

**"The music industry is looking for an alternative business model,  
not just another way to promote an album"**

**"Retail has to change, it's not going away"**

**"Napster is a poor service model"**

**"The recording industry is attempting to try to  
maintain control over music distribution"**

**"Music fans have loudly declared that they want music on demand"**

**DIGITAL MUSIC DISTRIBUTION**

**Internship @ Sony Music Europe**

**by Wouter Haring**

**Fall 2000**

**Sony Music**

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## 1. Introduction

With the growth of the Internet, people start to buy products online rather than just buying them in shops. Products that are being sold most online are books and audio CD's [8]. The main reason is because of the shipping size. Although most of these products bought online are still physical products, record companies and retailers have started to offer digital downloads of music.

Most of the music that is being downloaded up till now is illegal, meaning nobody has paid rights in order to own and listen to the music. For record companies as well for artists and eventually the consumers, this is a serious problem. Without money coming to the record company, there is no money for developing new artists. Established artists, who get paid a lot for selling their records, are not motivated to make new records for the record company because of the lack of payment. Eventually this could lead to the situation where (major) record companies cease to exist because artists do not want to be signed at them, and musicians have to do everything by their selves in order to release a CD. Consumers will most likely have to pay more for the legal music and also end up with less music to choose from. This is not the situation we want to end up with.

The purpose of this report, written during my internship at Sony Music Europe in London, is to give an overview of what is going on in the record industry and give recommendations that can contribute to a solution that results in a healthier situation where people buy music online instead of copying it illegally.

Chapter two takes a closer look at the most important problem facing the record companies, the miss or loss of income on record sales and digital music. After identifying the problems, the actual research takes place in order to come to recommendations that will lead to a better situation where record companies lose less money on digital music. In the third chapter, the structure of the research is explained.

The research is divided into three sections. The first section deals with the Business Model of Music Distribution, i.e. how to offer the music to the consumers. It seems the most common way to deliver music digitally is by downloading or streaming, see chapter four.

The second section tells about the infrastructure of offering digital music. Digital Rights Management services are methods for offering music in a secure way and incorporate good payment systems, see chapter five. Selling music online results in a problem, concerning payments. A large group of people who buy music online cannot pay with a credit card, simply because they are too young to own one. Chapter six describes a survey, conducted at the Sony Music site, about buying online and gives alternatives for credit card payments.

The third and last section gives an overview of the position of the Major Record Companies. All the five major companies have started test phases of offering digital downloads in one way or the other. Chapter seven gives a complete overview of the status of their tests. Together with other companies, the major record companies are represented in the Secure Digital Music Initiative (SDMI) and the Recording Industry Association of America (RIAA), chapters eight and nine respectively.

This paper ends with several recommendations as result of the research that has taken place. The consumer needs to be aware of the consequences of their illegal activities. Likewise, it's important for the record companies to fight against the illegal ways of obtaining music, but at the same time offer legal alternatives with a complete range of music. Only that way people are not tempted to do otherwise.

*Note: This paper is written from the point of view of the Record Companies, Sony Music particularly. With the rapid developments on the Internet, it's almost impossible to have this document updated to the current date. However, it should give a good overview about what has been going on and what will be expected in the near future at time of the release of this paper.*

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## **2. Problems facing the Record Companies**

### **2.1. Loss of income**

Currently, a lot of music, in MP3 format, is downloaded illegally from the Internet. Until a year ago, searching for illegal music would consume a lot of time. Programs like Napster and Gnutella have made the task of finding music a lot easier nowadays. This is because you only need one tool that does all the work, for instance sharing your (illegal) tracks, searching for songs and downloading the music from other users. In September 2000, over 1.39 billion tracks were downloaded using Napster alone, according to researchers at WebNoize [12]. In comparison with normal sales, in 1999 438.4 million singles have been sold, according to IFPI [5], and unit of sales are dropping over the last couple of years.

Especially people aged 10-25 are copying digital music illegally from Internet or friends (Media Metrix [8]). This group after all doesn't have much money to spend but does have lots of free time to search for music and copy it. Students have access to high-speed networks at their school and university but soon a lot more people will have access to broadband Internet at home with the appearance of cable-modem and ADSL. With people aged 26 and up, it's just the opposite. They don't have lots of free time anymore since they've got a job, but therefore do have some money to spend. Especially for this reason the latter group buys their CD's in the regular shops, or online.

There are several studies about the development on the use of tools like Napster and Gnutella. Part of the research tells us that illegal downloads will result in loss of sales. According to the Pew Internet & American Life Project survey [11], "61% of downloaders say they don't care if the music they are capturing is copyrighted". "78% of Internet users who download music don't think it's stealing to save music files to their computer hard drives". PC Online Data [10] reports "Apparently Napster users visit online retailers to get information about music, and then use Napster to download the music free of charge" as a conclusion since CDNow gets more visitors but sells less, especially the last couple of months. This group of people will therefore not buy the CD if they have downloaded the music for free already.

Other researches say however that because of this 'promotion-tool' people are buying more records or related merchandizing, thus increase in sales. According to Jupiter [5], "Napster users are 45% more likely to increase music spending", meaning if they download a track and like the music, they are willing to buy the complete album in store or online.

In conclusion, the main problem with all the music being distributed illegally is that record companies, and not to mention the artists, are missing or losing income on record sales and digital music. Record companies believe that free copying of music over the Internet is endangering a \$7 billion industry. A solution to this problem could be protecting the digital files for instance by use of encryption. This results however in new problem. There is no such thing as a 100% foolproof protection scheme.

### **2.2. How to prevent people from making illegal copies of music**

Nowadays a lot of attention and money is spent on protection of music. It is possible to download a track and play it a specified number of times or play only until a specific date. This is due to the use of Digital Rights Management tools, see chapter 5. Still many people believe it is possible to come up with a protection for digital music files that is 100% foolproof.

However, since the value of music is in listening, it's impossible to think of a copy proof protection, i.e. when you're playing a track of the CD you just bought, you can simply place a microphone next to the speaker and start recording it. With PC's it's just the same. After

you've downloaded your legally bought music file and play it, you can simply record it with any sound recorder on your computer. With soundcards getting better all the time, there is hardly any quality loss. At that point you can distribute this illegal copy over the Internet (using Napster etc.) thus ending up in a situation with lots of illegal files again. Although this is a time consuming process, still a lot of people take the time for it to copy the music.

The second problem is therefore how to prevent people from making illegal copies of music. As illustrated above, it's not possible to come up with a foolproof protection, but it is of the essence to make the threshold high enough to stop people with these activities.

### **2.3. Lack of a good legal alternative**

Fighting against the illegal activities is right, but people still want to have digital music. So, one way to stop illegal copying is to offer legal ways of obtaining digital music.

Therefore, record companies have started digital download tests this year. First they started with up to a hundred tracks being available by their own websites or by using retailers, the last few months there is a shift towards subscription services in the shape of streaming. This is mainly due to Napster and its uncontrolled environment. With Napster, everybody shares their files and copies other files freely to their computer. A stream is more secure, i.e. the threshold is higher before trying to copy it to a digital file.

However, all these tests lack in the availability of music. It's only possible to listen to a couple of hundred, up to a few thousands tracks. For a test to be successful, it is important that a complete catalogue of music is available in a digital format, only then people can get used to the new way of obtaining music and are willing to pay for it, rather than using tools like Napster. Therefore the problem is the lack of a good legal alternative.

### **2.4. How to get paid for content**

By using a legal alternative, people have to pay for the music being downloaded or listened to. With those payments, another problem arises. Teenagers don't have credit cards and therefore have problems buying music online. Other payment methods should be offered as well in order to let teenagers buy, see chapter 6. Without other methods, record companies might miss income on online sales.

### 3. The research

After identifying the problems, the actual research can take place in order to come to recommendations that will lead to a better situation where record companies lose less money on digital music. In this chapter, the structure of the research is explained. The first paragraph shows the problems after the analysis of the current situation and how they are prioritised. The second paragraph describes the structure of the paper and it relates to the problems.

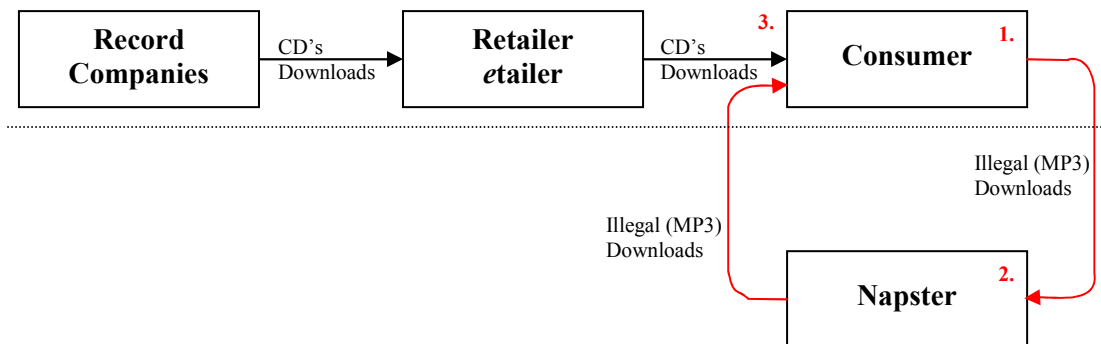
#### 3.1. Structure of the research

At the beginning of the research, an analysis of the current situation has taken place. The legal part of the current situation is as follow. Record companies sell music to retailers, and the retailers sell the music to the consumer. Record companies are also offering downloads trough etailers, retailers on the web, who sell a download to the consumer. This is the upper part in the figure below.

Since the last few years, there is also a lot of illegal music in the form of MP3, being copied from consumer to consumer. Tools like Napster have made this easy and are now a serious problem. This results in a couple of serious issues.

1. The consumer is interested in less expensive, illegal, music and searches for, offers it.
2. Tools like Napster make searching for and distributing of illegal music easy.
3. Because of the existence of illegal alternatives, consumers are tempted to choose them.

These issues create an endless loop of illegal music becoming available, as illustrated in the figure below.



These issues are responsible for the main problem for the record companies, the loss of income (P1). In order to solve this problem, something needs to be done on either of these issues. However, as seen in chapter two, there are some other problems of concern.

P2: How to prevent people from making illegal copies of music.

P3: Lack of a good legal alternative.

P4: How to get paid for content.

The next step in the research is to investigate the problems in order to come up with recommendations. The paper is set up into several sections, each dealing with some of these problems. The next paragraph will describe the link between them.

#### 3.2. Structure of the paper

Taking a good look at the problems, it is clear that the illegal alternatives for digital music must be fight against. But just fighting against the bad guys is a non long-term solution. The record companies have to come up with legal alternatives as well. Only with a good legal alternative, people are not tempted to search for illegal ones.

In order to provide a good alternative, it's important to think of how to offer music to the consumers, i.e. what business model to use for distributing music. Music can be delivered in several ways, downloading or streaming is the most common. When decided how to offer the music, it's important to think of a way how to get paid for it, and make sure once the music is downloaded or streamed to the consumer, it won't be distributed illegally. For this, security is also an important aspect, in order to maintain a healthy situation with only secure music files. This makes infrastructure another important aspect to look at. Once a good alternative can be offered, the illegal alternatives must be closed down. For this, the major companies have to sue the illegal alternatives. The paper is therefore set-up into three sections, each discussing one or more of the sub-problems.

### 1. Business Model of Music Distribution for legal cases (P3)

This section will give an overview of a way to offer music to the consumers. Music can be delivered in two common ways. Offering pay per downloads or subscription services where people can download or listen to streaming music for a specific amount of money for a period of time. It's important to offer a good alternative, one where people get used to pay for music and are not tempted to search for illegal alternatives (P3).

### 2. Infrastructure (P2, P4)

A part of the infrastructure is security and payment, which deserves a lot of attention. With the use of Digital Rights Management tools, music can be protected but still being distributed by the use of super distribution, like people are already used to in the Napster model (P2). In order to get paid for the music being distributed, different payment methods need to be offered, also for people, teenagers, without credit cards (P4).

### 3. Position of the Major Record Companies (P2, P3, P4)

The major record companies are now starting with digital download tests. They start to realise that there is a need for digital downloads because they are missing or losing money because of the Napster situation (P3). Although these tests are far from being perfect, they do offer valuable information for the record companies. This section will give a clear overview of the whereabouts of these tests. It will also describe what the record companies are doing against the illegal alternatives. In the form of the RIAA (Recording Industry Association of America), they are suing Napster and other companies for copyright infringements. Also, being part of SDMI (Secure Digital Music Initiative), they are trying to come up with a secure digital format to make the threshold, of copying music illegally, higher (P2).

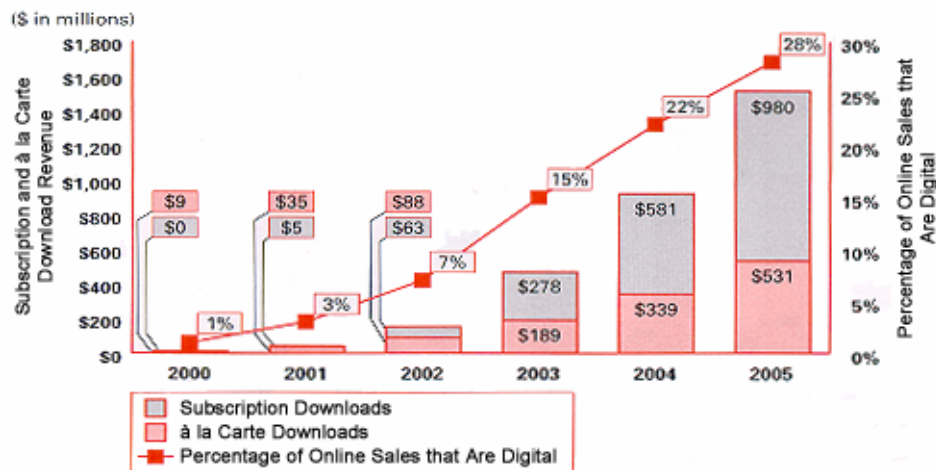
## **Business Model of Music Distribution**

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#### 4. Pay per Download vs. Subscription services

With all the music being distributed on the Internet illegally, record companies are starting to sell music online, besides just fighting the illegal alternatives, in order to stop losing income. Over the last year two common methods are being used. One method is by paying for every download. Another newer, method is subscription service. Here you pay a monthly fee in order to obtain your music but you can listen to it as much as you want within a specific timeframe. There are other forms of paying for music, mainly derived from the subscription services. Pay per listen, here you pay every time you listen to a song, and also pay per timeframe, where you pay for every second you listen to music.

According to Jupiter [5], subscription growth will outpace downloads. Consumers don't have to unlock individual songs with subscriptions and record labels will start an ongoing relationship with consumers. The online music market will grow to \$5.4 billion in 2005 and digitally distributed products will grow to 28% of total online sales, with subscription services accounting for the majority, \$980 million in 2005



Source: Jupiter Internet Music Model, 7/00 (US only)  
© 2000 Jupiter Research

In the next paragraph pay per download is described, most of the time the files being downloaded, by using tools like Napster, are illegal copies. Nowadays legal downloads are offered as well, albeit not often. The second paragraph describes subscription services. This upcoming method is being used more over time and should give record companies more control in what is happening. The chapter ends with the difference between delivery models, i.e. streaming vs. download.

##### 4.1. Pay per Download

Until now, the most common way to download music is by using tools like Napster and Gnutella. The problem, however is that these tools are based on the distribution of illegal tracks, i.e. no rights are paid in order to own and listen to the music. In September 2000, over 1.39 billion tracks have been downloaded using Napster alone, according to researchers at WebNoize [12]. The user base of Napster has grown to over 20 million within the last year.

Napster technology is however inefficient because it doesn't provide a centralized place to get all the music a consumer wants. Many songs listed on its search directory are fakes listed under popular song titles, but when downloading the song, it turns out to be two minutes of dogs barking or a completely different song from an unknown artist, who posted under a

popular song title to entice users to download it. That common practice also leads to a poor user experience, forcing customers to wade through many undesirable tracks to find what they really want. Thus the problem is that this model can't guarantee the quality of the music and therefore people don't want to pay for it.

Nowadays, there are legal alternatives as well as just a few. Retailers have started offering legal digital downloads. Although it's far from perfect, people can start experimenting with downloading files and get used to this new way. In order to obtain content, portals are offering downloads as well. For artists, a portal could be a very good way to promote and sell records. However, the portal can never take over the place of a retailer because its core business is not selling music but providing content. Eventually the retail will most likely be the place to pick up the music because that's the place where all the consumers are right now. Although retail has to change, it's not going away.

#### **4.2. Subscription services**

Subscription services are starting to develop rapidly, especially after all the attention about Napster, and trying to find a legal way for consumers to obtain music in a user friendly way. All the major record companies have announced they will start with such a service within the next few months. There are three different types of services offered, subscription download, subscription streaming or a combination of both.

With the download service, people download files to their computer where they listen to it after the download is completed. The streaming service only makes it possible for the consumer to listen to the music online. The benefit of this streaming service is that people don't have to wait before listening. With a download, they have to wait a specific amount of time before a track is downloaded to their computer. An example of the combined services is being allowed to download e.g. five files a month and stream all files. Subscription services are likely to cost between \$10 and \$15 a month.

A subscription service, as well as a download service, will only be successful when all major record companies make their music available for it, and even then not just a couple of thousand tracks but the complete catalogue of the last couple of years. The current tests allow users only to listen to a couple of thousand tracks, e.g. twenty-five thousand tracks in the Universal Farmclub test, of one record company at a time, while the illegal way, Napster, allows to listen to 'all' the available music.

Jupiter [5] has done a survey about which features were most important in driving people to a paid subscription service. The two features that were tied for first place in consumers' minds, both scoring a 3.8 out of a 5, were guaranteed file quality and virus protection. Survey results are as follow:

*Most important features driving people to a paid subscription service:*

- |                             |     |
|-----------------------------|-----|
| 1. Guaranteed File Quality  | 3.8 |
| 2. Virus Protection         | 3.8 |
| 3. No Advertising           | 2.8 |
| 4. Discounted Merchandising | 2.5 |
| 5. Deep Artist Information  | 2.2 |
| 6. Album Art                | 2.2 |
| 7. Exclusive Content        | 2.1 |
| 8. Customized Newsletter    | 1.8 |

#### **4.3. Differences in delivery models**

There are a couple of differences between (subscription) downloading files and subscription streaming services. As mentioned in the previous paragraphs, after downloading a file, the file

is physically on your own computer and you can do with it whatever you want i.e. playing it, or transfer it to a portable device. When streaming the file, you can only listen to the music at time of broadcasting. As a result you don't have to wait for the music to begin, while with downloading you have to wait a specific amount of time before a track is downloaded and ready to be played. With a slow Internet connection, this could take up a lot of time.

Another big difference is the quality/format of the sound. With a downloadable file, it's sufficient to support only one quality, i.e. the best quality. However this results in relatively large files. For bandwidth reason, often lower-quality are supported as well, but it is not necessary. With streaming, the bandwidth is a crucial issue. You need to offer music for different bandwidths in order to make streaming useful for every body on the Internet. Not every one has a fast connection. People could end up with gaps in the audio stream, which results in an unhappy consumer experience.

The last main difference is that downloadable files allow super distribution, sending the downloaded files to other people who in turn can send it again to others. Super distribution, together with Digital Rights Management for the protection, is a good way to let music promote itself. However, the music industry is looking for an alternative business model, not just another way to promote an album.

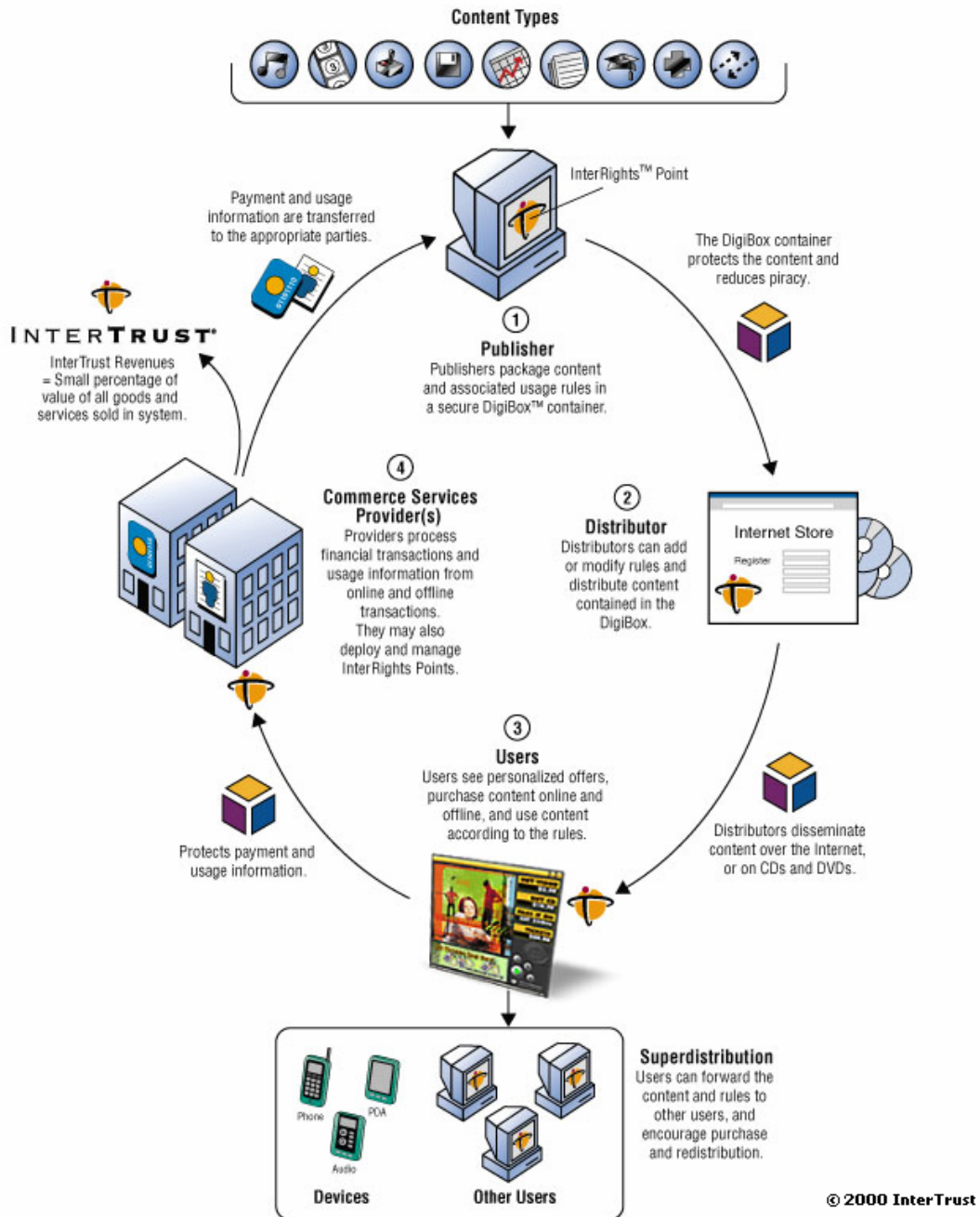
In conclusion, offering good alternatives for people to let them buy the music they want to listen to is very important (P3). Record companies start realizing this and are starting with test phases of download or subscription services. Although download and subscription both have their advantages, industry is seeing more in subscription services because they believe to have more control over it and to generate a more consistent revenue. Subscription Services could be a great alternative, offering lots of music for a low, monthly, price.

## Infrastructure

Once record companies have decided which business model to use for music distribution, it's important to take a close look at the infrastructure. Part of the infrastructure is having lots of servers and huge bandwidth capacities, although being important, it's obvious that there is no discussion about this and it is just a matter of implementing it. Another part of the infrastructure is security and payment. This part deserves a lot of attention however, as described in this section. With the use of Digital Rights Management tools, music can be protected but still being distributed by the use of super distribution, like people are already used to in the Napster model (P2). In order to get paid for the music being distributed, different payment methods need to be offered, also for people, teenagers, without credit cards (P4).

### 5. Digital Rights Management Services

In a legal environment, music files need to be protected in order not to tempt people to do illegal things with it i.e. listening to it without paying. This chapter describes the most common way to protect music files with the use of DRM (Digital Rights Management). DRM is the upcoming technology to protect content and distribute it over the Internet. It offers the benefit of super distribution as in the Napster scenario, but on the other side, it doesn't have the disadvantage of losing income. This is because of the protection and payment system that is incorporated in it. The figure below and the next paragraph, illustrate how DRM works.



### **5.1. How Digital Rights Management works**

Digital Rights Management Tools lets content providers deliver songs, videos, and other media over the Internet in a protected, encrypted file format. It helps protect digital media, such as songs and videos, by packaging media files. A packaged media file contains a version of a media file that has been encrypted and locked with a 'key'. This packaged file is also bundled with additional information from the content provider. The result is a protected media file that can only be played by a person who has obtained a license. The basic DRM Tool process is as follow:

#### *Packaging*

A DRM Tool packages the media file. The packaged media file has been encrypted and locked with a 'key'. This key is stored in an encrypted license, which is distributed separately. Other information is added to the media file, such as the URL where the license can be acquired. This protected media file is saved in a specific format.

#### *Distribution*

The protected file can be placed on a website for download, placed on a media server for streaming, distributed on a CD, or e-mailed to consumers. DRM protected files permits consumers to send copy-protected media files to their friends, an aspect of super distribution.

#### *Establishing a License Server*

The content provider chooses a clearinghouse that stores the specific rights or rules of the license and implements the license services. The role of the clearinghouse is to authenticate the consumer's request for a license. Media files and licenses are distributed and stored separately, making it easier to manage the entire system.

#### *License Acquisition*

To play a protected media file, the consumer must first acquire a license key to unlock the file. The process of acquiring a license begins automatically when the consumer attempts to acquire the protected content, acquires a pre-delivered license, or plays the file for the first time. The Rights Manager either sends the consumer to a registration page where information is requested or payment is required, or 'silently' retrieves a license from a clearinghouse.

#### *Playing the Media File*

To play the media file, the consumer needs a media player that supports DRM files. The consumer can then play the media file according to the rules or rights that are included in the license. Licenses can have different rights, such as start times and dates, duration, and counted operations. For instance, default rights may allow the consumer to play the media file on a specific computer and copy the file to a portable device. Licenses, however, are not transferable. If a consumer sends a protected media file to a friend, this friend must acquire his own license to play the media file. This PC-by-PC licensing scheme ensures that the computer that has been granted the license key for that file can only play the protected media file.

In conclusion the use of Digital Rights Management still allows people to send files to friends, as in the Napster world, they only need to acquire the correct licence. With this method, files are protected, super distribution makes files promote themselves and above all, musicians and record companies get paid because of the licences being sold.

## 6. Payment methods

When buying products from the Internet, the most common way to pay is by using a credit card. However, a lot of people still don't trust the Internet in using their cards, and they are not wrong. A report by CyberSource & Mindwave Research [3] shows that 5% of all credit card transactions are payments over the Internet. A striking contrast is that 50% of the frauds are based on online transactions. Last year 75% of web stores were victim of credit card frauds, this year it's up to 83%. Because of these reasons, people are very careful and would like to use other payment methods, if possible, which are less fraud sensitive. According to a report (April 2000) for the NVPI (Organization for Dutch Phonographic Industry) done by Blauw New Media Consulting [2], the number one reason why people don't buy products online is because of security concerns regarding credit card fraud. The complete list of reasons is as follow:

1. Security concerns	39%
2. Shipping costs	31%
3. Uncertain about delivery	27%
4. Missing look/feel with online shopping	26%
5. Uncertain about service level	22%
6. Uncertain about guarantee	15%
7. Long delivery times	14%
8. Don't have credit card	10%
9. Obscurity of import duty	8%
10. Too difficult	6%
11. Information overflow	3%

However, for digital music distribution there is an even bigger problem. Teenagers and kids don't even have credit cards because they are simply too young. Kids and teens are a big target in this market as youth under 18 in the U.S. spent in excess of \$158 billion in 1999 and directly influenced \$520 billion in purchases. According the most recent studies from Nickelodeon Online/Harris Interactive KidPulse and the MTV/Harris Interactive YouthPulse [4], the spending power of U.S. kids, teenagers, and young adults who use the Internet is now \$164 billion annually. Their online spending is 13 percent of their total spending, or \$21 billion. Furthermore, in Harris' estimate, 68% of U.S. teens are online. Music, clothes, movie tickets, and books are consistently the major items on which teens and young adults (13 to 24) spend their money.

In the following paragraph, a survey held at Sony Music Europe will briefly be discussed. It shows the number one reason for not buying online is not having a credit card in contrast to security issues, because of the young age of the visitors. As a result there should be looked for different payment methods. A different method for paying is using debit cards, described in the second paragraph. With this type of cards you first put some amount of money on it and thereafter use it as if it were a normal credit card. In case this debit card gets stolen, only the amount that is still on the card gets lost. Another benefit is that this card can be given to kids in order to do online purchases. An important aspect to consider is micro payments, described in the last paragraph, which makes it possible to pay very small amounts. The current credit cards can only be used if the amount to pay is larger than a specific value, when the amount is less; an extra fee needs to be paid.

### 6.1. Sony Music Europe survey

Throughout the last quarter of 2000, Sony Music Europe rolled out with a new corporate homepage all over Europe. A new look and new features makes the site become a more portal website making it 'The Artist Network'. In order to know more about the visitors, a survey was conducted (September 2000) and visitors were asked to participate within the three weeks

this survey was available. Questions were asked about age, sex, location, visits (reason, number of times), opinion, buying behaviour and credit card usage. Without promoting this survey, more than five hundred people participated (n=503). This paragraph will describe the most important results. *More detailed information can be read in Appendix 01 - Sony Music Europe Survey.*

As a result of the survey, a couple of interesting conclusions were drawn. Surprisingly 40% of the visitors buy more than 15 records a year. Considering the age and the money to spend, this is quite a lot. But it does mean that people are willing to pay for music, which is of course a good thing.

Regarding payments, about 58% of the visitors have not bought anything online yet. The number one reason for this is not having a credit card at all, which is an obvious reason considering the majority of the visitors are of age 11-24. In order to own a credit card, a person must be 18 and up. Therefore the relation between age and not buying online can be seen clearly. For these reasons another payment system could make a big difference in order for those people to start buying products online.

## **6.2. Other payment methods**

The most common way to pay for a product bought online is using a credit card. Up to recent, this was about the only way to pay. After listening to online customers, new methods have come up by different companies. Methods differ from using 'Beenz', an online currency, up to mobile phones, though debit cards are still the most common now.

A debit card doesn't differ that much from a credit card. The main difference is that you can put money on the card and use it as a prepaid card as well, which can save on transaction costs. The benefit of this is that parents can put money on the card and let their children use it for online shopping. Another benefit of the prepaid card is if the card gets stolen, only the amount that is on the card gets lost. There are of course other benefits for debit and prepaid cards but they are not related to online shopping and therefore out of the scope of this paper.

Another new way to buy your products is by using a regular phone or mobile phone. I.e. with your phone you dial a special 1-900 number, you will receive a personal code and with that code you can download your digital product e.g. music file. The cost of the phone call is the way you have paid for your product. Because almost everybody has a phone, this is an excellent way to buy the goods online. However, children have to be warned because they are calling to an expensive phone number and their parents are likely to pay for that phone call. There are also WAP services to use for payments, which are derived from the former payment system.

A number of companies have developed online currencies, such as Y-creds and Beenz. These can be purchased at their own sites or via affiliate partners. When you shop at a site that supports these types of currencies, you can buy the product without the use of a credit card, but by using this currency. The problem with these online currencies is, they are not accepted at sites that are not part of their networks and are not accepted offline. In addition, those companies need to educate consumers on how these currencies work and how they can be used.

Other companies have developed dollar-based online payment mechanisms. E.g. RocketCash offers users the ability to purchase products at a network of online merchants. A consumer puts money onto an account and can then use that account at retailers that accept it instead of using a credit card at every order. In this situation only one site contains your credit card details, which decreases the chance of credit card fraud.

The general problem now with most of the payment systems is they can only be used at specific sites, which makes it tough for visitors, because they end up with having numbers of accounts of different payment systems. *Read Appendix 02 about Payment Methods Overview for a complete summary.*

### **6.3. Micro payments**

When buying products online, the common way to pay is by using a credit card. However, when a product costs only a few dollars or even a few cents, a minimum fee will be charged. With the selling of music files online, this could result in a major problem. For every track you buy, you end up with paying an additional fee. Several companies have thought of a solution for these small payments (micro payments).

A good solution is what QPass is offering. Once subscribed, you can make small purchases as you normally do over the Internet. When the amount exceeds the \$15 limit, the money will be charged from your regular credit card or you can choose for a monthly bill. This way you won't get charged the extra fee, which normally would be charged over every small purchase you make.

Another solution is what PayPal/X.com is offering. It's referred to as Person To Person (P2P) but can also be used for Business To Consumer (B2C). After an account is created for both parties (buyer and seller), it's just a matter of sending an email with the amount to transfer. People can put money on the virtual/Internet bank or withdraw it and put it back on their normal bank. *Read Appendix 02 about Payment Methods Overview for a complete summary.*

In conclusion, with the development of different payment systems, the consumer will hopefully end up with not being afraid to buy products online, and also having the possibility to pay without the use of a credit card, e.g. for teenagers. Therefore, a lot of attention should be paid to look for different payment methods (*P4*). Good alternatives are debit cards but the Digital Service Providers are offering good and complete alternatives as well. Subscription services could be the answer against the micro payment problem. All this should prevent consumers from having a bad shopping experience.

## **The position of the Major Record Companies**

The major record companies are now starting with digital download tests. They start to realise that there is a need for digital downloads because they are missing or losing money because of the Napster situation (P3). Although these tests are far from being perfect, they do offer valuable information for the record companies. This section will give a clear overview of the whereabouts of these tests. It will also describe what the record companies are doing against the illegal alternatives. In the form of the RIAA (Recording Industry Association of America), they are suing Napster and other companies for copyright infringements. Also, being part of SDMI (Secure Digital Music Initiative), they are trying to come up with a secure digital format to make the threshold, of copying music illegally, higher (P2).

## 7. The Big Five and their standings

With the popularity of digital music, until now in the unsecured MP3 format, companies are trying to find ways to make money out of it by selling digital downloads in one way or the other. Small record companies were already experimenting with digital downloads of full albums or even complete catalogues of their artists since last year. The major record companies have been 'waiting' but are doing some serious tests since the last couple of months.

For a small company it's easy to start a digital download project. With having just a few artists, it doesn't take that much time to convert the music into a digital format. For a major record company, it has no use to start with a project containing just 1-5% of all their music, they need to have at least all the music of the last 3 years available and when possible the complete catalogue. Only then it can be considered to be a good test, because consumers want to have a choice of the music they like and not just at what the labels are offering. If there is no complete catalogue of music, consumers are forced to find the music using the illegal ways again. With the thousands of CD's needed to be converted to the right format, this of course takes a considerable amount of time.

After making the music available in the right digital format, other issues come up like choosing the Digital Rights Management system, Payment System, Clearinghouse and of course the price to sell a track or album for. But another important aspect, and probably the most important reason for the delay of the tests of the major record companies, is legal issues, i.e. how to pay the artists and publishers. Again, for the major record companies this is a much more sensitive decision to take than for a small company because changing from one model to the other isn't easy.

Finally, for the test-phase a couple of retailers need to be selected to use for the offering of the music to the consumers. Trying to sell the music just by the record company itself won't work because the customers hardly have any idea about which artist is signed at which label or record company, therefore the retailers are needed. The companies also have to consider what their competitors will do, i.e. in the record shops all the CD's have the same prices, on the Internet the prices are likely to be the same either. But again, this is where the retail comes in.

The consumers have the assumption that a digital album should be less expensive than the same album on CD. Instead of having the real product, you only have the file on the computer, so no money needs to be spend on production and distribution costs. Or at least, that is what the consumer believes. Right now, the actual price of a digital download should be even more expensive than the regular CD because of all the high cost involved in the conversion of the music to digital formats, setting up good payment systems, marketing the downloads, ensuring the quality of the product and above all, making sure the customer doesn't get a bad shopping experience.

One serious problem that is arising right now is that all the record companies are offering or start offering files in different formats, even within one record company, several formats are being used. For a consumer this results in an unhappy experience because it needs to download and install different players on its computer. Besides this, the consumer also needs to be registered at a number of clearinghouses and use different payment systems, making it very muddled.

The following paragraphs will give an overview of what major record companies are offering for digital downloads, partners used for Digital Rights Management Systems, payment systems being used, retail partners, download prices, sort of music, etc. *Appendix 03 contains news articles related to digital download tests the major record companies are starting now.*

Note: market shares are Year-To-Date market shares as of September 2000, according to NVPI [9].

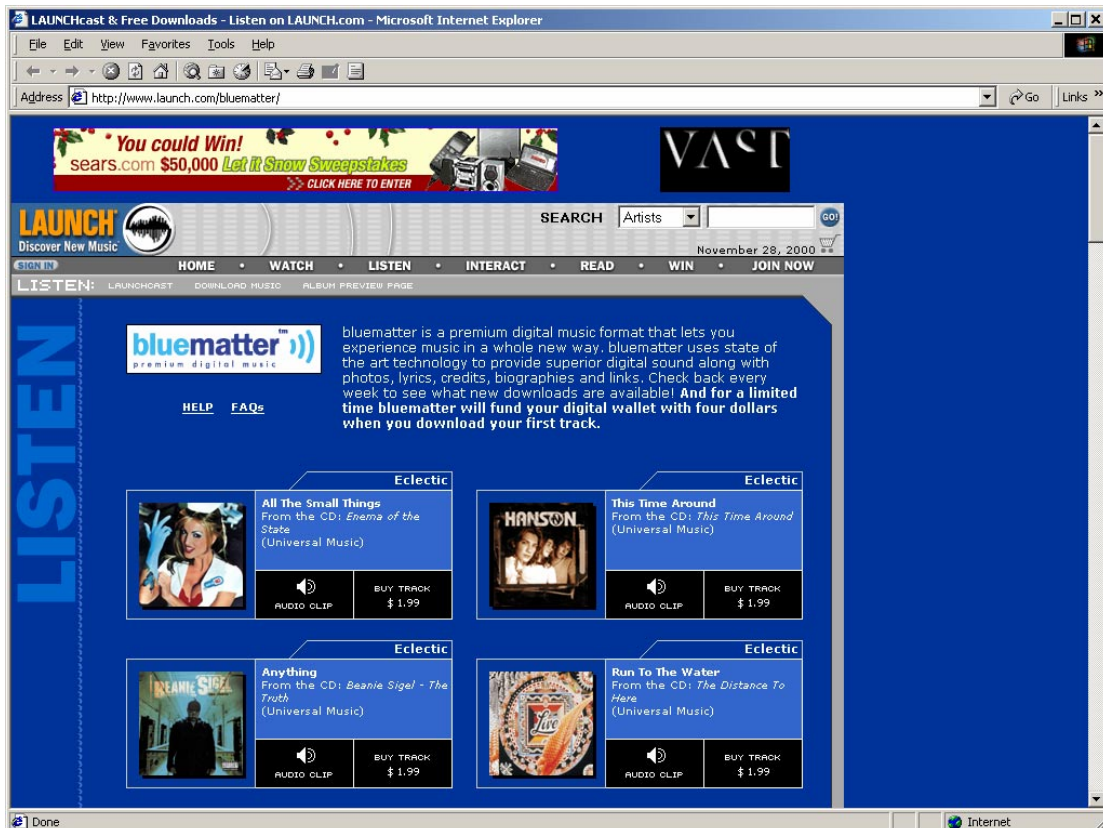
### 7.1. Universal Music Group (28.5%)

Universal debuted a new type of download product named Bluematter. Instead of having only music, this file format contains lyrics, biography and photos as well. It launched with about



60 singles but has since ramped up to more than 200 singles, which it has priced, using the commission model, at \$1.99 each. In this model, the owner, Universal, sets the prices on its product, and merchants receive a predetermined commission on each sale. The music is in the Advanced Audio Coding (AAC) format. Partners include Real Networks, which designed a Bluematter plug-in for its player, and Magex, whose digital wallet, pre-stocked with \$4, is being used.

Universal is doing its first test with a subscription service, using its own Farmclub. At the moment it is offering over 25,000 tracks in a streaming on-demand service. People can now participate for free in this test, but later have to pay about \$15 a month for using this service. Farmclub started as a label for unknown artists, who could upload their songs, thereby offering the same as MP3.com, but Farmclub is now being sued by publishers and songwriters because its not paying them while broadcasting their tracks.



**Summary:**

Launch date: July 31, 2000  
 Regions: US, Europe in Q1, 2001  
 Business model: Commission  
 Digital Rights Management: InterTrust  
 Payment System/Clearinghouse: Magex  
 File Format: AAC, Bluematter  
 Audio Player required: RealJukebox  
 Retailers: RollingStone.com, Launch.com, Lycos.com, Penny Lane Records, music.com, AudioHighway.com and more.  
 Tracks / Artists: 60 tracks including Blink 182, Luciano Pavarotti, 98 Degrees and Marvin Gaye.  
 Price: \$1.99 per individual track  
 New Media chieftain: Heather Myers, executive VP/GM of the Global e-division  
 © Billboard Magazine [1].

**7.2. Sony Music Entertainment (17.3%)**

The first label to plunge into U.S. digital downloads, Sony started with some 50 singles in April but has since expanded its offering to include more than 300 singles. As the pioneer, the label has taken some of the expected arrows in the back, having had a tough time initially finding retailers to carry its offerings, in large part because it chose to embrace a then new online business model dubbed agency or commission. Prices were initially set at \$2.49 but have since been reduced by the label to \$1.99. The music is encoded in Sony's own ATRAC3 format and can be played back on the Microsoft Windows Media Player with an ATRAC3 plug-in. Music can be exported to Secure Digital Music Initiative-compliant portable players. Reciprocal is providing the clearinghouse and transaction services.

The screenshot shows a Microsoft Internet Explorer browser window displaying the Sony Music store website. The address bar shows 'http://thestore.sonymusic.com/thestore/music.asp'. The page features a search bar, navigation links for 'new releases', 'sony music online', and 'customer service', and a shopping cart icon. The main content area is for Jennifer Lopez's album 'Waiting For Tonight', labeled as a 'digital download'. The price is listed as \$1.99 for a digital download (1 track only). A sidebar on the left lists various artists, including Jennifer Lopez, which is currently selected. The bottom of the page shows copyright information for Sony Music Entertainment Inc. and a timestamp of 11:28:00 2:04:17 AM.

Sony Music is finishing the world's first major label initiative of offering Internet users a combination digital storage locker and subscription services in January 2001. Under the name

Unsurface (part of their 550 Digital Media Incubator), Sony's new online plans are to give web surfers various Sony copyrighted content (movies, music and possibly video games) to be stored into their digital storage locker. Unsurface will be a subscription-based service. It is reported that Sony is also in talks with other music-publishing organizations.

In May 2000, Sony Music together with Universal announced their joint venture subscription-based distribution model. Until now, the deal amounts to nothing more than the initial press release. However, two early October moves, Universal announcing Loudeye to encode their tracks and Sony Music with its Unsurface, indicate that something might finally be on its way.

### Summary:

Launch date:	April 18, 2000
Region:	North America, separate project in Japan (Sony Music Japan)
Business model:	Commission
Digital Rights Management:	Windows Media
Payment System/Clearinghouse:	Reciprocal
File Format:	ATRAC3, Windows Media
Digital Service Providers:	Reciprocal
Audio Player required:	Windows Media Player
Retailers:	About 35, including Tower Records.com and Penny Lane Records.com, store@sony.com, Planet Grooves
Tracks / Artists:	50 singles by artists including Michael Jackson, Lauryn Hill, Charlotte Church
Price:	\$2.49 / 3.49 per individual track
New media chieftain:	Al Smith, senior VP; Fred Ehrlich, president of new technology and business development, Sony Music Entertainment

© Billboard Magazine [1].

### 7.3. BMG Entertainment (12.8%)



BMG launched in October with 100 albums and singles but has ambitious plans to ramp up to 2,500 titles by year's end, as it moves to day-and-date release of physical and digital goods. It is using the commission model to set its own prices, but unlike others with this model, it is using variable pricing, with singles ranging from \$1.98 to \$3.49, albums from \$9.98 to \$14.98, and double-albums from

\$11.98 to \$20.98. The music is encoded in AAC, with playback at launch through the MusicMatch and Sonique players. Partners include Digital World Services, InterTrust, IBM, Reciprocal, Digital Island and Liquid Audio.

Bertelsmann announced (October 31<sup>st</sup> 2000) that it has formed an alliance with online music-swapping service Napster, signalling a significant shift in the so far hostile face-off between the major record labels and the start-up. The two companies are developing a new subscription service to let Net users swap songs copyrighted by the recording giant. Members of the proposed service would be able to search and download songs, legally, from Bertelsmann's entire catalogue of artists, including Santana, the Dave Matthews Band, Christina Aguilera and Whitney Houston. Bertelsmann said it will drop its lawsuit against Napster once the service successfully launches. For now, the company will offer a loan to Napster to create the subscription service. In addition, Bertelsmann will purchase warrants that will give it a minority interest in the start-up. A stake in Napster could provide a lucrative return for Bertelsmann should the start-up go public. And the prospect of equity also could appeal to other record labels looking for a foothold in the company.

Less than a week after Bertelsmann stunned the music world by announcing it had joined forces with Napster, the chairman and CEO of the company's BMG Entertainment music division have both stepped down, the reason is most likely because of a disagreement in the new strategy of the company. Bertelsmann is reorganising the company into three divisions, content, media-services and direct-to-customer.



### Summary:

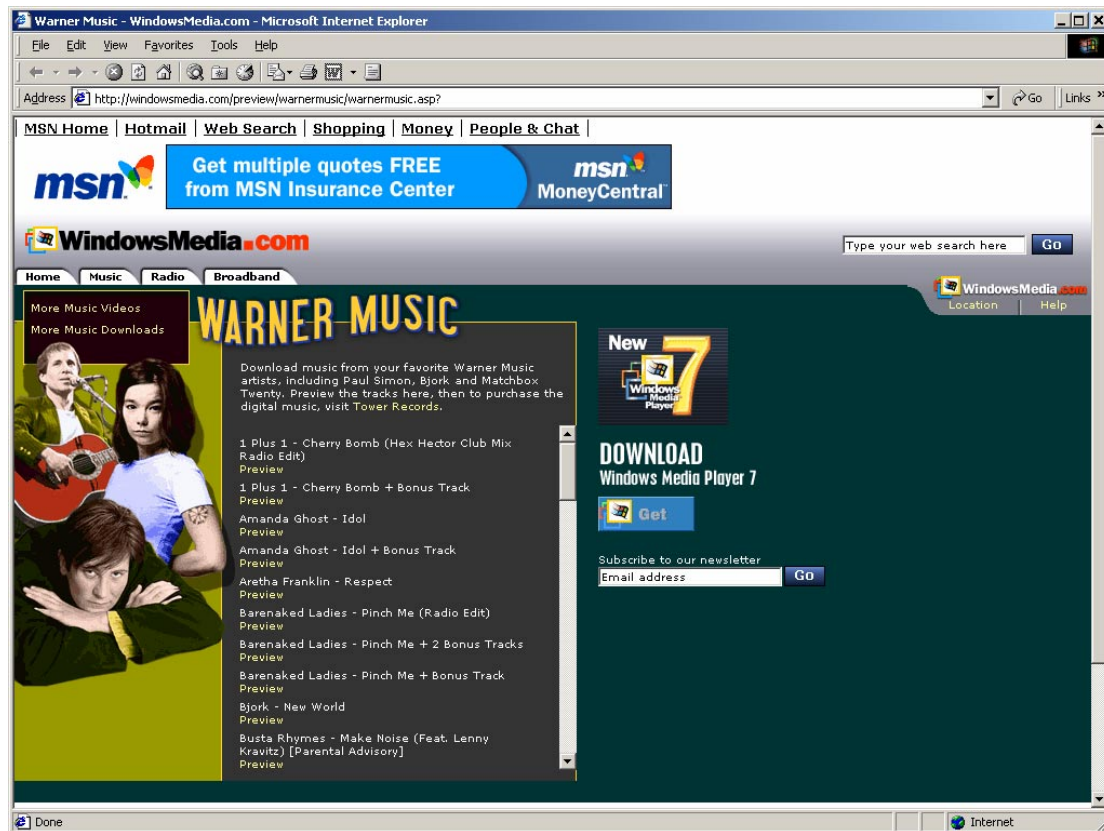
Launch date:	October 10, 2000
Region:	US
Business model:	Commission
Digital Rights Management:	Windows Media, Intertrust, IBM EMMS
Payment System/Clearinghouse:	Individual e-tailers
File Format:	AAC
Digital Service Providers:	Digital World Services, Reciprocal, Liquid Audio, Digital Island (hosting)
Audio Player required:	MusicMatch, Sonic

Retailers:	Lycos.com at launch, ARTISTdirect.com, Getmusic.com, Best Buy, Musicland, Tower, GetMusic among retailers due by year's end
Tracks / Artists:	100 singles and albums by artists including Toni Braxton, Christina Aguilera and Whitney Houston
Price:	From \$1. 89 to \$3.49 for singles and from \$9.98 to \$14.98 for albums
New Media Chieftain:	Kevin Conroy, Chief marketing officer/president of new technology

© Billboard Magazine [1].

#### 7.4. Warner Music Group (12.0%)

The last major-label entrant is slated to launch November 8<sup>th</sup> with 100 singles but plans to have 1,000 albums and singles available by January, including tracks not otherwise commercially available. The company had not confirmed its codecs yet or revealed the suggested list prices for its titles. It will use the gross-margin business model. In this model, the merchants receive a percentage, depending on the total amount being sold. Partners include RealNetworks, Liquid Audio, and Preview Systems.



#### Summary:

Launch:	November 8, 2000
Region:	North America
Business Model:	Gross margin
Digital Rights Management:	Windows Media, Liquid Audio, Real Networks
Payment System/Clearinghouse:	Transactions carried out by individual e-tailers with infrastructure from Preview Systems
File Format:	Liquid Audio, Windows Media, RealAudio

Digital Service Providers:	RealNetworks (infrastructure), Liquid Audio (content preparation, hosting/delivery, DRM, customer support), Windows Media (preview system)
Audio Player required:	Windows Media Player, Liquid Audio, RealAudio
Retailers:	SamGoody.com, TowerRecords.com, Walmart.com, Amazon.com
Tracks / Artists:	100 tracks including Tori Amos, Björk, Madonna, REM
Price:	Retailers will pay wholesale cost to the label and set their own consumer price.
New Media chieftain:	Paul Vidich, executive VP of strategic planning and business development.

© Billboard Magazine [1].

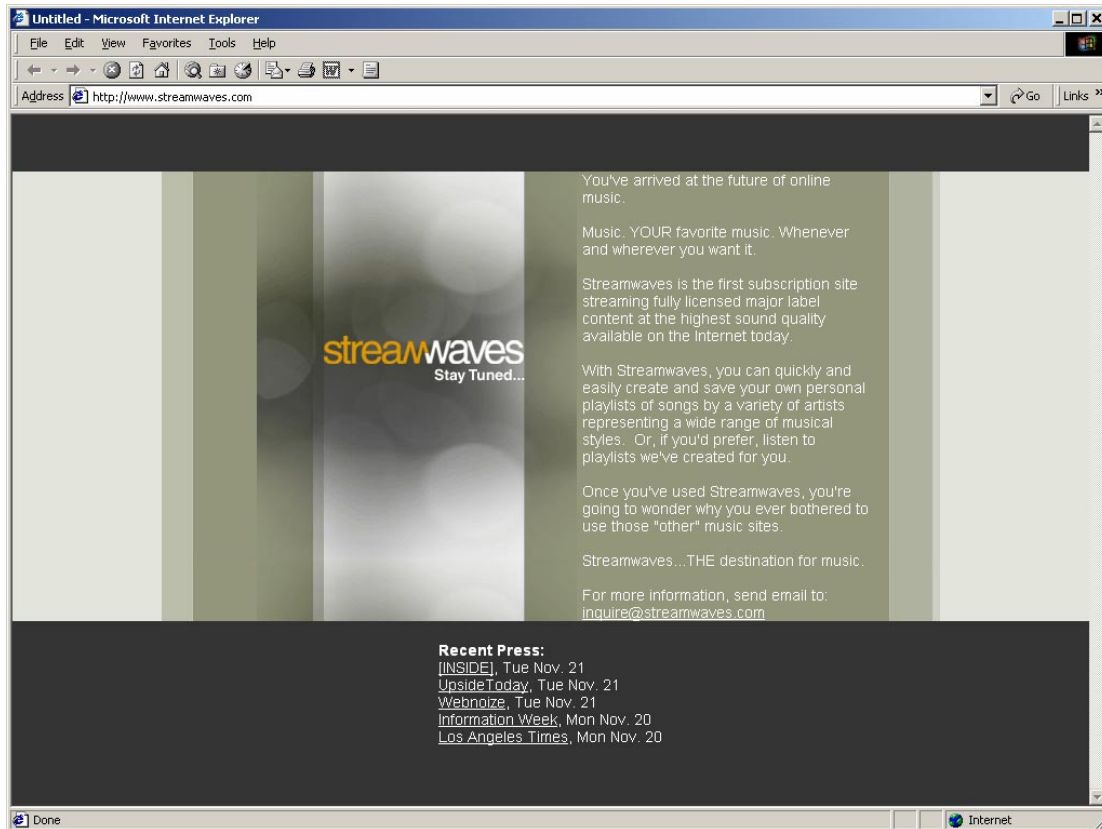
### 7.5. EMI Recorded Music (9.8%)

EMI pioneered its own territory in July when it became the first major label to offer a quantity of full-album downloads for sale. It launched with some 100 albums and 40 singles and has since added an additional 60 full-length sets, bringing its total to 160 albums. EMI also began this fall to move toward day-and-date release of new titles as both physical and digital offerings. The company is using the traditional gross-margin business model: Retailers pay a wholesale cost-and set their own prices. The music is encoded in the Windows Media Audio and Liquid Audio formats. Music can be burned to a CD-R or exported to a portable player. Distribution partners include Supertracks, Liquid Audio, Rioport and Amplified.com.

The screenshot shows the EMI Recorded Music website interface. The main content area displays a list of new releases from EMI. The list includes the following entries:

Artist	Song Titles
A.B. Quintanilla Y Los Kumbia Kings	Amor, Familia Y Respeto
Aaron & Jeffrey	He Is
Al Green	Call Me I'm Still In Love With You Let's Stay Together
Alex Eubank	...As Promised
At the Drive-In	Relationship of Command
Audio Adrenaline	Big House Bloom Get Down <a href="#">more titles...</a>
Avalon (Christian)	A Maze Of Grace Always Have, Always Will Can't Live A Day <a href="#">more titles...</a>
Ben Harper & The Innocent Criminals	Burn To Shine
Bleach	Epidermis Girl Super Good Feeling
Blondie	Call Me - Blondie Parallel Lines

EMI Recorded Music and Streamwaves, an Internet-based subscription music provider, announced a non-exclusive, multi-year license agreement that will allow North American consumers to stream music on demand. The streaming service is expected to launch officially at the beginning of 2001. For a monthly fee, subscribers to Streamwaves' service will have access to a wide selection of titles at any time.



### Summary:

Launch date:	July 18, 2000
Regions:	North America
Business model:	Gross margin
Digital Rights Management:	Windows Media, Liquid Audio
Payment System/Clearinghouse:	n/a
File Format:	Liquid Audio, Windows Media
Digital Service Providers:	Supertracks (Windows Media & Preview Systems), Liquid Audio, Amplified
Audio Player required:	Windows Media Player, Liquid Audio
Retailers:	More than 50, including Virgin, Checkout.com, Jamcast, TWEC.com, HMV.com and SamGoody.com
Tracks / Artists:	100 albums and 200 singles including David Bowie, Frank Sinatra and the Spice Girls
Price:	\$1.49 per single
New Media Chieftain:	Jay Samit, senior VP of new media
© Billboard Magazine [1].	

In general, the conclusion can be drawn that the major record companies are doing their best in order to start with download or subscription based services. But the use of different file formats, different players and just a small portion of the music that should be available, it is far from perfect (P3).

## **8. Secure Digital Music Initiative (SDMI)**

In order to do something about the illegal distribution of music, record companies and other music related companies have set up the Secure Digital Music Initiative (SDMI) in 1998. This initiative was supposed to deliver songs by major artists in a secure format at the end of 1999. But a year later, it is still not finished. This chapter will give an overview of the current status of the SDMI.

Now, the SDMI is a forum that brings together more than 180 companies and organizations representing information technology, consumer electronics, security technology, the worldwide recording industry, and Internet service providers.

SDMI's charter is to develop open technology specifications that protect the playing, storing and distributing of digital music such that a new market for digital music may emerge. The open technology specifications released by SDMI will ultimately provide consumers with convenient access to music both online and in new emerging digital distribution systems, enable copyright protection for artists' works, and promote the development of new music-related business and technologies.

In the following paragraph the initiative is explained, existing of two phases. The first phase is a temporary phase in order to merge to the second phase, incorporating a screening technology. The public was asked to try to crack this screening. A short summary of the status of this screening is described in the last paragraph.

### **8.1. Initiative**

The screening technology is specified in two Phases to expedite the time to market of SDMI-compliant components, while allowing such components to be voluntarily upgraded in the future to require the use of the copy protection technologies that will be incorporated in the Phase II screen. The Phase I screen is only capable of detecting the "upgrade to Phase II trigger". The Phase II screen is a more comprehensive solution. For example, when consumers wish to download new music releases that include new SDMI technology, they will be prompted to upgrade their Phase I device to Phase II in order to play or copy that music. The upgrade will incorporate a screening technology that permits playback of all content except pirated copies of new music releases. In both Phase I and Phase II, consumers will be able to rip songs from their CDs and download unprotected music, just as they do now.

An important part of the work that was achieved is the creation of a reference architecture, which comprises the elements necessary for moving music encoded and protected in various formats onto devices in a manner, which is consistent with SDMI rules. The specification also embraces many of the principles that are likely to be a fundamental part of the long term SDMI specification, namely that devices should respect the usage rules embedded in music by its creators. This will enable new business models that will provide consumers with new ways to enjoy the latest music.

The adoption of the portable device specification confirms that the infrastructure necessary for a compelling marketplace is on its way. Artists and record companies can now prepare for widespread electronic and digital release of the music that consumers want, confident that their rights will be respected.

SDMI launched the development of Phase II of its specification for a digital content copyright protection framework with a request for submissions for the screening technology that will lie at the heart of the system. The Call for Proposals (CFP) essentially describes the technical and legal framework screening technologies must fit into, in order to have a chance of being

adopted by the organisation. SDMI Phase II will ultimately define how future digital music systems, PC-based software players, portable devices or hi-fi units will prevent piracy but still allow users the rights they enjoy now to copy music for personal use.

However, the longer it takes to get Phase II done and for music and hardware companies to support it in their products, the more time the MP3 crowd has to build up support for their self-styled open approach to content, but there's little real evidence as yet that the digital music has any appeal beyond hardcore PC users. That said, that sector is growing, and as it is likely to form the core of the next generation of music buyers, it shouldn't be ignored.

No matter how the process of selling music evolves, the music business is set on a course of preventing piracy at source rather than dealing with illegal copying after it's taken place, and that means SDMI-compliance across the board, from CDs to downloads.

## **8.2. SDMI challenge**

### **8.2.1. About the challenge**

SDMI is developing specifications for a system, to be enforced by future music players/recorders, to hinder unauthorized copying by screening music. Music will be protected with various technologies, such as digital watermarking. Devices that play or record music will first screen it, and protected music clips will only be playable under certain conditions. For instance, with this system, you could buy a CD at a record store that contains protected music. You would be able to play the CD in an SDMI-compliant CD player. However, if you take a song from the CD, compress it into an MP3, and make it available on the Internet, those who download the MP3 will have trouble playing it on an SDMI-compliant device. Therefore it is important that all future devices will be made SDMI-compliant.

A digital watermark is an imperceptible signal hidden in an audio clip, image or any other object of value. The hidden signal is intended to communicate information about the marked object. There are many applications of watermarking. In the context of SDMI, the application is screening and piracy prevention. An audio clip with a watermark is recognized as copyrighted, warning a portable device that it should not be recorded (or possibly even played) except under specific conditions. Watermarking is apparently one of the central technologies behind SDMI's music protection system.

On September 6<sup>th</sup> 2000, SDMI issued "An Open Letter to the Digital Community", see *appendix 03*, inviting people to attempt to crack certain technologies they are considering for use in their system. They set up a website where music samples and some other information could be downloaded to aid in analysing the technologies.

In the first round of the challenge, SDMI provided four 'watermark' challenges and two 'non-watermark' challenges. For each watermark challenge, three audio streams were presented: a reference stream in its original form, the same stream with a watermark, and a challenge stream, watermarked, with no corresponding reference stream. The challenge was to submit to the SDMI 'oracle', a website, a version of the challenge stream with the watermark removed but without degrading the perceived sound quality of the original stream. The oracle would respond by email, after several hours, with an accept message, if the watermark was removed without degrading the sound quality too much, or a reject message.

In the second round of the challenge, SDMI offered additional 'challenge' tracks to participants who succeeded in defeating the original challenges. No oracle was offered. The SDMI requested that participants send the results of their watermark removal tools along with technical details of how the watermarks were removed. Following this, the SDMI would then offer participants the chance to sign a non-disclosure agreement in return for receiving a fraction of the prize money.

### 8.2.2. The results

As a result of the challenge inviting public participation in the selection process, 447 attempted challenges were submitted. After a long time of evaluation, SDMI claims there were no successful attempts that passed all levels of the tests. The participants, however, believe otherwise.

A coalition of cryptography and watermarking researchers from Princeton University, Xerox PARC and Rice University claims to have successfully defeated the music protection system proposed by the SDMI. The researchers say they have come up with more than one way to remove the watermarks that are supposed to protect the four SDMI-supplied music files and claim they are hacks that will pass all three of SDMI's 'tests' of a successful hack.

The team initially submitted the hacks to SDMI as part of the "Hack SDMI" contest. The hacks have already passed SDMI's automated 'oracle' test. As for the audio quality and repeatability tests, which SDMI representatives have repeatedly said would be the determining factor for a truly 'successful' hack. The researchers say they have good reason to believe that their efforts will pass these tests as well. The group also posits that its work could easily be repeated, and that it would be an cinch for an enterprising coder to turn one or more of its watermark-removal techniques into a downloadable program that would let any MP3 pirate "press a button to commit piracy."

However, the three remaining watermarks in the Hack SDMI contest weren't all 'successfully' broken after all according to a SDMI meeting in Washington at the beginning of November 2000. Although all three watermarks had hacks that passed the 'oracle' test, according to the official testing committee report, one of the security systems didn't managed to pass through the listening and repeatability tests.

According to SDMI documents, the attempt to break the watermark from Verance, one of the participating companies, failed the listening tests, but only by a 2-to-1 vote. Another watermark, from Blue Spike, did not pass the repeatability tests either, which required that the attack be repeated on three different songs; but only because they failed on one or two of three possible tracks, which suggests that the hacks were successfully repeated on at least one song.

Blue Spike, one of the two watermarking companies to offer systems that passed inspection, believes that the SDMI tests don't prove that a watermarking system is secure. All the systems that are going to be hacked will be hacked.

Members of the consumer electronics and computer industries are expressing some consternation with the results, especially considering the dearth of representatives from these industries involved in the listening and repeatability tests.

The Secure Digital Music Initiative is trying to do a good thing by setting up a standard for digital music files. However they gave a bit too much attention to their challenge, which resulted in a lot of negative reactions. Besides, consumers are willing to accept a quality of music that is less than the record companies accept. Meaning, when they can get music for free, they are willing to lose a bit on quality. The SDMI should be aware of this, which is not showing in their tests.

## 9. Recording Industry Association of America (RIAA)

The Recording Industry Association of America (RIAA) is the trade group that represents the U.S. recording industry. Their mission is to foster a business and legal climate that supports and promotes its members' creative and financial vitality. Their members are the record companies, creating, manufacturing and/or distributing approximately 90% of all legitimate sound recordings produced and sold in the United States. Although the RIAA is U.S. related, it takes a leading role in lawsuits against copyright infringement sites.

During the last year the RIAA has filed lawsuits against several companies including MP3.com and Napster. An overview of those and other lawsuits are provided in the first paragraph of this chapter. In order to find a solution for the protection of digital music, the RIAA has launched a project to develop a standardized system for identifying digital files of sound recordings. The second paragraph will describe the idea of the project.

### 9.1. Lawsuits

With tools distributing music illegally over the Internet, all the major record companies in the name of RIAA, have filed lawsuit against several companies. The following sub-paragraphs will give a brief overview of these lawsuits.

#### 9.1.1. Napster

Napster has built a system that allows users who log onto Napster's servers to obtain infringing MP3 music files that are stored on the computers of other users who are connected to the Napster system at the same time. Napster provides advanced search capabilities, as well as direct hyperlinks to the MP3 files housed on its users' computers.

The screenshot shows the Napster v2.0 BETA 7 search interface. The search criteria are Artist: Sade and Title: lovers rock. The search results are displayed in a table with columns: Filename, Filesize, Bitrate, Freq, Length, User, Connection, and Ping. The results list various MP3 files related to Sade's 'Lovers Rock' album, including tracks like 'By Your Side', 'Somebody Already Broke My Heart', and 'The Sweetest Gift'. The interface also shows a 'Max Results: 100' limit and a 'Returned 100 results.' status bar.

Filename	Filesize	Bitrate	Freq	Length	User	Connection	Ping
Sade - By Your Side (Ben Watt Remix) - Lovers Rock - 01.mp3	10,092,544	160	44100	8:16	Realbus	56K	40
Music\Sade - Lovers Rock - 04 - Somebody Already Broke My Heart.mp3	7,219,200	192	44100	4:59	scotne...	Unknown	80
Music\Sade - Lovers Rock - 10 - Lovers Rock.mp3	6,102,376	192	44100	4:14	scotne...	Unknown	80
Music\Sade - Lovers Rock - 07 - The Sweetest Gift.mp3	3,327,318	192	44100	2:21	scotne...	Unknown	80
Music\Sade - Lovers Rock - 09 - Immigrant.mp3	5,498,912	192	44100	3:49	scotne...	Unknown	80
Music\Sade - Lovers Rock - 06 - Slave Song.mp3	6,099,246	192	44100	4:14	scotne...	Unknown	80
Music\Sade - Flow (Lovers Rock).mp3	6,579,388	192	44100	4:33	scotne...	Unknown	80
Music\Sade (Lovers Rock) 03 - King of sorrow.mp3	7,022,592	192	44100	4:51	scotne...	Unknown	80
Music\Sade - Lovers Rock - 04 - Somebody Already Broke My Heart.mp3	7,217,347	192	44100	4:59	scotne...	Unknown	80
Music\Sade - Lovers Rock 05 All About Our Love.mp3	3,850,654	192	44100	2:42	scotne...	Unknown	80
Music\Sade - Lovers Rock - 08 - Every Word.mp3	5,861,366	192	44100	4:04	scotne...	Unknown	80
Music\Sade - By your side - Lovers Rock.MP3	6,543,360	192	44100	4:32	scotne...	Unknown	80
Music\Sade - Lovers Rock - 11 - It's Only Love That Gets You Through.mp3	5,676,139	192	44100	3:56	scotne...	Unknown	80
Music\Sade - Lovers Rock - 11 - It's Only Love That gets You Through...mp3	5,676,011	192	44100	3:56	MaryPatty	Cable	90
Music\Sade - Lovers Rock - 02 - Flow.mp3	6,579,388	192	44100	4:33	MaryPatty	Cable	90
Music\Sade - 1Somebody Already Broke My Heart (Lovers Rock).mp3	7,217,347	192	44100	4:59	MaryPatty	Cable	90
Downloaded Music\Sade - Lovers Rock - 02 - F.mp3	6,579,388	192	44100	4:33	lightbulb...	DSL	120
Downloaded Music\Sade - Lovers Rock - 01 - By.mp3	6,542,861	192	44100	4:32	lightbulb...	DSL	120
Downloaded Music\sade-10-lovers_rock-rns.mp3	6,102,376	192	44100	4:14	lightbulb...	DSL	120
Downloaded Music\Sade - Lovers Rock - 04 - S.mp3	7,219,200	192	44100	4:59	lightbulb...	DSL	120
Downloaded Music\Sade - Lovers Rock - 05 - A.mp3	3,850,654	192	44100	2:42	lightbulb...	DSL	120
Music\Sade - It's only Love That gets You Through (Lovers Rock).mp3	5,677,056	192	44100	3:56	Publicl...	DSL	130
Music\Sade - Lovers Rock - 07 - The Sweetest Gift.mp3	3,327,318	192	44100	2:21	Publicl...	DSL	130
Music\Sade - Lovers Rock - 05 - All About Our Love.mp3	2,521,582	128	44100	2:39	Publicl...	DSL	130
Music\Sade - Lovers Rock - 04 - Somebody Already Broke My Heart.mp3	7,217,347	192	44100	4:59	Publicl...	DSL	130
Music\Sade - Slave Song (Lover's Rock).MP3	4,070,087	128	44100	4:14	Publicl...	DSL	130
Music\Sade - Lover's Rock - 06 - Slave Song.mp3	6,099,118	192	44100	4:14	Publicl...	DSL	130
Music\Sade - Lovers Rock 03 King Of Sorrow.MP3	7,021,970	192	44100	4:51	Publicl...	DSL	130
Sade - Lovers Rock.mp3	6,102,376	192	44100	4:14	nicolas...	Unknown	140
Music\Sade - Lovers Rock - 06 - Slave Song.mp3	6,099,246	192	44100	4:14	jan345	56K	150
Music\Sade - Lovers Rock - Somebody Already Broke My Heart.mp3	7,217,347	192	44100	4:59	ravenles	T3	200
Music\Sade - Lovers Rock - By Your Side.MP3	6,542,733	192	44100	4:32	ravenles	T3	200
Music\Sade - Lovers Rock - 03 King of sorrow.mp3	7,021,970	192	44100	4:51	outlaw2...	Unknown	200

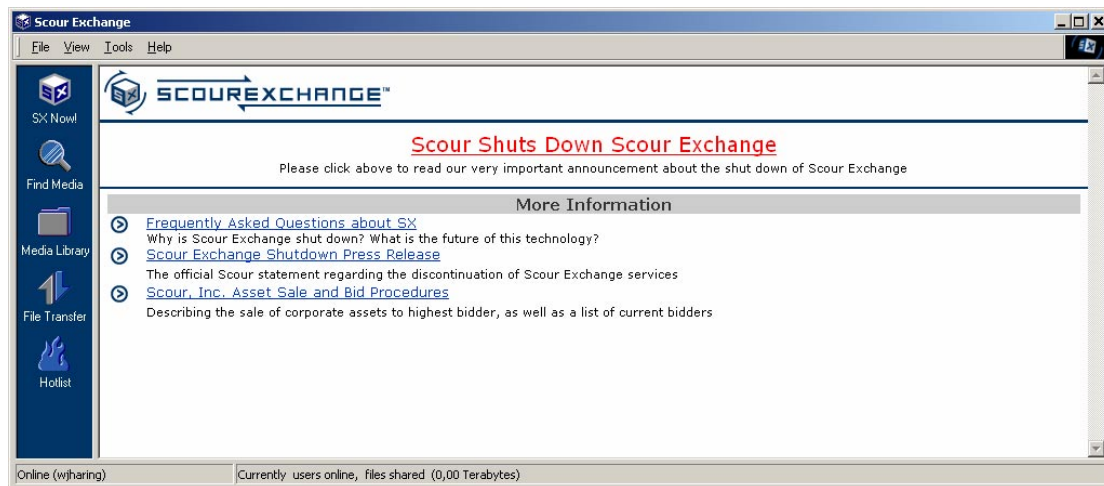
What RIAA is alleging is that Napster's users are committing copyright infringement and Napster should be liable because they can control the individual infringers from committing the acts, Napster also promotes such infringement by advertising the ease of finding songs

through their server. The fact that RIAA is suing Napster does not mean they cannot sue each individual copyright infringer who illegally downloads a song as well. However, the likelihood of them pursuing legal action against each copyright infringer is slim since it would be very costly and they would probably have difficulty collecting on judgments from the “empty pocket” lay person.

There is however a point of concern. Because the lawsuits consume so much time, Napster is still ‘allowed’ to distribute the music in the meantime, until the court has decided. Simultaneously, other Napster-like-tools e.g. Gnutella, MyNapster, Aimster, etc. are developing their programs and eventually can takeover the Napster community if ever Napster needs to close or changes its business. Those other programs need to be sued as well, taking another amount of time.

### 9.1.2. Scour

Scour is a company that offers free software that searches other users’ hard drives, finds audio and video recordings, and other files, on those hard drives and delivers identical copies to the users who have ordered the search. Scour’s service makes no distinction between the exchange of authorized material and stolen copyrighted material. Although the action is popularly called ‘file-sharing’, in fact, one user is allowing a limitless number of duplicate copies of the song or video contained in his hard drive to be copied. Because all of the content is in a digital format, literally millions of copies can be made and distributed without any degradation in the quality of the recordings. All the copies are free, with no compensation trading hands or going back to the rightful owners of the copyrights.



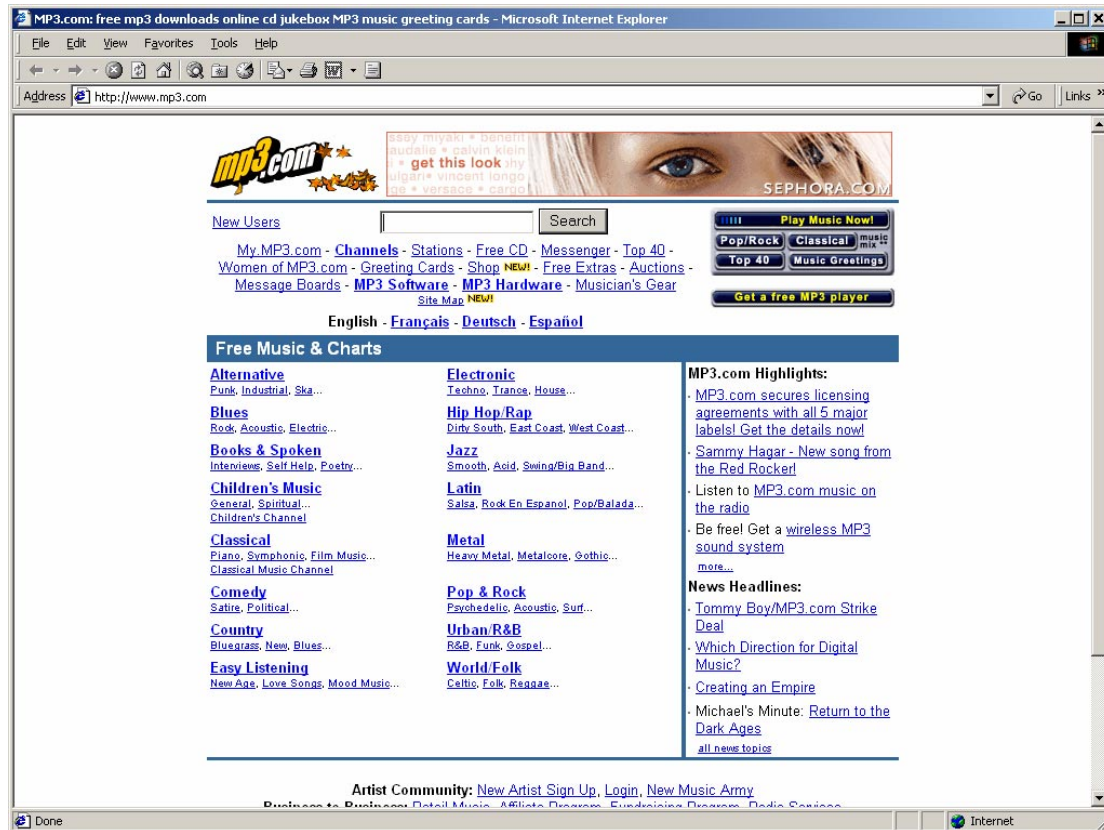
Scour differs from Napster because it offers, among other things, video content, including bootleg full-length feature films. That is why together with RIAA, the major motion picture studios and their affiliates are suing Scour.

Since November 16<sup>th</sup> 2000, Scour is claiming to have shutdown their exchange program ‘voluntary’, *see appendix 03*. While Scour has bankruptcy problems, because they couldn’t find any new investors, and lawsuits still against it, this doesn’t sound voluntary at all. Listen.com offered on November 1<sup>st</sup> to purchase Scour for \$5 million and 527,918 shares of Listen.com stock. Scour’s board and management supported the Listen.com proposal. On November 14<sup>th</sup>, CenterSpan Communications Corp. announced its intent to submit a bid for Scour's assets.

### 9.1.3. MP3.com

MP3.com has created a technology infrastructure for the storage, management, promotion and delivery of digital music. As the Internet’s premier Music Service Provider (MSP), the company is dedicated to providing consumers with anytime, anywhere access to their music

using any web-enabled device. The company's website hosts a large collection of digital music available on the Internet, with more than 647,000 songs and audio files posted from over 100,000 digital artists and record labels. Dedicated to growing the digital music space, the company's products and services include on-demand Subscription Music Channels, a Retail Music Program, a Syndicated Radio Division and others. Additionally, through the company's MSP initiative, MP3.com is partnering with a variety of technology companies to expand its digital music strategy.



The RIAA has filed copyright infringement litigation against MP3.com, calling for a halt to MP3.com's new services, Instant Listening Service and Beam-it. The foundation on which these services are built is an unauthorized digital archive with the most popular and valuable copyrighted sound recordings in the world, music that is not owned by MP3.com. MP3.com constructed that database without making an attempt to obtain permission from the copyright owners to do so. This is an infringement of rights, upsetting not only to record labels, but also large numbers of artists, retailers and technology companies who have business agreements with copyright owners.

MP3.com has already spent an estimated \$100 million to settle with four major recording groups and secure licenses to their copyrighted material. Finally it settled with Universal Music by paying them \$53.4 million. The lawsuits against MP3.com are still not over because the major record companies and MP3.com agreed that every company would receive an equal amount of money in the settlement. By paying Universal Music about twice the amount the other companies received, those others now want to receive the full amount as well. Since the first half of December 2000, the Instant Listening Service and Beam-it are once activated again.

#### 9.1.4. MP3Board

MP3Board is a website offering links to illegal music files. It offers three ways to find the files. It has a search engine that scours the Net for MP3 files to link to. It has a Web interface to a Gnutella search engine, which plugs into individual computers connected to the Net to

look inside private music collections. And it allows website owners to submit their own addresses for inclusion in its search engine. In the early days of its operation, before the RIAA's lawsuit was filed, the company had explicitly labelled itself as a way to find "illegal" MP3s.



The RIAA filed a lawsuit against MP3Board.com. This lawsuit is about copyright infringement, the website knowingly gathers, indexes, and organizes links to sites where illegal files are offered for download, this case isn't about hyperlinks itself. Within two weeks, MP3Board filed a lawsuit against the RIAA in order to still keep the links up. At the moment, MP3Board is still running its website with the links to illegal music.

## 9.2. New ID System for Sound Recordings

The RIAA is launching a new project to develop a standardized system for identifying digital files of sound recordings. This identification system, to be used in sound recordings worldwide, will build on and integrate with identification systems already in use. A primary benefit of the project will be to facilitate and accelerate the growth of digital delivery of music on the Internet. But the main purpose is to detect if a sound recording is legal or illegal.

Because the identification system is intended to be available for worldwide use, RIAA will be working in close cooperation with IFPI, the Recording Industry Association of Japan (RIAJ) and their member companies during the course of the project. To manage the project, the RIAA has selected Rightscom Ltd, a UK based consultancy with specialist skills in the design and development of identification systems and information management.

The project will determine the requirements for a new identification system for sound recordings, which is fully compatible with existing identification systems such as the International Standard Recording Code (ISRC). The project will seek to involve other music industry interests, including, among others, distributors and retailers, both traditional and web-based. The design of this new system will build on existing practices as far as practicable

and incorporate features that support the range of sale, licensing and tracking activities that will be vital in future online music commerce.

In conclusion, the RIAA is doing a good job by suing the common places, like Napster and MP3.com, where copyright is infringed. When it is hard to find illegal music, people are more willing to go to official places and buy the music there. However it does mean that there's a need for good alternatives where the same range of music can be purchased. Just fighting without offering good alternatives (P3), is not enough.

Another benefit of the lawsuits by the RIAA is that people are made aware of their illegal copy activities and how it harms the record industry (P2). Although this is in some countries already happening with special promotions, e.g. United Musicians Against Copying in Holland, these campaigns should be a lot more intensive because people hardly pay any attention to it.

## 10. Recommendations

As a result of my research, which took place at Sony Music Entertainment, Europe, I would like to end with recommendations for the record companies in order to get to a healthier situation where people buy music online instead of copying it illegally. Of course there are aspects, out of control of the record companies such as the development of broadband services and other technologies. But these recommendations are totally in control of the players in this field.

These recommendations should all be useful in order to solve the main problem, loss of income (P1), and are categorized at the sub-problems as found in chapter two. How to prevent people from making illegal copies of music (P2), lack of a good legal alternative (P3) and how to get paid for content (P4).

### **P2: How to prevent people from making illegal copies of music.**

*Make people aware of their illegal copy activities and how it harms the record industry. (P2)*

Most of the music that is being downloaded is illegal, meaning nobody has paid copyrights in order to listen to the music. For record companies as well for artists and eventually the consumers, this is a serious problem. Without money coming to the record company, there is no money for developing new artists. Established artists are not motivated to make new records because of the lack of payment and eventually there will hardly be any new music. This is not the situation we want to end up with. Therefore the record companies need to make the people aware of the fact that copying music illegally harms the industry. Although this is in some countries already happening, e.g. United Musicians Against Copying in Holland, these campaigns should be a lot more intensive because people hardly pay any attention to it.

*Make the threshold high enough to prevent people from copying. (P2)*

Before Napster, finding music online took a considerable amount of time. Only a few people found it worth to put that amount of time in downloading music. Now, with tools like Napster, it is very easy for people to copy music, hence the enormous amount of people using it. For record companies it is therefore important to make the threshold high enough so people are not tempted to do this. Fighting the common platforms like Napster, Scour and MP3.com, what the RIAA is doing, is good as long as there will be an alternative solution for people to obtain music, legally. With the rise of subscription services this might be the solution.

*Make consumers aware of the value of a digital track. (P2)*

The consumers have the assumption that a digital album should be less expensive than the same album on CD. Instead of having the real product, you only have the file on the computer, so no money needs to be spend on production and distribution costs. Or at least, that is what the consumer believes. Right now, the actual cost of a digital download is even more expensive than the regular CD because of all the high cost involved in the conversion of the music to digital formats, setting up good payment systems, using a rights management system, marketing the downloads, ensuring the quality of the product and above all, making sure the customer doesn't get a bad shopping experience. But this will decrease over time.

*Use retail, that's where the consumers are. (P2)*

The consumers hardly have any idea about which artist is signed at which label or record company, therefore trying to sell music just by record company itself won't work. What is needed is a central place where all music of all record companies is located. In the offline world this is at the retailers. For the online world this should be the same because it is just a small step for the consumers to find the retailer online, where as it would take a considerable amount of time and money to let them go to the record company sites.

**P3: Lack of a good legal alternative.**

*Provide good alternatives for people to buy legal music. (P3)*

People are downloading and copying digital music from friends and using tools like Napster, simply because there is no legal way to obtain the music they want. It is therefore important to offer good alternatives for people to let them buy the music they want to listen to. Subscription Services could be a great alternative, offering lots of music for a low, monthly, price.

*Enlarge test phase with a complete digital catalogue. (P3)*

The problem with all the current tests is the availability of music. It's only possible to listen to a couple of hundred tracks, if lucky a few thousands. This could end up with people having a bad user experience. For a test to be successful, it is important that all music is available in a digital format, only then can people get used to the new way of obtaining music and are willing to pay for it, rather than using tools like Napster.

*Don't confuse the consumers with different players and file formats, use a standard. (P3)*

A serious problem that is arising right now is, all record companies are offering files in different formats, even within the same record company, several formats are being used. For a consumer this results in an unhappy experience because it needs to download and install an equal amount of different players on its computer. Besides this, the consumer also needs to be registered at a number of clearinghouses and use different payment systems, making it very confused.

*Make a legal solution out of Napster instead of trying to get rid of it. (P3)*

With over 20 million users and more than 1.39 billion tracks being downloaded in September 2000 alone, Napster *could* have a lot of value for the record industry. For this reason, Bertelsmann has formed an alliance with Napster; *if you can't beat them, join them*. If Napster is turned into a legal service you end up with a new service, which has the biggest number of users, straight away. This could contribute to a healthier situation.

**P4: How to get paid for content.**

*Look at value-added aspects of digital music. (P4)*

Music should sell itself, but with the advantages of digital distribution, it's very easy to send extra valuable information together with the music, like the Bluematter format does. Besides the music it contains photos, biography and lyrics. With these value-added items, people can have a better idea about the value of digital music and are more likely to pay for it.

*Offer alternative payment methods for people without credit cards, i.e. teenagers. (P4)*

The number one reason for not buying online at music sites is not having a credit card, in contrast to security issues, because of the young age of the visitors. As a result there should be looked for different payment methods. Good alternatives are debit cards but the Digital Service Providers are offering good and complete alternatives as well. Subscription services could be the answer against the micro payment problem.

Although it is not just a matter of weeks, or months even, before the current situation will improve a lot. Eventually the music industry will get to a healthier situation where people buy music online instead of copying it illegally. With these recommendations I would like to paraphrase Shakespeare:

**“If Music Be The Food Of Love, Stream On”**

## 11. References

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- [3] CyberSource & Mindwave Research – CyberSource fraud 2000 survey reveals increasing concern about internet fraud among businesses selling online – <http://www.cybersource.com/press/releases/2000/00110601.html> – 6-11-2000
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- [5] IFPI – Record Industry in Numbers 2000 – 09-2000
- [6] Jupiter – Digital Music Subscriptions: Post-Napster Product Formats – p. 13 & 20 – 20-07-2000
- [7] Jupiter – Jupiter finds Napster users are 45 percent more likely to increase music spending – <http://www.jup.com/company/pressrelease.jsp?doc=pr000721> - 20-07-2000
- [8] Multiscope – E-commerce in Nederland – <http://www.multiscope.nl/ecommerce/result.html> - 09-2000
- [9] NVPI – Members report September 2000 – 07-2000
- [10] PC Online Data – Napster usage decreases music buying over time – <http://www.pcdonline.com/press/pcdo103100.asp> - 31-10-2000
- [11] Pew Internet & American Life Project - Downloading Free Music: Internet music lovers don’t think stealing – p. 2 – 28-09-2000
- [12] Webnoize News – Over 1.3 billion served - <http://news.webnoize.com/item.rs?ID=10620> - 03-10-2000

The following paragraphs give an overview of links to sites that were useful for research and contributed to this paper. Additional information to the related subjects can be found on the corresponding sites.

### 11.1. Digital Rights Management (DRM)

Audiosoft <a href="http://www.audiosoft.com">www.audiosoft.com</a>	Magex <a href="http://www.magex.com">www.magex.com</a>	Reciprocal <a href="http://www.reciprocal.com">www.reciprocal.com</a>
DX3 (Digital Distribution Domain) <a href="http://www.dx3.co.uk">www.dx3.co.uk</a>	Mode Records <a href="http://www.mode.com">www.mode.com</a>	Sealed Media <a href="http://www.sealedmedia.com">www.sealedmedia.com</a>
Info 2 Clear <a href="http://www.info2clear.com">www.info2clear.com</a>	OD2 (On Demand Distribution) <a href="http://www.ondemanddistribution.com">www.ondemanddistribution.com</a>	Supertracks <a href="http://www.supertracks.com">www.supertracks.com</a>
Inter Trust <a href="http://www.intertrust.com">www.intertrust.com</a>		Verance <a href="http://www.verance.com">www.verance.com</a>

### 11.2. Distribution (P2P) Software

Aimster <a href="http://www.aimster.com">www.aimster.com</a>	Gnutella <a href="http://gnutella.wego.com">gnutella.wego.com</a>	Scour <a href="http://www.scour.com">www.scour.com</a>
Freenet <a href="http://freenet.sourceforge.net">freenet.sourceforge.net</a>	Napster <a href="http://www.napster.com">www.napster.com</a>	

### 11.3. News sites

Billboard <a href="http://www.billboard.com">www.billboard.com</a>	CNet <a href="http://news.cnet.com">news.cnet.com</a>	Reuters <a href="http://www.reuters.com">www.reuters.com</a>
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The Register  
[www.theregister.co.uk](http://www.theregister.co.uk)

#### 11.4. Payment System Sites

1ClickCharge (Exchange Path)  
[www.1clickcharge.com](http://www.1clickcharge.com)  
[www.exchangepath.com](http://www.exchangepath.com)

Bibit Internet Payments  
[www.bibit.nl](http://www.bibit.nl)

Billpoint  
[www.billpoint.com](http://www.billpoint.com)

CHESS Creative Crowd  
[www.chess.nl](http://www.chess.nl)

CyberCash, Inc.  
[www.cybercash.com](http://www.cybercash.com)

CyberMoola  
[www.cybermoola.com](http://www.cybermoola.com)

Doughnet  
[www.doughnet.com](http://www.doughnet.com)

eCharge  
[www.echarge.com](http://www.echarge.com)

Email Cash  
[www.ecount.com](http://www.ecount.com)

eMoney Mail  
[www.emoneymail.com](http://www.emoneymail.com)

ChargIt  
[www.chargit.com](http://www.chargit.com)

ICanBuy  
[www.icanbuy.com](http://www.icanbuy.com)

iPIN  
[www.ipin.com](http://www.ipin.com)  
[www.musicpayment.com](http://www.musicpayment.com)

Net Gen Card  
[www.mynetgen.com](http://www.mynetgen.com)

OTS (Online Transaction System)  
[www.onlinetransactions.com](http://www.onlinetransactions.com)

PayPal (X.com)  
[x.com](http://x.com)  
[www.paypal.com](http://www.paypal.com)

Pay Place  
[www.payplace.com](http://www.payplace.com)

Qpass  
[www.qpass.com](http://www.qpass.com)

QSI Payments  
[www1.qsipayments.com](http://www1.qsipayments.com)

Rocket Cash  
[www.rocketcash.com](http://www.rocketcash.com)

Roos  
[www.roos.com](http://www.roos.com)  
 TWYP (The Way You Pay)  
[www.twyp.com](http://www.twyp.com)

UK Smart  
[www.uksmart.co.uk](http://www.uksmart.co.uk)

Western Union MoneyZap  
[www.moneyzap.com](http://www.moneyzap.com)

Wildcard Systems  
[www.wildcardsystems.com](http://www.wildcardsystems.com)

Y-Creds  
[www.y-creds.co.uk](http://www.y-creds.co.uk)

#### 11.5. Record Companies and Music Organisation sites

Bertelsmann eCommerce Group  
[www.dealinfo.com/BeCG-Napster](http://www.dealinfo.com/BeCG-Napster)

BMG  
[www.bmg.com](http://www.bmg.com)  
[www.click2music.com](http://www.click2music.com)  
[www.bmgmusicservice.com](http://www.bmgmusicservice.com)  
[www.getmusic.com](http://www.getmusic.com)

BPI (British Phonographic Industry Limited)  
[www.bpi.co.uk](http://www.bpi.co.uk)

EMI  
[www.emigroup.com](http://www.emigroup.com)

Farm Club  
[www.farmclub.com](http://www.farmclub.com)

NVPI (Nederlandse Verenigde Platen Industrie)  
[www.nvpi.nl](http://www.nvpi.nl)

RIAA (Recording Industry Association of America)  
[www.riaa.org](http://www.riaa.org)

SDMI (Secure Digital Music Initiative)  
[www.sdmi.org](http://www.sdmi.org)  
[www.hacksdmi.org](http://www.hacksdmi.org)

Sony Music  
[www.sonymusic.com](http://www.sonymusic.com)  
[www.sonymusic europe.com](http://www.sonymusic europe.com)

Universal  
[www.universalmusic.com](http://www.universalmusic.com)  
[www.getmusic.com](http://www.getmusic.com)

Warner  
[www.warnerbros.com/pages/music](http://www.warnerbros.com/pages/music)

#### 11.6. Research sites

Blauw New Media Consulting  
[www.blauw.nl](http://www.blauw.nl)

Business 2.0  
[www.business2.com](http://www.business2.com)

CyberSource  
[www.cybersource.com](http://www.cybersource.com)

eMarketer  
[www.emarketer.com](http://www.emarketer.com)

Forrester Research  
[www.forrester.com](http://www.forrester.com)

Gartner Interactive  
[www.gartner.com](http://www.gartner.com)

Harris Interactive  
[www.harrisinteractive.com](http://www.harrisinteractive.com)

J.P. Morgan & Co. Inc.  
[www.jpmorgan.com](http://www.jpmorgan.com)

Jupiter  
[www.jup.com](http://www.jup.com)

Media Metrix  
[www.mediametrix.com](http://www.mediametrix.com)

Multiscope  
[www.multiscope.com](http://www.multiscope.com)

Pew Internet & American  
Life Project  
[www.pewInternet.org](http://www.pewInternet.org)

Pro Active International  
[www.proactiveinternational.com](http://www.proactiveinternational.com)

Red Herring  
[www.redherring.com](http://www.redherring.com)

WebNoize  
[www.webnoize.com](http://www.webnoize.com)

## **12. Appendix**

Because of the large size of the appendixes, they have been put in separate documents.

*Appendix 01 Sony Music Europe Survey* gives a more detailed breakdown of the results of the survey conducted at the Sony Music Europe website.

*Appendix 02 Payment Methods Overview* gives a somewhat complete summary of the payment methods available online, differentiated in debit card systems as a solution for a teenage payment system and micro payment solutions, useful for paying very small amounts of money over the Internet.

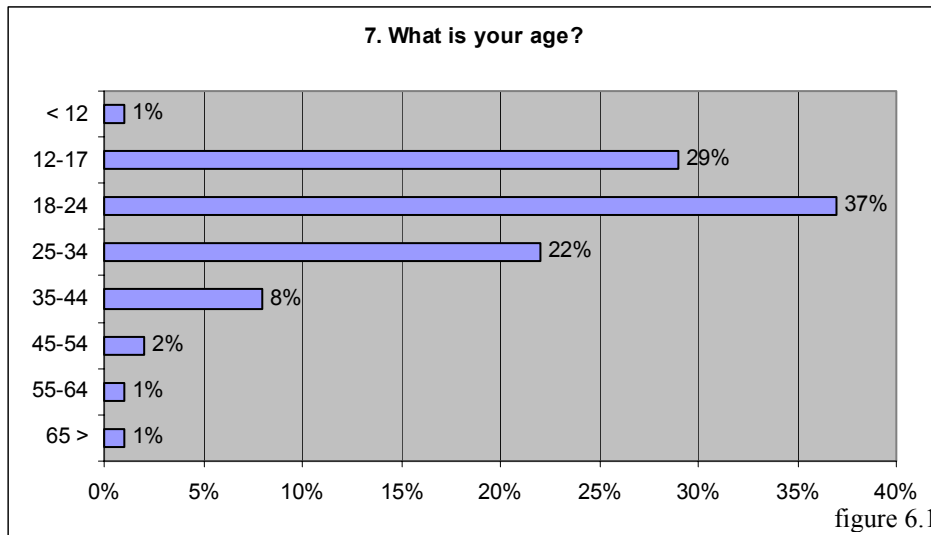
*Appendix 03 News Articles* contains news articles about various topics discussed in this paper, i.e. an overview of news articles concerning the subscription or distribution of digital download tests the major record companies starting or have to start with. It also gives a brief update of the SDMI challenge and the RIAA lawsuits.

Title: Appendix 01 - Sony Music E. Survey  
Author: Wouter Haring  
Version: 1.0  
Date: 14 December 2000

## Sony Music Europe Survey

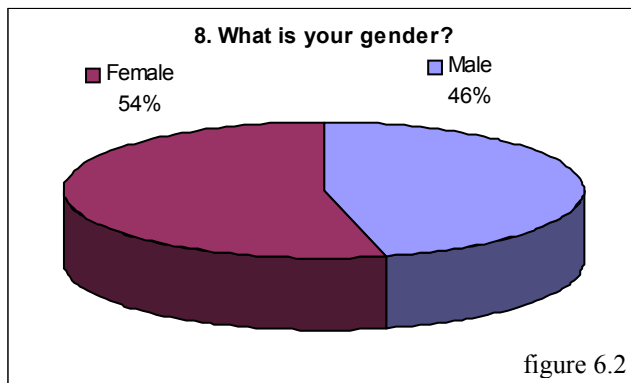
### 1. Sony Music Europe survey

Throughout the last quarter of 2000, Sony Music Europe rolled out with a new corporate homepage all over Europe. A new look and new features makes the site become a more portal website making it 'The Artist Network'. In order to know more about the visitors, a survey

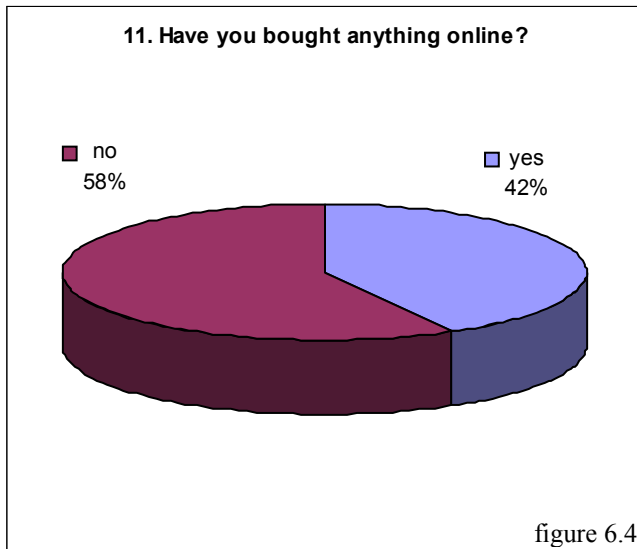
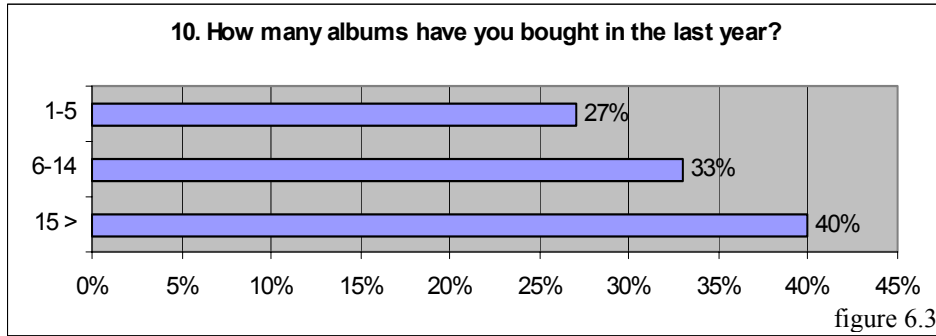


was conducted (September 2000) and visitors were asked to participate within the three weeks this survey was available. Questions were asked about age, sex, location, visits (reason, number of times), opinion, buying behaviour and credit card usage. Without promoting this survey, more than five hundred people participated (n=503). Within this paragraph, the relevant questions are discussed.

According to e-MORI (August 2000) 59% of the people that are online in the UK are male and 41% are female. The age variations are, age 15-24 (22%), age 25-34 (26%), age 35-44 (22%), age 45-54 (19%) and age 55+ (11%). For the Sony Music Europe site, this is different. Figure 6.1 shows 88% of the visitors are of age 12-34, which is quite normal considering the content (music). However, the majority of the visitors, figure 6.2, are female (54%).



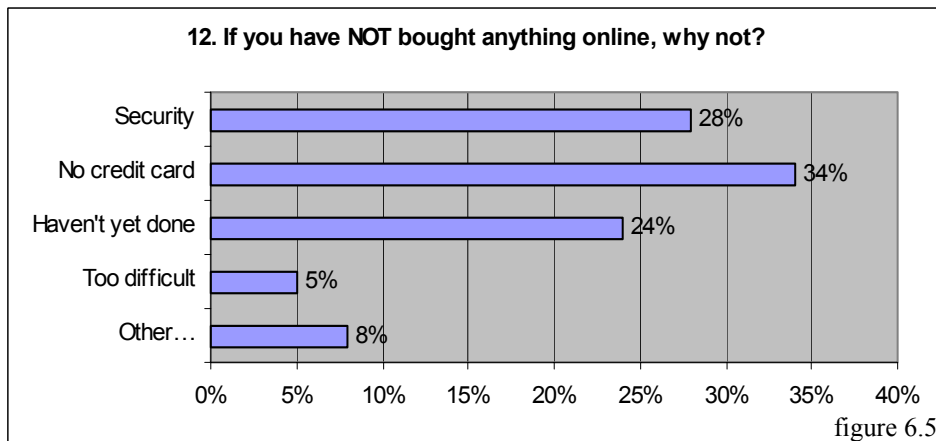
Another question asked was how many albums the visitor has bought during the last year. Surprisingly 40% of the people buy more than 15 records a year as figure 6.3 shows. Considering the age and the money to spend, this is quite a lot. But it does mean that people are willing to pay for music, which is of course a good thing.



Regarding payments, a couple of interesting conclusions came up. First, people were asked whether they have bought anything online. Figure 6.4 shows the results of that question. About 58% have not bought anything online yet.

Second, they were asked why they didn't buy online. As stated in the previous paragraph, the number one reason normally is that people are afraid of frauds with their credit cards. Figure 6.5 shows, the number one reason for visitors at Sony Music Europe is not having a credit card at all, which is an

obvious reason considering the majority of the visitors are of age 11-24. In order to own a credit card, a person must be 18 and up. Although figure 6.5 shows the result of all people, tables 6.1 to 6.5 displays a breakdown of the different age segments.



<b>Bought anything Online?</b>		
	<i>yes</i>	<i>no</i>
<b>11-17</b>	27,61%	72,39%
<b>18-24</b>	38,55%	61,45%
<b>25-34</b>	56,57%	43,43%
<b>35-44</b>	62,50%	37,50%
<b>average</b>	46,31%	53,69%

table 6.1

Table 6.1 shows a breakdown of the question if a visitor has bought anything online. Here, the relation between age and not buying online can be seen clearly. The percentage of visitors aged older than 44 and younger than 11 were so little (4% and 1% respectively) that they were left out of the rest of the results.

Of all the people saying 'NO' to the question why they didn't buy anything online, table 6.2 up to table 6.5 shows the corresponding percentages divided by age.

<b>Issue: Security</b>		
	<i>yes</i>	<i>no</i>
<b>11-17</b>	19,59%	80,41%
<b>18-24</b>	31,37%	68,63%
<b>25-34</b>	23,26%	76,74%
<b>35-44</b>	41,67%	58,33%
<b>average</b>	28,97%	71,03%

table 6.2

<b>Issue: No Credit card</b>		
	<i>yes</i>	<i>no</i>
<b>11-17</b>	45,36%	54,64%
<b>18-24</b>	30,39%	69,61%
<b>25-34</b>	25,58%	74,42%
<b>35-44</b>	16,67%	83,33%
<b>average</b>	29,50%	70,50%

table 6.3

<b>Issue: Not yet</b>		
	<i>yes</i>	<i>no</i>
<b>11-17</b>	13,40%	86,60%
<b>18-24</b>	24,51%	75,49%
<b>25-34</b>	32,56%	67,44%
<b>35-44</b>	33,33%	66,67%
<b>average</b>	25,95%	74,05%

table 6.4

<b>Issue: Too difficult</b>		
	<i>yes</i>	<i>no</i>
<b>11-17</b>	10,31%	89,69%
<b>18-24</b>	0,98%	99,02%
<b>25-34</b>	4,65%	95,35%
<b>35-44</b>	0,00%	100,00%
<b>average</b>	3,99%	96,01%

table 6.5

The conclusions of these tables are pretty clear. It shows that teenagers don't have a credit card, which is obvious, and security is still an issue for people with credit cards. For these reasons another payment system could make a big difference in order for those people to start buying products online.

Title: Appendix 02 - Payment Methods Overview  
 Author: Wouter Haring  
 Version: 2.11  
 Date: 26 October 2000

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## Teenage Payment Systems

### 1. Chargit

<http://www.chargit.com>

<http://www.musicpayment.com/>

#### 1.1. Products

The chargit suite of products provides the most effective payment methods for the goods or services you wish to sell online. Please use the chargit [product selector](#) to see how you could dramatically increase your sales potential.

##### **ChargitDIAL**

Fast, secure online purchasing charged direct to your telephone account.

##### **ChargitKEY**

The key to easy payment for Microsoft Windows media.

##### **ChargitCARD**

Fully automated secure online credit and debit card transactions, worldwide.

##### **ChargitSMART**

Make paying for services or participation easy.

##### **ChargitPREPAY**

Secure cash transactions from pre-pay cards.

##### **ChargitWAP**

Quick payments from mobile phones.

##### **ChargitSMART**

Take cash payments online with Smart card transactions.

##### **ChargitCHARITY**

Fast, easy to use donation payment solution.

#### 1.2. How it works

**ChargitKEY** is the easy way to pay for accessing online resources protected by Windows Media Rights Manager.

Online resources such as music tracks can be downloaded using the customer 's normal internet connection. The chargitKEY software is a small downloadable file, which can be branded by the merchant.

##### **When run, chargitKEY:**

- Identifies unlicensed tracks on the customer 's PC
- Automatically obtains the licencing URL for each track
- When instructed, uses a premium rate telephone connection to obtain the licence for each track selected

##### **Advantages of chargitKEY:**

- Enables low value licence payments without costs of credit card transaction
- Enables payment from markets without credit cards, especially music sold to the young
- Secure, certain payment through the telephone bill
- Differential payment by territory -made easy in local currency
- Truly global payment even where credit card usage is not widespread

##### **Uses of chargitKEY:**

- All formats managed by Windows Media Digital Rights Management including Windows Media native, MP3, Quicktime etc.

### **1.3. Personal comments**

Chargit offers a broad range of payment methods, all to sell online. Especially the **ChargitKEY** is interesting for selling music online. It works closely with Windows Media Rights Management software, but now teenagers can buy tracks without the need of a credit card.

## **2. Music Payment (ChargIt)**

<http://www.musicpayment.com/>

### **2.1. How it works**

GIB offers a range of payment options suitable for obtaining micropayments for downloads, including Payment Gateway, Scratch Card, and SMS.

#### **Payment Gateway**

GIB can connect the user to the Internet on premium rate, or international rate, worldwide.

There are two ways that our global access network can be used: the first means that all the while the customer is connected, they are paying - whether \$1 a minute, £1 a minute, or another rate dependent on the country they're in.

Secondly, Some countries allow a connection charge so that the customer can pay a 'one off' charge.

GIB can help manage these varying rates - and the fact that connection speed and track length would vary the price. To give more predictable pricing, the gateway manages the call according to rules that you specify.

GIB's Payment Gateway manages this complexity to deliver predictable pricing with convenience – see our white paper (Word 2000 format) for more.

Try the Gateway by 'buying' music here - go back to our home page and select a track or artist.

#### **Scratch Card**

Now here's a thought - say your teenage customers just pick up a card at a newsagent to pay for music.

In Europe, the young are already used to buying prepaid mobile telephone cards to buy time chatting to their friends. In fact, this is the fastest growing segment of Europe's mobile telephony market.

Just add spin - instead of a £10 phone card, sell those fans a £10 music card. A scratch panel, revealing a unique PIN is all it takes to get access to downloads.

We can place those cards out there alongside the magazines covering top acts, with point-of-sale display to really make them fly off the counter.

Or maybe you think that a scratch magazine insert giving access to a download or fan site would be an ideal promotional tool to help break a new act? Yup, we think so too.

Try the Scratch Card by 'buying' music here - go back to our home page and select a track or artist. And don't worry that you haven't got a card - there's a facility to get a virtual one.

#### **SMS**

Reverse charge SMS is available only in the UK right now through Vodafone.

The way it works is simple - your customer receives an SMS (Short Message Service) text message on their mobile that they pay to receive.

The application is subtle - what you get in the SMS is an access password for a download. If you know the valid password, you must have paid, right?

This requires some programming for your technical types, but not much - we take care of the interface with the mobile network, you just need to let us know a number and a password. That's not rocket science.

Try SMS by 'buying' music here - go back to our home page and select a track or artist. Have your mobile to hand!

## **2.2. Personal comments**

Music Payment (part of Chargit) seems to be a great way to let teenage people buy music (or other goods) online. Since teenagers have already got a mobile phone, this is indeed a nice tool to let them buy products by calling a specific number or by sending an SMS.

### 3. Rools

<http://www.rools.com>

#### 3.1. Partners

##### **Who is the banking partner**

The Rools team is currently working with a number of banks in the UK.

We already have a banking partner - Zebank, the online financial services company being rolled out by Bernard Arnault's [Europ@web](#). Zebank will offer a comprehensive range of financial services (from banking to insurance and assurance) when it launches across Europe later this year.

As an ambitious pure online player Zebank has the specific understanding of that channel and the flexibility and responsiveness that are critical for success. As a pan-European service Zebank will also be able to work with Rools as we expand across Europe

##### **Who are the retail partners?**

Rools is establishing an exclusive partner network of youth brands covering all the key areas in which young people spend their money: from music products, to clothes, to electrical products to phones.

There is an ongoing programme to recruit key e-tailers, both big high street names and leading online brands. Amongst the high profile partners announced to date are the Carphone Warehouse and Blackstar.

All partners are reputable retailers that sell products that teenagers want. They also have high standards of customer service.

#### 3.2. How it works

##### **How does the transaction happen?**

Very much like other payment methods. When you have chosen the products you wish to buy from a partner retailer you proceed to the checkout. There you will have the option to pick the Rools method of payment alongside other forms, such as Visa or Mastercard. You fill in the details required by the retailer, including your name, account number and delivery address. When confirming the transaction, you are prompted for your Rools username and password. This is the only additional step in the process and provides you with an additional level of security. Provided the account number, username and password are correct and there are sufficient funds in the account the transaction is confirmed and you can await delivery. Customers do not have to visit the Rools.com site before shopping but can proceed straight to partners' sites.

##### **Will I be able to access my own account details on the site?**

Yes. The accounts will be operated by the partner bank and you will be able to access online statements through the rools website. With this arrangement, all funds are fully protected.

##### **What is your return policy?**

Normal refund processes apply. Rools will be monitoring the performance of its partners to ensure that high levels of customer service are being provided.

##### **How does rools work?**

Accounts are set up through banking partners. Parents/relatives/employers/other adults/friends can deposit funds into the accounts. Account holders earn interest on deposits and can use the

funds to make purchases at Rools' partner retailers, which include Carphone Warehouse, Blackstar (more details on partners later).

**Where did the idea for Rools originate?**

Despite e-tailing increasing at an almost exponential rate, there is minimal spending by the under 18's because of age-related restrictions on the issue of credit and debit cards. Young people aged as young as 10 to 18 are keen to use the net to shop but cannot do so at the moment.

**Who are the people behind Rools?**

The Rools team is made up of people who have come from organisations such as Unilever, NatWest, KPMG, Extraprise and Lloyd's. For more information on the team feel free to look at our biographies.

**3.3. Personal comments**

Rool is an extension to normal credit cards. But it does allow children to buy products online.

#### **4. NetGen**

<http://www.mynetgen.com/>

<http://www.solspark.com/>

##### **4.1. What it is:**

The netgenCard is redefining the way teens shop, both online and offline. The netgenCard is the ONLY teen spending product that combines the universal acceptance of a major credit card transaction with a flexible, detailed control overlay. Using a payment mechanism built upon the world's most accepted non-cash payment systems, the netgenCard works like a credit card but is actually a pre-paid debit card that functions within parameters pre-determined by parents. This unique control layer allows parents to set comfortable limits around how much their teen spends and where he or she can shop, while allowing teens to choose where THEY want to shop from among thousands of merchants!

##### **4.2. Personal comments**

No further info on site (or you need to have an account)

## 5. Y-Creds

<http://www.y-creds.co.uk/>

### 5.1. How it works

POCKET money is about to go online. The traditional pounds and pence given to generations of teenagers could become a thing of the past when **Y-creds**, a currency for the digital generation, start trading this week, writes Sarah Toyne.

Parents credit their child's **Y-creds** account to allow the youngster to buy goods and services through the internet. Each **Y-creds** is worth 1p and they are bought in units of 500, costing £5.

**Y-creds** work like online book vouchers or record tokens and will be a godsend for spendthrifts under 18 who cannot own a credit card - the most popular way to pay for goods on the net. The bad news for children is that parents will be given more control over how they spend their pocket money. Adults can restrict access to particular goods and websites.

Kevin Sefton, an accountant and former consultant for AOL, an internet service provider, is the man behind Y-creds.

He said: "Today's teenagers want to shop online. **Y-creds** give them the freedom they crave, while reassuring parents that their children are buying only suitable merchandise."

Teenage currencies are popular in America, where Rocketcash and Cybermoola were launched last year.

Seema Williams of Forrester, the technology and consumer analyst, said: "Young people don't distinguish between online and offline - the net is a natural part of their world." The average disposable income for 14-16 year olds in Britain is £600 a year.

According to Mintel's pocket money survey, children are also saving up for more expensive goods, such as video games and CDs.

**Y-creds** could make your child more financially literate in other ways. In America, Doughnet, another teenage service, even offers the latest stock-market share prices.

### 5.2. Personal comments

A solution for teenage people. The parents create an account at Y-creds and then children can use that account to pay from. The problem is that the children are limited to spend only the amount that is on the account.

## 6. RocketCash

<http://www.rocketcash.com/>

### 6.1. How it works

RocketCash is a free online account that lets you buy what you want without using a credit card.

It's easy. All you have to do is:

- Sign up for your no-fee account
- Add money, beenz, cybergold, etc.
- Go shopping at over 100 merchants

Plus, whenever you buy, you earn RocketFuel Reward points which you can redeem for valuable coupons and discounts!

Shopping with RocketCash is super-easy. All you need is an e-mail address and a version 4.0+ browser. Sign up for a free, no-minimum balance RocketCash account using our signup page. After you have created an account with us, add money to your account in one of these three ways:

#### Adding Money

**Send Money:** You can add money to your RocketCash account by mailing in a cashier's check, money order, or personal check. (Please note that we don't recommend you send cash through the mail, as mail theft or loss is always a possibility. Be safe when sending your hard-earned money!) You can also add money to your RocketCash account with a credit card.

**Earn Money:** Thanks to developing technologies, you can now redeem rewards earned at other sites at RocketCash. We currently have redemption options for beenz and Cybergold credits. Stay tuned for more redemption options!

**Get Money:** Want to make sure you get cool gifts at your birthday or the next holiday? Make sure your friends and family know they can send you a RocketCash gift certificate! Gift certificates can be purchased using cashier's check, money order, or credit card.

#### Go Shopping:

After you've added money to your RocketCash account, click on any of the merchants advertised on our site. Pick the stuff you want; put it in your shopping cart. When you proceed to the merchant's checkout, RocketCash's system will take over, and insert all your information. It's very easy; and to help you along, our Checkout Wizard will give you instruction to guide you through checkout.

#### Get Rewards:

Your dad was wrong, there IS such a thing as a free lunch. Well, free shipping, actually. Or free gifts. Or free gift wrapping. How do you get these cool rewards? Every time you complete a transaction, your account accrues RocketFuel Reward points. Collect enough points, and you can redeem them for cool perks and gifts. Check out the RocketFuel Reward section of our site for details.

### 6.2. Participators

alloy online	artistdirect superstore	beyond.com
allposters.com	ashford.com	big deal
alltherageonline	backstreet boys direct	bigstar.com
altrec.com	beautyjungle.com	borders.com

buckle	rei.com
buy.com	ricky direct
capsized.com	rolling stone
cd universe	sanrio
cdnow	shades.com
cher direct	shop.eonline.com
chips & bits	staples.com
claire's online	steve madden
delias.com	tendollars.com
designeroutlet.com	the offspring direct
disneystore.com	tokyopop.com
droog.com	tophattoys.com
ebags	tori amos direct
ebworld.com	towerrecords.com
ehobbies	toysrus.com
emusic.com	tsi soccer
esprit	underneath.com
eve.com	urban decay
express.com	vans.com
ingaroo	video universe
fogdog sports	warner bros. studio store
foo fighters direct	worldcom
fossil	y2gshop.com
fragrancenet.com	
fusion.com	
games universe	
gracegourmet.com	
graffitionline	
hallmark.com	
ibeauty.com	
illuminations.com	
james bond direct	
jcrew.com	
journeys	
kbkids.com	
kewljewl.com	
korn direct	
limp bizkit direct	
littlearth.com	
magazines.com	
mattel.com	
mega dvd	
metallica direct	
mp3.com	
mvp.com	
nba store	
nextplanetover	
nsync direct	
officemax.com	
pacsun.com	
paris blues	
petsmart.com	
planetrx	
powells.com	
rage against the machine	

### **6.3. Company**

#### **Company Background**

RocketCash was founded in December 1998 when a casual conversation with a teen babysitter triggered a big idea. That idea was simple – to allow teens to shop online. Today, RocketCash is the preferred online gateway for Generation Y to make purchases at their favorite sites on the Internet. We provide a safe, secure environment for teens who shop here, for parents who educate their teens about managing money, and for merchants who offer the latest trends teens crave. Located in the bustling heart of Silicon Valley, RocketCash is a privately-owned, venture-funded company.

#### **Our Mission**

RocketCash is the first online gateway that enables Generation Y teens to shop and buy on the Internet in a free, parent-approved environment. With unique, patent-pending technology, RocketCash gives kids the freedom and independence to shop at the "coolest" online merchants, while giving their parents the peace of mind that comes with security, control and the opportunity to teach financial responsibility.

#### **Corporate Associations**

- As a subsidiary of the Council of Better Business Bureaus, BBBOOnline's mission is to promote trust and confidence on the Internet through the BBBOOnline program. RocketCash is registered with the Better Business Bureau and is a member of the BBBOOnline Reliability Program which recognizes companies who respond promptly to all consumer issues and whose services are considered reliable and trustworthy.
- As a VeriSign digital certificate identified site, you can be sure that RocketCash is a site you can trust.
- Intuit, the leader in personal and small business accounting and tax preparation software, has selected RocketCash as the online spending resource for teens whose parents use the Quicken.com web site.
- RocketCash is a TRUSTe-certified site and is further certified as a "Kids Under 13" site.
- RocketCash has a bank relationship with Chase Treasury Solutions, a division of Chase Manhattan Bank.

### **6.4. Personal comment**

Another online bank where you first put your money on after you can use it without having a credit card.

## 7. CyberMoola

<http://www.cybermoola.com/>

### 7.1. How it works

Cybermoola is prepaid e-money that lets you shop online without a credit card or bank account. Safe and easy to use, Cybermoola is available at national retail chains and supermarkets for purchase with cash.

Here's how it works. First, you need your own Cybermoola card or certificate. Then you have to come to our site to set up a personal account. You'll use your email address and PIN (i.e. secret password) to keep your account private and secure.

Once you have an account, you'll be ready to shop for whatever you want, anywhere Cybermoola is accepted. All the shops that accept Cybermoola are linked directly from our site, and we're always working to add great new ones.

We created Cybermoola so you wouldn't need a credit card, but if you already have one, you can buy Cybermoola cards directly from us. But don't worry, that's not the only way to Get Cybermoola.

Getting Cybermoola is as easy as spending it. You can actually use cash to buy Cybermoola at a store. It's just like buying a pre-paid phone card, but you can deposit it into your Cybermoola account. If you have access to a credit card, you can always use it to instantly add Cybermoola to your account. The obvious choice, if you happen to have a generous benefactor, is to have someone get it for you. Give the person your username (keep your PIN to yourself), and your benefactor can make a deposit into your account with a credit card.

When you set up your Cybermoola account, you will receive a Personal Identification Number (PIN) via email. You have to return to our site, login, and go to our Shop section. Click on the store where you want to buy something. Browse to your heart's content. At checkout, select Cybermoola as your payment option, and enter you email address (the one you set up your account with) and PIN.

### 7.2. Company

Cybermoola, Inc. is the leading provider of prepaid e-money that lets consumers shop online without credit cards or bank accounts. Through its website, Cybermoola, Inc. provides consumers with an intuitive, easy-to-use environment through which they can access a wide variety of web stores, purchase a broad selection of products, receive special promotions and other personalized services. A privately held corporation, Cybermoola, Inc. is headquartered in San Francisco, California and has offices in Illinois and Canada.

### 7.3. Personal comment

A prepaid card system. First put money on account, and then use it.

## **8. iPIN**

<http://www.ipin.com>

### **8.1. Company**

#### **The iPIN story**

In 1997 the idea to bring a safe and flexible payment system to the Internet was brought to life by a group of entrepreneurs and technologists from around the world. With decades of experience in the banking, credit card, telecommunications, software and Internet industries, the iPIN team has focused on being the technology leader in online and wireless payment solutions worldwide. iPIN is headquartered in Silicon Valley, and has offices in Asia and Europe.

To date, iPIN has raised a total investment of nearly US\$ 40 million from leading Silicon Valley venture firms including Accel Partners, Sutter Hill, and Nexus, as well as Invision AG and Wells Fargo Bank.

At iPIN, our mission is to provide powerful Internet payment technologies to enable financial institutions, telecommunications companies, portals and other partners to offer their customers the next generation of Web and wireless payment products and services.

iPIN's experience developing, implementing and operating payment solutions, combined with our partner focus, make us the clear choice for bringing Internet payments to your customers. From the start, we have focused on Flexibility, Security and International Capabilities as the cornerstones of our company and products.

#### **Flexibility**

iPIN's modular payment technology can be adapted to create different payment products and services that closely match partners' needs. Flexibility is the driving force behind not only our technology, but also the integration and service options we offer to partners.

#### **Security**

For iPIN, security is mission critical. This can be seen in the systems we design and in how we treat partners' sensitive customer data. For example, with iPIN payment solutions, customer account and personal information stays behind our partner's firewall and is not transmitted over the Internet at payment.

#### **International Capabilities**

The iPIN technology can manage currency conversion in 28 countries and localization in multiple languages, making our online payment service the first and only one of its kind. iPIN has proven its international installation and localization expertise having launched implementations in several countries worldwide.

#### **What Can We Do?**

Our technology enables a host of consumer payment solutions that partners can offer their customers in the US or overseas.



**Wireless**

Consumers can buy goods and services such as airline tickets with their mobile device, or even pay someone with iPIN Person to Person Payments (P2P).

**Web**

Shop online for downloads or hard goods like CDs or books. Even pay for auction items with P2P.

**Web and Wireless Together**

With iPIN, partners can offer a single specific wireless or Web payment option, or the entire suite of integrated payment solutions.

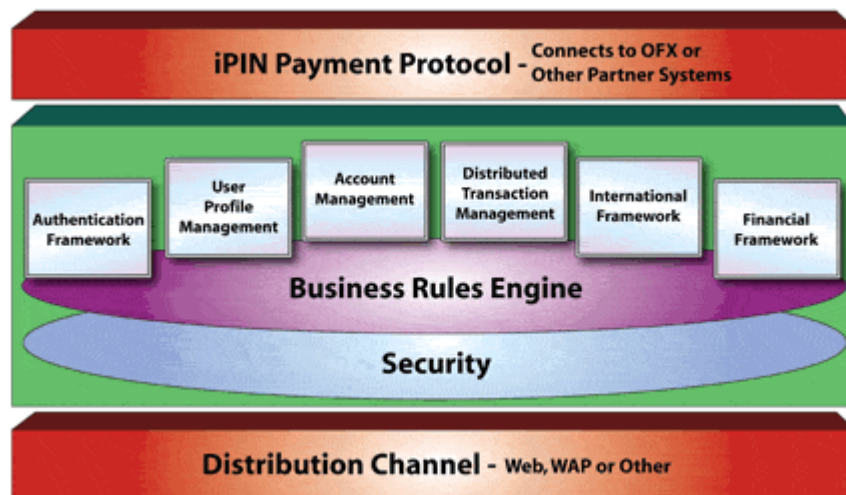
**8.2. How it works**

**Technology**

The iPIN payment technology can be adapted to fit many partner needs. Business rules and security measures can be customized to fit specific requirements. The modular applications that make up our technology allow us to more closely match customers’ needs than other options that offer specific point-to-point product solutions.

And our experience integrating with partner legacy systems or standard protocol gateways such as OFX, means that partners can achieve faster time to market.

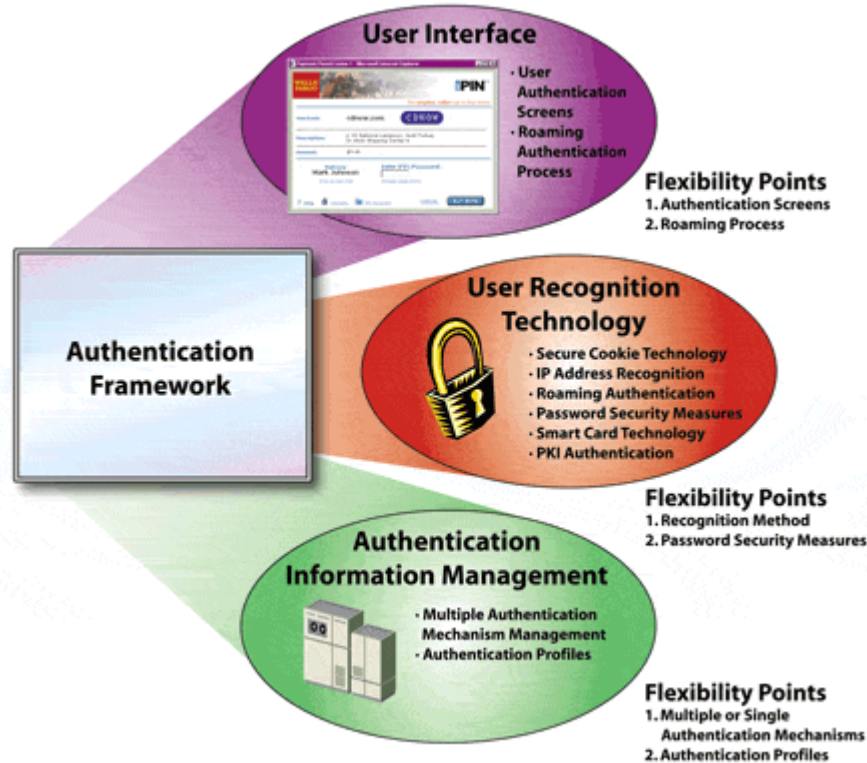
**The iPIN Technology Framework**



### An iPIN Technology Module

Our technology modules contain multiple points of flexibility, which is the key to our ability to adapt them to fit varying requirements. This diagram shows the major pieces of our Authentication Framework and their flexibility points.

#### A Sample Technology Module and Its Flexibility Points



By changing requirements at the flexibility points, we can create numerous authentication processes for partners.

For example, we created a 3-tiered process for a partner in which users choose between three methods depending on how much information they want to supply to make a payment:

- Simple IP address recognition
- IP address recognition or cookie, and password
- IP address or cookie, password and security question & answer pair

All of our technology modules are structured to provide maximum flexibility.

### 8.3. Partners

#### Strategic Partners

**France Telecom**, is one of the world's leading telecommunications carriers, with 1999 consolidated operating revenues of 27.2 billion euros and operations in more than 75 countries. France Telecom provides businesses, consumers and other carriers with a complete portfolio of solutions that spans local, long-distance and international telephony, data, wireless, multimedia, Internet, cable TV, broadcast and value-added services. With the acquisition of the U.K. wireless operator Orange, France Telecom is the second-largest wireless operator in Europe, with over 25 million subscribers. France Telecom is listed on the Paris and New York stock exchanges (NYSE: FTE). Wanadoo, was listed on the Paris stock exchange in July 2000. [www.francetelecom.com](http://www.francetelecom.com)

**Wells Fargo**, the first major financial services company in the U.S. to launch Internet banking services in 1995 ([www.wellsfargo.com](http://www.wellsfargo.com)), has blazed the trail for interactive tools and features for customers. Wells Fargo started online services in 1989, and over the last decade has introduced a wide range of easy-to-use online services for customers. Both Gomez Advisors and Nielsen/Net Ratings recently named Wells Fargo the top Internet bank in terms of market share (14.4%) and total monthly visitor count.

**Cap Gemini** is one of the largest management and IT consulting firms in the world and is publicly traded on the Paris Bourse. The company offers management and IT consulting services, systems integration, and technology development, design and outsourcing capabilities on a global scale to help traditional businesses and “dot companies” continue to explore growth strategies in the new economy. The newly formed organization Cap Gemini Ernst & Young employs more than 57,000 people worldwide and reports global revenues of 7.7 billion euros (1999).

**Asia Pathways** is one of the leading management consultancy firms in Asia specializing in bringing western IT businesses to Asia. Strategically located in Singapore, the business hub of Asia, Asia Pathways provides experienced business management and company start-up services to IT organizations wishing to develop a direct corporate presence in Asian markets. They provide clients with low risk and low cost entry into new Asian markets, generating incremental revenue streams, which in turn contribute to improved bottom line corporate performance.

**Portal®** provides the business infrastructure software for the Internet with Infranet®, the industry’s first and most widely implemented real-time customer management and billing platform for Internet and next-generation communications services. Portal’s comprehensive real-time solution accelerates the implementation of new services and supports complex, multi-service business models. Headquartered in Cupertino, California, Portal is a global company with offices worldwide.

**Oracle Corp.** (Nasdaq: ORCL) is the world’s leading supplier of software for information management, and the world’s second largest independent software company. With annual revenues of more than \$10.1 billion, the company offers its database, tools and application products, along with related consulting, education, and support services, in more than 145 countries around the world.

**Sun Microsystems, Inc.** has long been synonymous with leading edge technology. Now, after 18 years of telling the world “The Network is the Computer,” Sun is poised to become the leader in the emerging network-driven economy. Forward thinking organizations are looking to Sun to lead them into the dot com future. And we take our leadership commitment seriously. Learn more about the company committed to “anyone, anywhere, any time, on any thing.”

#### 8.4. Personal comments

iPIN offers a broad range of payment methods, person to person (P2P) as well as person to business. With P2P it’s also possible to pay very small amounts, which is not ordinary with regular credit cards.

**iPIN** [www.ipin.com](http://www.ipin.com)

**Founded:** 1997

**HQ:** San Francisco

**CEO:** Bradley Rode

**Funding:** \$14 million-plus

**Offering:** Web-based micropayment service that allows consumers to charge small online purchases of digital content to their monthly ISP accounts.

**Status:** Services set to go live in the fall with a projected 1 million iPIN-enabled users worldwide.

**Insight:** The most user-friendly and "lightweight" market solution yet proposed for purchasing digital content, unhitched to credit cards. Desperately needs sufficient numbers of ISPs and content partners to sign up.

## 9. Qpass

<http://www.qpass.com/>

### 9.1. How it works

Through its flagship Digital Commerce Service, Qpass provides the building blocks for next-generation digital commerce via the Internet and other emerging platforms.

The Qpass Digital Commerce Service is the industry's only fully outsourced transaction platform for the marketing, sale, and distribution of premium digital content and services online, enabling media companies, publishers and other content owners to drive revenue from the sale of content, news and information, financial research and data, archives, images, music, video, and digital services online.

An end-to-end commerce solution built on a highly scalable transactional infrastructure, the Qpass commerce platform supports the complete business lifecycle of digital content sales, including product management and merchandising, campaign management and promotion, distribution, customer care, and transaction processing, billing, reporting and remittance.

The Qpass Digital Commerce Service supports multiple payment options, including all major credit cards, debit cards, direct Internet Service Provider (ISP) billing, and alternative Web currencies, and cost-effectively enables the full pricing spectrum, from a few cents to thousands of dollars. With over 350,000 registered, regular users, Qpass is the most successful microtransactions solution on the Internet.

By leveraging the Qpass Digital Commerce Service, companies can plug in to the new digital economy and instantly diversify their online business -- without making a large upfront investment in infrastructure technology, systems development or customer support. The service can be used to sell any type of digital goods or services through any networked device; it is applicable to a wide variety of delivery mechanisms, including broadband, wireless and handheld devices.

Today, Qpass provides the commerce infrastructure for some of the most influential publishers on the Web, including The New York Times, The Wall Street Journal, the Los Angeles Times, USA Today, Forbes.com and Factiva (a Dow Jones/Reuters Company). Collectively, these industry-leading partners offer more than three million premium digital products for sale online through Qpass.

### 9.2. Partners

- ARTISTdirect.com
- AT&T National PrePaid Wireless
- Aviation Today
- Corbis
- Dreamlife
- eRegs.com
- Factiva, a Dow Jones & Reuters Company
- Forbes.com
- Houston Chronicle
- ISI Emerging Markets
- latimes.com
- Morningstar.com
- National Journal
- Newsbytes
- NHL Plus
- STAT-USA
- The New York Times on the Web
- The Wall Street Journal Interactive Edition
- Today's Headline News
- USA TODAY
- USADATA.com
- zDisk.com

### 9.3. Investors

- American Express
- Andersen Consulting
- Angel Investors LP
- BankBoston Ventures
- Hook Partners
- Integral Capital Partners
- J&W Seligman & Company
- JGE Capital Management
- NeoCarta
- Oak Investment Partners
- Partech International
- RRE Ventures
- SeaPoint Ventures
- Venrock Associates
- The Zeron Group

### 9.4. Company overview

#### **Enabling Commerce in a Connected World**

The global leader in digital commerce services, Qpass provides the commerce infrastructure for next-generation transactions across the Internet, broadband and mobile networks and devices.

#### **THE QPASS CONNECTED COMMERCE PLATFORM**

Integrating its flagship Digital Commerce Service, a cross-site micro-transactional solution for the sale of content and services via IP networks, with its industry-leading electronic wallet technology, the Qpass Connected Commerce Platform enables the sale of content, goods and services across a full range of networks and devices -- including personal computers, wireless phones, PDAs and interactive television set-top boxes.

The first next-generation transactional service uniquely optimized for commerce across the Internet, broadband and wireless networks, the Qpass Connected Commerce Platform offers network operators and wireless carriers a solutions-based approach to enabling pervasive transactions, adding commerce capabilities to communications platforms and making those capabilities available to consumers from a single, unified account, regardless of network or device.

By providing persistent, portable payment credentials, a consistent purchase experience and universal account management capabilities, Qpass eliminates the need for buyers to enter personal or credit card information with each transaction, or with each merchant. Because it securely stores and manages personal and payment-related information and delivers the relevant information directly into a merchant's order processing system, the Connected Commerce Platform provides a common infrastructure to which merchants can integrate once, and then be able to sell via mobile, broadband and PC environments.

#### **THE QPASS DIGITAL COMMERCE SERVICE**

Through its flagship Digital Commerce Service, Qpass provides the building blocks for content commerce on the Internet and other emerging platforms.

The industry's only cross-site transaction platform for the marketing, sale and distribution of digital content and services, Qpass enables online content providers to cost-effectively diversify their business models by generating revenue from the sale of premium content and services.

As a fully outsourced solution built on a highly scalable, centralized infrastructure, the Qpass commerce platform supports the complete business lifecycle of content commerce, including product management and merchandising, campaign management and promotion, distribution, customer care, and transaction processing, billing, reporting and remittance.

The Digital Commerce Service supports multiple payment options, including all major credit cards, debit cards, direct Internet Service Provider (ISP) billing, and alternative Web currencies, and cost-effectively enables the full pricing spectrum, from micropayments to thousands of dollars.

By leveraging the Qpass Digital Commerce Service, content owners and publishers can plug directly into the new digital economy and diversify their online business without making a large upfront investment in infrastructure technology, systems development or customer support.

Today, Qpass provides the commerce infrastructure for some of the most influential media companies on the Web, including AT&T, The New York Times, The Wall Street Journal, the Los Angeles Times, and Factiva (a Dow Jones & Reuters company), among others.

Collectively, these industry-leading partners offer nearly 3 million premium digital products for sale online through Qpass.

Founded in 1997 by Chase Franklin, Mark McNeely and Bill Bryant, Qpass is a privately held company, backed by strategic and private investors, including American Express and Andersen Consulting, and leading venture capital firms including Venrock Associates, RRE Investors, Oak Investment Partners and Integral Capital Partners, among others.

#### 9.5. Overview (Business 2.0)

**Qpass** [www.qpass.com](http://www.qpass.com)

**Founded:** 1997

**HQ:** Seattle

**Founder and CEO:** Chase Franklin

**Funding:** \$15 million-plus

**Offering:** Qpass' PowerWallet is a digital accessory to consumer credit cards: At participating content sites, it automatically fills out ordering and billing data, allowing instant purchasing at participating merchant sites.

**Status:** Current content partners include The Wall Street Journal, Morningstar, and U.S. Department of Commerce.

**Insight:** No market traction yet.

## **10. 1ClickCharge (Exchange Path)**

<http://www.1clickcharge.com/>

<https://www.exchangepath.com/index.jsp>

### **10.1. Company Overview**

ExchangePath™, L.L.C., a CMGI company, offers a secure, easy-to-use service for consumers to make and keep track of online payments. With an ExchangePath account, consumers are able to send, receive and request money by email.

The company was founded to develop technologies for electronic commerce on the Internet. The founders determined that their technology could support many types of transactions at any price point. In September 1999, the company was acquired by CMGI, the world's largest and most diverse network of Internet companies. The ExchangePath service officially launched in July, 2000.

ExchangePath has assembled a senior management team that offers the right mix of entrepreneurship, technology, marketing and financial services expertise to establish market leadership for the ExchangePath service.

#### **Heidi R. Goff-President and CEO**

President and CEO, Heidi Goff has over 20 years of payment systems experience having led new technology launches for MasterCard International, ADP and IBM. Most recently, Goff was executive vice president of strategy and marketing development for Global Payment Systems, an LLC of National Data Corporation and MasterCard International, one of the world's largest merchant payment processors with more than 2.7 billion transactions annually for over 700,000 merchants. Additionally, Goff brings extensive management expertise and provides valuable relationships throughout the entire payment services industry, including the leading IT corporations, banks and payments processors in the U.S. and abroad. Goff is a graduate of Spencerian College.

#### **Joseph W. Rio-Chief Financial Officer**

Rio is chief financial officer and comes with over 17 years of financial experience. Most recently, Rio served as vice president and controller for Vendor Financial Services, a \$14 billion subsidiary of GE Capital Corporation. Prior to that, Rio was with MasterCard International, where he held various positions including senior vice president and controller. Rio was selected as Financial Executive of the Year in 1996 by the Institute of Management Accountants (Westchester, NY). He holds an MBA from Northwestern University, and a BS in Biology from Loyola Marymount University in Los Angeles.

#### **J. Ronald Totaro-Chief Operating Officer**

Totaro, chief operating officer, contributes over 10 years of invaluable expertise in developing, implementing and marketing ecommerce solutions and financial services products. Most recently, Ron was an executive at Andersen Consulting in the Financial Services Strategy practice where he led numerous engagements with global financial institutions. Prior to that, Ron played an integral role at GE Capital in the acquisition of consumer lending businesses in Europe and Asia while leading the strategy and marketing development for over 20 global business units. Ron has also held numerous marketing and product development positions at American Express and was responsible for launching their Corporate Purchasing Card service. Ron holds an MBA from the University of Michigan and is a graduate with honors of the State University of New York, Albany with a BS in Business Administration.

**Roy Bricker-Vice President of Product Development**

Bricker, vice president product development, has extensive experience in the payment industry and in developing and managing technology based products. He is charged with creating ExchangePath's innovative and secure payment technology. Previously, at MasterCard International, Bricker served as a director of product management for MasterCard's Automated Point-of-Sale Program (MAPP) and as senior director of product management for the MasterCard debit/credit application on a smart card platform. Bricker holds an MBA in Marketing from Fordham University and a BA in Computer Science at City University of New York (CUNY).

**Richard S. Siegel-Vice President and General Counsel**

Siegel, vice president and general counsel, is responsible for all legal matters and payments systems compliance. Siegel is a general and corporate finance attorney with over twenty years of experience at both international corporations and major law firms. Siegel brings a decade of experience from MasterCard International where he was vice president and senior counsel responsible for legal matters related to all aspects of general and consumer product marketing counsel, member credit risk, joint ventures and all financial matters. Prior to MasterCard, he was an integral part of the legal staff of Xerox Credit Corporation. Siegel received his JD, from the University of Chicago Law School.

**Stan Francois-Vice President Marketing**

Francois, vice president marketing, brings 15 years of marketing expertise in technology and financial services to ExchangePath. Most recently, Francois served as vice president of marketing for Boostworks, a network software company, where he led the global marketing and public relations programs across three continents. Prior to that, Francois held key positions at Oracle Corporation including product marketing director and senior business development manager. He marketed Oracle's Web initiatives and launched, in conjunction with Oracle Apps, the initial Business Intelligence System. He also led efforts in establishing strategic relationships with leading companies such as 3com, McAfee, and Infospace. Francois' financial service experience comes from Manufacturers Hanover Trust where he performed marketing research for credit card services. He holds an MBA from HBS and is a graduate of Skidmore College with a BS in Liberal Arts.

**10.2. How it works****What is ExchangePath™?**

ExchangePath is the best way to send and receive money online. It's an easy-to-use service that lets you send or receive personal payments (including online auction bids), purchase digital content like software and music, and even hit your friends and family up for cash if you find yourself a little short!

ExchangePath is fast and **free**. In fact, you'll receive a \$10 bonus in your account after you sign up and try our service. Refer some friends and you could earn even more.

ExchangePath is secure. Once you open an account, your personal information (like credit card numbers) stays put. Because you're sending and receiving money through ExchangePath, your personal information is never revealed to buyers or sellers.

**Sounds interesting. Can you give me some examples on how I'd use it?**

ExchangePath's security, convenience, and flexibility make it the very best way to send or receive money online.

Selling something on an auction site? Use ExchangePath to receive payment instantly. No need to worry about getting bad checks. You can also use ExchangePath to send auction payments instantly, so you'll receive your merchandise faster.

You and some friends are planning a vacation together... and you've been elected trip coordinator. Problem is, everybody lives in a different part of the country, and you need their vacation money now. With ExchangePath, you'll be able to coordinate finances instantly: Your friends can send you the money for that bungalow on the beach with the click of a mouse.

Student away from home, and a little low on cash? Mom and Dad can send you money via e-mail! No need to wait for a check or risk sending cash through the mail. And, unlike wire services, there are absolutely no fees for sending the money.

### **So how does it work?**

ExchangePath creates an online account for you where you can transfer or receive money with a click of the mouse. A detailed account summary keeps track of all transactions, so you always know who your money is going to, and where your money is coming from.

To join, you'll complete a short enrollment form. After that, you can send or receive money as well as ask for money from friends, family or anyone with an e-mail address.

When you receive money, ExchangePath will notify you by email. We will also notify you by email whenever your credit/debit card has been charged.

### **You can make payments by using the following:**

- Credit Cards: Visa® card, Mastercard® card, Discover®card, JCB® card, Diners Club International® card.
- Charge Card: American Express® card.
- Debit Cards: Visa or Mastercard.
- Existing funds in your account.

You'll be able to take money out of your account simply by crediting your card on file, or transferring funds to your checking account. And remember, because your private information never travels on the Internet after you sign up, you can feel safe making transactions with your ExchangePath account.

### **Does ExchangePath cost anything?**

No! ExchangePath is absolutely free. In fact, we'll PAY YOU to sign up!

### **10.3. Overview (Business 2.0)**

**1ClickCharge** [www.1clickcharge.com](http://www.1clickcharge.com)

**Launch:** End of 1999

**HQ:** New York

**CEO:** Heidi R. Goff

**Offering:** The most credit-card-centric strategy among the new payment players. Aims to add digital speed and efficiency to conventional credit card purchasing. 1ClickCharge's downloadable tool allows users to use card information to set up pre-paid accounts, through which they can make 1-click purchases of Web content.

**Status:** Limited partner network. Partnership with one of the major credit card associations looms this fall.

**Insight:** Major backing by Visa or MasterCard could give it big market potential.

## 11. eCharge

### 11.1. Partners

#### AT&T

AT&T Corp. is the world's premier communications and information services company, serving more than 90 million consumer, business and government customers. The company has annual revenues of more than \$52 billion and more than 130,000 employees. It runs the world's largest, most sophisticated communications network and is the leading provider of long-distance and wireless services. AT&T operates in more than 200 countries and territories around the world. The company also offers online services and access to home entertainment, and has begun to deliver local telephone service. In addition, AT&T offers outsourcing, consulting, systems-integration, and customer-care services to large businesses, and manages one of the world's largest credit card programs.

Visit the AT&T Website: [www.att.com](http://www.att.com)

#### Cable & Wireless

Cable & Wireless is a major global telecommunications business with annual revenue of over £9 billion (U.S. \$14 billion) and customers in 70 countries. Its businesses around the world offer a range of services spanning broadband data, Internet and voice services. Cable & Wireless' priority for expansion is the fast-growing market of Internet Protocol (IP) and data services for business customers. It is making major investments in developing advanced networks and services in the United States, Europe and the Asia-Pacific region to build the world's leading global IP infrastructure. With the capacity of this advanced infrastructure and its presence in key business markets, Cable & Wireless holds a unique position in terms of global coverage and services to business customers.

[www.cableandwireless.com](http://www.cableandwireless.com)

#### Edgar, Dunn & Company

Founded in 1978 Edgar, Dunn & Company consults with a broad range of industries and clients in developing and implementing strategies that capitalize on changing market opportunities. Much of EDC's recent focus is assisting clients in taking full advantage of E-business opportunities. With offices in San Francisco, London, Sydney and Atlanta, EDC is widely respected for its expertise in e-commerce, chip technology, on-line brokerages, financial services, telecommunications, energy services and market entry strategies. In the e-commerce area, groundbreaking work is successfully under way on behalf of a wide range of companies, from Internet start-ups to multinational firms.

[www.edgardunn.com](http://www.edgardunn.com)

#### EDS

EDS is a recognized global leader in providing e-business and information technology services to 9,000 business and government clients in about 50 countries around the world. Having founded the information technology (IT) services industry more than 35 years ago, EDS delivers high-value management consulting, electronic business solutions, business process management, and systems and technology expertise to help clients achieve superior value in the digital economy.

[www.eds.com](http://www.eds.com)

#### FairIsaac

Fair Isaac helps businesses worldwide maximize the value of data to make more profitable decisions about their customers, operations and portfolios. Fair Isaac delivers data management services, analytics, software, and consulting to the financial services, healthcare, telecommunications, and e-business markets.

<http://www.fairisaac.com/>

**RiskWise**

RiskWise helps companies implement new and creative solutions to increase revenue and control loss. With an extensive data network, real-time processing capabilities, and scoring expertise, RiskWise provides fast, flexible services to companies that operate in traditional channels, on the Internet, or both.

[www.riskwise.com](http://www.riskwise.com)

**SafeHarbor.com**

SafeHarbor.com delivers outsourced customer support services to companies with e-business initiatives, from .com start-ups to Fortune 500 enterprises. The company's graphical Web self-help KnowledgeBASES - supported by multi-channel, one-to-one services - increase customer satisfaction while reducing cost and time to market. Backed by expert Knowledge Engineers and a state-of-the-art technical infrastructure, SafeHarbor.com's solution enables companies to scale instantly and fuel company growth.

[www.safeharbor.com](http://www.safeharbor.com)

**Washington Mutual**

Washington Mutual, Inc. is a regional financial services company that provides a diversified line of products and services to consumers and small-to mid-sized businesses. Its subsidiaries provide consumer and commercial banking services, securities brokerage, mutual fund management, property/casualty and life insurance sales, and underwriting for insurance annuities.

[www.wamu.com](http://www.wamu.com)

**11.2. Products**

**eCharge Net Account** is a new Internet payment method designed for consumers who want a secure, convenient and flexible way to purchase goods and services online. Consumers can establish a Net Account online in minutes and make purchases right away. Consumers can also set up Sub Accounts for family members and view statements and transaction listings online.

**eCharge Phone** is a secure, convenient online payment option that allows consumers to charge digital goods and services, such as software, online subscriptions, and music to their local telephone bill. The eCharge Phone payment option extends credit to anyone who connects to the Internet via a telephone line. No application or personal information is required.

**11.3. Overview (Business 2.0)**

**eCHARGE** [www.echarge.com](http://www.echarge.com)

**Founded:** 1997

**HQ:** Seattle

**CEO:** Ron Erickson

**Offering:** Like iPIN, eCHARGE allows consumers to piggyback small purchases to a pre-existing credit account, in this case, the consumer's local telephone service. Pre-paid account service also offers online credit for higher-ticket purchases.

**Status:** eCHARGE services to launch toward the end of the year, along with a revolving online consumer credit service.

**Insight:** Bold but risky strategy, aimed at antagonizing traditional credit card companies.

## 12. MoneyZap

<https://www.moneyzap.com/main.asp>

### 12.1. How it works

REGISTER with the Western Union® MoneyZapSM Service

1. If you're new to the MoneyZap service, you will need to register. Just go to [www.moneyzap.com](http://www.moneyzap.com) and click "Register Now." Tell us your name, address, e-mail address and create a User ID.
2. A few minutes later, you'll receive an e-mail message (to the e-mail address you registered) with your TEMPORARY PASSWORD.
3. Use the link in the e-mail message to enter your TEMPORARY PASSWORD to activate your account.
4. Follow the prompts to create your own password.

That's all there is to registering!

To send money or receive money, you will need to add financial accounts\* to your Wallet. To receive money, you need a checking account; to send money, you can use your checking account or a credit or debit card.

\*All financial accounts must be held with U.S. based financial institutions. Debit cards must have a MasterCard® or Visa® logo to work over the Internet - traditional PIN based ATM only cards will not work.

### SEND MONEY

1. Click on "Send Money" in the menu bar at the left of any page.
2. Enter the name of the person you are sending money to, their e-mail address, the amount, and an optional personal message. The recipient does not have to be registered with the MoneyZap service for you to send them money -- but they will need to register to claim it.
3. Tell us which checking account or credit/debit card you are using for payment. Your account information is stored in your Wallet - you need to enter it only once!
4. Review your transaction and submit.

You will receive an e-mail message from the MoneyZap service confirming the transaction. The person you sent money to will typically receive funds within 4-6 business days (depending on the payment method you used and the policy of the financial institutions involved). The recipient receives an e-mail message that says the funds are available.

### RECEIVE MONEY

When someone sends you money with the MoneyZap service, you will get an e-mail message letting you know money is available (even if you are not yet registered with the MoneyZap service).

#### To claim your money:

1. Register with MoneyZap (see How to Register above) or log in if you have already registered.
2. If you have indicated a preferred deposit account in " View Profile," you do not need to do anything. We will automatically deposit your money into your preferred account.
3. If you have not indicated a preferred deposit account, you can claim your money by clicking on the link in the e-mail OR by clicking "deposit" on the item in your IN BOX. Then follow the prompts to indicate an account for deposit.

You will typically receive your funds within 4-6 business days depending on the payment method used by the sender and policy of your financial institution.

### **REQUEST MONEY**

You can request money from one person or a from group of people. This feature makes it easy to collect money from family members for a gift for mom and dad, or for a ski trip with a group of friends.

To send a Request:

1. Click "Request Money" in the menu bar at the left of any page.
2. Request money from one person or many (whether they are registered with the MoneyZap service or not) by entering name and e-mail address. Click "Add Name" after each new name entered. Then enter the amount of money you want from each person and an optional personal message.
3. Pick the account where you want the money to be deposited and submit.

After the recipient has fulfilled the request and the money is available to you, we will automatically deposit it in the account you indicated.

## **12.2. Company overview**

### **About Western Union MoneyZap Service**

Now you can send and receive money online with the confidence of using Western Union. You can even request money online. The Western Union® MoneyZapSM service makes it simple to send money.

The MoneyZap service is convenient and easy. No need to put a check in the mail or get a money order when you want to buy an item at an online auction, settle up for your share of the beach house, or even ask your sisters to chip in on your parents' anniversary gift. You can also send an e-mail message with the MoneyZap service. Using the MoneyZap service is so easy, you may never use snail mail again.

All you need to use the MoneyZap site is your e-mail address, checking account, credit/debit card, and the recipient's e-mail address. Registering on the MoneyZap website only takes a few minutes and you're ready to send or receive online.

### **About Western Union**

Western Union Financial Services, Inc., a subsidiary of First Data Corp., has been helping consumers and businesses for literally decades to securely transfer money or make payments using money orders and other electronic systems. Credited with being the first to engage in electronic commerce more than 125 years ago, Western Union turned cash into bits flowing across wires - the world's first electronic money transfer service. Today, the company is an industry leader, moving funds in minutes through more than 80,000 agent locations in 180 countries worldwide. For more information, visit the company's website at [www.westernunion.com](http://www.westernunion.com).

### **About First Data**

Western Union's parent company, Atlanta-based First Data Corp. (NYSE: FDC), helps move the world's money - more than 2 trillion dollars every year. As a leader in electronic commerce and payment services, First Data serves more than two million merchant locations, 1,400 card issuers and millions of consumers, making it easier, faster and more secure for people and businesses to buy goods and services using virtually any form of payment. With more than 30,000 employees worldwide, First Data provides credit, debit and stored value processing and merchant transaction processing services; Internet commerce solutions; money transfers and money orders; and check processing and verification services throughout the United States, United Kingdom, Australia, Mexico, Spain and Germany. For more information, please visit the company's website at [www.firstdata.com](http://www.firstdata.com).

**About Telecheck**

TeleCheck Services, Inc., is the electronic check authorization provider for the Western Union MoneyZap service. A subsidiary of First Data Corp., Telecheck is the world's leading check acceptance company, and provides electronic check conversion, check guarantee, check verification, and collection services to more than 288,000 retail, financial institution and other industry clients through a sales and service network with offices in more than 90 cities in the United States. For more than 35 years, merchants and consumers alike have sought assurance with the familiar red-and-white TeleCheck® logo, knowing that the TeleCheck service reduces merchant risk in accepting checks while providing an easy, hassle-free payment option. For more information, please visit the company's website at [www.telecheck.com](http://www.telecheck.com).

**12.3. Personal comments**

Another Person 2 Person payment system

### **13. Wildcard Systems (Visa Buxx)**

<http://www.wildcardsystems.com/>

#### **13.1. General**

WildCard Systems is a technology leader for electronic host based stored value cards, virtual stored value accounts, Internet payment systems and web-based application, design and software solutions.

WildCard Systems delivers scalable stored value solutions which enable our customers to offer the features of smart cards without the cost, long lead times and implementation issues of chip cards.

#### **13.2. Partners**

A guiding principle of WildCard Systems is to identify the market leader in each channel or in a particular application category and partner with that leader. Superior technology, speed to market, outstanding service and continuous innovation are core to WildCard. Our partners bring existing customer relationships, in-place demand for payment system alternatives and vision. Together, we are able to leverage our strengths and establish indisputable market dominance.

#### **Visa**

WildCard Systems has been chosen by Visa, USA as the processor for Visa TravelMoney cards. These cards are more secure, easier to use and offer a number of valuable advantages over carrying cash, travelers checks and other currency when traveling Internationally. There are a number of distinctions between this card and other forms of pre-paid ATM cards on the market that are made possible by WildCard's proprietary technology. From web based applications that enable bank branches or other type of offices to instantly distribute, assign value and activate these cards to the consumer friendly way in which PINs may be selected, as well as the ability to obtain cash back at the point of sale - Visa TravelMoney through WildCard are a compelling value proposition to issuers and consumers.

In addition, WildCard has been named the Preferred Stored Value Processor for Visa USA. WildCard has the transaction processing platform and internet applications that are leveraged by Visa Member banks in a variety of applications. These range from complex and secure online financial transactions to mall gift cards that can be used at all mall merchants without changes to the merchant's POS equipment.

WildCard partners with Visa in constantly exploring new product opportunities for the application of our innovative technology.

#### **Bank Partnerships**

WildCard Systems partners with banks to provide leading edge payment system solutions to its customers. As the technology leader in host-based stored value programs, we are instrumental in getting our bank partners to market out ahead of the competition.

Legacy bank systems and traditional issuing processors are incompatible with the demands of the market. For example, existing platforms are built around one-to-one relationships between a debit card and a checking or savings account, as well as between a credit card and a revolving credit account. Additionally, targeted authorization at the merchant level, multiple purses, complex handling of fees and transaction discounting are simply not available on traditional platforms. Our bank partners realize that their customers (commercial and

consumer) require the flexibility and feature rich functionality of stored value products and applications available from WildCard Systems.

WildCard partners with a number of prestigious financial institutions to deliver card products and services.

**Bank One Corporation**, headquartered in Chicago, Illinois, is the nation's fifth-largest bank holding company with assets of more than \$256 billion as of June 30, 1999. Bank One offers a full range of financial services to commercial and business customers, and consumers. The world's largest Visa issuer, it also is the third-largest bank lender to small businesses, one of the top 25 managers of mutual funds and a major national automotive lender. It operates more than 1,900 banking centers and a nationwide network of ATMs. It is a major commercial bank in the United States and in select international markets.

**Fleet Financial Group**, headquartered in Boston and listed on the New York Stock Exchange (NYSE: FLT), is a diversified financial services company with \$107 billion in assets under management. Fleet is the nation's sixth largest commercial lender and New England's leading small business lender. Fleet's products and services include consumer banking, government banking, mortgage banking, private banking, corporate finance, commercial real estate lending, credit cards, insurance services, cash management, trade services, export finance, capital markets, equipment leasing and asset-based lending. Fleet also provides a wide array of investment management services for both individuals and institutional clients and operates the nation's third largest discount brokerage firm through its Quick & Reilly, Inc. subsidiary. With 1,150 branches and 2,400 ATMs, Fleet also provides 24-hour telephone banking as well as on-line banking services for individuals and businesses.

**Household International**, through its subsidiaries, is a leading provider of consumer finance, credit card, non-prime auto finance and credit insurance products in the United States, United Kingdom and Canada. In the United States, Household operates under the two oldest and most widely recognized names in consumer finance - HFC and Beneficial. Household is also one of the nation's largest issuers of private-label and general purpose credit cards, including the GM Card and the Union Privilege card. For more information, visit the company's web site at <http://www.household.com>.

**MBNA** is the largest independent credit card lender in the world. MBNA also provides consumer financing options and insurance products and offers a variety of superior deposit accounts. MBNA has more than 22,000 people working to provide top-quality customer service in the United States, the United Kingdom, Ireland and Canada.

### **Commercial**

Purchasing, T&E, fleet and payroll cards are valuable tools used by companies to more effectively manage their expenses, improve operational efficiency and productivity. With WildCard Systems' unique stored value cards and software, companies have more control over those card programs than ever before. The ability to target transactions to a specific merchant or merchants rather than just by MCC, the ability to load value in real-time when needed through the Internet and portability of the platform from one bank to another is the relationship changes are advantages of WildCard Systems. Additionally, a new product specifically designed for the payment of relocation expenses and disbursement of related benefits is available from WildCard Systems as well. Finally, Internet commerce has created a new set of challenges for transactions between companies, customers and individuals - which is served by WildCard Systems.

### **Merchants**

The Wildcard Systems merchant network is a distinguished collection of companies that include large national chains, regional and super-regional retailers, as well as merchants that

specialize in mail/telephone ordering and the sale of goods through the Internet. This dynamic network of merchants reflect the lifestyles, preferences, tastes and needs of America. They deliver value in their pricing, selection in their product assortment and exceptional customer service.

1- 800 - LUGGAGE  
Cambridge Camera  
City Furniture  
ComputAbility  
Diver's Outlet

HomeGoods  
Pascoe & Company  
Sears  
Service Merchandise  
Silverwarehouse

Spiegel  
Sports Authority  
TJ Maxx

**Investors**

WildCard Systems is a privately held, venture capital banked company. Key investors include Sutter Hill Ventures, Greenwich Street Partners, E.W. Blanch and Cleveland Pacific Equity Ventures, LLC.

## 14. I can Buy

<https://www.icanbuy.com/>

### 14.1. Company overview

#### Mission

Our mission is to enable kids, teens, and parents to manage money wisely. We do this by empowering them to save, shop, create a wishlist and donate to charity from a secure online account - with a unique parental permissions system to promote learning and safety.

#### Product

Nothing like iCanBuy™ currently exists in the marketplace. We are pioneering a new product and a new market - and we intend to maintain our leadership with a constantly evolving product, state-of-the-art customer service and world-class brand-building.

Our product has been designed to appeal to kids and teens, with a colorful, innovative interface and plenty of features to keep them coming back. We've also kept adult users in mind in the design of our parent and guest areas. Their pages are intuitive and easy to navigate. User feedback has always been crucial to the development of iCanBuy™, from our earliest focus groups to our current users. We welcome any and all feedback.

#### Founders

##### PAUL HERMAN, CEO

Paul was born in Chicago, and got his first subscription to "Business Week" at age 12. Since then, he has worked at Oscar Mayer (and driven the Wiener Mobile once!); People Express Airlines; McKinsey and Company Consulting; and Computer Sciences Corp. He holds a degree in entrepreneurship from The Wharton School of Business at the University of Pennsylvania, and is proud to be a quantitative geek. Paul is also a former board member of Big Brothers/Big Sisters of Marin County, California. The #1 item on his WishList is a savings account from Security First Network Bank!

##### GAYLE KECK, PRESIDENT

Gayle comes from St. Louis, where she marketed lemonade from an early age, using her toy cash register (still a prized possession). She honed her skills at the University of Missouri School of Journalism, graduating with a concentration in advertising. She then went on to work at major ad agencies (FCB, Ketchum, Y&R) creating commercials for everything from greeting cards to gasoline. Gayle doesn't like to brag, but her last commercial won a Clio Award. She is also a board member of Larkin Street Youth Center, which helps homeless and runaway youth. The #1 item on her WishList is a G-Shock watch from Designer Outlet!

##### ROSS HERMAN, CHIEF OF PRODUCT DEVELOPMENT

Ross is from Chicago, where he was in the computer and information system industry for over 5 years, running the gamut from technical development to the advertising, graphics and design fields. He attended the DeVry Institute of Technology in Chicago. Prior to joining iCanBuy, he spearheaded the Web practice at Trungale, Egan & Associates. Ross keeps the level of friendly competition high at the office with network gaming and practical jokes. Plus he has a really cool Lava Lamp. The #1 item on Ross' WishList is the Microsoft Force Feedback Driving Wheel from Outpost.com!

##### MacGUFFIN, KEWL KAT IN RESIDENCE

MacGuffin grew up in San Francisco. He is half Abyssinian and half Burmese, but being from California, he likes to lie in the sun a lot. His favorite activities are fetching balls, eating, sleeping, purring and surfing the 'Net. Although MacGuffin has no formal schooling, he can

always sniff out what's kewl. The #1 item on his WishList is anything nice and bouncy from Just Balls!

### **Partnerships**

iCanBuy has partnered with premier retail, banking and community web sites with many more to come:

We continually seek to build partnerships in these areas:

#### **Retail**

Is your website losing sales because kids and teens can't make purchases? Most of them (91%) don't own credit cards, the main payment method of the Internet. So if your products appeal to the kid and teen audience, you should be an iCanBuy retail partner. We seek partners in the categories of apparel, entertainment, personal care, sporting goods and toys-as well as niche marketers with products that cater to our consumers.

#### **Financial**

iCanBuy seeks financial services partners who can help our customers invest for their future through custodial accounts. We are particularly interested in financial services providers with special programs for young investors, including educational content.

#### **Community**

Mutually beneficial audience-building partnerships are always welcomed. If your site serves the under-18 audience, please contact us about links, content-sharing or co-marketing possibilities.

#### **E-commerce and iCanBuy.com**

iCanBuy.com has identified an untapped market with strong and growing potential. Not only are kids and teens a growing online population, but there are also a number of factors which will help drive this market.

#### **A Need for Convenience**

With increasingly hectic and busy schedules, both parents and kids seek convenience. Parents don't want to have to drive to the mall at every kid's or teen's whim. This year's boom in online shopping has been in part driven by the greater accessibility of goods online and the increase desire to shop at any time of the day or night. With iCanBuy.com, parents can set up their kids' account for them to shop and not always have to drive them to the store.

#### **Double-Income Families**

Increasingly, both parents work. Not only does it impact their available time but it also provides them and their kids with increased income. With iCanBuy.com, kids can learn at an early stage financial responsibility while enjoying a fun shopping experience.

#### **A "Virtual Family"**

With more and more families spread around the country, it is often difficult for family members to know what their grandchild or niece/nephew would like for a birthday or a holiday. iCanBuy's cross-vendor wishlist is designed to give parents, family members and friends a list of gifts with the child's sizes and preferences.

#### **Safety and Security**

With growing concern over the safety of kids in malls and superstores, with iCanBuy.com, parents have an alternative to sending their kids to the mall. In addition, iCanBuy.com is the first website for kids and teens designed on the premise of parental permissions. Parents set up their child's account and control the sites available to him or her as well as set spending limits.

### **Income is Growing and Discretionary**

Last year, kids and teens spent over \$130 billion. There has been a steady increase over the last decade of kids and teen income, generated by bigger allowances as well as from jobs and internships. As most kids and teens don't have many expenses, this increased income is purely discretionary. Their spending takes place largely in apparel and entertainment but increasingly kids and teens have become interested in saving and investing.

### **Need for Financial Education**

Because spending habits are determined at an early age, it is important for kids and teens to learn financial responsibility in a safe and parent-approved environment. With iCanBuy.com, kids can save at an on-line bank, chat about financial management issues and shop within certain spending limits. As parents often lack the tools to educate their children and find it difficult to discuss financial issues, iCanBuy.com is a great tool for kids and teens to learn how to manage their money early on.

### **Increased Sophistication of Teens and Kids**

With the increased access to information, kids and teens have become more savvy over the past couple of years. A recent article in Money magazine illustrated this trend with a growing number of kids learning how to trade and play the stock market. In addition, when it comes to shopping decisions, kids and teens are more and more conscious of safe products, brands and prices.

## **14.2. Partners**

### **Retail**

999 Central	EZCandles.com	Pacific Sunwear
Alloy Online	EZone.com	PC Flowers
amuZnet.com	FamilyWonder.com	Philou
Barnes and Noble	Fossil.com	rallycaps.com
BennySmart	Gotmerch.com	Rival99.com
BuyersAvenue.com	Graffiti Online	SharperImage.com
CDNow	Joolry.com	Tees.com
Designer Outlet	JustBalls!	Top Hat Toys
Dork.com	KewlJewl	Underneath.com
DryIce.com	New York Cosmetics	UrbanMall.com
Emerchnow.com	Outpost.com	uv115.com

### **Financial Services**

Security First Network Bank (SFNB)

### **Charity**

American Brain Tumor Association	iSafe America
Child Welfare League of America	Special Olympics
Global Fund for Children	

## **14.3. How it works**

This is the safe, secure site that lets you manage an environment where your children can Shop, Save, create a WishList, Learn, and donate to Charity.

iCanBuy is completely free to you and your family. Here's how it works:

- You register yourself and your child. Each of you has a separate user ID and a personal password.

- You can set permissions that manage where a child shops and how much she/he may spend. Permissions may be revised at any time.
- You create a child's account by using your credit card to make a deposit. (Often, kids and teens will give their parent the funds in cash, and the parent will then "deposit" them by using a credit card.)
- You can also set up an automatic allowance that will be deducted from your credit card. The right amount is automatically transferred into your child's account when you specify-on a weekly or monthly basis. It's safe and convenient.
- If you'd like, you can also register Guests. A Guest is a friend or relative who is allowed to view your child's WishList and make deposits to the child's account. Each guest receives a separate password, and can access only the Guests portion of the site.
- Then give your kid or teen the good news! Once you tell them their ID and password, they are ready to shop, save and donate from their own online account.

#### **14.4. Personal comments**

This is an online bank. Parents put money on the account and children can then use this account to pay for the products they buy online.

## **15. Other Person-To-Person (P2P) payment systems**

### **15.1. eMoneyMail**

<https://www.emoneymail.com/>

### **15.2. PayPlace**

<https://www.payplace.com/>

### **15.3. PayPal (X.com)**

<http://x.com/>

<http://www.paypal.com>

### **15.4. BillPoint**

<http://www.billpoint.com/>

## **16. Debit Cards / Prepaid**

### **16.1. eCount**

<http://www.ecount.com/>

## **17. Miscellaneous**

### **17.1. DoughNet**

<http://www.doughnet.com/>

### **17.2. Cyber Cash**

<http://www.cybercash.com/>

## **18. Credit card Payment Systems (alternatives)**

### **18.1. TWYP (The Way You Pay)**

[http://www.twyp.com/website/SilverStream/Pages/index\\_EN.html](http://www.twyp.com/website/SilverStream/Pages/index_EN.html)

### **18.2. Bibit**

<http://www.bibit.nl/>

### **18.3. OTS (Online Transaction System)**

<http://www.onlinetransactions.com/inside/english/index.html>

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 Author: Wouter Haring  
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## Teenage Payment Systems

### 1. Universal Music Group

#### 1.1. Record Company Universal Streams Music, Gets Sued

(8/12/2000 BetaNews) Universal Music's recent victory in a copyright infringement lawsuit against MP3.com made it clear that the recording giant - and not the Internet music distributor - holds the right to make copies of the songs on its CDs.

But when Universal itself is broadcasting those tracks on the Web, it should be paying music publishers and songwriters - just like radio stations do - according to a lawsuit launched this week against the Seagram-owned company behind such well-known labels as Decca, MCA, Motown, Philips, and Polydor.

A number of those publishers and songwriters, including Jerry Leiber and Mike Stoller, Irving Berlin Music Company and Elvis Presley Music, are seeking up to \$150,000 for each of their works served up by Universal from the site of its Internet record label, Jimmy and Doug's Farmclub.com.

Farmclub.com recently launched a Beta-test version of a music- subscription service, boasting that 25,000 songs from the huge Universal library were available for listening on demand.

Based on streaming-audio technology, the service aims to please music fans without actually handing over high-quality digital-audio files listeners can permanently store on their own computers and, perhaps, distribute through the Napster-like file-sharing networks feared by the industry.

But artists say streaming audio is akin to radio play and that they should receive royalties for any Internet broadcasts.

Battles over royalties for digital-audio rights and streaming technologies have divided music companies that were on the same page when it came to fighting Napster, or the former video- and audio-swapping service Scour.

Earlier this week, New York District Court Judge Jed Rakoff, who recently awarded Universal more than \$50 million in its lawsuit against MP3.com, exonerated both those companies and most of the other major record companies in a lawsuit brought by a group of artists that included The Coasters, The Original Drifters and The Chambers Brothers.

The artists said the recording companies and MP3.com had no rights to make digital versions of their music and distribute it over the Internet.

In his ruling Tuesday dismissing the case, Rakoff noted that all the artists had signed contracts containing language "identical or equivalent to the following: All recordings, phonograph record masters and reproductions made therefrom, together with the performances embodied therein, shall be entirely (the record company's) property. (The record company) shall have the unrestricted right to manufacture, use, distribute and sell sound productions of the performances recorded hereunder made by any method now known, or hereafter to become known."

Said Rakoff: "This language ... is clear. Without limitation it conveys all of (the artists') rights in these recordings to the record companies, including the right to exploit the recordings by any method whatsoever."

## **1.2. Universal Music Testing Online Subscription Service**

Label group makes more than 20,000 songs available in streaming audio formats.

The world's largest family of major labels, the Universal Music Group, began testing a program that offers more than 20,000 free songs online Monday, the first major-label test of a streaming music subscription service.

The program, offered in a beta test to 5,000 users of the company's Farmclub.com site, includes access to full albums by such current Universal acts as Eminem, U2 and DMX, as well as classic rock, soul and jazz albums by the likes of James Brown, Chuck Berry and Cannonball Adderly.

"The reality is that there's a demand out there to hear music online. This is a very important piece of the puzzle." — Noah Stone, Artists Against Piracy

Users can play individual songs and entire albums on demand or design their own playlists. Songs are streamed in RealAudio or Windows Media formats but are not saved onto users' hard drives.

A Universal spokesperson described the Farmclub.com Music Service as "a closed beta trial," but declined to comment further on it. The company sent e-mails to registered Farmclub.com users urging them to sign up for the service.

Noah Stone, founder of Artists Against Piracy, which is supported by artists including Christina Aguilera and Blink-182, praised the service as a significant step forward in fighting Napster and other non-label-sanctioned sources of online music.

"The reality is that there's a demand out there to hear music online," Stone said. "This is a very important piece of the puzzle."

The five major-label groups are in the midst of a copyright infringement lawsuit against the popular music-sharing service Napster. An appeals court is deciding whether Napster should be shut down before the trial.

Universal and Sony Music, which is home to such artists as Rage Against the Machine and Bruce Springsteen, announced earlier this year that they plan to start a subscription service together, but the current trial includes only Universal music.

Universal was alone among the major labels in refusing to settle a copyright infringement lawsuit against MP3.com, which offered a streaming service that was intended to allow customers to listen to music online that they already owned on CD.

In September, Universal won a judgment against MP3.com that will force the online music company to pay \$25,000 per Universal CD used in the streaming service, called My.Mp3.com.

Universal, along with the four other majors, already has begun selling a small number of downloadable songs online, but analysts have urged the labels to move toward a subscription model.

## **1.3. Universal tests Napster-style music service**

(23/10/2000 The Register) 'Big five' recording company Universal Music Group has begun secret trials of an unlimited access, subscription-based digital music distribution service.

Universal itself won't discuss the trial, but its parent company, Seagram, and the drinks giant's prospective merger partner, Vivendi, have mentioned it during talks with analysts and shareholders, Reuters reports.

The trial apparently provides unlimited access to some 20,000 tracks via a streamed media connection over the Internet. Subscribers, of whom, Reuters reckons there are 5000 - seems a lot to us - can't download and keep the songs they choose to listen to.

Subscription-based services have been touted as a workable alternative to the pay-per-download digital music distribution systems the major labels have been focusing their efforts upon. The arrival of Napster, with its 'all you can eat' approach to downloads, is believed by many observers to have pretty much whacked the original model on the head - punters are now so used to unlimited access, they will no longer put up with a 'single fee, single download' model.

That's certainly one possible motivation behind Universal's trial. The other is the development of Net-based audio-on-demand services of the kind Japanese giant Sony is looking to when it rolls out broadband digital entertainment services next year.

Just as the video market has split between those who want to buy tapes - and now DVDs - to keep and those who simply want to rent movies occasionally, the audio market has traditionally been a sell-through only business. The ability to stream audio provides a way of building a music rental operation without the usual piracy concerns. There are plenty of folk out there who might want to hear, say, the new Radiohead album, but don't want to buy the CD outright in case they find it a mite too depressing.

#### **1.4. Universal to bring digital music service to UK**

(18/08/2000 The Register) Universal, one of the world's 'big five' recording companies, will bring its Bluematter digital music service to the UK this autumn, along with an expansion of the service in the US.

The company's boss, chief executive of parent company Seagram, Edgar Bronfman, broke the news at a Seagram Q4 earnings announcement yesterday.

"Bluematter was only launched two weeks ago but we expect to expand it to thousands of tracks over the next couple of months," he said.

Bluematter is currently operating on a trial basis, providing 60-odd songs to online retailers, who sell them on to music consumers.

"What the music industry needs to do is come up with a market-born solution, where people who own the copyright are paid," Bronfman said when asked about preventing illegal downloads. "I believe we are closer to a solution... I expect a robust alternative for music lovers by the end of the year."

That solution is expected to not only prevent illegal copying of digital downloads, but protect music stored in other formats, including CD, too.

Bronfman's comments on copyright protections are clearly a dig at Napster, the software developer whose legal tussle with the Recording Industry Association of America comes to court later today.

"I believe the courts will continue to enforce copyright laws," Bronfman added

### **1.5. Universal to launch digital music trial**

(02/08/2000 The Register) Universal is finally set to follow Sony and EMI with the launch of a digital music download service of its own.

The music company, one of the world's 'big five' recording operations, will launch its service, codenamed Bluematter, this week - more than seven months after it originally planned.

This time last year, Universal said it would launch a full digital music service by the end of 1999. December rolled by, and there was still no service. And then Universal's parent, drinks giant Seagram, got involved in merger talks with France's Vivendi.

The new service, which is being called a 'trial' by Universal, will offer 60-odd songs, rather less than the 100 albums being offered by EMI. However, Universal said it will add new songs to the roster weekly, in preparation for a full-scale roll-out sometime in the autumn.

The trial at least will offer tracks in RealNetworks proprietary format, though Universal executive VP Heather Myers said other formats would be considered, according to customer feedback. Copyright protection technology will be provided by Intertrust, a long-term partner with Universal on digital music.

Like EMI's service, Universal's Bluematter will be primarily be offered through third-parties, in particular online retailers. Tracks will also be sold by Universal's joint venture with fellow 'big fiver' Bertelsmann Music Group (BMG), GetMusic.

## **2. Sony Music Entertainment**

### **2.1. Sony to sell music via cell phones**

(07/11/2000 The Register) Sony is to begin distributing music to mobile phones thanks to a new partnership with Japan's largest cell phone network company, NTT DoCoMo.

Sony will invest in AirMedia, the JV formed last February by DoCoMo and consumer electronics company Matsushita. Sony and Matsushita will develop phones that can download and playback music tracks via the airwaves. Other devices will allow music to be downloaded via cellular networks to users' home audio equipment. Sony will also provide content.

AirMedia's music service is still in development, with its launch scheduled for the tail-end of this year, according to Japanese newspaper Mainichi Shimbun, when DoCoMo rolls out its PHS personal phone network.

AirMedia itself will then be relaunched as a new operation, presumably one better able to market itself and its media services to consumers. Some 20-odd more music and media companies will also invest in the company.

### **2.2. Offspring agrees to can Napster album giveaway**

(26/09/2000 The Register) Pro-Napster band The Offspring have knocked on the head their plan to offer their next album in MP3 format ahead of the CD release via the trouble music sharing service.

We're not entirely surprised. Offspring is signed to Columbia Records, which is owned by Sony Music Entertainment. Sony is, of course, one of the recording companies on whose behalf the Recording Industry Association of America is suing Napster.

In protest against that action, Offspring threatened to release its new album, Conspiracy of One, the follow-up to the rather fine Americana, on the Internet.

And, to be fair, Offspring also hoped the giveaway would boost sales of the CD, due to go on sale in the US on 14 November, so the band's move wasn't entirely made in a spirit of fighting for the little guy and Damning the Man.

Either way, Sony was none too pleased, and threatened legal action against the band to prevent the promotional exercise. One source, cited by Reuters, suggests that a legal battle was averted on Friday, when Offspring agreed not to release its album on the Web before the CD ships.

"We are extremely happy that Sony Music has worked out a solution with The Offspring and its management that supports the integrity of the band's creative idea and enables them to proceed with their promotion," a Columbia Records spokesman said yesterday.

That suggests the band will go ahead the promo after the CD release. A statement from the band's manager only stressed their agreement not to offer the album until the CD has shipped. Before then, Sony will release one of the album's singles, Original Prankster, on the Web this Friday, but that's little more than an attempt to compile a list of fans' email addresses, it seems.

And don't forget that The Offspring found themselves on the wrong side of Napster having offered pro-Napster T-shirts and baseball caps on their Web site. Napster's complaint? Copyright infringement...

### **2.3. We will block Napster at source - Sony exec**

(23/08/2000 The Register) If the Recording Industry Association of America doesn't zap Napster, Sony certainly will.

At least that's what Sony Pictures Entertainment US senior VP Steve Heckler told attendees at the Americas Conference on Information Systems 2000 this past weekend.

"The [music] industry will take whatever steps it needs to protect itself and protect its revenue streams," Heckler said. "It will not lose that revenue stream, no matter what."

Fair enough, you might think. That is after all the reason behind the RIAA's legal action against Napster, though it's nice to have an industry executive admit that the case is about control of "revenue streams". Sony Pictures Entertainment operates alongside Sony Music Entertainment, an RIAA member.

But Heckler's comments, as reported by the U-Wire Web site, US news service aimed at college students, get better: "Sony is going to take aggressive steps to stop this. We will develop technology that transcends the individual user. We will firewall Napster at source - we will block it at your cable company, we will block it at your phone company, we will block it at your [ISP]. We will firewall it at your PC.

"These strategies," Heckler told conference attendees, "are being aggressively pursued because there is simply too much at stake."

Particularly for Sony, which is aggressive basing its digital content strategy around the ability to sell music and movies into the home via broadband Net connections and (ideally) PlayStation 2 consoles.

Of course how practical and effective are the strategies Heckler outlined remains to be seen, and his comments should perhaps be read more in the light of what could happen if Napster wins the legal battle - which seems pretty unlikely right now. Building Napster-blocking technology into browsers and other Web-enabled apps and devices is plausible, but would depend on universality to be effective - and there are plenty of OSes and systems that Sony and others would not be able to get its code into.

Point is, though, the powers that be in the music and entertainment industries are not going to let this one lie.

### **3. BMG Entertainment**

#### **3.1. BMG to bring music downloads to Europe**

(04/12/2000 The Register) BMG Entertainment is to bring a music download trial in Europe through a deal with New York-based Magex.

BMG, the music division of Napster-befriender Bertelsmann - says the move is the first part of its plan to put its whole stable of 'artists' - including Christina Aguilera, Kenny G and teen groups Five and Westlife - online.

The UK will be BMG's guinea pig, with a pre-Christmas internal trial and a semi-commercial trial early next year. If successful, it is planning a full commercial rollout, possibly to the rest of Europe, soon after.

In October Bertelsmann broke ranks with fellow music giants and ditched its lawsuit against file-swapper site Napster. The two former foes said they planned to create a subscription-based service.

"Through Magex, the BMG catalogue will be available online in the UK for the first time," said Patrick Campbell, Magex Chairman and CEO. "The European community is a huge growth market for the music industry."

Magex provides a service for buying and selling music in digital format over the Net.

Forrester Research reckons the market for digital downloads will be worth \$2 billion by 2003.

#### **3.2. Napster makes sweet music with Bertelsmann**

(31/10/2000 The Register) Bertelsmann today beckoned others to follow its lead after ditching its part of a piracy lawsuit against Napster.

The two former foes have struck an 'alliance' to develop Napster into a membership-based service that will pay royalties.

Bertelsmann, parent of music company BMG Entertainment, will fund the development of the service through a loan from its e-Commerce group. The e-Commerce group will hold a warrant to acquire a portion of the MP3 file-swapping company's equity.

While promising to "preserve the Napster experience", the all-new Napster will make payments to record artists, songwriters, recording companies and music publishers.

"Person-to-person file sharing has captured the imagination of millions of people worldwide with its ease of use, global selection of content, and community features," said Thomas Middelhoff, Bertelsmann chairman and CEO.

"Napster has pointed the way for a new direction for music distribution, and we believe it will form the basis of important and exciting new business models for the future of the music industry."

By withdrawing from the suit, Bertelsmann is going out on a limb - the rest of the record industry is still baying for Napster's blood and want the site shut down permanently.

But Middelhoff issued a plea to rivals to adopt his if-you-can't-beat-'em-join-'em attitude: "We invite other record and publishing companies, artists and other industry members to participate in the development of a secure and membership-based service."

Shawn Fanning, the college drop-out who founded Napster, said: "I am excited that Bertelsmann appreciates and values the uniqueness of the community Napster users have built. I look forward to Napster becoming a part of even more people's lives, helping the way people discover and explore music."

Napster has 38 million users, and has rattled the cages of gazillionaire artists such as The Spice Girls, Madonna and Metallica.

### **3.3. BMG to launch digital music service next month**

(23/08/2000 The Register) Recording company BMG (Bertelsmann Music Group) will join fellow 'big five' music labels EMI, Sony and Universal when it launches its own digital music download service next month.

The service will initially provide 50 albums and 50 singles, according to BMG VP of business development Sami Valkonen, cited by Reuters.

Like the services offered by other music labels, BMG's service will operate through online retailers, essentially to prevent the company's existing retail partners getting annoyed at having to compete with it directly. And with the vast majority of a label's sales still being made on the High Street and through online CD sales, you can understand why BMG doesn't want to piss them off.

Interestingly, Valkonen - and, by implication, BMG itself - appears to be pretty dismissive of the much-mooted subscription business model. That scheme, whereby punters pay a monthly fee to download as many tracks as they like, is being widely touted by industry analysts as the way the music biz can beat the likes of Napster.

"We don't really believe in the all-you-can-eat model for a couple of reasons," Valkonen told Reuters. "One is that it doesn't give you the advantage of mass customization that allows you to target certain music to certain customers.

"Also, our research shows us that customers will download all the music they want in the first two months and then not use it very often after that. And unless they proactively cancel the service, they're being charged for something they don't get much value from. That's not very friendly to the consumer."

Not that that's really been a prime concern of the music biz - more likely the concern is simply that the music buyers get a better deal than the record companies.

Instead, BMG hopes buyers will be happy paying \$1.98 to \$3.49 per single and \$9.98 to \$16.98 for complete albums, which is what they'd pay in the shops anyway.

BMG's service will follow on the heels of Universal's recently launched bluematter trial run - soon to be expanded - and similar operations from Sony and EMI. The final 'big fiver', TimeWarner, has said it will announce its own plans in its fourth quarter - presumably once it has become part of AOL.

#### **4. Warner Music Group**

##### **4.1. Warner digital music service goes live**

(02/11/2000 The Register) Warner has launched its digital music distribution service, offering a feeble 100 songs via third-party e-tailers - rather less than the thousands of tracks insiders had claimed would be made available.

The 'big five' music label announced the service back in September. Tracks will be offered in both Liquid Audio and Windows Media formats, backed by Liquid Audio and Microsoft's rights management applications.

True, both formats may, as Warner said, be available to the majority of computer users, but they're hardly a comprehensive selection.

In keeping with the music industry's desire to avoid annoying its traditional retail partners, Warner's tracks will be offered through online e-tailers and the Web sites of bricks'n'mortar record stores.

#### **5. EMI Recorded Music**

##### **5.1. EMI picks partners for Euro digital music trial**

(20/11/2000) British 'big five' music company EMI is to bring its digital music distribution trial to Europe, signing two further partners to offer its content.

EMI's latest signing emerged over the weekend. DX3 (which is short for Digital Distribution Domain, apparently) and On Demand Distribution will separately take EMI's digital content and sell it to online retailers.

The deals follow a similar one with the Tornado Group, and alliances with the likes of Liquid Audio in the US.

Essentially, it's an old economy model: the manufacturer (EMI) ships to resellers (e-tailers) via distributors (Tornado, DX3 and On Demand). Since Net-based commerce is largely about cutting out middlemen, we wonder why EMI is so keen on bringing them into the equation. Clearly, old habits die hard with old economy companies.

That's not how EMI's fellow 'big fivers' are tackling the business. BMG's deal with Napster is the most obvious example of a music label getting to the heart of digital distribution, but the others all appear to be targeting e-tailers directly.

EMI's approach does bring with it some important benefits. For a start, it should ensure that its content is made available in as wide a range of formats as possible. After all, no one wants to be forced to use software they don't much care for simply because that's the only way they can hear their favourite band's latest single.

It also ensures EMI takes relatively little risk. It has stakes in both DX3 and On Demand, so it can share in their success, but it doesn't lose as much if one of them goes titsup.com. And if

they do phenomenally well, it's in a better position to snap one or more of them up as its digital distribution division.

Still, it's a very cautious, tippy-toe approach to Net-based sales that contrasts markedly with Bertelsmann's 'dive straight in' strategy, and makes us wonder if EMI really understands this Internet thing.

Meanwhile, over in the US, EMI has signed up Streamwaves to stream its music content to subscribers. Streamwaves will offer EMI's music early next year. Punters will pay a monthly fee - in return, they get to listen to as many tracks as they like, when they like and as often as they like.

It's not quite Napster, but it's as close as it gets, and a model for emerging online music rental services loosely modelled on the video rental sector. Why buy a CD when you can listen to it via the Net for a fraction of the cost? Sony favours a similar approach, but one based on pay-per-listen rather than monthly subscriptions, which favours hardcore music buffs, not casual listeners, who are more likely to be interested in a rental service.

### **5.2. EMI and Streamwaves to launch Internet music subscription service**

(20/11/2000, EMIgroup) Streamwaves to Offer Consumers the First Licensed Streaming Subscription Service of Its Kind

Dallas, TX and Los Angeles, CA (Nov. 20, 2000) "EMI Recorded Music and Streamwaves, an Internet-based subscription music provider, today announced a non-exclusive, multi-year license agreement that will allow North American consumers to stream music on demand. The streaming service, located at [www.streamwaves.com](http://www.streamwaves.com), is expected to launch officially at the beginning of 2001. For a monthly fee, subscribers to Streamwaves' service will have access to a wide selection of titles at any time.

"Music fans have loudly declared that they want music on demand," said Jay Samit, Senior Vice President of New Media, EMI Recorded Music. "Through Streamwaves, we are offering our artists' fans a user-friendly subscription service."

Together, Streamwaves and EMI will offer a wide breadth of music from a variety of genres, with plans to add new content regularly. Subscribers can create their own playlists using an Internet browser with a user-friendly interface that functions much like a jukebox or CD player. Subscribers will also be able to listen to pre-programmed music selections and playlists created by other users. Streamwaves' secure, high-quality proprietary technology is designed to provide an easy-to-use entertainment experience.

"Subscribers to Streamwaves' service will be able to choose from a variety of music at any time, every day, without interruption," said Jeff Tribble, Chief Executive Officer, Streamwaves. "We are thrilled to offer our subscribers selections from EMI's world renowned music library. Streamwaves is passionate about giving music lovers flexibility and freedom of choice."

### **5.3. Soundbuzz To Receive Content and Support from Global Major Record Label**

(19/10/2000, EMIgroup) Hong Kong/Singapore, October 19, 2000 - Digital music distributor Soundbuzz, today announced that EMI Music Asia, a division of EMI Recorded Music, a global record label with a presence in over 70 countries, has entered into a strategic agreement with the company.

The relationship will result in a host of benefits for both companies. Soundbuzz will receive EMI's expertise and services in connection with its on-line music business while EMI will

have access to Soundbuzz's network across Southeast Asia, India, Taiwan, Hong Kong and Australia to market, promote and, when EMI rolls out its digital download trial to Asia, sell downloadable music securely. Music lovers who log on to [www.soundbuzz.com](http://www.soundbuzz.com) will be able to sample music and video clips from EMI's popular international and local recording artists, and EMI expects its download trial, which was launched in North America in July, to expand into Asia by the end of this year.

Says Sudhanshu Sarronwala, co-Founder and CEO, Soundbuzz, "This is a landmark moment for the Asian music industry as Soundbuzz becomes the only digital music retailer in Asia to partner with a global record label for the sale of secured downloadable content for digital distribution throughout the Asia-Pacific region. EMI has seized upon new media and become one of the leading companies in this area. The reason we have partnered with EMI is because they have shown themselves to be very creative and forward-thinking here."

Says Matthew Allison, President and CEO, EMI Music Asia, "Our agreement with Soundbuzz is a recognition of its leading position in the digital music space in Asia. We look forward to capitalizing on Soundbuzz's leading market position, strong brand and consumer knowledge in the Asian region for the distribution of our downloadable music."

To ensure that purchasing EMI artists' music by digital download is as easy as possible for consumers, all downloads sold through Soundbuzz's network will be secured using Microsoft's Media Rights Manager, which with its also ensures payments to the necessary parties.

Soundbuzz investors include Creative Technology and the National Science and Technology Board of Singapore (NSTB).

## **6. Napster**

### **6.1. Napster challenges EMusic monitoring plan**

(23/11/2000 The Register) Napster yesterday slammed music company EMusic's attempts to track downloads made across the MP3 sharing service as a violation of its users' privacy.

EMusic plans to monitor Napster's service to locate users sharing songs to which it owns the copyright. The digital music company said this week it had begun embedding a watermark in the tracks it offers for sale and would use that mark to pinpoint users trading its songs on Napster.

If it finds any, it will email the Napster user posting the tracks and ask them to stop. The user has 24 hours to do so - after that time, EMusic will ask Napster to boot them off the service.

Some chance, if Napster reaction to EMusic's plan is anything to go by. Napster CEO Hank Barry said his company will be "reviewing EMusic's interaction with the Napster system", ostensibly to ensure it doesn't infringe Napster's own privacy policy.

Responding to Barry's statement, EMusic CEO Gene Hoffmann denied his system is a threat to Napster users' privacy. "We're not maintaining information about any consumer," he said.

EMusic's argument is that its software essentially does only what any Napster user does: it looks at what tracks are available at a given time and downloads any it finds interesting. It, presumably, then checks for the watermark and uses Napster's own technology to contact the sharer.

EMusic's software has to maintain some record of which users it believes are infringing its copyrights. How else is it to check whether user x has obeyed its demand to cease sharing its tracks? How else is it to then ask Napster to yank the account of user x?

But since the identity of x is known only by EMusic, Napster and x themselves, that's hardly a privacy infringement. Napster could argue that EMusic has no right to know what x is up to, but the company has as much right as user y who wants to see if x has anything groovy to download.

It isn't like Intel's inclusion of an ID number in Pentium CPUs, which could be used to track a user's travels through cyberspace. EMusic simply tracks a song's progress through the Net.

Napster also claimed that EMusic's watermarking system was inconsistent with the US Digital Millennium Copyright Act, but it's hard to see how. EMusic has every right, surely, to mark tracks it offers for download in anyway it sees fit, and there's no reason why it shouldn't use that mark.

In any case, EMusic isn't the only one monitoring Napster use. Metallica located Napster users it alleged were infringing its copyrights using the help of a US Internet consultancy. If they can do it, anyone can, and you can bet a number of interested parties already are.

Remember Sony's claim it would attack Napster users at source? We'd be very surprised if, as an interested party, Sony isn't monitoring Napster use, even if it's only by watching filenames. Companies like Sony have the resources to create and then stamp watermarks into all their media products, watermarks that can survive conversion to MP3. That, after all, is one of the goals of the Secure Digital Music Initiative.

True, the SDMI's technology may have been beaten, but the work continues. The point is, this highly monitored environment is the arena in which the likes of Napster and its users will have to operate, like it or not. Better then to work with it and, as we suggested yesterday, create a market that works for everyone - music companies, music sharing companies and music lovers.

## **6.2. Bertelsmann and Napster form strategic alliance**

Will Establish Industry Accepted Community for File Sharing  
Invite Others in Music Industry to Participate

New York and Redwood City, California, (October 31, 2000) - Bertelsmann AG and Napster, Inc. today announced the formation of a strategic alliance to further develop the Napster person-to-person file sharing service.

Bertelsmann AG's newly formed eCommerce Group, BeCG, and Napster have developed a new business model for a secure membership-based service that will provide Napster community members with high-quality file sharing that preserves the Napster experience while at the same time providing payments to rightsholders, including recording artists, songwriters, recording companies and music publishers.

Napster and Bertelsmann will seek support from others in the music industry to establish Napster as a widely accepted membership-based service and invite them to participate actively in this process.

Under the terms of the agreement, once Napster successfully implements its new membership-based service, Bertelsmann's music division, BMG, will withdraw its lawsuit against Napster and make its music catalogue available.

Bertelsmann eCommerce Group will provide a loan to Napster to enable development of the new service and will hold a warrant to acquire a portion of Napster's equity.

Thomas Middelhoff, Bertelsmann's Chairman and Chief Executive Officer, said "Person-to-person file sharing has captured the imagination of millions of people worldwide with its ease of use, global selection of content, and community features. Napster has pointed the way for a new direction for music distribution, and we believe it will form the basis of important and exciting new business models for the future of the music industry. We invite other record and publishing companies, artists and other industry members to participate in the development of a secure and membership-based service."

Hank Barry, CEO of Napster, said, "This strategic alliance with Bertelsmann is the right next step for Napster. The Napster community - which is the fastest-growing in the history of the Internet - will benefit enormously from Bertelsmann's historic commitment to innovation and its experience in offering a seamless and convenient user experience."

Andreas Schmidt, President and CEO of Bertelsmann eCommerce Group, said, "Our strategic alliance with Napster is key to providing consumers in the future with access to the largest global music catalogue of high quality music files -- with added convenience and features. We will work closely with Napster to establish a new membership-based service that achieves acceptance by other music providers. For recording artists and songwriters, we hope to realize Napster's full potential as a promotional vehicle while protecting their interests. For the recording industry, we are looking to take a positive and forward-looking approach with a membership-based service that complements other forms of music distribution."

Shawn Fanning, founder of Napster, said: "I am excited that Bertelsmann appreciates and values the uniqueness of the community Napster users have built."

Strauss Zelnick, President and CEO, BMG Entertainment, said: "Bertelsmann's forward-thinking approach will enable the new Napster membership-based file sharing service to become an important community for artists, record companies and consumers. BMG, as a leader in the online space, supports an array of secure, digital distribution alternatives that respects copyrights, including file sharing, downloads and subscription services."

## **7. MP3.Com**

### **7.1. My.MP3.com back up and running**

(05/12/2000 The Register) MP3.com relaunched its virtual CD collection, My.MP3.com, today after an seven-month hiatus.

As company CEO Michael Robertson said last month, the new version of the service is available in two forms. The first, free to the user but paid for by advertising, allows users to access up to 25 online copies of CDs they already own.

If they want more, they'll have to pay a \$49.95 annual subscription, which lets the listen to as many as 500 online discs and avoid all the ads.

The relaunch follows the final settlement between MP3.com and the major recording companies of their copyright infringement lawsuit. Most labels settled out of court, but Universal pursued the online music operation to the bitter end. MP3.com will pay Universal \$53.4 million in damages and music licence fees. It has already paid EMI, Sony, Warner and BMG around \$20 million apiece.

## 8. Secure Digital Music Initiative (SDMI)

### 8.1. Hacker research team disputes 'hack SDMI' results

(9/11/2000 The Register) The SDMI (Secure Digital Music Initiative) group has announced, despite earlier claims to the contrary, that practically all of the 447 entries to the 'Hack SDMI' challenge bounced off. This would mean all in the garden was lovely, if it weren't for the pesky Princeton University researchers led by Edward Felten, who stoutly maintains that SDMI is toast, and says the Princeton team will be publishing its results by the end of the week.

The Princeton team entered the first stage of the challenge, but declined to move onto phase two. The aim of the challenge had been to test candidate watermarking and non-watermarking protection technologies to be used in the distribution of digital music, so a complete whitewash - as claimed by Salon, a couple of Register sources and the Princeton team, would have been highly embarrassing, and would have visibly set back the music industry's protection plans some considerable distance.

Stage two of the challenge, as Princeton points out, was secretive. Anybody who submitted a likely looking crack at stage one could move on to two (and had to do so in order to stand a chance of winning the money), but by doing so would be NDAed into total obscurity, unable to say a thing about the hack or the processes. By not playing, Princeton left itself free to publish results and blow whistles as necessary.

The final SDMI hack testing seems to have placed considerable emphasis on "golden ears" - real humans judging whether or not the hack degraded audio quality. This is obviously very much a subjective judgement, and potentially allows the goalposts to be moved around to wherever best suits SDMI. Not that we're suggesting anything of the kind, of course.

SDMI's line is that two of its five technologies were successfully attacked, but that only one attack was repeatable. Princeton says its attacks weren't counted because it didn't enter phase two.

The Princeton team also seems to feel it's been on the receiving end of some kind of smear campaign though. It insists that "contrary to the statements of the SDMI, their oracles [the automated systems that checked stage one] did check the audio quality of the submitted music," and accuses the RIAA of falsely claiming it admitted some of its entries had poor audio quality. "We obtained a number successful results on all watermark technologies, using various techniques," says the team.

SDMI will no doubt be awaiting the team's technical report with some interest.

### 8.2. An Open Letter to the Digital Community

September 28, 2000

SDMI welcomes this opportunity correct a few misconceptions that have surfaced since the public challenge was announced (see [www.hacksdmi.org](http://www.hacksdmi.org) for details about the challenge).

To be clear, with SDMI:

- **You will be able to make personal copies of your music.** The SDMI specification allows people to make an unlimited number of personal copies of their CDs if in possession of the original CD. Nothing SDMI is doing will conflict with journalists' and educators' use. What will be affected is the ability to make large numbers of

perfect digital copies of music, and distribute them instantaneously on the Internet without any compensation to the creator or copyright holder.

- **SDMI-compliant players will play music already in your library**, as well as new unprotected music, and new SDMI-protected music that has been legitimately acquired.
- **You will be able to access more music.** SDMI compliant devices will permit consumers to access more music than they currently can over the Internet, because copyright holders will be able to distribute music online without fear that it will be distributed instantaneously worldwide on the Internet.
- **You will be able to play the music you already own.** The CDs and MP3s you already have will be able to play on any SDMI compliant device.

**SDMI will enhance your ability to put music online, whether you are affiliated with a record label or not.** Prior to the inception of SDMI, an artist who wanted to distribute his or her music over the Internet could not be assured of retaining control of it. With SDMI, a person will be able to choose SDMI protection if he or she wants. In fact, SDMI is taking pains to be sure its protections are available to all who want them, affiliated or independent, large or small, famous or undiscovered.

**SDMI has engaged in dialogue with critics of the SDMI effort.** Movements such as open source software and groups such as the Electronic Frontier Foundation play a valuable role in the bringing attention to important policy issues as technology advances and new business models emerge. We have had extensive dialogue with EFF and with representatives of the open source community since the public challenge was announced. While we have agreed to disagree on certain details, SDMI has always welcomed and continues to welcome dialogue on this effort.

I hope this answers some misconceptions and unfounded fears that have recently emerged.

Sincerely,

Leonardo Chiariglione  
Executive Director, SDMI

### **8.3. An Open Letter to the Digital Community**

September 6, 2000

Here's an invitation to show off your skills, make some money, and help shape the future of the online digital music economy.

The Secure Digital Music Initiative is a multi-industry initiative working to develop a secure framework for the digital distribution of music. SDMI protected content will be embedded with an inaudible, robust watermark or use other technology that is designed to prevent the unauthorized copying, sharing, and use of digital music.

We are now in the process of testing the technologies that will allow these protections. The proposed technologies must pass several stringent tests: they must be inaudible, robust, and run efficiently on various platforms, including PCs. They should also be tested by you.

So here's the invitation: Attack the proposed technologies. Crack them.

By successfully breaking the SDMI protected content, you will play a role in determining what technology SDMI will adopt. And there is something more in it for you, too. If you can remove the watermark or defeat the other technology on our proposed copyright protection system, you may earn up to \$10,000.

To participate, just go to the website at [www.hacksdmi.org](http://www.hacksdmi.org) after September 15, 2000 and read the public challenge agreement. If you agree to the terms, you will have until at least October 7, 2000 to do your best.

SDMI is a body that includes 200+ companies and organizations from start ups to global enterprises, and from around the world. Participants include leading consumer electronics, information technology, music, and wireless telecom companies. (More information can be found at [www.sdmi.org](http://www.sdmi.org))

Here's your chance to shape the future of digital music.

Sincerely,

Leonardo Chiariglione  
Executive Director, SDMI

## **9. Recording Industry Association of America (RIAA) Lawsuits**

### **9.1. RIAA bids for control of online royalty payments**

(29/11/2000 The Register) The Recording Industry Association of America yesterday launched its controversial online royalties collection operation SoundExchange - the RIAA's bid to dominate the finances of the emerging digital music market.

The RIAA claims SoundExchange's role is to ensure that the many recording companies it represents are paid for the use of music broadcast over the Web. In the past, record labels haven't been owed a royalty when music for which they own the copyright is transmitted over traditional media, such as radio. Royalties have, however, been collected on behalf of performers and composers.

However, the US Digital Millennium Copyright Act (DMCA), provides scope for the labels to demand a royalty from Web-sent songs. And the RIAA has been vigorously pursuing a plan to collect those royalties ever since. SoundExchange's mission is to collect online royalties and share them between record labels and artists.

But it's not a plan without controversy. Many online music distributors believe that the royalty collection operation should be run independently of the beneficiaries of those royalties. The RIAA is, after all, funded by the recording companies, and that gives it too much power.

"There should be transparency and no control by any members of the music industry in this process," said Jonathan Potter, executive director at the Digital Media Association (DiMA), cited by Reuters. The DiMA represents online music suppliers, including Amazon.com and Spinner.com, and is keen to prevent the RIAA gaining too much control over how its members can supply songs.

Equally, artists groups are worried that a record label-sponsored royalty collector will find it too easy to pass the bulk of royalty payments to the labels and not the performers and composers. It's a clear conflict of interest, they say.

Of course, all this sounds pretty esoteric and far removed from the Napster controversy. After all, what has royalties for streamed audio got to do with MP3 sharing?

Well, quite a bit really. Napster's MP3 sharing system is the prototype for a variety of peer-to-peer music distribution services, all of whom are going to have to pay for the songs they all users to share. Whether their revenue model is advertising, membership subscriptions or both, they are going to have to pay royalties.

As we understand it, the DMCA grants record labels the right to a royalty on streamed audio, essentially because what's being sent is music data - in the form of bits - rather than the sound of the music, as is the case with radio. Bits may not be physical entities, but in the digital world they're just as much a commodity as a CD, and so the record labels are granted their cut.

With Napster, the argument is even clearer, since its not just bits, but complete files that are traded. However, since users aren't buying tracks but subscriptions, the files cease to be the commodity, but access is. That means, like radio and Web casting, a more nebulous payment system is necessary.

As Potter puts it: "These buffer copies have no independent commercial value and justly should be protected as fair use." (our italics). True, but they do have group commercial value.

That means payments not to record companies directly - since trading isn't done in units - but through collection agencies who can share out fees according to the volumes of files sent from user to user. And the RIAA wants to make sure that it's the one doing the collecting, especially when legitimately trading peer-to-peer music services becomes far more widespread than Web radio.

## **9.2. Scour to stop Napster-style movie sharing service**

(16/11/2000 The Register) Bankrupt Scour is to scuttle its 'Napster for movies' Scour Exchange service in a desperate bid to end all legal action against it and so smooth its sale to listen.com.

Scour filed for Chapter 11 last month, a move that not only protects a company from its creditors but from pending litigation. In Scour's case, that's the action taken against it by the Motion Picture Association of America (MPAA) and the Recording Industry Association of America (RIAA), who both launched copyright theft suits against the company in July.

Online music company Listen.com offered \$5 million for Scour on 1 November, an offer supported by Scour's board.

This week, CenterSpan Communications, a US-based developer of Internet-oriented data sharing software, said it intends to make a rival bid. CenterSpan has until 5 December to make its offer. All offers will be judged on 12 December.

Whoever wins the bidding, Scour's buying isn't going to want to be saddled with legal action, and that's presumably why Scour will shut down Exchange having received permission from the bankruptcy court to end the service.

"We believe our unilateral decision to take down the Exchange will facilitate a resolution of the copyright infringement litigation pending against Scour. In addition, we expect the shutdown of the Exchange to facilitate a sale of Scour's assets, which will maximise creditor recovery," said Scour president Dan Rodrigues.

### **9.3. Napster to RIAA: The issue is not the copyright, it's the control**

Final Court Papers in Appeal of Preliminary Injunction Buttress Napster's Arguments on AHRA, Sony, and DMCA; Reiterate that District Court Misallocated Burden of Proof

REDWOOD CITY, CA - September 13, 2000 Napster, Inc, the world's largest peer-to-peer file sharing community, made its final written presentation to the Ninth Circuit Court of Appeals before the oral argument scheduled for October 2, 2000. Replying to the plaintiff's brief filed last week, the Napster brief stated:

"This case is not about any diminution in the value of Plaintiffs' copyrights; none has occurred or is reasonably foreseeable as the result of Napster. This case is about whether Plaintiffs can use their control over music copyrights to achieve control over Napster's decentralized technology and prevent it from transforming the Internet in ways that might undermine their present chokehold on music promotion and distribution."

Napster attorney David Boies commented, "The recording industry is attempting in this case to try to maintain control over music distribution. By repeatedly refusing Napster's offers of a reasonable license and opposing a compulsory license, they have demonstrated that they are not seeking to be appropriately compensated, but rather to kill or control a technology they view as competition."

The brief strongly reinforced Napster's key defenses to the RIAA lawsuit. Regarding the Audio Home Recording Act (AHRA), Napster contends that the plaintiffs in their brief disregarded key language in the AHRA and substituted words that better suited their purpose. Napster's brief notes that the plaintiffs ignored the very purpose of the Act's immunity provisions as previously described by, among others, their own General Counsel and that the Ninth Circuit has already resolved this question in Napster's favor.

Specifically, the brief argues, "There is no suggestion in the legislative history [of the AHRA] that the intent was to include only some primarily musical audio recordings within §1008 protection and to exclude other primarily musical audio works," a point reinforced by RIAA General Counsel Cary Sherman's declaration in the Diamond Rio case that the only purpose of the changes in the Act's statutory definitions was to exclude computer programs and talking books.

The Napster brief also exposed the plaintiffs' attempt to radically restrict the Sony Betamax precedent. The plaintiffs would have the Ninth Circuit nullify the Supreme Court's central holding in Sony that "new technologies should not be judicially banned (or re-engineered) unless the only substantial use of which they are capable is unlawful." The brief goes on to state, "Both Napster's present uses" including sampling, space shifting, and the authorized distribution of the music of emerging and established artists, "and its demonstrated, and dramatic, capability" for such use in the future "satisfy Sony."

The brief takes issue with the plaintiffs' attempts to insert a Napster exception into the Digital Millennium Copyright Act (DMCA): "It dismantles the framework created by Congress..., which insures that Internet companies can continue to function in the face of claims about the actions of their users."

The Napster brief is the last filing in a series set in motion by the District Court's preliminary injunction on July 26, 2000. Napster was joined in criticizing the District Court's decision by several amici curiae, including 18 copyright law professors and leading Internet and technology industry groups whose members include Apple Computer, Cisco Systems, Sony Electronics, Yahoo and America Online, among others.

#### **9.4. Scour to voluntarily shut down file-sharing exchange**

##### **Additional Company Announces Intent to Bid for Scour Assets**

LOS ANGELES, Calif - November 14, 2000 - Scour, Inc., the world's leading Internet search destination for digital entertainment, announced today it will voluntarily shut down the Scour Exchange community within 48 hours to facilitate a resolution of pending litigation and a sales of its assets in the U.S. Bankruptcy Court.

The announcement came after the U.S. Bankruptcy Court granted the company's motion to disable the file-sharing application.

"We believe our unilateral decision to take down the Exchange will facilitate a resolution of the copyright infringement litigation pending against Scour. In addition, we expect the shutdown of the Exchange to facilitate a sale of Scour's assets, which will maximize creditor recovery," said Dan Rodrigues, president of Scour.

Listen.com, a San Francisco-based company that integrates and distributes online music products and services across a network of sites, offered Nov. 1 to purchase Scour for \$5 million and 527,918 shares of Listen.com stock. The Listen.com proposal was supported by Scour's board and management.

Today, CenterSpan Communications Corp., a Hillsboro, Oregon-based developer and marketer of Internet software applications for communication and collaborative information sharing, announced its intent to submit a bid for Scour's assets.

According to a procedure and calendar established by the court, interested parties must deposit \$500,000 with Scour's legal counsel no later than Dec. 5 to qualify as a bidder. The successful bidder will be determined at the final sales proceeding scheduled for Dec.12. Further information concerning the sale procedure and deadlines is available from the company's bankruptcy counsel, Paul M. Brent of Steinberg, Nutter & Brent at (310) 451-9714.

Under Section 363 of the U.S. Bankruptcy Code, the sale of a company in Chapter 11 is subject to competitive bidding process. Scour filed its voluntary Chapter 11 petition in the U.S. Bankruptcy Court for the Central District of California in Los Angeles on Oct. 12, 2000, which automatically stayed all pending litigation against the Company.

In July, the Motion Picture Association of America (MPAA), the Recording Industry Association of America (RIAA) and the National Music Publishers Association (NMPA) sued Scour over allegations of copyright infringement.

Scour, founded in 1997, develops and markets Scour.com, the Internet's leading entertainment search site; Scour Exchange, an online multimedia file sharing community; and Scour Caster, an online radio community.

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