audiocassette taping in 1982. The study, based on a survey of people who taped at home from any source, found that respondents would have purchased 90 percent of everything taped from sources other than their own collections if they had not taped them at home. The researchers translated these findings into a potential sales loss of 14 percent.

A 1979 survey sponsored by the International Federation of Phonogram and Videogram Producers determined that home copying has an even greater effect on retail sales. The survey reports that in 1979, approximately 280 million LPs had been copied. It purports that approximately 25 percent of these copies replace retail sales, resulting in lost sales of approximately \$622 million—the equivalent of 70 percent of the value of retail sales.

Besides industry organizations, the record companies themselves have also completed studies attempting to assess the impacts of home copying. A 1981 study sponsored by Warner Communications indicates that 25 percent of all home tapers made copies of music in place of purchasing prerecorded music. Meanwhile, a 1981 survey sponsored by CBS Records reports that audiocassette taping costs the prerecorded music industry 100 million units annually, translating into lost sales of \$700 to \$800 million.

The Audio Recording Rights Coalition (ARRC) is an organization that represented the interests of manufacturers, retailers, and consumers of consumer electronic audio recording products. The Coalition has since begun to support the

interests of entities related to all consumer electronic recording products and is currently known as the Home Recording Rights Coalition (HRRC). The AARC sponsored a survey published in 1982. This survey was concerned primarily with the audiocassette home taping practices and the motivations behind those practices. It made no effort to estimate the harm caused to the music industry due to the taping. The ARRC found that seventy percent of respondents recorded mainly to construct their own program selections, instead of to avoid purchasing the prerecorded selections. Between one and three percent cited cost as the only reason for home taping. Of all audiotaping reported, only 52 percent was of prerecorded selections and 51 percent was made from respondents' own collections. The survey also reported that taping stimulates purchases, citing as evidence the findings that "heavy tapers" owned approximately three times as many prerecorded selections as others.

Three years after the publication of the general OTA report on information technology and intellectual property, the OTA completed the landmark study, which seems to best minimize bias, titled *Copyright and Home Copying: Technology Challenges the Law*. Written in 1989, the forward-looking report assesses the effects that the state-of-the-art copying technology of a decade ago would have on the music industry.

A particularly interesting portion of the report included the results of a survey completed by a representative sample of U.S. residents. Its questions were primarily on the subjects of home-copying activities and public awareness of, and opinions on, policy issues. While technology has developed significantly since the date of the report, its findings and methodology are well developed, well presented, and worthy of review.

Those findings that deal with home copying are likely to become even more important should home copying activities become more prevalent, as predicted.

Many of the OTA's findings related to home audiocassette taping are interesting from a present-day perspective, with the coming of digital distribution. While attitudes and activities have no doubt changed somewhat, historical ideas and practices will likely be somewhat applicable to present issues. From a nationally representative sample of people aged ten and over, the OTA survey found that four in ten people had taped recorded music in the past year. Furthermore, it found that those who tape music are more likely to have a greater interest in music, listen to more music, and purchase more prerecorded music products than non-tapers.

While the general public was not well versed in copyright law as it relates to home taping, they did have opinions on the norms governing generally acceptable behavior. Of those tapers and non-tapers surveyed, 75 percent felt that it was acceptable to make a copy of a recording that one owned for their own use. Furthermore, 63 percent felt that it was acceptable to copy prerecorded music to give the copy to a friend. However, 76 percent felt that copying a tape to sell was unacceptable.

The OTA report also found that there are some positive stimulative effects of unauthorized taping. The OTA study found that it is likely that there are stimulative effects of unauthorized taping. It states that hearing a piece of music on a homemade tape has some promotional value for both songs and artists. Of past-year purchasers, 24 percent reported that "they had heard the recording or performer of the recording that they most recently purchased on a tape made by themselves or someone else before their purchase." This is a higher portion than those that heard the performer or recording in

concert (21 percent). Another possible stimulative effect of home taping is related to the purchasers' intent to copy the music when they purchased the media. Of past-year buyers, 14 percent said that at the time of their most recent album purchase, they expected to tape from the recording purchased.²³

Hearings on the subject of alleged harm to the recording industry due to home copying were held in Congress during the mid-1980s. A 1985 analysis was presented by Alan Greenspan of data collected by his firm, Townsend & Greenspan, in a survey sponsored by the RIAA. Greenspan estimated that 42 percent of all home tapings from prerecorded selections and forty percent of broadcast tapings would have resulted in sales to consumers if unauthorized taping were not possible. Based on this figure, the firm estimated retail losses of \$1.5 billion, or \$600 million in lost revenues after industry costs. From these estimates, and the problematic state of the industry at that time, Greenspan concluded that "continued home taping had grave implications for the viability of the recording industry."²⁴

While the surveys described above represent different time periods, types of media, and geographical regions, the findings of each still seem to follow the interests of the stakeholders that sponsored the study. Generally, the record industry argues that the harms to them include lost sales, depressed prices, lower profit margins, and, as a result, fewer and less diverse recordings being released. Meanwhile representatives of the recording hardware and blank media industries dispute the results on methodological grounds. These parties argue that the record industry representatives' figures are inflated, but did not publish their own estimates of tangible or intangible benefits. Rather, they

²³ *Copyright & Home Copying: Technology Challenges the Law*. U.S. Congress, Office of Technology Assessment. October 1989, OTA-CIT-422.

argue that there are net economic benefits when both effects on the recording industry and the public are considered. Due to the abstract nature of the hardware and media manufacturers' arguments, individual findings are not comparable. However, one can conclude that there are both some stimulative and some negative effects brought about due to home copying.

The findings in studies on consumer audiocassette copying habits and attitudes are applicable to current industry issues. While the technology involved has changed, along with copying techniques, consumer attitudes have likely not changed as quickly, and consumers have adapted and taken advantage of newly available technologies. Therefore, with easier, faster, and higher quality copying options available, consumers will likely copy more, both for their own use and for others. However, the extent to which practices will affect the different sectors of the recording industry is unclear.

Spread of MP3-Format Music

The MP3 audio format is a means for encoding digital audio in a highly compressed form. While the audio is nearly as high in quality as that which is stored on standard compact discs, digital files are approximately one-twelfth of the size. Therefore, people can share and store quality digital audio easily via computer. The Motion Picture Expert's Group introduced the MP3 standard in 1992.²⁵

Over the past few years, MP3 music has become the most often used format for transmitting high-quality digitized music over computer networks. Music files saved in the format are widely available on the Internet through channels such as the World Wide

²⁴ Ibid. 171.

²⁵ Chiariglione, Leonardo. "MPEG-1 FAQs." International Organisation for Standardisation. Internet: http://drogo.cselt.stet.it/mpeg/faq/faq_mpeg-1.htm.

Web, Usenet newsgroups, and File Transfer Protocol. The music is stored and downloadable in single-song files.

While some of the songs are available on the Internet with the permission of the artist and record company, most songs are available without copyright holder authorization. In general, for the major record companies, this represents a problem. They argue that if the music for which they hold the copyrights is available online free-of-charge, there is a decreased impetus for consumers to purchase the music. However, some artists, and smaller labels, disagree with this argument. They feel that music available online act as a promotional vehicle. In this vein, they insist that consumers who download and listen to the music of an artist, whether or not they were previously familiar with that artist's music, are more likely to purchase music from the artist in the future. Popular artists such as the Beastie Boys made available live tracks and "B sides" in efforts to promote their latest album, They Might Be Giants have uploaded entire albums, and Garbage released rare musical pieces online. These types of practices have created rifts between artists and their labels. The Beastie Boys' label, Capitol Records persuaded the group to remove their tracks from the Internet, arguing that they do not want to encourage unsecured music on the Internet and will wait until the music industry agrees on a secure delivery system that allows the label to be compensated for downloads.

Most music is available without the permission of the artist or their record label, however. Using various search engines, Internet users are able to find songs that suit their tastes and download them to their own computers. Due to the compression factor, average length songs could take about fifteen minutes to download. This translates into

over two hours for most albums. Hardie found that 76 percent of Internet users would not wait longer than thirty minutes for downloads.²⁶ However, MP3s are still widely available and downloaded by millions of computer users. As network connection speeds increase and higher speeds become available to a wider market, download times will decrease and people will be more inclined to download the media. Before this occurs, people who are inhibited from downloading due to long download times can opt to time-shift their downloads, copying files over networks to their computer at times when the extended time period does not matter to them, such as over night.

Most music industry actors see the MP3 file format as a threat to their profits. However, some businesses are attempting to use MP3s both promotion and for profit. Some companies are selling and distributing the files with the permission of the copyright owners. Even the largest of these, MP3.com, does not currently generate a very large number of sales. However, MP3.com's model represents a viable alternative to traditional distribution channels for the music industry. Along with the files that the firm sells to consumers, MP3.com also distributes many tracks free-of-charge as promotional material for the artists it represents. If consumers enjoy the free music, they are encouraged to purchase custom-made CDs. While some tout this model as the future of record labels, MP3.com reportedly has yet to sell more than 100 CDs per day.²⁷

In its pure state, the MP3 format does not have copy protection. However, some software companies have developed "shells" in which MP3-format files can be packaged so that they are encrypted and cannot be easily copied and distributed. Some formats also

²⁶ Hardie, Mark E. *Virtual Music Rocks*. The Forrester Report. March 1999. 2.

²⁷ Goodman, Fred. "Is MP3 the End of the Music Business? Or is it a new Beginning? How the Record Industry is Coping with Technology that lets you Hear your Favorite Bands for Free." *Billboard*. 1 April 1999. 38.

include watermarking technologies, which allow people to trace the origins of a specific digital music file. While many companies have developed different formats, no single format has yet emerged as a viable competitor to the pure MP3 format, in large part because the major hardware and software do not support any of the other formats.

Issues surrounding MP3 distribution have been discussed widely in popular media. Industry actors, research groups, and the media themselves have presented much speculation and many predictions concerning the format's future. Some predict that it will represent the downfall of the music industry while others suggest that consumers and artists will force the industry to embrace the MP3 format. However, while the format could potentially be modified to adhere to industry requirements for legitimate electronic distribution, it is unlikely that MP3 will be the chosen format. While some algorithms from MP3 may be used in a new standard, the music industry will not wish to appear to accept the music piracy associated with MP3s. This is even though modification could make MP3 piracy more difficult. Furthermore, with major modifications, firms will need to produce new hardware and software to decode and play the music files. Consumers will need to acquire these new products whether or not they utilize a format based closely on that of MP3s.

Consumer Demand for Pirate Music

Music piracy refers to the unauthorized manufacture, or copying, of goods with characteristics protected as intellectual property rights. Under this definition, any music copied or manufactured without permission is pirate media. This includes the unauthorized distribution of MP3s as well as manufacture of unauthorized hardcopy music media. MP3s and other digital music formats in which music piracy is practiced

are relatively new and consumer demand for them has not been heavily studied.

However, there is extensive research on counterfeit demand in general and demand for pirate media. Hypotheses relating music can be developed from the findings of this research.

Legitimate and counterfeit copies of music each satisfy consumers' needs in terms of listening to the music that they hold. With perfect digital copies, they are essentially identical in this respect. Meanwhile, Cordell, et al found that the most important determinant in consumer decisions concerning whether to purchase a counterfeit product is performance expectation. However, the primary gauge of performance (music quality) is constant between counterfeit and authorized music products. But Tom, et al found that based on price, when compared to counterfeit software, t-shirts, and purses, counterfeit CDs were lowest in customer satisfaction.²⁸ Even though the music was of the same quality as a legitimate CD and lower priced, customers were still relatively unhappy with the counterfeit CD. It is important to examine factors other than the music contained to determine why the public might be dissuaded from purchasing counterfeit music. These factors include:

- I. lawfulness attitudes,
- II. pricing,
- III. artist loyalty,
- IV. social implications, (and)
- V. attributes specific to legitimate music media.

²⁸ Gail, Tom, Gail, Barbara Garibaldi, Yvette Zeng, and Julie Pilcher. "Consumer Demand for Counterfeit Goods." *Psychology & Marketing*. Vol. 15(5), August 1998,. 413.

I. Lawfulness Attitudes

Cordell, et al found that while attitudes toward lawfulness and espoused willingness to purchase a counterfeit product may have been suppressed by unfavorable performance expectation on “high investment-at-risk products”, they were significant in the intention to purchase “low investment-at-risk products”. The study concludes that moral attitudes may not work to convince consumers not to purchase counterfeit goods when practical deterrents are present, but only in the absence of practical deterrents.²⁹ According to these findings, in the case of music, a low investment-at-risk product, attitudes toward lawfulness would therefore, be important.

Tom, et al completed an interesting survey that examines public attitudes toward counterfeiting. Respondents were categorized as those who had previously purchased counterfeit goods and those who had not and indicated their attitudes to various statements on a Likert-type scale. Findings key to this report are listed in the table below.

Attitude Statements	Group Means	
	Counterfeit	Legitimate
Counterfeit products hurt the companies that manufacture the legitimate product.	2.9	3.1
People who buy counterfeit products are committing a crime.	3.28	2.54
People who sell counterfeit products are committing a crime.	3.34	2.81
People who manufacture counterfeit products are committing a crime.	3.34	2.76

Scale: 1 = strongly agree, 2 = agree, 3 = neutral, 4 = disagree, 5 = strongly disagree.

These findings indicate that those who use counterfeit products generally do not realize the extent of the impact that the unauthorized products have on the authorized manufacturers or the legal implications involved with their use of counterfeits. Those

²⁹ Cordell, Victor V., Nittaya Wongtada, Robert L. Kieschnick, Jr. “Counterfeit Purchase Intentions: Role of Lawfulness Attitudes and Product Traits as Determinants.” *Journal of Business Research*. 1996, Vol. 35, 49.

who do not use counterfeit products realize the impacts and legal implications to a greater extent but do not fully understand the issues involved with counterfeits.³⁰ Meanwhile, the 1989 OTA survey found that both tapers and non-tapers believed that it was acceptable for a person to make a copy of a prerecorded item for one's own use or to give to a friend. This serves as further backing to the opinion that there are societal misconceptions concerning acceptable taping behavior.

These findings indicate that to combat counterfeiting and piracy, the music industry should launch more programs that are educational on the subject of piracy. The RIAA created the Soundbyting Campaign in an effort to educate college and university administrators and students about the issues surrounding music piracy. Through the campaign, the RIAA provides educational kits for university and college administrators, and publishes an educational Web site.

The campaign has the stated mission to "raise awareness that reproducing and distributing music illegally is akin to stealing, and such actions have serious ethical and legal consequences".³¹ It was created as a reaction to the usage of school computer systems to hold unauthorized MP3 music libraries available for download and because students often have access to high-speed Internet access that makes downloading MP3 files faster. In the future, it will become easier for others to obtain higher bandwidth network connections that can be used to create servers and download music. Thus, the industry should create additional educational programs to reach new audiences that will gain increased power to participate in music piracy activities.

³⁰ Tom, Gail, Barbara Garibaldi, Yvette Zeng, and Julie Pilcher. 408.

³¹ Soundbyting Campaign Web Site, Recording Industry Association of America. Internet: <http://www.soundbyting.com>.

II. Pricing

Consumer demand for counterfeit goods is partially determined by the price of the legitimate goods and the alternative counterfeit goods. Cordell, et al found that with low investment-at-risk products, such as music, price concessions significantly influence a consumer's likelihood of purchasing a counterfeit product. Meanwhile, Tom, et al found that consumers who prefer an authorized CD to a counterfeit rated the counterfeit CD as superior overall to the legitimate, but comparable to the legitimate in brand, style, function, and durability attributes.³²

Legitimate CD manufacturers, distributors, and retailers will have to adjust prices in order to account for any increase in music piracy. Since the cost of counterfeit goods are cheaper for consumers, in order to dissuade them from purchasing the unauthorized media, economic forces will work to push price levels for the authorized media lower. However, there is also an economic force leading toward the music industry raising the prices of prerecorded music. In order to cover fixed costs, prices must be higher for those who purchase copies of albums that would have had better sales without the effect of counterfeiting. Thus, it is difficult to determine how price levels will adjust. Nonetheless, the music industry will likely be hurt and record labels will be less liberal about investing in artists.

III. Artist Loyalty

Roselius found that brand loyalty is the most helpful strategy in preventing money loss from product purchases.³³ In music sales, this is especially true. Music consumers very often feel a strong identification with artists of whom they consider themselves fans.

³² Tom, Gail, Barbara Garibaldi, Yvette Zeng, and Julie Pilcher. 413.

Music is often a very emotional and personal purchase. Consumers understand and identify with the messages behind songs and albums. They often buy and listen to music to get themselves into a certain type of mood or to Various artists evoke different types of moods in people, such as a relaxing mood, a party mood, or a contemplative mood. For different consumers, different artists work to evoke just the correct mood. Thus, to fulfill their needs, consumers become loyal to certain artists.

Many music consumers realize that their purchase decisions directly affect artists. Of each dollar that they spend on an artist's album, a portion goes directly to the artist. Building artist loyalty is an important goal for music marketers. The OTA survey reported that more respondents felt that current taping practices are fair to artists than felt that current practices were unfair.³⁴ However, nearly a quarter had no opinion. Marketing campaigns should focus more on building artist loyalty. In tandem with efforts to educate consumers on the results of counterfeit music, consumer artist loyalty would help greatly to reduce piracy.

Historically, record companies have sold most musical compositions as part of entire albums. While singles have long made up a portion of the sales of compositions, usually only a few tracks from only the top current albums are available. When companies sell singles, they realize that in some instances, consumers would have purchased the entire album had the song not been available individually. Currently, the dollar value of shipments of singles to retailers has made up only 3.6 percent of the total dollar value of recordings shipped during the first half of 1998. While manufacturers

³³ Roselius, Ted. "Consumer Rankings of Risk Reduction Methods. *Journal of Marketing*. 35 (January 1971): 56-61.

³⁴ *Copyright & Home Copying: Technology Challenges the Law*. 164.

shipped \$5.71 billion worth of full albums (at suggested list price), they shipped only \$205 million worth of singles.³⁵

As online digital distribution becomes more widespread, more single songs will likely become available individually. Hardie reported that 24 percent of Internet would prefer multiple artist compilations as their first choice for product format if MP3-formatted music were widely available. Meanwhile, 19 percent would prefer a single song product format, and only 17 percent would prefer a full-length album from one artist.³⁶ A shift in demand from albums to singles will drive the price of these single songs up since relative amounts of revenue from album sales will decrease. Because of the shift, all portions of the recording industry will put greater emphasis upon individual songs.

Albums, however, may tend to evoke greater artist loyalty than individual songs. The sets of compositions on albums often revolve around a certain theme or musical motif. While music consumers enjoy individual songs, owning an entire album represents a greater economic investment in an artist. This investment translates into increased artist loyalty, and in turn, lessened piracy of the artists' music, since people have spent more money on the artists' products and own more of the artists' music.

IV. Social Implications

There are externalities associated with counterfeits. On a societal level, counterfeit music causes customer confusion and criminal behaviors supporting the counterfeit activities. Furthermore, with increased ownership of counterfeit music, there

³⁵ "1998 RIAA Midyear Statistics." Internet: <http://www.riaa.com/98ships.htm>

³⁶ Hardie, Mark E. 3.

is a degraded social value of the goods. If more people possess a particular album, the social value to each individual with the album is decreased.

If counterfeit music media would appear counterfeit to those people the purchaser interacts with socially, potential purchasers would be dissuaded from buying the media. Thus, there is an impetus for counterfeit manufacturers to make their music media look as much like the actual albums as possible. In the past, this has been relatively difficult to achieve, as it was expensive to print graphics on CDs and booklets in the quality that would be required for the original to be indistinguishable from the counterfeit. Due to economies of scale, printing costs per unit decrease when printing for more units. However, there is a tendency toward minimizing the size of counterfeit operations as larger counterfeit businesses are more likely to be caught and their proprietors prosecuted by authorities. As printing technology gets more advanced and less expensive, hardcopy counterfeiters will be better able to replicate actual hardcopy albums. This will allow the albums to be more acceptable in social situations, creating a larger problem for copyright owners.

V. Attributes Specific to Legitimate Music Media

Consumers would rather own legitimate music than pirate music if there are differences between the two types that affect them personally. Due to the same attributes of counterfeit music that dissuade consumers from owning and displaying counterfeit music in social situations, they would rather own legitimate music for personal reasons. When counterfeit music is manufactured or copied digitally, it is often not a perfect copy. Consumers can detect the differences between some counterfeit and legitimate music. Owning inferior media lowers music's utility to the consumer. They may not be able to

use the media in the same ways or enjoy it as much if the quality of the music, booklet, or packaging is inferior, or they may merely not feel as satisfied with the music since it is not legitimate.

Legal Environment

The legal environment surrounding counterfeit media will have a major impact on the future of piracy. While much of the burden of curbing music piracy rests on the directly interested parties—record labels artists, and others—government and international non-government organizations have the power to control the actions of these entities through the creation of laws and treaties.

Domestic

The majority of music albums contain copyrighted material. The United States Constitution calls for the Congress “to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries”.³⁷ The U.S. Copyright Act, Section 17 of the United States Code outlines this right. A copyright holder has the exclusive right to reproduce, distribute, perform, display, or license the work referenced in the copyright. The holder also receives the exclusive right to produce or license the production of derivatives of the work. The Copyright Act specifically gives the copyright owner the exclusive rights “to reproduce the copyrighted work in copies or phonorecords,” known as the Right of Reproduction. The Act limits the exclusivity of this right by allowing for duplication that the courts determine falls within the boundaries of “fair use”. The Act enumerates some situations considered fair use, such as criticism, comment, news reporting, teaching,

³⁷ *U.S. Constitution*, 1787.

scholarship, and research. However, it does not exclude other uses, such as home recording for personal use. Consequently, the term, fair use, has various interpretations.

Various affected parties and organizations have different views on what types of activities are legal and illegal, as well as what policy should be. The RIAA asserts that any copying of music to CD that you perform on your computer is copyright infringement. This means that the copy could be for personal use, such as for listening in one's automobile. However, Section 1008 of the Audio Home Recording Act (AHRA) of 1992 does give those who perform this sort of copying immunity from legal action on the grounds of copyright infringement. This is provided that the device conforms to the AHRA's guidelines for digital audio copying devices.³⁸

Among other things, AHRA-compliant devices, such as Digital Audio Tape (DAT) recorders, Mini Disc (MD) recorders, and CD recorders, must incorporate the Serial Copy Management System (SCMS). The AHRA outlines the requirements for an SCMS that permits first generation digital-to-digital copying of audio works, but prohibits multi-generation, or "serial" copies of those copies. While this does not prevent owners of the original product from making a copy for themselves or others, it presumably prevents those who possess a copy from making any further copies of the product. While devices that incorporate SCMS and similar technologies make it more difficult to make copies of digital media, the protection schemes can be subverted. Consumers can easily obtain plans to subvert SCMS protection on many consumer models. In addition, there are already devices known as "SCMS-killers" available (though their use is not permitted by the DMCA), and professional (as opposed to consumer) devices do not need to incorporate SCMS. As increasingly more digital

recording is processes by computers, their open architecture and more easily modified software will allow even greater ability to get around copyright management systems.

The HRRC's members believe that the AHRA gives them the right to make and play digital audio compilations of music, copied or compiled, from materials that they purchased. In addition to the support lent to the opinions of this group by the AHRA, the judicial record serves to reinforce the lawfulness of copying from purchased materials. The U.S. Supreme Court decision in the 1984 Betamax case, *Sony Corporation v. Universal City Studios* indicates the legality of similar activities involving video. In this case, Universal sought an injunction to keep Sony from selling its Betamax video recorders on the grounds that the video recorders would be used for activities that infringe copyrights. One challenge was that time-shifting, watching a program recorded from broadcast at another time by taping the program's original broadcast, was an instance of copyright infringement. As part of its ruling in favor of Sony, the court stated that "when one considers the nature of a televised copyrighted audiovisual work, and that time-shifting merely enables a viewer to see such a work which he had been invited to witness in its entirety free of charge, the fact that the entire work is reproduced, does not have its ordinary effect of militating against a finding of fair use."³⁹ This ruling is a direct indication of the legality of burning CDs for personal use from one's own music collection.

Before the passing of the No Electronic Theft (NET) Act by the House of Representatives in 1997, it had been legal to distribute copyrighted materials if the actor distributing the goods was not receiving any monetary benefit. This allowed people with

³⁸ *Audio Home Recording Act of 1992*. U.S. Congress. H.R. 5982.

³⁹ *Sony Corp. v. Universal City Studios, Inc.* U.S. Supreme Court, 464 U.S. 417 (1984).

Internet distribution sites, such as college students, who could maintain servers will little cost to themselves, to distribute copyrighted materials such as computer software, without breaking the law. The NET Act makes any reproduction or distribution of copyrighted works with a retail value of more than \$1000 a willful act of copyright infringement.⁴⁰

With the NET Act, music copyright holders are protected from the illegal distribution of their works under law. However, it is not currently practical to prosecute most violators of the Act. Offenders are very numerous, difficult to track down, and individually do not have the potential to cause a great deal of harm. Many of those who help to distribute unauthorized copies of digitized music hide their music on university and other computer servers. Furthermore, sites that have music are generally of a fleeting nature; site administrators both create and disband them routinely without much warning. Aggregately, those that aid in distribution likely cause harm to the music industry. To prosecute, or even threaten, a great portion of offenders is not currently practical. Therefore, while the legislation exists to protect the intellectual property, interested parties must also find solutions outside legal action.

International

The networked world intensifies intellectual property issues. When users can access intellectual property at lower cost offshore than it is to purchase a license from the legitimate owner of the information, users will naturally choose the less expensive alternative. As this is currently the case, there is now great pressure on copyright holders and law enforcement agencies to develop new ways to enforce copyright law. Johnson

⁴⁰ *No Electronic Theft Act*. U.S. Congress. H.R. 2265.

and Post enumerate four links to geographical location that are destroyed through the rise of the global computer network, including:

- I. the power of local governments to assert control over online behavior,
- II. the effects of online behavior on individuals or things,
- III. the legitimacy of a local sovereign's efforts to regulate global phenomena,
(and)
- IV. the ability of physical location to give notice of which sets of rules apply.⁴¹

Due to their inability to control information flow within their physical borders, some authorities have attempted to construct artificial boundaries through technologies such as filtering mechanisms. However, it is unlikely that these types of strategies will succeed as networking technologies spread and worldwide demand for information increases. Strategies should shift to law enforcement and producing advantages to owning the legitimate product.

Copyright law is subject to international treaties. The Berne Convention for the Protection of Literary and Artistic Works of 1886 was the first major step toward guaranteeing intellectual property rights to copyright holders internationally. Currently, there are 136 state signatories of the Berne Convention. The crux of the treaty is the statement that "works originating in one of the contracting States... must be given the same protection in each of the other contracting States as the latter grants to the works of its own nationals".⁴²

⁴¹ Johnson, David R. and David Post. "Law and Borders: The Rise of Law in Cyberspace." *Stanford Law Review*. Vol. 48, May 1996, 1367.

⁴² World Intellectual Property Organization Web Site. Internet: <http://www.wipo.org>.

The US government is thus playing a large role in protecting artists against international copyright infringement. One example is the government's acceptance of World Intellectual Property Organization (WIPO) treaties. The WIPO currently furnishes the secretariat for the Berne Convention. In 1998, Congress passed the Digital Millennium Copyright Act (DMCA), which amends US copyright law to comply with the WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty. The DCMA fulfills the WIPO treaty requirement that the US, as a contracting party of the treaties, must provide legal remedies against tampering with copyright management information and circumventing copyright protection measures.⁴³

Even with the treaties, international copyright infringement of US music remains a major problem. Many countries feel little incentive to enforce US copyrights within their own borders. Furthermore, not all nations are parties to international copyright treaties. Specifically, many developing nations are absent. They may see maintaining minimal copyright recognition as a viable strategy for improving their standard of living.

Impacts on Industry

In general, it is likely that the existence of counterfeits lowers the number of legitimate albums sold. A portion of those consumers that buy counterfeit media would have purchased legitimate media had the counterfeit option not been available. As a result, record labels are less likely to invest in artists, especially those that are not established and, thus, more risky. The record companies potential for garnering profits is lower since revenues will be lower. Consequently, counterfeits may cause a major

⁴³ *WIPO Performances and Phonograms Treaty*. World Intellectual Property Organization. 23 December 1996.

negative impact on innovation if the owner of intellectual property rights cannot fully exploit their investment and creativity.

There is, however some argument on these points. Groups such as recording rights advocates claim that piracy has a stimulative effect on music sales. While these groups admit that piracy is widespread, they assert that the existence of counterfeits acts as advertising. They say that record labels sell a higher number of albums due to this fact than the number of sales that are displaced by counterfeiting. Though it is likely that this type of reaction does occur to some extent, evidence works against the claim that there are more new sales than lost sales.

Hardie predicts that piracy will only dominate digital music delivery until 2000. During this time period, a substantial number of people will enjoy digitally downloaded music. However, this number is not large enough to have a major impact on the music industry. Hardie goes on to say that between 2001 and 2002, the record industry's use of digital distribution as a promotional tool will begin to displace pirate downloads. In 2003 and beyond, there will be a great deal of commerce conducted via digital downloads.⁴⁴

Fighting Pirate Audio

The RIAA is responsible for blocking the operations of many audio pirates both domestically and internationally. It is difficult to determine the real impact of the RIAA's actions in terms such as a percentage of counterfeits seized, or profits that could be realized. However, the number of seizures, court cases, and actions taken against online pirates is rather large. Furthermore, much of the benefits from these actions are

⁴⁴ Hardie, Mark E. 7-12.

realized through implicit threats to those who are conducting activities similar to those who are specifically targeted.

The RIAA describes its anti-piracy strategies under 5 general approaches. These include education, enforcement, litigation, legislation, and technology. The education portion of the RIAA's strategy includes the Soundbyting Campaign, described previously, and the CD Plant Education Program. Under the Education Program, the Association teaches employees of CD manufacturers how to identify whether manufacturing orders might be suspect and what actions to take should a suspect order be found. Under its enforcement actions, the RIAA provides assistance to law enforcement agencies, the U.S. Customs Office, and other authorities in identifying and prosecuting those who violate copyright laws and treaties. The RIAA's assistance includes coordinating seizures of domestic and international pirated goods and working against city street vendors of pirated audio media.

The Association works in other ways to curb piracy as well. It assists in civil trials and initiates criminal litigation in efforts to curb piracy. Some of the RIAA's litigation has brought about major media coverage and could have major consequences. In October 1998, the RIAA filed a complaint against Diamond Multimedia, alleging that the portable MP3 player violates the Audio Home Recording Rights Act since it has no protection against unauthorized copying. The RIAA was, however, unsuccessful in the court case. The organization also works to enact legislation domestically and internationally. They have worked with state legislatures to force audio media manufacturers to include their names and addresses on their wares. The RIAA has also helped to bring the piracy issue into US trade agreements with countries such as China

and Mexico. They also work with technology, acting as an administrator in the US working to compel media companies to implement the International Standard Recording Code, a digital identifier of each song that makes up an album, in music media manufacturing.

The RIAA has declared that it will be channeling most of its anti-piracy resources toward Internet piracy. The Association will likely be a major force against piracy since they represent the most influential music copyright holders in the US. In the future, as electronic music distribution becomes prevalent, the RIAA will undoubtedly work to ensure the safety of the copyright holders it represents.

Through the Customs office, the US Government helps to slow the rampant disregard for copyright law in Asia, Latin America, and elsewhere. The figures for international production of counterfeit music are astronomical. Analysts estimate that in Hong Kong alone, pirated disc manufacturing capacity is around 400 million discs per year.⁴⁵ Law enforcement agencies, US and international, have been increasingly working against CD pirates, conducting many seizures and making many arrests, but the real impact is questionable. As networking technology makes music piracy simpler, agencies must develop new tactics.

The Secure Digital Music Initiative (SDMI) is a coalition of companies, created by the RIAA, working together to obtain consensus among the recording, electronics, and computer industries on a standard for secure digital distribution of music. The SDMI, has stated its mission as “to enable consumers to conveniently access music in all forms, artists and recording companies to protect their intellectual property, and technology and

⁴⁵ Farley, Maggie. “CD Piracy Ring in Hong Kong is Busted.” *Los Angeles Times*. 30 April 1998.

music companies to build successful businesses in their chosen areas.”⁴⁶ To this end, SDMI members plan work to establish a digital distribution format that maintains security while delivering the best value to the record industry, the electronics industry and consumers.

⁴⁶ “Secure Digital Music Initiative Mission Statement.” *RIAA Website*. Internet: <http://www.riaa.com/tech/sdmimis.htm>.

Chapter 5

Future Electronic Distribution

The music industry has realized that there is a potentially strong and profitable future for them in the electronic distribution of music. Firms, however, have been extremely careful about attempting to pursue electronic distribution sales models since they are afraid of the real dangers of future piracy, even involving media originally distributed through authorized channels. The industry is afraid that once the music is in an easily transmittable format—one that is digital and compressed—it will flow relatively unchecked through computer networks to people that have not paid for the privilege of owning a copy of the media.

Various groups have suggested and developed numerous solutions in efforts to solve the problem. These include variations on media watermarking and encryption technologies and unique hardware identifier systems. There has not yet been a consensus as to what technology or type of technology to use. Therefore, there are currently many available, although immature and largely untested, options. Predictably, numerous software and hardware firms have suggested that their strategy is best.

A Workable Standard

The SDMI, has stated its mission as “to enable consumers to conveniently access music in all forms, artists and recording companies to protect their intellectual property, and technology and music companies to build successful businesses in their chosen areas.”⁴⁷ To this end, SDMI members plan work to establish a digital distribution format that maintains security while delivering the best value to both the record industry and consumers.

According to Waldman, the SDMI will be one of the progenitors of the future of electronic distribution. He claims that it is in everyone's best interest to create standards since all parties are working toward the same goal.⁴⁸ Levin analogized that "the industry is trying to avoid what happened with Beta and VHS".⁴⁹ At this early point in SDMI discussions, all parties seem optimistic concerning the possibilities of the forum; however, history has shown that it is difficult to establish a standard when parties with different interests are concerned. In similar types of negotiations to reach consensus for a standard, such as those over DVD, the consumer market will be a major determinant of the final format. Though DVD hardware and software has been available for over two years, there is still no single format. For example, on some DVDs, surround audio is encoded in Dolby Digital format while on others, the DTS format is used. Not all players can decode both formats and the consumer market will likely be the major determinant in deciding which format will prevail.

Pricing Reproducible Goods

There are varying opinions on the optimal pricing of reproducible goods. A high initial price can provide large margins, but will likely depress sales volume and encourage copying. Meanwhile, some feel that people will always make counterfeit copies and copyright owners should not worry about them, and instead try to profit from the legitimate sales base.

Nascimento and Vanhonacker have suggested a model to use when pricing reproducible goods such as music. The numbers of potential copiers and buyers are

⁴⁷ "Secure Digital Music Initiative Mission Statement."

⁴⁸ Waldman, J. David.

⁴⁹ Levin, David.

functions of the reservation price distribution, the copy cost distribution, and the market price of the product. If an individual's reservation price is above the market price, that person is a potential buyer. If the cost of copying is below a consumer's reservation price, that person is a potential copier. If the reservation price is above both the copying cost and market price, that individual could either be a buyer or a copier, but it is assumed that the consumer will choose the least expensive option. The authors describe the cost of copying as consisting of two major components, a fixed cost and a variable search cost. The fixed cost includes those costs incurred obtaining a copy of the media once it has been located, and the variable cost includes costs of materials and time needed to locate the media. The cost of copying could also include quality differences between an original and a copy, moral issues, and fear of legal prosecution.⁵⁰

This model is powerful in determining how to price media distributed electronically. In this case, marketers must carefully examine consumer reservation price through demand, which will change in the face of the new distribution model. Copying costs, however, are even more crucial to analyze. Variable costs associated with locating media of which to make an unauthorized copy, including time, software, and hardware, will decrease with advancing technology. Copyright holders must also pay close attention to costs associated with quality differences, moral issues, and fear of legal prosecution, and must work to keep all of these consumer costs as high as possible. As technologies mature, firms should constantly study changing public opinions and behavior surrounding those technologies.

⁵⁰ Nascimento, Fernando and Wilfried R. Vanhonacker. "Optimal Strategic Pricing of Reproducible

Chapter 6

Conclusions

With the increasing use of electronic distribution for retail music sales, industry actors must begin to change the entire way that they conduct business. Currently, record companies are reluctant to enter the electronic distribution field. They realize that there are dangers associated with early entry into the use of an untested retail model. Their profits will be substantially hurt if they shift to new business models prematurely. However, new and reorganized players will force established companies to change their ways. Some firms using electronic distribution, empowered by its efficiencies, will be able to undercut the established firms and provide competition. As established record labels begin to use digital distribution, changes in industry relationships will ensue.

The music industry itself will create or embrace a standard format for electronic distribution, including a file format, security measures, and possibly a licensing infrastructure. While it will be difficult for all actors—the music industry, technology firms, and electronics manufacturers—to agree on a standard, they realize the urgency associated with creating one. Governments and international non-government organizations will provide the rules on which the standard is to be based, but will not play a major role in the standard's development.

While the actual production of music may not get cheaper, costs associated with distribution and marketing will drop. Electronic models will make distribution more efficient and marketing tactics such as increased segmentation will increase sales efficiencies. Artists and consumers will reap the benefits of this change in industry structure. Artists will be empowered to demand higher royalty percentages while consumers will be able to pay lower prices for music. Electronic music distribution will

allow other marketers to develop other models. Just as software is often bundled with computer hardware today, music—or a license that entitles one to hear or download music—will be bundled with other products as value-added incentives to consumers. Bundled music will serve joint marketing roles for the core product and the music and will allow firms that are stakeholders in various industries, such as Sony, exploit synergies.

Value in terms of artist reputation is important to the music industry today, but with electronic distribution, artists will be able to build and leverage this power in new and increasingly lucrative ways. Artists could follow a Netscape-like strategy. The Web browser company built up its reputation-value by providing its software to consumers free-of-charge. Once its name was established, the value created, the firm subsequently converted the value into income by selling other software and services for profit. Music artists, following a similar strategy can build a fan base by providing music free of charge, and later capitalize on their reputation by charging for albums, concerts, and merchandise.

Building artist loyalty will serve multiple purposes. Consumers loyal to artists will pay the artist for goods they have to offer and in return for the right to listen to music. It will also prevent consumers from attempting to gain access to artists' intellectual property in ways unacceptable to copyright owners, through piracy and theft. Education will become an increasingly important mode of inducing customers to support artists rather than take part in piracy. Music industry actors will launch programs similar to the Soundbyting Campaign, created for educational institutions, to educate other types of consumers about piracy and the music industry.

As the costs associated with launching artists decrease, the music industry will be able to sign and promote artists that previously would not have received much industry backing. Meanwhile, with centralized distribution and decreased costs of storage space for purely digital media, music industry actors will be able to distribute relatively unpopular music genres and styles to consumers. Local artists, whose music currently sells only in local brick-and-mortar outlets, will have access to global distribution. Thus, consumer choice will expand as artist opportunities grow. Just as those companies that best understand and take advantage of the new opportunities will succeed in the retail marketplace, those artists that capitalize on the new opportunities will experience market success as musicians. The public, in turn, will benefit from an efficient marketplace designed to turn a profit for the industry by better servicing their needs.

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