## THE RECORDING INDUSTRY'S DIGITAL DILEMMA: CHALLENGES AND OPPORTUNITIES IN HIGH-PIRACY MARKETS

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ABSTRACT. Globally, the recording industry has experienced significant revenue decline and piracy growth within the last five years. In some countries like the United States, piracy is comprised mainly of the illegal sharing of digital recorded music files such as MP3s. In other countries like Spain, recorded music piracy is dominated by the physical production and sale of CD-Rs by organized crime networks. While there have been a number of legislative and law-enforcement changes made in many countries across the globe, these defensive efforts have at best served to slow piracy's growth. The next step for the recording industry is to develop a recorded digital music strategy for each country in an effort to restore revenue growth and reduce piracy by offering consumers a compelling digital music value proposition. In this paper, I explain why.

#### 1. Introduction

Piracy has been an issue for the recorded music industry forever – but only within the past five years has it become an issue that affects the industry's revenues in a significant way. Over the past five years, the industry has focused on refining legislation, laws, and attitudes in an attempt to preserve their current CD-based business model. However, though these efforts have shown some slight effect on piracy in some countries, it is clear to this author that the industry must develop compelling digital music products to consumers in order to regain revenue growth momentum and push piracy levels – both physical and digital – to manageably low levels.

At the outset of my Fulbright Scholarship, I set out to better understand the current state of the global and Spanish recorded music industry. I then sought to quantify the importance of high physical piracy countries, in general and individually, to the recording industry's future financial health. Armed with this knowledge, I developed a framework, included in the full paper but not in this version, for evaluating a country's "digital-music readiness level" as well as a digital recorded music strategy to follow in developing compelling digital music products.

1.1. **Methodology.** In order to better understand the current state of the global and Spanish recorded music industry, I performed a significant amount of reading of popular American, British, and Spanish magazines and newspapers from the past five years. For this research, I gathered data from a contact at the US Embassy in Madrid who had studied the issue for years, researched Spanish papers and magazines in the National Library, and read American and British magazines

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and newspapers online. In quantifying the importance of high physical piracy countries, I researched and compared GDP and per-capita spending on recorded music through the World Bank, the International Federation of the Phonographic Industry, and the Economist through on-line and text-based research across a number of identified high-piracy, high-revenue-generating countries. I then developed a strategy for leveraging digital music products in regaining revenue growth.

# 2. The Importance of Spain and Other High-Piracy Markets to the Recording Industry's Future

Legal music revenue has dropped; seizures and shutdowns of pirated CD manufacturing paraphernalia and online piracy network shutdowns have been surpassed only by the growth in illegal activity in both areas; and yet piracy shows no significant signs of slowing. However, with the entertainment saturation of mature music markets such as the United States, the United Kingdom, and Japan, countries with high levels of physical piracy such as China, Greece, Spain, and Italy actually offer the largest near-term opportunity for regaining revenue growth – but it is a growth that will come only in response to the industry's introduction of digital music products with novel value propositions for unique consumer groups. Amongst all of the high physical piracy markets considered in this section, Spain offers a unique combination of characteristics conducive to significant near-term revenue growth.

- 2.1. The Global Revenue Contradiction. In 1999 the recording industry earned US\$38.5 billion dollars in global revenue, its highest sales total in history (Figure 1). By 2002 this number would fall to roughly US\$32 billion, representing a 17% drop in only three years as a result of the rampant growth of piracy and the general slowdown in the worldwide economy. However, this global picture obscures a variation of country-specific trends. A major factor of this decline came from the world's largest market, the United States, where revenue dropped from US\$14.3 billion in 1999 to US\$12.6 billion in 2002. In most major music-consuming countries in the EU, recorded music revenue declined over this three-year period despite moderate population and GDP growth. The United Kingdom and France, on the other hand, both experienced revenue growth over this period, US\$265 and US\$400 million respectively.
- 2.2. Quantity of Recorded Music Experienced & Implications. It is important to note that the decline in spending on legal music worldwide does not equate to a lesser quantity of music consumption. In fact, the quantity of all recorded music being experienced has certainly risen over the past five years. However, this overall growth is the direct result of an increase in consumption of illegal music while legal music consumption as represented by sales revenue of recorded music has clearly declined. Therefore, the gap between consumption levels from 1999 to 2002 represents the consumption threshold in 1999 for legal recorded music products. At present, the total consumption of music is much higher than the peak demonstrated in Figure 1, but it is illogical to assume that all current consumption of pirated media translates to consumption of legal music products. Hui and Png's research in 2003 (see Hui and Png, 2003) concluded that one unit of pirated CD music equates to 0.42 units of legal CD music, or roughly half. Regardless, the gap between the legal music revenue from 1999 to 2003 should be viewed as a

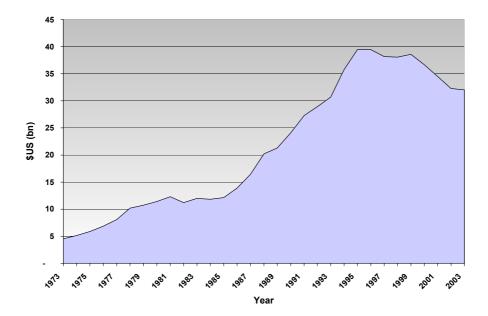


FIGURE 1. Value of global recorded music sales 1973-2003 (source: IFPI (2004b, p. 181)

challenge and opportunity for revenue growth, as the industry could regain a significant portion, if not all, of this revenue by substituting pirated recorded music consumption with legal recorded music consumption. If the assumption is made that music consumers have not decreased their overall appetite for music but are simply finding illegal means to satisfy that appetite, this gap represents the minimum revenue gain that the industry could expect by substituting pirated products with legal products. I will elaborate more on this assumption at a later point in this paper, but I do believe that this is in fact the case.

Furthermore, the growth in consumption by many consumers as a result of pirated products offers an opportunity for the industry to grow sales past what has been experienced in prior years, as theoretically once consumers are accustomed to a certain level of usage of a product they should have a propensity to stay relatively close to that level of usage given a relatively similar value propositions. And, digital music products allow for easier variation of the core product – the music recording – and should allow the industry to adjust its product's characteristics and sale price accordingly to fit multiple consumer preferences, unlike with the CD. The key issue will be adjusting consumers to the different value proposition offered by legal digital music – both in the shift from CDs to digital music and from pirated digital music to legal digital music. Revenue growth will be dependent on the industry's ability to develop and deliver products with differentiated characteristics at a reasonable price, not solely upon its ability to compete on price.

With this potential in mind, let's try to quantify the feasibly recognizable revenue gains that the industry could gain on a country-by-country basis by taking a look at recorded music spending per capita as a percentage of per capita GDP.

2.3. Recorded Music Spending per Capita as a Percentage of per Capita GDP. Worldwide, music is an important piece of every culture, though the economic demand for recorded music clearly differs on an individual and intercultural level as with any product or service. Yet while some countries may differ slightly in the percentage of income dedicated to recorded music due to a number of complex factors, a significantly lower percentage might come as the result of one of the following three substitution reasons: first, that consumers purchase other entertainment products such as television, video games, cell phones, and movies. Second, that the consumers in that country, due to low income levels (as represented by GDP per capita), have less disposable income to spend on recorded music products and entertainment products in general, instead focusing their purchases on products needed for everyday living. Third, that the recorded music offerings in that country do not adequately satisfy the needs of the consumer, and so they instead purchase or download nearly undistinguishable illegal recorded music products at a lower price.

Per capita spending on music as a percentage of a country's per capita GDP provides a quantitative measure of the relative importance of legal recorded music products to each country's consumers. Simple per capita spending on music is a less accurate measure of this relative importance due to the vast difference in countries' per capita GDP, which is a good relative indicator of each consumer group's available income to be spent on recorded music products.

See Figure 2 for a graphical representation of specific countries' percentage of GDP spent on recorded music in 1999 and 2002.<sup>1</sup>

While the true importance of recorded music to a consumer's life is more complicated than one measure, this method allows for comparison of consumer groups from different countries. One would expect a lower percentage of GDP per capita to be spent on music in poverty-stricken countries since poorer consumers spend a greater percentage of their annual income on basic necessities than very wealthy consumers. With the countries listed in order of lowest GDP per capita to highest and assuming that the demand for music is universally elastic in regards to price relative to disposable income, one would assume that consumers with more money would spend a greater percentage of their annual income on music until the value gained from an additional unit of music is not worth the relative price – however, there are clear variations from this trend exhibited in Figure 2.

Mexico's percentage of GDP spent on recorded music in 1999 was much higher than countries with significantly higher per capita GDP such as Spain and Italy. Since 1999, however, this measure has dropped drastically, due in large part to the greater appeal of cheaper pirated music alternatives.<sup>2</sup> Portugal also has maintained a surprisingly high percentage but has seen only a slight decline since 1999. Spain, Italy, and Germany are also anomalies, with a lower percentage of their income spent on recorded music products than other countries with lower GDP per capita. Since 1999, Spain has experienced a significant drop in this measure, Italy has always ranked extremely low in comparison to other countries and experienced

<sup>&</sup>lt;sup>1</sup>This, and all subsequent recorded music revenue used in this section, has been derived from IFPI (2003, 2004b). GDP amd other demographic data has been derived from World Bank (2004) and The Economist Intellegence Unit (2004).

<sup>&</sup>lt;sup>2</sup>IFPI (2004a, p. 126)

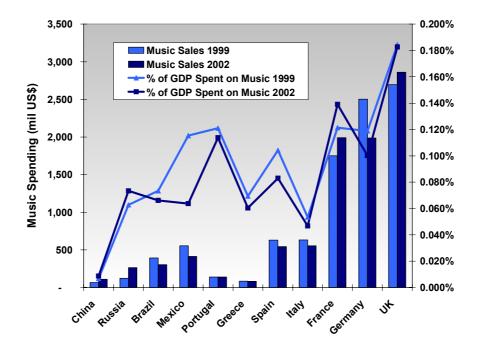


Figure 2. Analysis of % of GDP Spent on Recorded Music 1999-2002

only a minimal decline, and Germany's significant decline is a result of both the country's recent economic situation and piracy.

As Figure 2 shows, consumers in Greece, Italy, and Spain spend less on recorded music as a percentage of their per capita GDP than nearly any other country's consumer group in Europe.<sup>3</sup> China's consumers spend even less on music in relation to their per capita GDP than these three high-piracy markets, though this percentage has grown in the last three years to 0.09%. Also telling is the magnitude of the decline in this measure between 1999 and 2002 in Spain, Mexico, and Germany from 0.104% to 0.083% for Spain, 0.114% to 0.064% for Mexico, and 0.119% to 0.100% for Germany. While alarming, these low percentages – in particular, in the high-GDP, high-piracy, high-GDP markets of Italy and Spain - represent a significant opportunity for the recording industry under the assumption that much of this per-capita spending on music has not declined, but that legal spending has been replaced by illegal spending. Of further interest, for means of comparison, are China, the world's fastest growing economy and highest-piracy market in the world, and Greece, another high-piracy market in Europe with far less economic strength than Italy or Spain.<sup>4</sup> Let's do some more analysis of the GDP and per capita recorded music spending of each of these countries in order to identify which offers the most enticing financial reward for the introduction of successful digital music products.

 $<sup>^3</sup>$ Certainly less than any of the other significant, from a revenue standpoint, recorded music markets.

<sup>&</sup>lt;sup>4</sup>IFPI (2004a, p. 8)

2.4. Revenue Impact of Recorded Music Spending per Capita as a Percentage of per Capita GDP. Previously, three causes for a decline in percentage of GDP spent on recorded music were identified: a slow economy and the resulting decrease in spending on entertainment goods, substitution by other entertainment products, and substitution of legal products by physically and digitally pirated products. For the purpose of this analysis, I assume the effect of the substitution of other entertainment products to be zero, an assumption I believe to be true because this type of dramatic consumer preference trend typically takes effect over a much longer timeframe than the time period from 1999 to 2002.<sup>5</sup> Proof that this factor is not the primary cause of the overall decline in legal music consumption is the existence of music piracy itself, which when measured as a part of true music consumption demonstrates that overall music consumption is equal or greater than ever before. With roughly one in three discs sold worldwide being pirated, and a significantly greater volume of music downloaded illegally online, there is a huge pool of music consumption for the industry to tap. While there might be some downward trend in overall recorded music consumption, the overall effect over such a short time period is theoretically so small as to be considered negligible.

Therefore, for the purpose of this analysis and based upon the logic outlined above, we will assume that the two primary causes of any country's decline in this measure are the growth of pirated substitutes and poor overall economic climate. With this assumption in place, one can further assume that in countries that have experienced strong economic growth since 1999 this difference can be entirely attributed to piracy. This assumption is founded upon the theory that there would be no adverse economic effect on consumers' spending habits, and on the contrary, spending on entertainment goods such as music should theoretically increase as an economy grows.

In the case of Greece, China and Spain, one can thus perform hypothetical calculations of the revenue that the recording industry could potentially gain by multiplying prior percentages of GDP spent on recorded music products as representatives of a piracy-free 2002. This quantifiable dollar difference represents potential growth for the industry if it can replace pirated spending with legal spending on music products (Figure 3).

In the case of Spain, analysis suggests that the industry could realize around US\$140 million dollars in incremental revenue if it were able to substitute legal music purchases for consumers' current illegal music purchases and downloads. In Italy the incremental revenue could total US\$77 million, though some portion of this total would likely remain unattainable until Italy's economy emerges from its current slump. Like Spain, Greece's recent economic boom suggests that the full amount of US\$12 million could be available for the recording industry under

<sup>&</sup>lt;sup>5</sup>The only potential exception to this generalization is mobile telephony, which has seen huge growth in a relatively short period of time. However, it is my contention that the two products do not compete head-to-head, as communication is a very different need than the need for music. Furthermore, by offering novel legal recorded music products that incorporate mobile telephony – ringtones, callbacks, etc. – in an attempt to provide a better value proposition than pirated alternatives, the fine line between recorded music and mobile spending will continue to dissolve.

<sup>&</sup>lt;sup>6</sup>The IFPI estimates that in 2003, 35% of all music CDs sold worldwide were pirated, slightly higher than in 2002. While not every pirated disc equates to a legal sale, between US\$3.5 billion and USS\$19.8 billion dollars could be gained with the assumption of 1.7 billion illegal CDs and US\$11.7 average revenue per CD (2003 average revenue per legal CD sale).

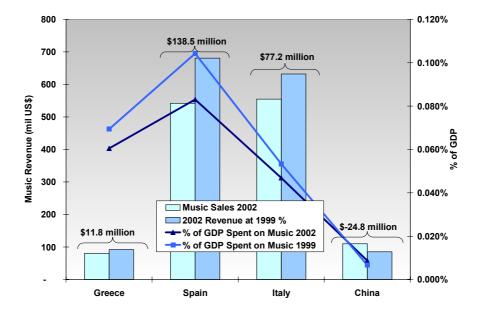


FIGURE 3. Analysis of Revenue Growth through Substitution of Pirated Music Consumption with Legal Music Consumption

the right circumstances. China's growth in this measure makes this calculation impossible – as the legitimate recorded music market has never been established. The world, as an entity, could stand to realize US\$3.17 billion revenue according to this analysis, and these four markets would fill nearly US\$250 million of that gap, or around 9%.

Further revenue growth could be attained by increasing this measure to even higher rates than those demonstrated in each particular country in 1999 – such as the rates demonstrated in the United States in 1999 (.16%) or the United Kingdom (.18%). Let's take a look at the examples of Spain, Greece, Italy, and China to gauge the potential revenue gain in each country given a 0.15% percentage of GDP spent on recorded music products. (Figure 4).

Increasing the percentage of GDP spent on recorded music in Spain by 1% yields US\$65 million in incremental revenue whereas in Italy it yields US\$118 million. In Greece and China, this 1% gain yields US\$13 million and US\$127 million in incremental revenue. Were the recording industry capable of growing the percentage of GDP spent on recorded music to levels similar to the United States, or 0.15%, it would realize hundreds of millions of dollars of revenue growth: US\$1.6 billion in China, US\$1.1 billion in Italy, US\$372 million in Spain, and US\$106 million in Greece. While none of these gains are immediately realizable and have a certain dependency on overall economic prosperity, they are a stake by which the industry should seek to measure itself as there exists the possibility that such a difference in per-capita GDP spending on music is at least partially a result of the global music

<sup>&</sup>lt;sup>7</sup>While such growth would clearly be beneficial for the recording industry, it would come at the cost of spending in other industries and therefore could have a negative impact on the country's overall economy.

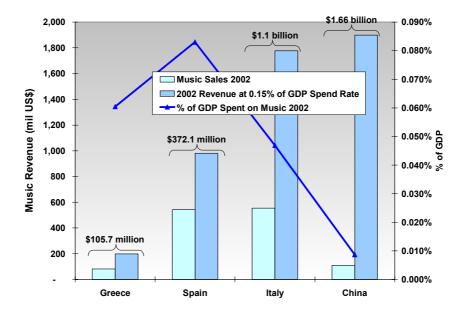


FIGURE 4. Analysis of Potential Revenue Growth through Growth in % GDP Spent on Music

industry's products being tailored to suit the consumers in the highest-revenue countries. Further statistic research might yield insight into the true correlation between GDP and GDP growth and recorded music spending, which would allow one to calculate a more concrete revenue growth figure in this manner.

Still, with the goal of achieving a 1% growth in percentage of GDP spent on recorded music products over the next five years by more precisely catering music products to specific countries' needs, nearly US\$350 million of revenue growth could be achieved in just four countries: Greece, Spain, Italy, and China.

2.5. The Industry's First Targets. Looking at the most economically significant high physical piracy markets in the world – China (in the future), Italy, and Spain – it is apparent that the industry's first high physical piracy target in its attempt to turn the tide of piracy should be Spain. The reasons for this conclusion are that Spain offers the greatest near-term potential revenue growth through GDP growth (US \$46.3 million) and substitution of pirated music products with legal music products (\$US140 million) as well as significant potential for long-term revenue growth (US \$65 million per 1% increase). Italy is a close second, with roughly half the near-term potential revenue from GDP growth (US \$20.7 million) and substitution of pirated music products with legal music products (US \$77 million), and with a significantly larger long-term revenue growth potential (US \$118 million). However, Spain's higher near-term potential and generally strong economy make it a more attractive target at present. China and Greece both offer significantly less near-term potential; although China's long-term potential should make it a priority country for the industry's long-term global strategy.

#### 3. A Framework for Developing Digital Recorded Music Products

In the first two sections of this paper I highlighted the importance of high-piracy markets through revenue and demographic data analysis. What is evident throughout this paper is the fact that the industry has undertaken significant defensive initiatives in the form of legal, legislative, and promotional campaigns against piracy. What is further evident is that these initiatives are not having the desired effect on piracy that the industry needs in order to regain revenue growth – indeed, the very absence of this evidence suggests that these efforts are not sufficient in eliminating the piracy problem.

3.1. **Defensive Actions, Effects, and Limitations.** In regards to digital piracy, the effects of legislation and lobbying for tighter IP laws can already be sensed anecdotally in some countries - for instance, many consumers in the U.S., when faced with the download-versus-buy decision, are reconsidering the pay-for-play versus peer-to-peer decision due to the perceived risk of prosecution the industry has promoted through the media. This perceived pressure on the consumer is growing much slower in the rest of the world because many countries' court systems simply do not allow for the aggressive lawsuit strategy employed in countries such as the U.S. Since these countries are typically the same countries that have more problems with physical piracy than online piracy, this limitation is less important for now but only until technologically-savvy consumers in these countries become the majority group and begin to pirate music online in masses. And even in countries such as the U.S., the benefits of such strategies have yet to be proven through quantitative analysis, and to the contrary, some studies are emerging that suggest that legislation and lobbying are having little to no proven effect on limiting piracy. Two possibilities exist: one, that these efforts will not affect the consumer. Two, that the effects lag significantly behind the campaigns themselves, and so the benefits have yet to be reaped. I believe that the campaigns will have some effect on certain risk-averse consumers, but that it is not sufficient in and of itself to eliminate piracy.

As for physical piracy, in many countries across the world such as Spain, street vendors are actually beginning to feel the teeth of law enforcement due to modification of legislation to make the entire process more effective and punitive. In high-physical piracy markets such as Spain, changes in legislation will allow police and judges to apprehend and charge street vendors with greater ease, and the increase in police attention on the matter should lead to a greater number of successful raids and seizures. These actions, if effective and over time, should reduce the number of street vendors as well as increase the inherent risk involved in selling pirated CDs, which should translate into higher sales cost of pirated CDs.

This section will not address the defensive strategies that the industry has or should undertake to fight piracy as a solution to piracy. It is the author's opinion that the industry has already undertaken or is beginning to take the necessary steps in every country throughout the world to make the selling and downloading of illegal music more difficult both for vendors and consumers. This is the first logical step in trying to regain revenue growth and reduce piracy to manageable levels throughout the globe, but it is not sufficient alone to eliminate piracy. Through my research on the global and Spain-specific problem of music piracy, I believe that

high-piracy markets in particular will continue to lack revenue growth and experience problematically-high levels of piracy until novel, innovative digital recorded music products are offered to the consumer.

3.2. Taking the Offensive with Digital Recorded Music Products. In combination with efforts to defend the CD business model, the industry needs to offer its consumers digital music products that can be differentiated from both pirated CD-Rs and illegally downloaded MP3 files. By decreasing the perceived value of pirated music through lawsuits against kingpin file sharers and offering a music product with a higher perceived value (such as single downloads) from iTunes than legal CDs, pirated CDs, and downloaded MP3s, the industry will simultaneously push with defensive-minded lawsuits and legislative changes and pull with offensive-minded digital products in the direction of a legal digital music model. And, with the greater versatility allowed by digital media, the industry should be able to offer consumers new and innovative ways to happily spend more money on music.

However, this is a far simpler point to write about in a paper than to execute in reality. With the local nature of the piracy issue combined with a constantly shifting technological landscape, plotting a course for the future is an exceedingly difficult task. With these country-specific characteristics in mind, it is clear that any digital recorded music strategy must be developed and implemented for each country in order to successfully compete against pirated products.

Given this country-by-country approach, there is a need to evaluate whether a country's consumers are likely to adopt digital music products right now. If the answer to that question is yes, then there is a need to develop a set of digital music products that satisfy the needs of the consumers to generate revenue. If the answer to that question is no, then the industry must either take a wait-and-see approach, or attempt to push consumers and technology towards a more digital music-friendly state. Let's take a look at some of the factors that are involved in creating innovative digital music products in the following section.

3.3. Purchase Drivers for Recorded Digital Music. The first step in this process is to identify the purchase drivers for digital recorded music products. There are two sets of drivers that influence consumers in any country with regard to digital music product acceptance: technology and the consumer disposition towards digital music products. While a country's consumers may be ready for digital music products, the current technological offerings and infrastructure might not be advanced enough to support these needs. On the other hand, consumer groups might not be prepared to make the leap to spending more money on digital media despite an advanced technological environment in the country. The outline that follows is a breakdown of each of these two drivers into a number of smaller, measurable factors that can be assessed via consumer surveys and focus groups in order to assess and develop innovative digital music products for that country.

## Consumer Readiness/Willingness to Purchase Digital Music

(1) Deterrence to piracy – This factor measures the perceived deterrence to satisfy one's music needs with pirated music, whether it be in physical or digital form.

<sup>&</sup>lt;sup>8</sup>In the full version of my research paper, I explain how to use these factors to analyze a country and develop digital music products suitable for that country's consumers.

- (2) Comfort with purchasing of non-physical product This factor measures the consumer's willingness to pay for a product with no physical manifestation.
- (3) Willingness/Ability to try new technologies This factor measures the consumer's self-perceived willingness (and therefore, their self-perceived ability) to learn and understand new technologies.
- (4) Internet access This factor measures the frequency by which the consumer accesses the internet.
- (5) Importance of music This factor measures the perceived importance of music to the consumer's life by assessing the number of music products the consumer buys; it is meant to be a means of estimating the relative demand for music for each consumer.

## **Technology Penetration**

The most objective way to measure the technological penetration of technology related to digital music in any country is to analyze the percent of consumers who own/have the following products/services:

- (1) Mobile phones
- (2) Computer in household
- (3) Broadband access at home
- (4) Video game console
- (5) Portable MP3 player

## 3.4. Developing Digital Music Products.

3.4.1. Revenue Sources. Down the road, subscription services may become more appealing to both consumers and the industry as connectivity improves to the point where digital media can be cheaply and effectively streamed to media devices. However, at this point, consumer demand is for ownership of recorded music products such as MP3-format files. Towards this end, my full length paper focuses on developing a digital music product strategy and leaves digital services for future analysis.

As the recording industry hopes to regain growth in per-person spending on music products, it will be imperative for them to develop not just one digital product – iTunes singles, for example – but instead an array of enticing digital recorded music products. As consumers are confronted with more and more media consumption options, it will be imperative for the recording industry to find ways to couple the music that consumers desire with other entertainment outlets – including movies, music videos, video games, and cell phones. As Dominic Pride, who owns Ear to Earth, a music consultancy, said in early 2003:

You can't just send out a prereleased clip and a picture of the artist and hope that is going to be a sustainable revenue model ...[The music companies] have to get hold of the devices, look at how consumers use those devices, and give the consumers something they didn't know they wanted in the first place.

One of the greatest advantages that digital media offers is the distribution flexibility it gives content providers – giving record companies the ability to distribute music to consumers at times and in places that are currently impossible for content providers to penetrate, in new and varied digital formats.

However, before it harvests the fruits of the digital world, the industry has a significant amount of internal and external change to accomplish. These media giants will need to continuously evolve over the next few years and their internal transformations will be largely driven by the evolution of the digital products and services they begin to offer as they diversify their revenue streams. Therefore, it is imperative for these companies to analyze the likely future revenue sources for the industry not only to develop new products, but also to gain an understanding of the internal changes these products will require.

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