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You Say You Want a Revolution? A Case Study of MP3.com

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Abstract: Mp3.com was a revolutionary venture set up in an attempt to break the mold of the music recording industry. The case study documents the venture's impressive growth and the factors affecting its performance. A deep understanding of the case requires the reader to draw from a wide spectrum of economics, new venture management theory, and both antitrust and copyright laws.

Keywords: music industry, dot.com venture, new venture economics, copyright law.

1. Introduction

Michael Robertson decided he was going to launch a venture that involved traveling along a well worn path that was littered with business failures. He was going to start a firm in a market that had a poor survival record for start-ups. The music recording industry had a long history of seeing new firms come and go without threatening the major record labels' dominant control of the market (see Table 1 for UK market share data). The record company sector of the music industry was big business. It was a large market that was highly concentrated. For example, MBI (2001) estimated that the top five record companies accounted for 77.5% of the global market in 1999; equivalent to combined revenues of $25 billion[1].

The fundamental economics of the music industry ensured that most new start-ups would eventually fail to compete with large incumbents or would see their interests – if not survival – dependent on being taken over by a major record label. In effect, because of economies of scale in manufacturing, distribution, and marketing, minimum efficient scale (MES) in the recording industry was relatively high. However, the advantage of the large incumbents over smaller entrants did not stop there. The mass appeal of western culture and the globalization of the industry alongside the highly dynamic level of product differentiation innovation (with concomitant viral marketing effects)

1. The MBI World Report 2001, London.

This case study has been written for classroom discussion rather than as an illustration of either effective or ineffective handling of a situation.

implied that artists with potential faced a large but short window of opportunity. Thus, artists had to rapidly disseminate their music to a large market while their product still had a shelf life. All of this pointed towards competitive advantages for large multinational companies who would have the financial clout to launch artists on such a scale. These same companies were more liquid than independent SME record companies and faced less financial risk by being able to spread the risk involved in music investment across a wide array of artists. Thus, apart from rare exceptions such as Geffen in the US, and Virgin in the UK, most independent record companies had posed no real threat to the dominance of the major record labels. Furthermore, if past history was anything to go by, most new record companies were destined to fail and a common belief in the industry held that "the major record labels *always would* dominate the industry because the major record companies *always had* dominated the industry".

But Michael Robertson thought differently, not only was he going to survive in the music industry, he was going to shake it up! He believed it was possible to launch a successful new venture, which could challenge the dominance of the major record companies.

Table 1: UK record company album market share 1985-2000

Albums % Units	*1985*	*1990*	*1995*	*2000*
PolyGram (Universal 2000)	14.5	23.2	20.6	20.5
EMI	13.4	15.9	13.4	10.7
CBS-Sony	15.0	10.4	12.0	11.6
WEA-Warner Music	12.2	12.1	9.9	11.7
Virgin	8.0	7.4	8.3	7.2
RCA-BMG	5.4	4.7	8.1	8.7
Total	**68.5**	**73.7**	**72.3**	**70.4**

Source: BPI Yearbooks. PolyGram data excludes Universal except for year 2000

2. Background

At 32 years of age, Michael L. Robertson founded MP3.com, and served as the Chief Executive Officer and Chairman of the board from March 1998 to August 2001. From September 1995 to March 1998, Robertson operated several web sites that focused on merging search technologies with commerce. From September 1995 to September 1996, Robertson was President and Chief Executive Officer of Media Minds Inc., a developer of digital picture software. From January 1994 to August 1995, Robertson was President and Chief Executive Officer of MR Mac Software, a developer of networking and

security tools. Robertson received his Bachelor of Arts from the University of California, San Diego.

Directly prior to the formation of MP3.com Robertson started a company called Filez.com. File sharing technology was emerging as an interesting little business back in 1997. All types of document and image files were flying across the Internet. While working on this venture, Robertson was joined by Greg Flores who was a former business broker and had a keen interest in computers. Flores actively tried to be alert to new business opportunities; both searching out Michael Robertson as a business contact and playing a significant role in observing the growing interest in mp3 files (see box 1).

Box 1: What's in an idea and a domain name?
An interview with Greg Flores

"I worked in the brokerage business for 13 years but I always stayed connected to computers. I bounced from BBS to BBS (bulletin boards) explored Prodigy and AOL in the mid-1980's while things were just getting started for the World Wide Web. I decided to leave the brokerage business and start my own company in 1996. *Can Do Computing* was a computer consulting company specializing in helping people purchase, setup and use computers to explore the Web. I worked one on one with mostly affluent individuals interested in getting connected to AOL and other services.

In 1997, my wife had the opportunity to head a division in California and I figured that I could do the computer consulting from anywhere so we moved to San Diego. In August of 1997, I spotted an insert in the Tribune featuring the "Top 25 Cool Companies of San Diego" and a little company called Filez.com was mentioned in the article.

I found the number for the company, called and spoke to Michael Robertson, and he and I met the next day for lunch to talk about Filez and some other ideas he had brewing. We talked about Filez and the other concepts involving other search technologies with the main idea being to help consumers easily find things to purchase on the web. The things that struck me about Michael were his different way of looking at the Internet and his belief that traditional business methods weren't going to work on the Internet. One example is the traditional way of marketing a business which does not work when applied to an Internet company. He told me that he thought we could build a great company together and he'd like me to come on board. There was just one problem, he couldn't pay me anything but he was willing to give me some equity in the company and I agreed to take the chance. Bottom line, I didn't buy into a concept or group of concepts, I bought into Michael.

My two main roles at Filez.com were to generate revenue and find creative ways to drive traffic to the site. In order to generate traffic, I used to keep my eyes out for growing trends in site ranking charts. Instead of looking at the top of the heap and trying to copy what was at the top, I would watch what was climbing the charts and MP3 file sites had really started to move up the charts. I also looked at the search logs for Filez and noticed that MP3 searches were on the rise. I decided to explore the MP3 thing and downloaded my first MP3 file. Since I was on a cable modem, the download process was pretty fast but finding a song to actually download was more challenging.

I e-mailed an MP3 file to Michael and he was also blown away by the file size and the quality of the sound. We found that MP3.com had already been registered but wasn't live on the Internet. We e-mailed the owner and told him we were interested in buying the domain name. He asked why and we told him we wanted to setup an MP3 site. He e-mailed back, "what is MP3?". We asked him why he had registered MP3.com if he didn't know what MP3 was. He said that he registered because it was the "handle" that Network Solutions had assigned to him when he had registered a previous name and he thought it would be "cool" to register his handle. His name is Martin Paul and Network Solutions had assigned him the handle of MP3. We offered him $1,000 for the domain name and after a little bit of haggling, we purchased the domain for $1,500. While all this was going on, I set out on the Net to find someone with an MP3 site to run the site for us since we didn't yet know that much about MP3. I compared lots of sites that were giving information about MP3 but weren't actually allowing people to download pirated files and the one that we ended up purchasing was MP3shoppingmall.com. MP3shoppingmall was an information site about MP3 only and the guy running it lived in Scandinavia. We paid him a couple of hundred dollars and a small monthly salary to work on MP3.com.

A few days later after the ownership transfer had taken place and we had the webmaster for MP3shoppingmall in place, we turned MP3.com on and Michael and I were shocked by the amount of traffic. In the first 24 hours, we had over 10,000 unique users and this was especially amazing because MP3.com wasn't yet registered in any search engines. People where solely finding MP3.com by typing the URL in the address bar of a browser. We knew immediately that we where on to something. Within the first 18 hours, I received my first call from a company wishing to purchase advertising and I sold them $5,000 in advertising. The name of the company was Xing Technology and they were later acquired by Real Networks. We more than paid for the domain purchase and the new webmaster purchase in the first day of the site."

In early 1998, Robertson and Flores soon realized that the trading of a file-type with the extension .mp3 was growing exponentially over the Internet. That file type .mp3 represented a convenient way to compress any song or audio track by eleven times its normal size, thus making it much easier to send over the Internet. A normal four-minute pop song that was once 40-50MB in size was now 3.5-4MB. Although at the time dial up modems (<56k speeds) were common, users were still sending files often taking over one-hour to send and receive. For those users who had access to a broadband connection (cable modem, ISDN, DSL) the transfer times were shortened significantly. Soon hard drives across the technology sector began filling as users converted existing CDs to .mp3 files and trading their files with friends and colleagues.

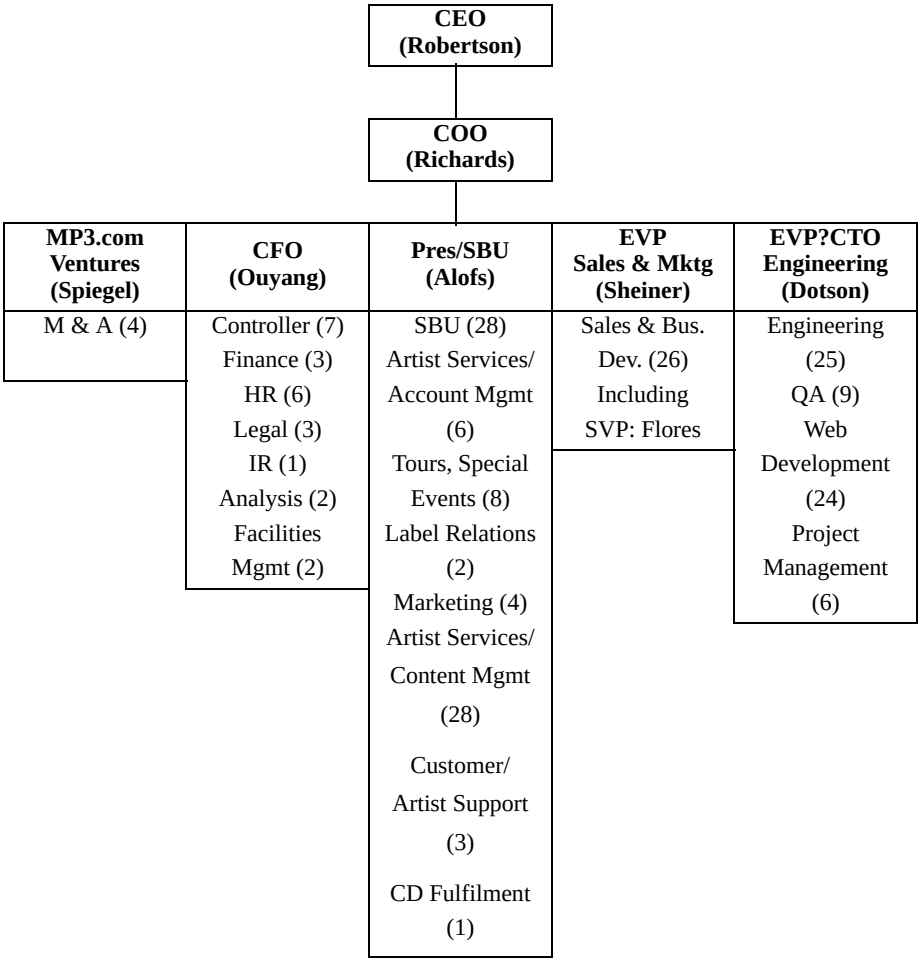
Robertson, who had no formal music industry experience, soon realized that the music industry's distribution chain was vulnerable. Robertson never perceived MP3.com to be a "record label" in the typical sense. His vision was to create the most efficient vehicle that would connect music with music fans. Essentially, to create all the tools and a system without offering many of the competencies that major labels possess – namely, marketing and promotion, A&R/talent development, and financial support. Robertson believed that although the music industry created the stars they did not understand how new technologies would make distribution and marketing more efficient.

Traditionally, record companies (labels) and their parent distributors (RCA Records/BMG Entertainment for example) did not utilize direct communication with music fans. The reality of a dialogue between a consumer and a record label has seldom existed in the past, save for a few niche independent labels. When a consumer leaves the high street record store, no further contact is generally made. So understanding the consumer is very difficult. Record companies have in actuality relied on B2B marketing – via radio promotion and in-store marketing and promotion. Without these two elements, consumers would not be made aware of new recordings. But two major factors were beginning to change the music industry marketing landscape, namely the internet and a consolidating radio industry in the United States.

As the Internet grew and reached more consumers, so too did the ability to track consumer behavior and subsequently communicate with them. On-line retailers, such as Amazon.com and Barnes & Nobel increasingly sold more product, tracked behavior, created consumer profiles (that consisted of music, books, videos and other consumer purchases) and matched those profiles against hundreds of thousands of other consumers. This type of artificial intelligence and predictive research expanded the possibilities for further monetization of the consumer.

As a result of the centralization of radio programming in the US market, the need became very apparent. Since it is increasingly difficult to add new songs (with extremely high initial fixed costs) to a wide number of radio

Table 2: MP3.com, Inc. Organization Chart, Pre-IPO (headcount in parentheses)



stations, labels needed new ways to communicate with music fans. An artist's 'fan web site' is a good start, but the aggregation of many fan sites is necessary.

The Majors have always been powerful and never believed that any small technology company or independent label could threaten their business. That was until the .mp3 file came along. Instead of embracing the format for its efficiencies and the data associated with the tracking of the consumer's *entire* listening, they tried to block the diffusion of the technology.

The first high profile lawsuit by the Recording Industry Association of America (RIAA) came in the last quarter of 1998, when Diamond Multimedia Systems, Inc. (San Jose, California) launched a new product called the Rio PMP300 portable mp3 player. Much like a Sony Walkman™, the Rio allowed consumers the opportunity to transfer mp3 music files from their PC onto a small hand-held device. The popularity of the Rio portable device played a

major role in promoting the mp3 music file format. The Rio PMP300 held just under one hour of CD audio quality music, would never skip and could pause and stop much like a common CD player. But the music files were in a format that the industry had no control over and fears of piracy escalated.

The RIAA attempted to prove that the Rio was a 'two-way' device that would facilitate and promote the illegal distribution of music. Diamond Multimedia successfully proved that the Rio was in fact a one-way device, meaning that music could go in to the player and not be set up to re-distribute the music to a friend with a PC or another Rio player.

Initial reactions by many of the industry executives were extremely negative towards the Rio player. But over time an understanding of the technology and the new distribution channels caused executives to participate on one level or another with the new music economy. In this external environment, Robertson and a small band of revolutionaries set out to create MP3.com.

3. The Initial Management Team

Robertson was in need of a management team that would make this vision become a reality and built one that was more akin to a large multinational than a new start-up. Robin Richards was brought in to serve as President and COO. Richards prior experiences included Managing Director of Tickets.com, Inc., an Internet ticketing company, a founder and President and Chief Executive Officer of Lexi International (a teleservices company) and a director of Cash Technologies Inc., a publicly-held company that provides solutions for coin and currency handling, cash management and electronic commerce transactions. He also held a Bachelor of Science degree from Michigan State University.

Next came Paul Ouyang and Steve Sheiner. Ouyang was named the company's Chief Financial Officer. He had served as Chief Financial Officer and Executive Vice President of Operations of Tickets.com, Inc., as a consultant to UDP Inc., (a company involved in dental practices management) as Chief Financial Officer and Executive Vice President for Cheap Tickets, Inc., and as the Managing Director of Corporate Finance at KPMG Peat Marwick LLP. He also held various positions with J.P. Morgan & Co., Inc. culminating with Vice President of Corporate Finance. He received a BA from Amherst College and an MBA from Wharton (University of Pennsylvania).

Sheiner was named Executive Vice President, Sales and Marketing. Sheiner previously served as Vice President Business Development at Aegis Communications, Inc., a telecommunications company and as a direct marketing consultant, including President of Sheiner Direct Marketing &

Advertising, Inc. Sheiner holds a Bachelor of Arts degree from Concordia University (Montreal, Canada).

Paul Alofs was named President of the Strategic Business Units. Alofs was formally executive vice president and general manager for The Disney Store, Inc., a wholly owned subsidiary of The Walt Disney Company, and a president of BMG Music Canada, (a division of Bertelsmann).

Thomas Spiegel was named as an executive officer of the company. Spiegel was chief executive officer of Columbia Savings and Loan Association, a financial institution based in Beverly Hills, California. He also founded the Columbia Charitable Foundation, a not-for-profit organization that funds education, medical and social causes.

Other Board of Directors included Mark Stevens, a general partner of Sequoia Capital MP3.com's leading Venture capital firm, Lawrence F. Probst III, President and Chief Executive Officer of Electronic Arts, Inc., and Ted Waite, President and Chief Executive Officer of Gateway Computer.

Robertson and his crew thought that their innovation would be embraced by the music industry due to its distribution efficiencies. They did not realize that the music industry was steeped in a monopolistic tradition. This was a physical product world where Compact Discs (CDs) reigned supreme and the notion of sending a digital file of music to consumers via the Internet was alien. So, Robertson had no choice but to 'hit the streets' himself in hope of finding musicians who would like to share their music via the Internet and potentially reach new fans – due to the fact that most of these independent musicians had no record contract, distribution or marketing competencies.

Many musicians rejected Robertson's early attempts, agreeing with the music industry executives. So MP3.com began doing all the work for the artist. They would convert songs, scan images of bands and artists, build out web pages on MP3.com's web site. As you can imagine, this was very labor and time intensive work. In an attempt to reduce the long term costs of this process MP3.com attempted to alleviate the burden by introducing a new system. The result was a "touchless" system that allowed artists to take on the role of uploading music onto the site thereby freeing MP3.com to concentrate resources on other areas of the business.

MP3.com created a series of "templates" that were user-friendly and empowered all artists with the ability to create a web page on the MP3.com web site in a matter of hours. All that the artist needed was one song in an mp3-file format, a band image and small amount of biography text to be eligible for a place on the MP3.com web site. Artists assigned a genre classification to each song and MP3.com assumed a pure intermediary role, making no comments on song quality or other subjective references to the music.

This "touchless" system helped spur an extremely rapid growth. From late 1998 to July 1999 (IPO) the artist community grew to over 15,000 artists with nearly 100,000 songs posted on the MP3.com web site. That number has

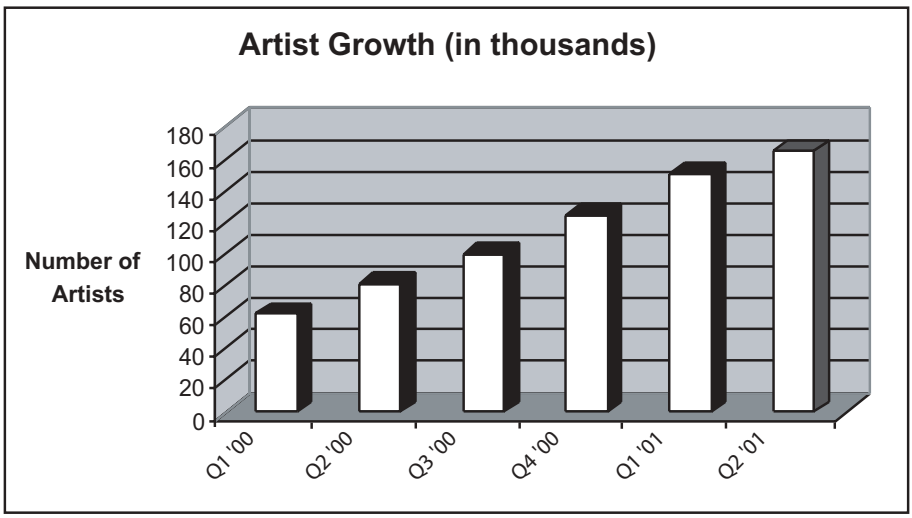


Figure 1

grown to over 150,000 artists and over 1,000,000 songs posted within a two-year period of time (see figures 1 & 2).

MP3.com achieved a significant milestone in the second quarter of 2001 when it exceeded the million-title level with total approved songs ending the quarter at 1,095,050. Although not a music publisher itself, the significance of

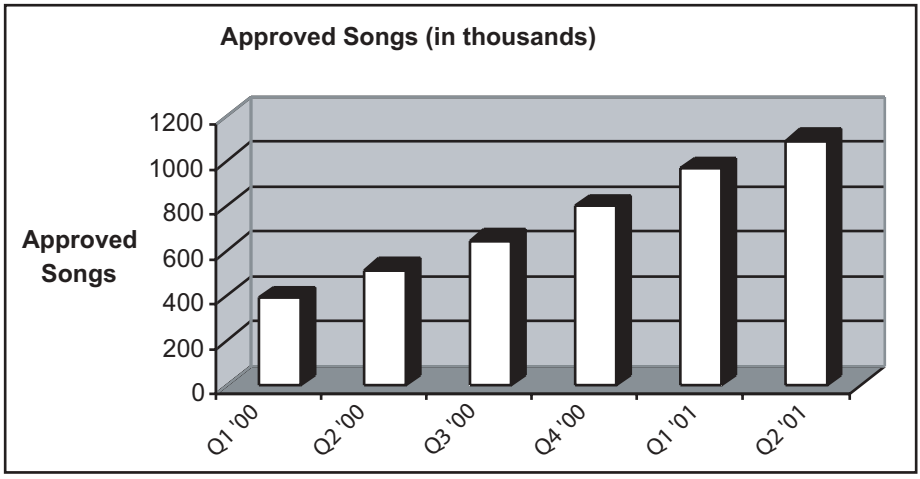


Figure 2

the 1 million threshold is apparent when one considers that MP3.com's single source of independent music titles was now comparable in size to the largest rosters of the major record companies' publishing divisions.

Table 3: Major Music Publishing Company Stockholdings of Music Titles: 1996

Company	*Number of titles*
Warner	>1 million
EMI	>1 million
BMG	500,000
PolyGram	270,000
MCA	100,000
Sony	100,000

Source: MBI World Report 1996

3.2. Initial Legal Hurdles

Content management played a key function in the maintenance of the MP3.com web site. With an ever-increasing number of artists and songs being submitted, the risk related to posting illegal content increased. As a safeguard measure to protect the intellectual property rights of the creators of music, artists had to complete an on-line Submission Agreement which states that they possess among other things, the two main intellectual property rights associated with any song – that being the rights for master use and the publishing rights. MP3.com also created two departments – Musicology and Genre Management. As songs were submitted to the site, the Musicology staff (all possessing music industry background) verified that each song was original, not a copy of "Hey Jude" (McCartney/Lennon) for example, and that the file was not corrupted or technically defective. If there was any question about validity, the song was put on hold until positive verification was made.

Once it passed Musicology, the Genre Managers, (also possessing music industry background) listened to each song, confirmed that it was correctly classified and contained no offensive language. Those that were offensive were assigned to the 'Adult Material' section of the site. This is similar in concept to the use of stickers on offensive CDs by record labels.

MP3.com grew to be the home of over 100 music genres, ranging from Pop & Rock to obscure indigenous music.

3.3. Technical and Human Resources

MP3.com was fortunate to have a large number of gifted programmers and engineers join the company during its early growth stage. Many of them once worked for Netscape (who had just been acquired by AOL prior to the AOL/

Time Warner merger) and other Silicon Valley start-ups. The motivation for employees was high: a rebellious Internet music technology company located in San Diego, California (not part of the Silicon Valley cluster), a group of people who shared Robertson's vision and a looming IPO that could create fortunes. MP3.com attracted highly productive personnel from the technology, investment and music industries. The company paid attractive base salaries that could compete with Silicon Valley but the corporate culture of a music revolutionary was also irresistible to many. With that attraction, the company grew from under 50 employees in early 1999 to over 200 at its IPO. Robertson believed that it is was more efficient to have 250 skilled employees who constantly innovate than to boast of 1,000 semi-challenged staff. The outcome was that MP3.com generated a web-based technology which competitors – including the Major record companies – found difficult to replicate.

4. The Market and Competitors

While continuing with technical innovation, MP3.com needed to be fully aware of whom their customers were. MP3.com recognized that they were serving two masters: the artist and the consumer/music fan. Both had different needs and wants. It was essential that the company continue to develop systems, interfaces and user experiences that satisfied everyone. Thus, just as in the case of developing a user-friendly system for its suppliers (i.e. the aforementioned "touchless" system for content management), MP3.com also had to achieve the same objective for its consumers.

Since the consumer was essentially a low-tech individual with a basic knowledge and a dial-up modem, MP3.com developed a user-friendly strategy for accessing, listening and storing a consumer's music collection (see appendix 1 for a full listing of MP3.com's products). Other competitors who assumed a more advanced knowledge by the consumer often criticized this. In fact, there had been a huge number of entrants into the digital music space beginning in 1998. The following is a list of a few of these competitors which reads more like a casualty list, with only a few survivors: icast.com, spinrecords.com, N2K, listen.com, liquidaudio.com, musicboulevard.com, riffage.com, mjuice.com, mxgonline.com, countrysong.com, beatnik.com, scour.com, gig.com, aMP3.com, amplified.com, cductive, cdbaby.com, rollingstone.com, getmusic, emusic.com, Cdnow, MusicBank and rioport.com. Those involved in MP3.com believed that it was largely because of this low-brow approach (to both providers and users of music) that MP3.com could boast 800,000 unique visitors and over 2.1 million song streams each day by the first quarter of 2001. A total which they claim is greater than the sum of all their competitors combined.

5. The Business Model

Getting music users and providers onto a web site was one thing but generating a revenue and ultimately a profit from it was quite another. MP3.com faced a number of options. One of these was based on Digital Rights Management (DRM) and was the model favored and supported by the Majors. DRM involved encryption of music files that could then be securely distributed to approved users. Consumers could acquire a key to decrypt and ultimately listen to the music if they had secured a license for this purpose. The DRM option also included 'watermarking' where music files could include auxiliary information that allowed music providers to track use and to identify who the rightful owners of a music recording are. The DRM option always faced some threat of an encryption code being 'cracked' with subsequent 'open' files being made available. Nonetheless, the DRM solution offered artists a means of selling digital music files online on a pay per track, per album, or rental basis.

The only problem was that few consumers were willing to pay for music in this form – preferring to buy CDs. The main impediments were the lack of Hi-Fi to play digitally downloaded files, the lack of bandwidth that made the process very slow and later (mainly in 2000) the availability of free pirated music on sites such as Napster. In a nutshell, consumers viewed online music as a poor substitute to offline alternatives. Thus, they were willing to sample music online but opted to purchase CDs if they really wanted to buy. Similarly, established artists faced major cannibalization of offline revenues by making music available online; especially with consumers' low willingness to pay for online music. Not surprisingly, the major record labels showed little enthusiasm for making their comparably higher priced content available online. DRM based online music business models were either a non-starter or before their time.

However, from the outset MP3.com had decided not to use the DRM business model not only because they viewed it as unprofitable but also because it went against the whole ethos of what MP3.com thought they were about. Their key objective was to enable and satisfy the music user – and DRM was all about restricting what the consumer could do. Thus, copyright was not at the heart of MP3.com's philosophy as it was with the major record companies. Instead, MP3.com wanted to leverage its user base in order to generate advertising revenue. They sought to sell advertising to non-music industry companies (such as a $150 million deal with Group Arnault) and to music suppliers who wanted to take advantage of the fact that MP3.com had a captive audience who were browsing music and maybe intending to buy CD versions later. In order to maximize value added for advertisers, MP3.com introduced many innovations such as direct email marketing to users (who could be organized by zip code, music tastes, age, gender etc) and payola

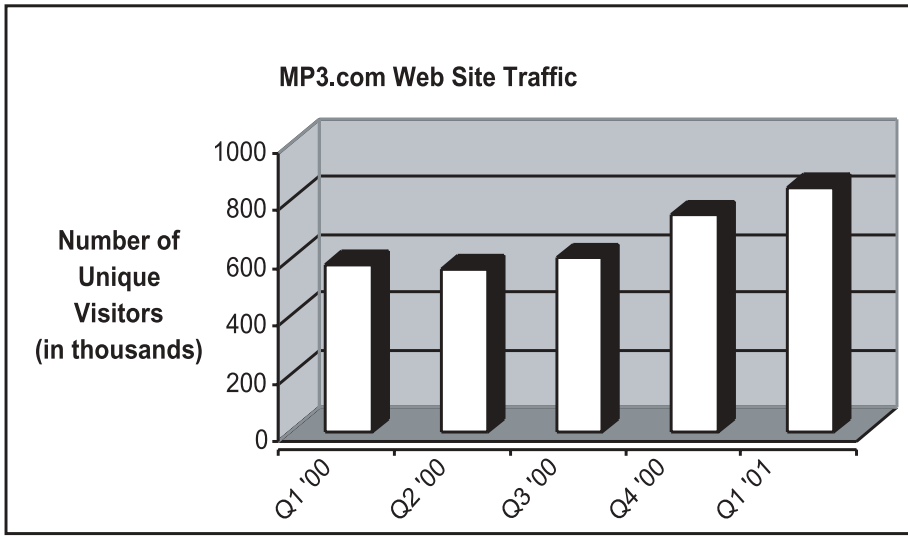


Figure 3

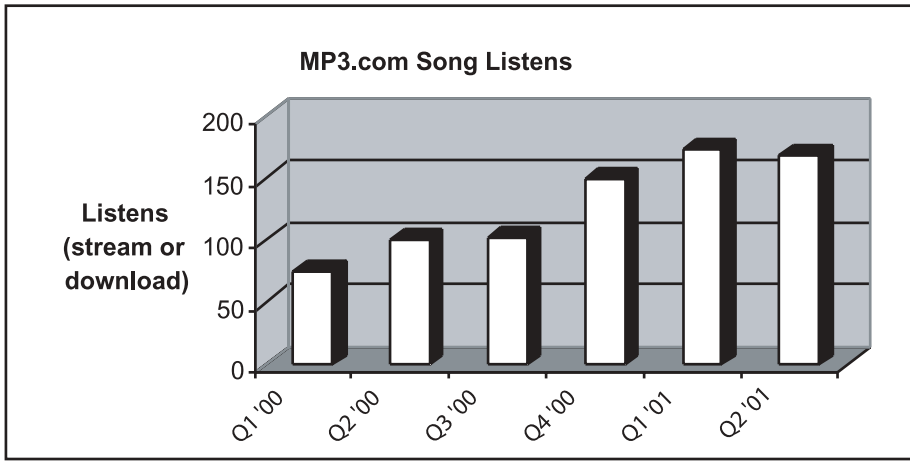


Figure 4

options where artists were slotted strategically into music charts. In addition, they also adopted various forms of traditional web site banner advertising.

Part of their strategy to offer a flexible service to music providers generated a small but significant revenue stream, namely DAM – their CD on demand service (see section 6). This took advantage of new technologies that were eroding the economies of scale originally inherent in CD manufacture.

At the time of the IPO in 1999, MP3.com reported that 91% of its 1998 net revenues were accounted for by advertising. The customer base for the firm was also very concentrated with MP3.com reliant on a small number of advertisers. For example, 27% and 70% of first quarter advertising revenue in

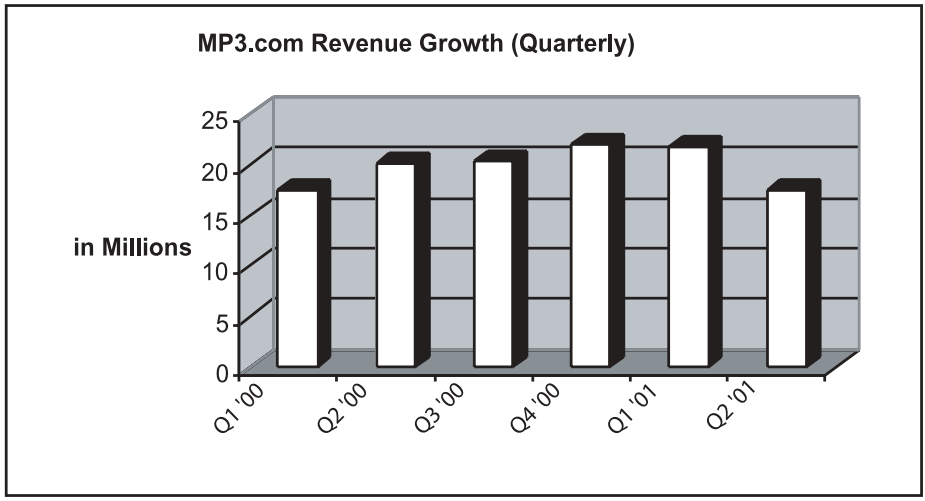


Figure 5

1999 were accounted for by the top 2 and top 10 accounts respectively. In subsequent years MP3.com would continue to rely heavily on advertising revenue. In the first six months of 2001 87.8% of MP3.com's revenue was accounted for by advertising while the comparable figure for 2000 was 88.4%. Figure 5 plots the revenues over the last six quarters to 2001Q2.

6. The Need to Grow and the Necessity to Innovate

Independent musicians created and accounted for 99% of the music on MP3.com. Many criticized the web site for its lack of success in securing Major label content for distribution or marketing campaigns. Therefore, the innovation of new and unique product and services that served and benefited consumers, artists and music fans was essential. Perhaps with the creation, experimentation and validation of new distribution, marketing and consumer relationship tools, the Major labels would view MP3.com as a friend and not a rebel. But one often-cited setback was the view by the Major labels that Robertson was an arrogant outsider who was interfering in a mature and powerful international industry.

Innovation was achieved through product development practices. Open weekly discussion forums were used for idea generation. Once an idea had reasonable support, the use of Matrix Team management was used to deliver the product to market in a timely fashion. Matrix teams usually involve at least one member from various departments who work together on a common project before moving to another project. Once that specific project or task was completed, those employees were assigned to a new team. This helped to eliminate any 'down time' for a particular department and continually utilized

Table 4: A Matrix Team

# of Employees	*Department*	*Duration*
1	Marketing	2 days (develop and execute marketing plan) 2 weeks to monitor and evaluate final product
1	Accounting	1 day (payment systems, revenue recognition, accrual, etc.)
1	Legal	4 days (draft legal contract)
5	Engineering - Programming/coding - Creative design - Quality Assurance	1 week (design, build, and execute)

as many skills across the company as possible. An example of a MP3.com matrix team is shown in Table 4.

Typically, an employee would be involved in multiple projects, therefore part of multiple matrix teams. In cases where a large project required extensive engineering or web development, up to 100% of an employee's day might be allocated to delivering the task. Gant charts were often used to view the complete project and insure that timelines were met.

One advantage of the matrix team structure was that because of the small and often intimate nature of the group, employees had the opportunity to voice opinions, add suggestions or generally comment on ways to enhance or alter the development process. Since the nature of product development at a technology company such as MP3.com was extremely fluid, input from various team members was absolutely vital.

After an initial level of internal evaluation MP3.com frequently tested the viability of new innovations on the market directly. They were able to pilot new web based innovations by simply 'switching on' the device or service online. If music users or providers responded positively it was adopted. If not, the innovation was adapted in order to meet user demands more succinctly and/ or altered in order to deal with functional shortcomings. Alternatively, if obstacles proved to be too immense or users were simply not interested the innovation was withdrawn. MP3.com's business model was developed in this chunky, evolving trial and error manner.

One of the most innovative early products developed by MP3.com was the Digital Automatic Music (DAM) CDs, which are compact discs, produced on-demand only using a proprietary just-in-time manufacturing process. This system allows an artist to create a record (CD) using part of the template

system for content management. The main benefits for the artist are that there is no inventory risk, little to no initial investment apart from recording, and the flexibility to modify the product to suit consumer demand and/or focus.

The process follows this path:

1) Artist uploads multiple tracks to MP3.com web site via the "template" content management system.
2) Artist designates which tracks to appear on the DAM CD.
3) Artist creates a title for the CD and assigns a price point.
4) Artist designates the song order of tracks.
5) Artist uploads cover art via .jpg image file. (Artists may currently upload inside booklet graphics as well)
6) MP3.com and artist agree to share revenue evenly: 50/50 split.
7) When a consumer orders DAM CD, product is created through the just-in-time process: CD burned, booklet/artwork printed.
8) Consumer pays shipping and handling costs.

Another innovative product developed by MP3.com in May 2000 was the On-Demand Music Subscription Model. Thought to be the first of its kind on the Internet, MP3.com launched the Classical Music Channel as a response to the 'vaporware' that permeated the press releases of major labels and many of their technology partners. The afternoon of the official launch saw Sony Music announce their plans to launch a subscription channel by the end of 2000.

The Classical Music Channel allows consumers the ability to listen to a large body of musical works on-demand, whenever he/she chooses to. The initial offer contained over 400 CDs worth of music for a $9.99/month price following a two-week trial period with the ability to stream and/or download the content to a subscribers hard drive and potentially move it to a personal mp3 playback device (such as a Rio Player). Other offers have been experimented such as year long subscriptions. This valid proof of concept then grew across the MP3.com web site.

A month following this product release the 'Children's Channel' was launched. MP3.com then turned the system over to its artist community. It was now possible for any artist or label of any size to create a subscription service offering. They would control pricing, selection of tracks, stream or download functionality and would benefit from a centralized payment/accounting management system, robust delivery platform and log-in security. Although MP3.com has never publicly discussed the numbers of subscribers for any or all channels, they have stated that artists and labels have created over 4,000 channels.

But perhaps the most innovative and controversial product suite created by MP3.com was based on the Beam-it™ technology. Those products are Beam

-it™ and Instant Listening™. These two services were at the root of the controversial MP3.com copyright infringement lawsuits.

Beam-it™ technology allowed a consumer access to CD recordings online that they already own by simply inserting the CD into the CD-ROM tray on their computer. MP3.com technology recognized each CD and if it is contained in the MP3.com database, allowed that consumer access to the said recording when they were logged onto their My.MP3 account. This eliminated the need to upload a complete album, which on a slow dial-up modem connection could take many hours. Beam-it™ technology used server-side security (vs. client-side, such as Liquid Audio) and restricted the number of people permitted to log into any one My.MP3 account.

Instant Listening™ is a derivative of the Beam-it™ technology. Used in conjunction with designated retail partners, a consumer could purchase a CD on-line and listen to that CD once the financial transaction was complete. The physical CD was then mailed to the consumer, but the consumer received immediate benefit for the purchase via their My.MP3 account. This basic philosophy of helping consumers aggregate and access their musical collections from one central location has been a thread since the early days of MP3.com.

6.1. The Music InterOperating System (IOS)

Officially launched in January 2001, the Music IOS was perhaps the cornerstone to the differentiation and value that MP3.com had created. One original MP3.com corporate philosophy was Michael Robertson's notion of the Music Service Provider (MSP) model. The basis of the early MSP model and subsequent Music IOS was the need to connect disparate communities, who create, market or distribute music. Once musical content is added to the IOS hub, business rules are assigned which permit the use(s) of that content. For example, if a song is added by label XYZ, it could then be accessed by on-line retailers, software or hardware manufacturers, special promotional offerings, subscription music services or consumers who have formerly purchased the recording or pre-order an advance copy.

In order for this IOS to grow into compelling consumer applications, MP3.com developed a set of APIs (application protocol interface) that allowed software developers access to a limited amount of music while creating new ways to experience music. These applications ranged from auto mp3 players to mobile phone, personal data assistants (PDAs) to other web sites.

Another way of viewing this IOS is to look back at the early days of personal computing when DOS was the most common computer language. Various word processing, spreadsheet and database programs existed but it was very difficult to integrate them into one master document. Once Microsoft

and Apple announced their respective operating systems software developers began designing compatible software. This helped to advance the pace of growth significantly.

MP3.com's innovations proved successful on two fronts. First, the company demonstrated an ability to produce innovations which customers – both music users and musicians – wanted. Secondly, MP3.com demonstrated that it had core technological competencies which rivals had difficulty replicating. After the initial success and subsequent growth of MP3.com, competitors began to encroach on MP3.com's market space. Two main groups of mp3 music web sites began to appear. The first group merely aggregated music that was available in a mp3 file format. For example, Rioport.com was established as a 'filling station' for the highly popular Diamond Rio PMP 300 mp3 player. Thousands of tracks were manually added to the site by Rioport.com staff and organized by genre for consumer ease of navigation. The major drawbacks were that little major label content was available and that uploading was labor intensive and expensive. This was in contrast to the 'template' system used by MP3.com. Rioport subsequently shifted its direction towards providing infrastructure services to web sites and retailers and the sale and distribution of Major label content.

Riffage.com adopted another aggregation start-up strategy. Ken Wirt who was a former marketing executive from Diamond Multimedia (parent company of RioPort.com) founded this company. Riffage.com not only intended to compete directly with MP3.com but also attempted to establish an on-line record label. Riffage.com lacked finance and the competencies associated with becoming a record label. It subsequently closed its operations.

The second group of competitors attempted to offer similar services to the artist community that MP3.com had developed. For instance AMP3.com also competed directly with MP3.com, offering artists the ability to upload their own music. Consumers and artists could also create stations, read news and product reviews. One unique differentiating factor with AMP3.com was their attempt to insert audio advertising before every track - offering to pay the artist a percentage of that revenue. The major labels were unenthusiastic and due to lack of financing AMP3.com has apparently closed operations, although the web site does remain live on the Internet.

As a competitor to the My.MP3 service, Myplay.com established a locker service. However, this service required consumers to upload their own 'previously purchased' CDs or tracks to the Myplay locker. This was extremely time consuming and often proved to yield consumer dissatisfaction. Myplay was subsequently taken over by BMG. Sony also launched the Sony Digital Locker - a multi-media storage product.

Search engines (such as Lycos.com, Launch.com, Gig.com, Yahoo.com) also played a key role in the successful brand building of MP3.com. During late 1998 to mid-1999 mp3 was one of the top searched words/phrases on the

Internet. MP3.com also secured all top level mp3 spots on these search engines.

Essentially, MP3.com viewed itself as an infrastructure company and therefore, allocated resources towards building an engineering firm. These resources, which included over 150 dedicated engineers, helped bring new products to market at an extremely fast pace. As we have read, it was this approach to product development that helped to create sustained differentiation. Coupled with powerful financial resources and Michael Robertson's vision, MP3.com was able to create a first mover advantage.

7. Financing Innovation and Growth

As with any company experiencing rapid growth, Robertson, Richards and Ouyang realized that additional funds were necessary to grow. The economics of their industry indicated the importance of first mover advantages associated with network externalities. This in itself was an impetus for fast growth even at the expense of sustained initial losses. However, Robertson's grand plan would involve technology development too. Thus, up front loss making was copperfastened by a significant R&D component. At the end of 1998 MP3.com had just $39,509 cash assets and an asset book value of just under half a million dollars. By the end of March 1999, MP3.com secured venture finance and private funding to take the company to an asset value of over $11 million with over $9 million in cash. However, this was not nearly enough for a new music industry upstart who intended to challenge the Majors and in July 1999 MP3.com raised nearly $350 million in an historic IPO on the NASDAQ (see www.sec.gov for an online copy of the IPO S-1 filing).

After the flotation MP3.com's stockholders represented a portfolio of MP3.com customers (including advertisers such as Arkaro holding, a subsidiary of group Arnault[2] and stock reserved for music users), key music providers (such as Tori Amos and Alanis Morisette), employees (with stock options ranging from 11 cents to $6.67). In effect, suppliers and buyers were given a return for trading with the new venture. Financiers took their share too. The early venture capital firm of Sequoia Capital (Menlo Park, California) was no stranger to technology IPOs. In return for venture capital, Stevens received 14.5% of shares outstanding upon the IPO. In June 1999, Cox Interactive Media, Inc. invested $45 million and formed a joint venture with MP3.com. In return for the cash injection, Cox received 9.4% of shares outstanding upon the IPO.

2. Groupe Arnault is a French corporation with interests in diverse companies such as LVMH, Moet, Hennessy, Louis Vuitton and others.

The IPO was one of the largest single Internet flotations on the NASDAQ. MP3.com's shares were placed at a value of $28 dollars, valuing the company at approximately $1.9 billion. The proposed use of the funds (see appendices) was loosely defined and allowed the management significant strategic flexibility.

8. Legal Problems: The Empire Strikes Back

In January 2000, MP3.com launched its controversial new music locker service. The premise of the service was to allow consumers to register for a secure storage locker where their music collection could be stored. This would include music from four main sources: (1) free promotional content on MP3.com's web site, (2) subscription music channels where they pay a monthly or yearly fee for access, (3) CDs that they previously own using the Beam-it™ software or, (4) CDs that they purchase from an on-line retailer by way of Instant Listening™.

In order for the consumer to add music to their personal online music locker account only 3 and 4 above created legal concerns. In order to facilitate the inclusion of a CD in a music locker account, MP3.com purchased 45,000 CDs and created a secure database from which consumers access the music. It was this act of creating a single unauthorized copy of each work that the US court system found to be willful and subsequently in violation of the Copyright Act. The plaintiffs (including Arista Records, BMG Music, EMI Music, Universal Music, Warner Music Group, and Sony) would seek damages of up to $150,000 per CD violation and injunctive relief prohibiting MP3.com from using any reproductions of the plaintiff's copyright material. MP3.com defended that the new locker service made a "fair use" of the copyrighted recordings, since they believed that it was a consumer's right to listen to their music anywhere or any time they desired. They argued unsuccessfully that the rights that a consumer purchases relating to a recording should be transferable to the Internet.

The overall settlement payments to major labels to date have been estimated to be approximately $150 million. However, with undefined waters in terms of copyright enforcement in the Internet; particularly in the areas of violation, fair use and compensation, the future was far from certain. The fight for survival was at the core of these activities with a rising number of plaintiffs (now including independent record labels and music publishers). The September 2000 ruling in the case of *MP3.com v. Universal* where the Court ruled that Universal should be compensated to the tune of $25,000 per CD copied did not auger well. Pressure on MP3.com's share price (already battered from the dot.com crash) and a massive erosion of cashflows due to actual and potential lawsuits reduced the strategic options facing the company.

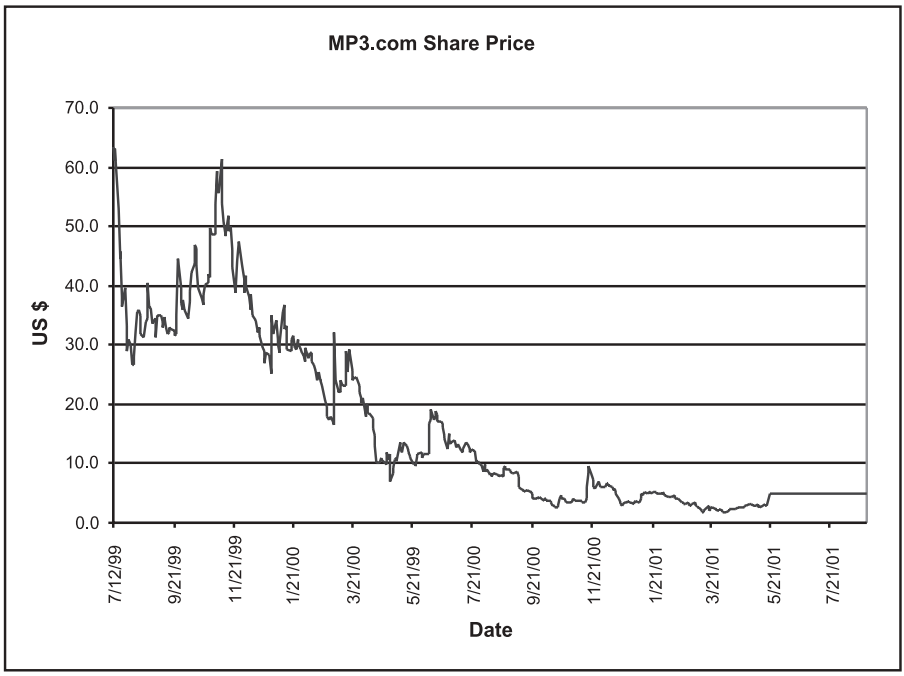


Figure 6

9. Harvest and Exit

In May 2001 Michael Robertson sold the company to one of the Major record companies, namely the French owned Universal/Vivendi. MP3.com was sold at a value equivalent to $5 per share which was significantly less than the 1999 IPO flotation offer price of $28. At the time of writing Michael Robertson had stood down as CEO of MP3.com and had already announced a new venture (Lindows) which planned to produce a computer operating system to compete with Microsoft Windows. Vivendi split MP3.com into 2 divisions. The first concentrated on generating revenues from online music and the second focused on MP3.com's technological competencies. MP3.com had become the powerhouse of Vivendi's online music strategy.

APPENDIX 1:

MP3.com Products

MP3.com's primary focus has been on products targeted at two groups of users: the artist community and global music and entertainment fans. The following is a list of some of the main products offered by MP3.com (as of October 2001) in the order of (1) products for the music providers (2) products for the music user (3) revenue streams from products. For more detail the reader is directed to inspect the web site at MP3.com.

(1) Products for Music Providers (encompassing artists, labels, managers and publishers)

Promotional Tools

- *Premium Artist Services* (see Subscriptions under the Revenue section below)
- *Auction.* Artists or their representatives may bid for promotional advertising slots throughout the MP3.com web site.
- *New Music Army (NMA) Program*. This program rewards individuals who act as representatives for artists on MP3.com. MP3.com subsequently rewards this activity with 5% of any revenues due to the respective artist.

Content Management Tools and Opportunities

- *Payback for Playback (P4P)*. This royalty payment program was launched in early 2001. $1 million per month is paid on a pro rata basis to content owners for activity generated on the web site. Example: If artist A generates a higher number of song streams and/or song downloads than artist B, artist A will receive a larger percentage of the $1 million.

- *CD Program (originally called DAM CDs).* This revolutionary just-in-time (JIT) manufacturing process was developed and launched by MP3.com in order to enable artists with the opportunity to produce a CD recording without the potential inventory risk and need to be signed by a large record label. The official name for the program and the technology is DAM (digital automatic music).

- *Business Music Services (BMS).* Similar in concept to a Muzak delivery model, where retail and business establishments may, for a monthly fee, play songs by MP3.com artists. Artists receive Payback 4 Playback. The important features that differentiate this service from the competition is:

(a) the ability to program play lists of music from a central location or at each and every individual store location and, (b) the ability to insert audio advertising which may help to offset or generate revenue for the service.

- *Music Licensing Program.* Licensing music for movies, advertising campaigns or compilation use has always been a significant source of revenue for the music industry. Using a searchable database, music and film supervisors for example, may find music for a film sequence. Artists categorize their own music by mood, instrumentation, vocals, tempo and others in order to streamline the search process.

- *Copyright Wizard.* Artists are able to submit works for a fee, directly to the US Copyright Office via MP3.com.

(2) Products for consumers

- *Searching for music*
  - Top 40 Chart and musical Genre Charts
  - Explore by genre or geographical location
  - Browse Local Events (search globally for music and live shows)

- *Managing your music*
  - My.MP3.com
  - Premium Listener Services (PLuS) (See below)
  - Messenger: consumers may receive new music, direct to their email address on a daily, weekly or monthly basis.
  - Notify Me! Consumers are notified whenever their favorite artist's page is modified (new music, new images, new concert information).

- *Stations.* Music fans, artists and labels are encouraged to create their own music stations on the web site. It is an excellent way to create thematic play lists that may be shared with the entire global music community via MP3.com.

(3) Revenue Streams

- *Advertising, sponsorship and promotion*. MP3.com's main revenue streams come in the form of consumer-base advertising, sponsorship and promotional activity. Referring to the initial S-1 it is stated that Groupe Arnault and MP3.com would enter into a $150 million, three-year relationship which would promote the Groupe's suite of brands. Given the rise in popularity of the web site and the historic IPO, many of America's

leading brands also chose to include MP3.com as a marketing and promotional vehicle.

- *Subscriptions.* Three basic subscription models exist on MP3.com: Subscription Music Channels, Premium Listener Services (PluS) and Premium Artist Services (PAS).

- *Subscription Music Channels.* In May 2000, MP3.com created and launched the first on-demand music subscription channel on the Internet – The Classical Music Channel. It featured over 400 albums of musical repertoire, fully downloadable or streamable for a fee of $9.99 per month, following a two-week free trial offer. Experimentation with various pricing models occurred during the first year of service until $29.99 per year and $9.99 per month options were instated.

  The Artist Community on MP3.com is encouraged to create subscription channels, market them and sell them to music fans. Artists and/or their labels designate the content which may reside in a channel, control the functionality (stream and/or download) and the monthly pricing. To date, thousands of channels have been created.

- *Premium Listener Services (PLuS).* During 2001, MP3.com launched PLuS. Pricing was set at $2.99 month or $29.95 per year. Two of the important features of the PLuS are the ability to turn off advertising (banner, portals, etc.) and being able to download a small software application that runs on a computer desktop, without a browser, such as Internet Explorer or Netscape.

- *Premium Artist Services (PAS).* Early in 2000, MP3.com launched PAS. Pricing was set at $19.99 per month and targeted at the artist community. Some of the benefits include participation in the Payback for Playback royalty program, bold listing on MP3.com charts and priority placement in the Featured Songs section in each genre section on the web site.

APPENDIX 2:

Use of Proceeds as Outlined in the 1999 IPO Offering

We estimate that our net proceeds from the offering will be approximately $290.2 million (based upon an assumed initial public offering price of $25.00 per share) after deducting the estimated underwriting discount and commissions and estimated offering expenses ($321.5 million if the over-allotment option is exercised in full).

We expect to use approximately $10 million of our net proceeds for

marketing and promotional activities, $8 million for capital expenditures, $4 million for concert sponsorships and tours, and $2 million for planned facilities expansion and related improvements. We intend to use the remaining net proceeds for general corporate purposes, including working capital. A portion of the net proceeds may also be used for strategic partnerships, including joint ventures, or to acquire or invest in complementary businesses, technologies, product lines, content or products. We have no current agreements or commitments and we are not currently engaged in any negotiations with respect to any acquisitions. The amounts we actually expend for general corporate purposes may vary significantly and will depend on a number of factors, including the amount of our future revenues and the other factors described under "Risk Factors". Pending these uses, the net proceeds of this offering will be invested in short term, interest-bearing, investment grade securities.

We have no current plan for a significant portion of the proceeds of this offering, and our management will retain broad discretion in the allocation of the net proceeds of this offering.

The principal reasons for this offering include:

– establishing MP3.com as a public company;
– increasing the visibility and brand recognition of our products and services;
– positioning our company to be better able to take advantage of strategic opportunities in the future;
– making a trading market available to our existing stockholders; and
  providing us with capital sufficient to enable us to implement our business plan.

APPENDIX 3:
Summary of MP3.com's Consolidated Statements of Operations (in US$000)

Six months ended:	*June 2001*	*June 2000*
Net Revenues:	39,283	37,673
Cost of Revenues	9,077	7,568
Gross Profit	30,206	30,105
Operating Expenses:		
Sales and Marketing	17,384	28,963
Engineering & Product Development	10,854	11,404
Administration	11,601	14,359
Charges relating to Lawsuits	44,698	–
Charges relating to Copyright claims	–	150,000
Acquisition activities	3,160	1,704
Amortization of Stock based compensation	1,717	6,336
Total Operating expenses	89,414	212,766
Operating profit (loss)	**(59,208)**	**(182,661)**

Source: IPO S-1 filing: www.sec