

***Introduction***

The phenomenon of internet music started in 1993, when three students from UCSC formed IUMA, a venue for unsigned artists to share their music over the internet. However, internet music didn't really take off until the year 2000 with the advent of Napster and similar sites, where fans massively shared music files. However, these sites were found to violate copyright laws and were shut down. This was followed by attempts by the "Big Four" music labels to open their own internet stores. However, the high prices charged at these stores and other policies caused them to fail. The first successful music store was the iTunes Music Store from Apple, later renamed to the iTunes store. It sold 1 million tracks in its first five days of operation and hasn't looked back since. In January of 2008, it passed the 4 billion sold songs milestone and in April of 2008 it passed Wal-Mart to become the biggest music retailer in the US. However, with legal downloading only constituting 10 percent of the US music market[1], there is a lot of room for growth in the future. In addition, the iTunes Store faces competition in the future, especially from Amazon MP3, which is the favorite of the "Big Four" music labels (Universal, Warner, EMI, and Sony BMG) in their hope to reduce Apple's bargaining power[2][3]. Of course, there are many online music stores. In addition to the iTunes Store, we chose to analyze Amazon MP3 and Napster (the store, not the file sharing service). These three stores are very representative of the entire industry. In this paper, we do a Porter's six forces analysis of the industry, discuss the strengths and weaknesses of the competitors, and give recommendations to each of them for how to proceed in the future.

***Six Forces Analysis***

There are several barriers to entry. One barrier to entry is that for the average person, learning to use a new kind of software when they are already accustomed to the one that they are using is a big switching cost. This is confirmed by the fact that although Amazon MP3 is cheaper than the iTunes Store, very few of

its customers are previous iTunes Store users[4]. Another barrier to entry is that it is difficult to make a profit running an online music store. The iTunes store is able to make an estimated 10 cent profit on every song that they sell for 99 cents[5]. However, a new store would sell a smaller volume of songs, and would therefore pay more expenses such as network fees and employees' salaries per song sold. Furthermore, while the iTunes Store is able to sell gift cards and allowances to reduce credit card transaction fees[5], a new store wouldn't be able to do so as effectively, meaning that the transaction fees they paid per song would be higher. If the new store also had to pay for advertising, this would reduce the already small operating profit even further, maybe even to zero or to the negatives. In view of this, an entrant may decide to offer subscriptions, which have a higher profit margin than a la carte song sales[6][7][8]. This would cause them to run into a different set of problems. Chief among them is that their subscription service would not be compatible with iPods, which hold 70% of the portable media player market[9][16]. In addition to this, they would be entering a very crowded market which already has companies such as Napster and Rhapsody fighting for customers.

Buyer bargaining power is very low. Of course, as a whole, consumers are very important, and if they decided to abandon some music store as a whole then that music store would go out of business. However, an individual buyer has no power to bargain with the music store.

Supplier bargaining power is very high. There are only four suppliers of music that make up 87% of the music market[10]. If one of them refuses to sell their music to your store, then this is a big blow to what you have to offer the consumers. Of course, for the independent labels, bargaining power is not so high, since they are not that important to the music store, and they need the music store more than the music store needs them.

The substitutes to an online music store are CDs, P2P file sharing, burning music from others, and ripping music from others[1]. CDs sold in actual stores make up the biggest, but also the most rapidly declining share of the music

industry[1]. In all, buying music from an online music store only makes up 10% of the US music market[1].

This industry has a high degree of rivalry. The main reason for this is that in addition to competing amongst themselves, music stores must compete against illegal downloading, which although illegal and inconvenient, is free. There is only so much the music stores can charge for the added convenience that they give over relatively risk-free illegal downloading. The most obvious indication of the rivalry is that songs only cost 99 cents regardless of the popularity of the songs. In fact, record companies have put pressure on Apple to charge more for more popular songs and Apple has refused to do so, saying that it would only drive people to download those songs illegally[11]. Another indication is that when EMI released their songs DRM free to Apple, they initially sold them for 30 cents more than FairPlay protected songs. However, when Amazon began selling DRM free songs for 99 cents, Apple was forced to cut the price of the EMI songs back to the DRM price[12][13]. Some online music stores sell songs for even cheaper than 99 cents a song. For example, Amazon sells certain songs for 89 cents.

The biggest complement to online music stores is a portable music player since along with the computer, this is the device used to play back digital music. The radio is another complement since if you hear a good song on the radio, you may want to get it without buying the entire album, and the only place that you can do that is an online music store. This is why most music stores offer free internet radio stations. MTV is another complement, because after watching music videos on MTV, many will want to purchase them, and the only place that they can do that is an online music store. Finally, published playlists are another complement because people will want to buy the songs on those playlists without buying the albums they are in, and the only place that they can do that is an online music store. This is why online music stores will publish playlists and sometimes pay a celebrity to publish a playlist of their favorite songs.

## ***Strengths and Weaknesses***

### ***The iTunes Store***

The iTunes Store run by Apple was introduced on April 29, 2003, and is the dominant store by a wide margin. It has 85% market share in US paid music downloads[14] and 70% market share worldwide[14][15]. In analyzing its strengths, it is not difficult to see why. The first strength is the iPod, which since 2004 has been by far the most popular portable digital music player[9]. Until the Summer of 2007, the iTunes Store was the only online music store that sold music from the “Big Four” that could be played on an iPod. This was the case because before then, the “Big Four” did not sell digital music DRM free[17]. Meanwhile, Apple did not license their FairPlay DRM to rival music stores[20][21], nor did iPods support rival DRM technologies[18][19]. Thus, until recently, for those who used an iPod and wanted music from the “Big Four”, the iTunes Store was the only option for online music downloading. This is what led to its widespread popularity. Many iPod owners, who have already invested energy into learning how to use the iTunes Store, will need a big incentive to switch to a different store. In addition, if one was to ask a friend who owns an iPod, where they download music, they would most likely say the iTunes Store. Thus, its current popularity will only serve to increase its popularity in the future.

Some say that with the advent of DRM free (and therefore iPod compatible) stores selling music from the “Big Four”, the iPod will no longer give the iTunes Store an advantage over the others. This is not true, thanks to the iTunes software, the application used by iPod owners to sync their iPods with their computers. While using the iTunes software, which is free, does not obligate you to buy music from the iTunes store, it makes it a lot more likely that you will. One reason for this is convenience. If you are using the iTunes software, then the easiest place to buy music from is the iTunes Store which is built into the software. However, more important than this, the iTunes software provides tremendous advertising for the

iTunes Store. Whenever you are syncing your computer with your iPod, there it is, just one click away.

The second strength of the iTunes Store is the store itself. It has the most songs, over 10 million[14]. In addition, the iTunes store has music videos, TV shows, movies, trailers, podcasts, free internet radio stations, and audiobooks all in one place. Furthermore, it has the best user interface of all of the stores. In other words, it is a fun and user friendly one stop shop for all of your digital media needs.

The biggest weakness of the iTunes Store is that with the exception of EMI, their music obtained from the “Big Four” is DRM protected. This protection makes these songs less valuable to the consumer for several reasons. The first reason is that these songs can only be played back on an iPod, not on any other kind of portable digital device. The second reason is that it limits what the user can do with the song, even when they are using an iPod. For example, users can only access protected songs from a maximum of five computers. Finally, the third reason is that these songs are of lower quality than songs that are not DRM protected. Selling songs that are DRM protected makes them less attractive compared to CDs since songs on CDs are not protected in any way. Furthermore, with Amazon and Napster selling songs from the “Big Four” that are not DRM protected, some users may begin switching to these stores for that reason.

### ***Amazon MP3***

AmazonMP3 is the number two online music store[1], and should be Apple’s biggest concern. The greatest strength of Amazon MP3 is the website Amazon.com. People buy many things on Amazon, from books to DVDs to kitchen appliances to pretty much anything that you can think of. This is the thing that has the potential to give Amazon MP3 exposure which is comparable to that of the iTunes Store.

Another strength of Amazon MP3 is that they offer songs from the “Big Four” that are DRM free which makes them better than the FairPlay protected songs

offered at the iTunes Store[4]. Furthermore, their songs are often cheaper than those sold at the iTunes Store[4].

The weakness of Amazon MP3 is that it does not utilize its greatest strength. There should be a big button saying “go to Amazon music store for better prices than iTunes” at the top of the page when you go to amazon.com. There is no such button. In fact, looking at the front page of the Amazon website, it isn’t even clear that they have a music store[22].

The second weakness of Amazon MP3 is that its usability is not as good as that of the iTunes Store. The store is spread out over too many web pages, making it difficult to browse. One has to use the back button of the browser to navigate the store, which is much less convenient than the navigation bar in the iTunes Store. The content of the store is not displayed in as attractive a fashion as in the iTunes Store. There are no music videos sold at the store and there are no free radio stations. Furthermore, one has to download videos through Amazon Unbox, which is not connected to the music store in any way. It feels much less like a music store than it does a compilation of Amazon web pages.

Their third and final weakness is that you have to download an additional piece of software in order to buy songs from Amazon MP3. However, they have minimized this weakness by making this software automatically import songs into the iTunes software upon purchase.

### ***Napster***

Napster differentiates themselves from the iTunes Store by offering subscriptions. For \$12.95 a month, you can listen to any song in their library of 6 million songs from any internet-connected PC, but not from a Mac[23]. In addition, for \$14.95, you can transfer these songs to a portable media player that supports WMA DRM, but not to an iPod[23]. You still don’t own these songs, you can listen to them as long as you are a subscriber.

The major weakness of the Napster subscription is that it is not compatible with an iPod. This is because they need DRM protection on their subscription songs to ensure that users can only listen to these songs while they are paying subscribers. However, Apple doesn't license their FairPlay DRM. Thus, Napster is stuck using the WMA DRM which is not compatible with the iPod.

Additionally, since they have no vehicle through which they can advertise for free, they must spend money on advertising. This has been the main reason that Napster has been losing money and has yet to become profitable[24][25]. In light of this, Napster has introduced several programs such as Napster Mobile and free Napster. Napster mobile makes Napster songs downloadable to a cell phone through certain service providers. Free Napster allows people to listen to music for free, but with advertisement. While Napster hopes to make money from these programs, a big reason for starting them is to try to gain wider exposure for Napster without paying for direct advertising[26][25]. In a similar vein, on May 19, 2008, Napster opened the world's largest DRM free music store with 6 million DRM free songs available for purchase[8]. Napster hopes to make some money from the store itself, but just as importantly, they hope it will get users to eventually sign up for one of their subscription plans, which remain their bread and butter[8].

### ***Strategies***

#### ***All music stores***

We suggest a strategy that all music stores should use to make online downloading more attractive than buying CDs. The advantage of online downloading over CD purchases is that you can download single songs without downloading the entire album. Buying an entire album is a big risk. If there is only one good song, then you've paid \$15 for one song. Thus, we propose that online music stores adopt the policy that if you buy an album from the music store, you have one week to return any of the songs from that album and get your money back for those songs. With this system, it wouldn't make sense for anyone to buy a CD in the store, and many more people would buy their music online.

## *iTunes Store*

It would be in Apple's best interest for the iTunes Store to sell all of their songs DRM free. This would not hurt the sales of the iPod. As pointed out by Steve Jobs in an open letter, the average iPod only has 3% of its music from the iTunes Store[21]. Thus, the iTunes Store does not really lock customers into using an iPod. However, removing DRM from their songs is easier said than done. While EMI songs are sold DRM free at the iTunes store, the other three of the "Big Four" are purposely not offering their songs DRM free through the iTunes Store in order to help Amazon take over iTunes Store market share[2][3].

However, there may be signs that tensions between Apple and the "Big Four" are lessening. Apple and the labels are in discussion over a future iPod that would cost 100 dollars more, but would come with free access to the entire iTunes library for the lifetime of the device[28]. The record labels have had similar discussions with Nokia who are willing to offer \$80 per handset sold to the record labels for access to their music libraries. So far, Apple has only offered \$20 per iPod sold[28].

In our opinion, this development would be very beneficial for Apple for several reasons. First of all, this extra offering would be very unlikely to cannibalize current iTunes Store song sales since the average iPod user only purchases about 20 songs from the iTunes Store for the lifetime of the device[21]. The user is still likely to want to own these few songs even if they have access to the library. In addition, this kind of deal would be very attractive to consumers, especially considering that an equivalent subscription from Napster costs \$15 dollars a month while the lifetime of an iPod is 2-3 years. Thus, this would dramatically improve iPod sales, driving them to an all time high with the extra price tag making them even more profitable. Furthermore, if another company beats Apple to the punch on this kind of deal, it may cause some customers to switch from the iPod to a different device.

In light of all of this, we think that Apple should meet the record labels half way and offer them \$50 per iPod sold. However, in return, they should require that all of the "Big Four" sell their songs DRM free through the iTunes Store, eliminating

an advantage that song purchases at Napster and AmazonMP3 have over song purchases at the iTunes Store.

### ***Amazon MP3***

Amazon's first step to improving their music store is to realize that it can't be in the same format as the rest of the Amazon.com website. They should make it a coherent whole, much like the iTunes Store. They could do this by transforming the downloading application that you get from their site into an actual music store which is easy to browse and where they sell songs, music videos, TV shows and movies all in one place. Their store should still automatically sync to the iTunes software as it does now.

Their next step should be to use the Amazon website to advertise the music store. They should do this by putting a link to the Amazon music store at the top of the page, with some kind of quote like "Better prices than the iTunes Store". In order to give you an incentive to download their music store application, they should give you 5 free songs of your choice when you download it. Also, any time you search for a CD or a DVD on Amazon.com, in addition to displaying that item in conventional form, it should offer you a link to see the item in the Amazon music store. Finally, they should try to synergize the music store with the rest of the sales made on the website. For example, by buying a textbook on Amazon, you would earn discounts on songs purchased in the music store. In this way, if you have already purchased a textbook from Amazon, you are more likely to buy a song from them than you are to buy one from the iTunes Store. Similarly, if you have the choice of buying a book from them or from some other place, you would be more likely to buy from them in order to get a discount at the music store.

### ***Napster***

Napster faces an uphill battle. Their subscription services are marginalized by the fact that they are not compatible with the iPod. In addition, whenever they

have tried to attract more subscribers through advertising, they have lost more money from the advertising cost than they have gained through the extra subscriptions[24]. Nonetheless, by experimenting with various programs and partnerships, they have managed to improve their bottom line consistently over the last few quarters[27].

One other idea that we suggest for them to try is to develop syncing applications similar to the iTunes software, but for other devices. For example, like most non-iPod devices, the SanDisk portable media players, which are second behind the iPod with an 11% market share[16], can only sync to a computer through generic software, such as the Windows Media Player. However, if Napster can develop a good application which is very specific to the SanDisk devices and provide it for free, most SanDisk users will use that application for syncing rather than the Windows Media Player. Furthermore, Napster could build their store or subscription service into the software just as the iTunes Store is built into the iTunes software. They could develop applications for other devices as well. This would be a one time expense which could provide a lot of advertising. In addition, since they are a software company, this would be in their area of expertise. Furthermore, these types of applications could potentially raise the popularity of the other players which would of course help the Napster subscription plans.

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