

A Case Study Of The Music Industry

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INTRODUCTION

Every industry in the world is affected by technological advancements. As new products and methods are invented, old products and methods become obsolete. Perhaps no industry illustrates this basic principle better than the music industry. From the invention of sheet music to the digital music files known today, the music industry has remade itself time after time. With the development of the latest technology, old products have repeatedly been abandoned. This case will explore the history of the music industry by highlighting the various technologies that changed the industry. In addition, a discussion will be offered to explore possible future directions of the industry.

HISTORY OF THE MUSIC INDUSTRY

Music has been an important part of the life of humans since the beginning of time. Early man made crude drums and other percussion instruments. As man advanced, so did the musical instruments used to create music. However, music as a commercial enterprise can trace its origin to 1473. It was then that the first method of copying print music was invented. (www.wikipedia.org) Only 20 years after the printing press was invented, sheet music was manufactured and sold to the public. People bought this music to take home and play on their own musical instruments. For the first time, people were paying for the ability to have music in their homes.

Phonographs

For over four hundred years, sheet music was the primary industry for music. In the late 1800's Thomas Alva Edison invented the first music-playing device. Shortly after, Leon Scott invented the Phonograph. The phonograph translated air pressures and scribed them onto a smoke cylinder. Many improvements to this invention were made. Charles Cros expanded on the idea by using the original design and adding the ability to retrace the pattern resulting in the replay of the sound. During this time three separate people applied for a patent of the Phonograph. Thomas Alva Edison was granted the patent in the late 1800's for a machine using a wax-coated cylinder. (www.wikipedia.org)

"Phonograph and the Bell-Tainter Graphophone were in intense competition for the popular market. The Phonograph was beginning to prove more popular, and the New York Phonograph Company opened the first purpose-built recording studios." (Adorno 1941) Edison's rival, Chichester Bell, invented the Graphophone. This invention was easier to operate but didn't offer the sound quality of Edison's phonograph. In the late 1890's there was major competition in the music industry and the demand for recorded music was huge in the U.S. People wanted the ability to listen to music in their homes.

The phonograph went through many technological changes. In the early 1900's Berliner and Johnson started recording on thick wax. Many companies claimed that this was a patent infringement. By 1904 Fleming invented the Diode Thermionic Valve, which was the beginning of electronic recording (Adorno 1941.)

With the invention of the phonograph, the jukebox was the next logical step for the industry. In 1889 the first coin-in-slot "primitive jukebox" was invented (Adorno 1941.) The coin-in-slot machine was very popular in amusement arcades. The most commonly played records were comedy monologues.

Radio

In 1923 the record industry slowed down due to the popularity of radio. Radio was the next invention to allow people to listen to music and be entertained in their homes. “The Radio Corporation of America” also known as RCA bought The Victor Talking Machine Company, this was the beginning of the large music industry known today.

Stereo And Other Advancements

A patent was granted in 1931 to Alan Dower Blumlein (EMI) for a stereo recording technique that resulted in the basis of the present day techniques. Multi track recordings were done on 35mm film stock by 1938. When the Disney movie Fantasia came out in 1941 it symbolized a major advancement in improved musical performance and sound technology. (www.Wikipedia.org) Monophonic sound was soon to be replaced by stereophonic sound. Stereophonic made it possible to play sounds out of two channels or more. Stereo LP’s became available to the public in 1956. By 1960 Stereo had replaced Mono recording entirely.

Eight Track And Cassettes

After World War II, the original format for the magnetic tape was produced. This was the beginning of what is known as the eight track. The eight track was a large cassette tape that did not have rewind capabilities. Music came on recorded tapes approximately the size of a VHS video tape. Eight track players were put in cars in the late 1960’s and early 1970’s. Now consumers had the ability to listen to the music they wanted, not only in their homes, but also in their cars. This was a major technological breakthrough for the industry and the consumer. As obsolete and maybe even laughable the eight track technology is by today’s standards, the ability to listen to **selected** music in one’s car was a major and much desired breakthrough for the industry.

Through the 1970’s eight tracks were on the decline. The last major recorded eight track ever produced was in 1988 and was “Fleetwood Mac’s Greatest Hits”. (www.wikipedia.org)

Although some bands have produced eight track recordings even as late as 2006, it is more for the collectors of this ancient technology. Recording studios replaced their old technology with multi-track recording capabilities.

The first music cassette was released in 1965. By 1968 85 different manufacturers sold over 2.4 million cassette players. The cassette tape industry was generating over \$150,000,000 per year. (www.wikipedia.org)

Cassette tapes were the new technology that made the eight tracks obsolete. Cassette tapes were smaller, more portable, and produced better sound quality than eight tracks. In addition, for the first time, one could record music from their turn-tables onto a cassette, and enjoy music in their cars they recorded themselves.

Compact Discs

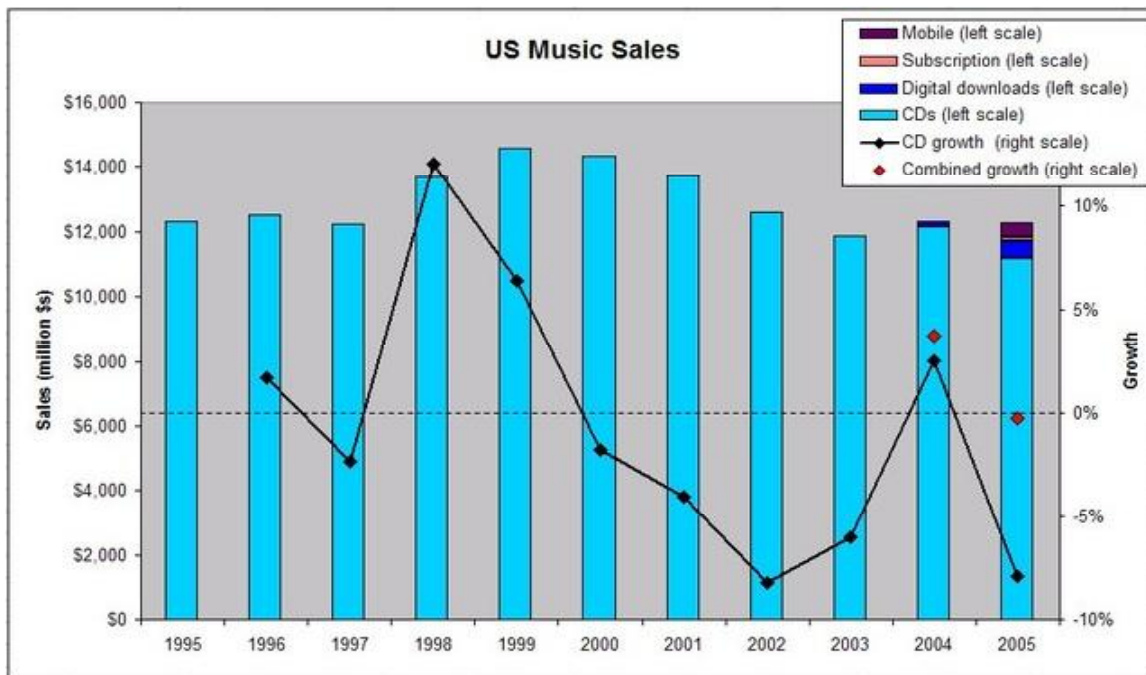
In 1978 the first announcement of the Compact Disc was made. One year later Sony introduced the Walkman which was priced at about \$200.00. In 1978 a price tag of \$200 was huge. However, for the first time, the consumer had the ability to not only listen to their desired music in their homes and cars, but also at any time and any where on their walkman. Music had reached the pinnacle of mobility. Technological advancements were made to the Walkman over the next few years. Due to these changes, both the size and price of the product decreased.

In 1986 over 50 million Compact Discs were sold. CD’s outsold Vinyl for the first time and LP’s were slowly starting to disappear from record stores. Earlier technologies such as the eight track and cassette tape complimented the primary method of distributing music, the record. With the introduction of compact discs, the music record was becoming obsolete. That is, the compact disc was designed specifically to replace records. Now one could use one medium (the CD) and enjoy their music at home, in the car, or in a Walkman anywhere.

MP3 Format

The major competitors in the music industry in the early 1990’s were Sony and Philips. Philips came out with the CD-ROM in 1992 and Sony responded with the Minidisc (MD). The MD never took compact disc’s market share and died in the late 90’s. By 1998 music piracy on the Internet started using MP3 format. In response to this, record companies started using watermarks to help prevent piracy. Many companies tried to use legal alternatives to pirated music, but failed. Soon after the turn of the millennium MP3 players were introduced. People bought MP3 players, but as soon as Apple invented the I-Pod, the sales of MP3 players sky rocketed. Although Apple did not invent the MP3 player, they manufactured their product to be user friendly, and they marketed their product to the younger consumer, which made I-Pod the front-runner in the industry. Because of the MP3 technology, Compact Disc sales started to decrease. Figure 1 illustrates the sale of music today. Notice the increase in digital downloads, and the decrease in CD sales. It is obvious that digital download technology is replacing the CD as the preferred method of buying music. Soon Compact Discs will follow the eight track and cassette tape and be a thing of the past.

Figure 1



From “TheLongTail.com”

MUSIC AND THE INTERNET

Since the Internet became one of the main mediums of communication and information, music has found its new home. The decreased sales of compact discs have forced many record stores out of business. Record stores all over America are closing their doors. It is no longer necessary to go to a store to purchase music. Now, music can be purchased over the Internet 24/7. In addition, one need not buy an entire album or CD for the one or two desired songs. Songs can be purchased individually for the low of \$.99.

File sharing has been a major problem in the music industry. File sharing is when one person shares programs, music, or any other computer file illegally. A good example of a file-sharing program would be Napster. When Napster was first introduced in June 1999, it became widely popular. It was popular because it enabled people to share music, movies, and programs between two separate parties for free. People were able to take music

that they did not own or purchase, download the files for free and transfer them to recordable compact discs or MP3 players. (Cave 2002) This was great for the users since they could obtain mass amounts of music without paying for it; this was not good for the industry or the music artists. In early 2000, the band Metallica filed lawsuits against Napster and demanded that all of Metallica's music be removed from the site. Other artists joined in on the lawsuits. A year had passed since the lawsuits were filed and Napster still had over 40 million users. It seemed as if file sharing was almost inevitable and couldn't be stopped.

The court found Napster guilty of facilitating others in copying copyrighted material. After the lawsuit, Napster became a pay site. Today there are still many sites where one can share music for free. Every time a site is shut down, another one pops up. It seems as if it is an endless cycle of file sharing and there is almost nothing anyone can do to stop it. I-Tunes, which is a pay site, is very successful due to Apple's product the I-Pod. All music bought on I-Tunes is watermarked and prevents people from sharing. This is one step in putting an end to file sharing.

The RIAA, which stands for Recording Industry Association of America, represents the record companies and is involved in several copyright infringement lawsuits. The RIAA represents 90% of all of the music sold in the U.S. The RIAA has been fighting file sharing since 1998. RIAA claims that file sharing costs the industry over 4.2 billion dollars per year. They have filed many lawsuits against file sharing web sites. However, as was mentioned earlier, when one web site shuts down three more are created. Once again it is a never-ending cycle and stopping file sharing is nearly impossible. (www.Wikipedia.com)

FUTURE OF THE MUSIC INDUSTRY

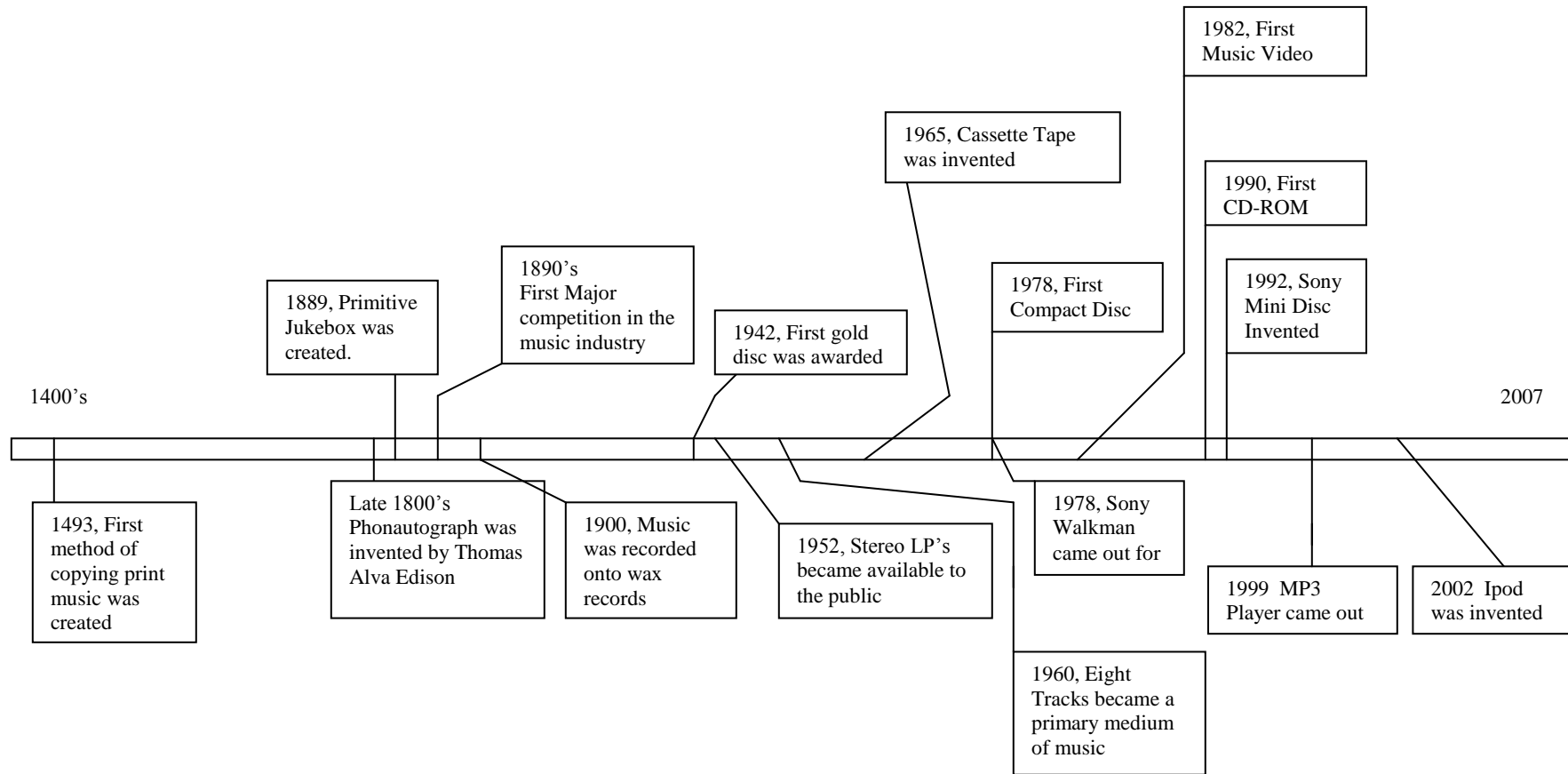
Attempting to predict the future of the music industry is truly an exercise in futility. Who could have predicted the MP3 player twenty five years ago? In addition, in twenty years will the MP3 technology be as obsolete as eight tracks are today? No one knows what the future holds. However some possibilities are interesting to examine. For example, the Internet makes it possible for artists to sell directly to the consumer. This could make record companies obsolete. The necessity for an artist to sign a contract with a record company stemmed from the fact that the record company was the only way to distribute the artist's music. Since the artist can post their music on the Internet and sell directly to the consumer, the necessity of the record company and their contracts has greatly diminished. Does this mean record companies will disappear? The answer is probably not. However, it is obvious that the big record companies will have to make major adjustments.

There are some new products that are on the rise that will change the way one listens to music forever. Faculty at UC Berkley are constantly developing new technologies in the music industry. Whether it is inventing a new musical instrument or inventing new musical recording methods, they are constantly researching new methods to innovate the music industry.

Once a year there is a music technology conference called "The NAMM Show". In 2007 the conference was in Anaheim and over 1,500 music manufacturers attended. Everything from print music, musical instruments, and new portable music technologies were present at the conference. Among some of the new technologies that were shown at this conference, the Beyerdynamic Head Zone looked fascinating. The Head Zone is a pair of headphones. The difference between these headphones and other headphones is when the consumer turns their head one can hear different musical instruments. For example, if the consumer were to face one way they might be able to hear the acoustics more clearly and if the consumer faced the other way they might be able to hear the percussion better.

There is also a new product coming out that will revamp the home entertainment center. This product enables the consumer to replace their home audio center with wireless capabilities. Also any audio compact disc they put into this product will automatically copy and save in its memory. It is similar to a jukebox. What is unique with this product is that it can be hooked up to a network with other people who have the same product and it enables you to share music.

Figure 2



CONCLUSION

Throughout history, music has been bought and sold through many different mediums of technology. Figure 2 offers a timeline of some of the major changes in the music industry discussed in this case. Since the invention of the wax coated cylinder to the invention of the MP3 player, the advancement in music innovation forces businesses, artists, and consumers to convert and adapt to the latest technology. However, these technological evolutions do possess a silver lining for the music industry. Take for example the Beatles. In the 1960's consumers bought their music on vinyl albums. The same music was repurchased in the late 60's and early 70's on eight track. The Beatles music was sold again on cassettes, CD's, and now over the internet. It can easily be seen that technological advancements have been an opportunity for the industry. Music piracy however, presents a clear and present danger for the industry.

It is also obvious that consumers are willing to pay again and again for the same music in different formats. This willingness to repurchase music in different technological formats stems from the fact that each technological advancement has offered a significant advantage over its predecessor. Consider a music lover in the 60's who possessed hundreds of albums. Those albums may have taken a closet to store them. In addition, one could not play an album in the car or on the go. Today, that same amount of music can be stored on a relatively inexpensive device that fits into a shirt pocket and the music can be heard through headphones or can be connected to one's car, or home stereo system.

The direction the music industry is headed is a great mystery. The digital age is the newest medium of technology, and computers run everything. MP3's could be around for a long while. Or, technology could make the MP3 obsolete next year. One thing is for certain, the music industry has undergone numerous changes in the past, and those changes will continue in the future.

TEACHING NOTES

This case presents an excellent opportunity to present many marketing phenomenon. Perhaps most important, this case represents an industry the student knows and cares about. One might begin the discussion by asking "how many of you own an MP3 player?"

In addition, this case offers the opportunity to discuss the product life cycle. The student will be able to clearly see how long some product life cycles are (records) and how short some are (eight tracks). One might also point out a truism associated with the product life cycle. That is that price skimming is very common for high-tech products and price typically reduce as the product progresses through the product life cycle.

Another possible topic for discussion is how music was distributed and how that may change in the future. The distribution channels have changed so much that many record stores are going out of business.

The future of music and the music industry is another topic for discussion. Each student will have an opinion about where technology will take the industry.

Finally, this case presents an excellent opportunity to discuss ethics. One might ask "how many of you have shared a music file with a friend, or have copied a music file from a friend?" This presents an excellent opportunity to discuss the ethics of piracy and the legality of the practice. In addition, the Professor will most likely discover that some or maybe even most of the students will feel there is nothing wrong with pirating or sharing music files.

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