



The Effects of Piracy in a University Setting

by [Joseph Nyiri](#)

Introduction

With the recent rise and fall of Napster, the MP3 file format has become a source of ire for numerous corporations nationwide. The MP3 digital audio compression technology enables users to download a complete CD in under an hour via a broadband connection. This nascent technology has built new "doors" that can now be easily opened with a computer and a modem. Users have a great deal of raw computing power available to them, and this power increases year after year. But with this newfound power comes additional responsibilities, as never before have the opportunities for copyright infringement been so rampant.

Why are the entertainment industry, businesses, and universities so passionate about stopping this rash of illegal MP3 downloading? There are two main reasons: album sales and bandwidth. In the November 11th, 2002 edition of the New York Times, a report from Nielsen SoundScan reveals that, "[f]or the first nine months of the year, in-store and online sales combined were down by 13 percent, compared with last year's nine-month period" [13]. In addition, universities and businesses invest enormous sums of money annually to increase or maintain data transmission speeds; excessive downloading of MP3s and other digital files clogs the Internet pipeline and can slow both Internet access and data transmission to a crawl.

MP3s as Intellectual Property

Most of the songs on the Internet found in the MP3 format are protected by intellectual property laws. **Intellectual property**, such as copyrighted or patented work, is protected under numerous federal laws. Without intellectual property protection, it is believed that people's incentive to create would decline, resulting in massive "idea borrowing." Also, everyone would be free to use other people's ideas as they wish, and they would be allowed to financially benefit from these ideas. Intellectual property can be seen as an umbrella under which the concepts of patents and copyrights rest.

Patents basically cover inventions and are not meant to cover artistic expression.

Copyrights, on the other hand, cover artistic expressions. When someone downloads a copyrighted MP3 from the Internet without the proper license, a copyright violation has been committed. In civil court, copyright violation damages for MP3 piracy can be as high as \$150,000 per infraction.

The Internet as the Medium of Piracy

Technically, the unauthorized downloading of an MP3 online is akin to stealing; the holder of the copyright does not receive recompense from the MP3's use. Unlike shoplifting, when stealing via computer, the crime is distributed in two distinct places -- at the perpetrator's computer and at the host computer. The perpetrator never actually sees the "victim" in the traditional sense of the word. Because the perpetrator is often committing crimes over the Internet, evidence is difficult to obtain. Moreover, unless a monitoring program has been installed on a perpetrator's computer, it is difficult to track usage behavior. In addition, because the Internet is so widely available, even if the record industry was able to trace illegal activity back to the original computer, the search may lead to a public terminal at a library and not to a specific person's computer.

Even if record companies know who is downloading illegal files, it is hard to sue "Dr. Death Star 1428" without knowing his or her real identity. Screen names serve as a valuable mask for perpetrators of Internet crimes because the Internet serves as a forum for anonymity. As Hinduja [8] explains, "On an individual level, data communications often take place at high speeds without personal contact, leaving very little time for users to consider the implications of their actions online." A growing sense of depersonalization is thereby ingrained in the MP3 pirate. This occurs not only as a result of the apparent absence of a victim but also as a result of the user

becoming less a member of society and more a member of the online subculture, or community, of MP3 pirates that gathers on the Internet. Also, because of the lack of a tangible social environment, people's inhibitions are reduced. The combination of these factors results in a breeding ground for crime and chaos.

The RIAA

The Recording Industry Association of America (RIAA) is the organization responsible for maintaining the rights of record labels to retain the privilege to market albums for profit. The RIAA, its member record labels, and the record labels' artists are unhappy with the prevalence of piracy. The RIAA, on behalf of its members, fights to stop the piracy of digital music files using what some would call strong-arm tactics.

Although tracking down users who are trading copyrighted files on the Internet can be difficult, one approach is harvesting the IP addresses of suspected users which are cross-referenced with existing records through ISPs. The RIAA has filed subpoenas to obtain the personal information on over 1,500 users suspected of trading these files on services such as KaZaA and Morpheus. The Digital Millennium Copyright Act (DMCA) includes a provision under which "...copyright owners need only get the signature of a district court clerk in order to subpoena Internet service providers for the names and addresses associated with a customer's IP address" [2]. Utilizing information garnered from the subpoenas, lawsuits are filed against the users. Up to October 22nd, 2003, the RIAA has filed 261 lawsuits against users in this manner. They have also sent letters demanding 204 users to settle out of court in the week of October 13th, 2003 in lieu of a lawsuit.

Such tactics have been met with a opposition. Claiming the subpoenas filed by the RIAA violate the rights of its users, the ISPs Charter Communications, Verizon Communications, and Pacific Bell Internet Services have filed motions with the courts to dismiss similar subpoenas each received from the RIAA. In addition, at least two individuals being sued by the RIAA have maintained their innocence. Ross Plank and Sarah Ward have both denied using KaZaA and claim to be caught in the middle of cases of mistaken identity. The case against Ward has since been dropped, but the case against Plank is still pending at the time of writing [2].

One might ask, "Are the tactics of the RIAA working?" The answer is unclear. In a September 19th, 2003 article, the New York Times reported that 36 percent of respondents to a New York Times/CBS News poll believe "file swapping is never

acceptable" [7]. Consequently, approximately 65% respondents view file sharing as acceptable either always or under certain circumstances. Without polling numbers prior to the RIAA lawsuits, it is difficult to analyze these numbers and conclusively say if their tactics are working. It is certain, however, that the majority still feel file sharing is acceptable. Another poll conducted by the Gallup organization found 83% of 517 teens found illegal downloading of music to be morally acceptable [11].

A more accurate representation might be drawn from traffic to the immensely popular KaZaA network. "Since the week ending June 29, traffic to KaZaA has fallen 41 percent to about 3.9 million unique visitors from 6.5 million in the week ending September 21" [11]. However, it is hard to assign the decrease in users to the RIAA. The RIAA did not really intimidate users until they began suing them September 8th. What is needed to reach a more accurate conclusion are day by day numbers beginning a week before the lawsuit announcements and ending a week after. However, even with this data, it cannot be clearly shown that the RIAA is responsible for this decrease.

The Other Side of the Coin

It is easy to place blame solely in the hands of those who commit crimes and agree with the stance of the RIAA. Often, during the sentencing phase of a criminal trial, a judge and/or jury will hear arguments from the defense pertaining to why their client should have some of his guilt shifted to a third party. Although not prosecuted criminally, this is often the case with Internet users who download or share MP3s. Of those who do download MP3s online, most will defend their actions wholeheartedly. In an attempt to shift blame to third parties for their illegal actions, some will deny responsibility for their actions. Although unethical, this practice is not without merit.

The RIAA and its member record companies are not without fault. Prices of CDs have decreased very little since they were picked up by mainstream America in the late '80s, even though CD production costs have plummeted. Home users, through one of several formats, can burn a CD for approximately 10 cents per disc. The RIAA stated that the average cost of a CD was \$12.75 in 1996 [1]. Recently, the world's largest record company, Universal, who employs such artists as Eminem, 50 Cent, and No Doubt, decided to drop its prices from \$18.98 to \$12.98 [6]. That means prices are just slightly higher than they were in 1996. Yet consumers are still not willing to pay that much for CDs when they know production costs are not that high. This price inequity may have been a contributing factor to the decrease in CD sales the United

States has seen in the past three years.

When presented with a less expensive CD, the RIAA may find that the public is much more willing to purchase CDs. Norah Jones had her debut album priced at \$7.98 -- until she won her numerous Grammy awards [6]. This low price helped make her album one of the top sellers of 2002. After the Grammy Awards, however, the price went back up to the normal \$18.98. Such price gouging is exactly what some people are quickly tiring of.

The RIAA claims the general public has been turned off to the concept of paying for music as a result of the increasing popularity of the MP3 in recent years. The debut of several pay to download sites has demonstrated that the RIAA may be wrong. The popularity of such services as the iTunes Music Store, Musicmatch, and Listen.com has shown that people are more than willing to pay for downloadable music. It may be the ability to select 19 good songs at 99 cents each instead of an album by a single artist with 2 or 3 good songs at the same price point that draws consumers to this new business model. The public showed its willingness to adopt the new standard of digital music back when the popularity of the now defunct Napster was at its peak. Unfortunately the music industry is only now starting to catch up. Apple sold 1 million songs during its first week of its iTunes service [4]. The figure has now topped 30 million. Even more remarkably, this service had only been available to Mac users until recently. Apple launched iTunes for Windows on October 16th, 2003 to an amazing market reaction. By the next Monday, the 20th, the site had sold 1 million songs at 99 cents each to Windows users [10]. Also worth noting is the return of Napster. Napster 2.0 launched into an already saturated 99 cent song market on October 28th, 2003, hoping to draw market share with its well-known brand.

The RIAA has been slow in adopting the Internet as a legitimate medium for the distribution of music. With the enormous success of the iTunes Music Store and similar services, the RIAA has finally seen a portion of the Internet's potential. The true potential of the Internet, however, lies in its advertising power. With millions of users connected in cyberspace, word of mouth is a powerful tool. Many artists have embraced this technique and offer MP3s of their songs on their websites. Smaller, unsigned bands have used this to their advantage by gaining a tremendous new market outside of their home towns. As MP3s of the band spread via their web site, file sharing programs, and word of mouth, some bands can attain success by getting air time on the Internet, not the radio.

Record companies have finally begun to embrace the digital revolution started by the first incarnation of Napster. As previously stated, Napster-like services such as KaZaA continue to draw millions of users per day, but the number of users patronizing these services has waned recently. Naturally, the RIAA claims this as a personal victory won by their utilization of scare tactics and lawsuits. There is no doubt that the actions of the RIAA have been a contributing factor, but on the other hand, millions of people have begun paying for their music again, this time online. However, the RIAA will continue its fight against piracy, a fight some say would not have been necessary had the record industry not been so slow in embracing this new business model.

The Impact of Piracy

The monetary losses attributed to piracy by the RIAA are substantial. It is difficult to put a number on the amount of revenue the RIAA's member groups lose as a result of online piracy. Falling CD sales are not enough to enumerate these losses. Users who download music online may simply be experimenting with different musical styles or artists. These people may not necessarily have purchased the albums that the songs they downloaded came from. As a result, these figures cannot be attributed to lost revenues. However, the RIAA still maintains that millions of dollars are lost annually to online piracy.

Piracy also causes indirect harm to consumers. The majority of pirated recordings are from the most popular artists. This is great for the music pirate; the most popular music is also the most easily attainable. However, these items dominate a label's income, as these are the albums people are most likely to buy. These losses have to be recovered somehow, so they are rolled into the price of albums. Unfortunately, the people who bear the brunt of this solution are the legitimate consumers. These are often the people who never download albums and depend on their local record stores or radio stations for music. Every law-abiding member of society who goes to the store ends up having to pay the increased price for a legitimate copy of their favorite artist's album.

In addition, piracy causes non-monetary effects by stifling creative efforts. When artists don't see their expected royalties coming in, they get frustrated and may attribute this loss of revenue to piracy. According to the RIAA, 85% of all recording that are released never make enough revenue to cover their costs. So for these 85% of artists, this piracy hurts even more [12]. This could cause some artists to "throw in the towel" because they are making little to no money in their chosen occupation.

National universities and businesses also feel the harmful effects of piracy. The threat of litigation from the RIAA or a law enforcement agency is a very real danger posed to both groups by students and workers committing piracy. The legal fees that result from fighting litigation can become astronomically costly. Negative publicity raised by accusations is also extremely detrimental, as negative publicity can often be worse than a financial reprimand.

The University Standpoint

The RIAA has relentlessly targeted schools across the country. As a result, MP3 piracy is a topic that has come under fire at national universities more than elsewhere. The high-bandwidth Internet connections that universities provide are typically seen as being warranted only for legitimate uses, not only by students, but also for faculty research, communication, and collaboration. Faculty research attempts slow dramatically when bandwidth is being harnessed by illegal, non-educational, student activity. The cost of universities to upgrade their Internet lines as a result of increased student use is high. Universities see the Internet as a new method of learning, not as a new distraction for students to amuse themselves with, and they cannot justify paying for students to use it for such tangential and illegal activity.

Piracy is a large problem at national universities. If nothing is done about this problem, universities may find it difficult to escape the repercussions of piracy. There are a variety of actions that can be taken to combat illegitimate bandwidth use. One method universities use is called packet monitoring, a form of bandwidth monitoring. One such system, *PacketShaper*, is developed by Packeteer. **Packet monitors** enable organizations to discover and classify applications, analyze their performance, and then enforce policy-based bandwidth allocation based on their user-defined importance [9]. The University of Florida has unveiled a new open-source solution known as Integrated Computer Application for Recognizing User Services (Icarus). *Icarus* is a software-based program developed by on-campus programmers that is similar to PacketShaper. "Icarus automatically sends an e-mail and an immediate pop-up warning and disconnects the student from the network. The first violation disables network access for 30 minutes; the second cuts off access for five days. Third-time offenders are subject to the school's judicial process, and their network access is cut off indefinitely" [3]. Initial results have been extremely promising, as bandwidth use dropped a massive 85% since initial deployment [3]. It is also important to remember that faculty, not just students, can engage in illegal downloading habits. Unfortunately,

most schools do not publicly acknowledge this fact.

Another method employed by some universities is called **port restricting**. Port restricting controls bandwidth usage by stopping (blocking) or restricting (capping) the use of certain ports. These measures can cripple certain programs and reduce bandwidth usage substantially by either not allowing users to connect to the Internet or severely slowing down their access. Typically, Information Technology (IT), Information Systems (IS), or the equivalent department, can identify the most common port numbers being used by these programs that are taking up all the bandwidth, and they restrict these ports on a reactive basis.

Unfortunately, both packet monitoring and port restricting are inherently flawed. Much of the traffic the university is blocking could be legitimate, such as the exchange of students' personally created, legal files. In the case of Icarus, hosting computer games over the LAN is no longer permitted. In addition, neither of these systems can determine whether the data being transmitted is copy-protected. Even with the most advanced system, this is one sticking point that may never be overcome. Another problem is that students typically become angry about the speed of the Internet for their entertainment needs when such restrictions are employed, and the use of restrictions can actually exacerbate more problems than it fixes. The most common gripe is that students are paying to use the Internet in one way or another so they believe they should have unrestricted access to it [5]. Students who are dedicated to downloading MP3s will find some way around imposed restrictions, move off campus, or transfer to a different school just to satisfy their need to use the Internet the way they want to.

Another way to stop students from downloading copyrighted files is to prevent them from desiring to download these files in the first place. Education is a method some universities have utilized to attain this goal. When it comes to issues pertaining to intellectual property, some students do not even know that downloading MP3s is (usually) illegal. College students are an especially difficult group to work with because they are not used to being under the more restrictive rules that most universities place on Internet use. As a result, new students have a hard time adapting to these new rules and will just continue to engage in the same downloading habits they practiced at home.

The system most universities have undertaken is one of many forms of passive

education. In passive education, schools expect students to learn about intellectual property issues on their own. This can be accomplished through posters hung on the walls, a clause in the student handbook, pamphlets handed out when registering your computer, disclaimers that must be agreed to when using the Internet, etc. The problem with passive education is that it is usually not very effective. Many students will not even read disclaimers, regardless of where they are - mindlessly clicking "agree" to computer-based disclaimers, laughing at posters on the walls, tossing out distributed pamphlets, and not even knowing about that clause in the student handbook.

The overwhelming majority of students will never receive any formal education on intellectual property unless they take a law class that deals specifically with this topic. As a result, some universities have employed systems of active education. In active education, students are directly told what is and what is not acceptable usage of the Internet. Many universities have some sort of a mandatory class for all new students, and this is an excellent forum for in-class education, a method of active education. If a presentation about digital piracy, its costs, effects, etc. was given in one class session, positive effects may soon surface. The Icarus system described above is also a system of active education because the student is "forced" to understand the rules of Internet usage.

A sanction system is another method of active education. Possible sanctions, or punishments, could include progressively increasing periods of Internet suspension. Although harsh, it is indeed one way for students to understand the policies surrounding Internet use. Sanctions are important for universities to impose so that students will understand that these places of higher learning do not tolerate intellectual property violations. If sanctions are not imposed, it may tell students that the university doesn't care, silently endorses, or condones this behavior [8].

Conclusion

As file sharing becomes more prevalent, the distinction between good and bad becomes easily blurred. Many students in national universities have a loose, inaccurate interpretation of piracy, which has caused university officials a variety of problems. The easiest solution is to ignore the problem, but clearly, not taking proactive decisions to curb the problem will only result in a bigger one.

As piracy continues to flourish, computer users across America have the opportunity to

listen to music from some of the all-time greats. The only problem is that these wonderful artists never see any profit from these MP3s. Sooner or later, if this trend continues, piracy could become so mainstream that even the big-name artists will be unable to support themselves through album sales. Can digital piracy be stopped, or is it too late? The RIAA may have taken the wrong stance on the MP3 issue, giving more publicity to popular services such as Napster and KaZaA. With the overwhelming success of legal services such as iTunes and Musicmatch, hopefully the RIAA will see the mistake they have made. It has taken the RIAA too long to embrace this new music distribution format, one that the public has been gravitating toward for more than half a decade.

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Biography

Joseph Nyiri (j_nyiri@yahoo.com) recently graduated summa cum laude from Niagara University with a Bachelor's degree in Criminology. He is the author of the recently completed honors thesis "Neutralization Theory and MP3 Piracy on the Campus of Niagara University." Dr. Timothy Ireland, Dr. Suzanne Wagner, and Joe are continuing research on the topic of neutralization theory at Niagara University. He plans to study Computer Crime Investigation in graduate school in the fall of 2004.