Dealing with Casual Piracy: Limiting Distribution of Copyrighted Content with Digital Rights Management

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Welcome to the Social
- Microsoft tagline for the Zune digital music player

Sharing music among friends and family is not only an important cultural tradition,¹ but, from the content provider’s point of

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view, it is also an increasingly effective form of marketing. Recorded music enjoys legal protection in the form of intellectual property, specifically copyright law. As a property right, copyright enables the holder to control a wide range of uses that do not fall into “fair use.” The legal uncertainty of sharing digital music among friends and family generally would not draw the attention of copyright holders, but the widespread sharing of digital music either over networks or through high capacity portable music players threatens the economic viability of the music industry.

The use of digital restrictions to control downstream distribution of music theoretically clears up the hazy line between private use and piracy. Content providers, software developers and technology suppliers may negotiate appropriate transfer limitations to protect content providers’ interests. The protection of copyright through technological measures is commonly known as Digital Rights Management, or simply DRM. Such protections have been employed by content providers and technology companies. In practice however, managing copyright with DRM interferes with consumer interests in a manner that undermines the perceived legitimacy of copyright law that is necessary for voluntary compliance.

This article argues that it is possible to implement DRM schemes without eroding the public’s trust by offering consumers a choice between technologically-restricted and unrestricted content. Part I discusses how DRM have harmed voluntary compliance with the law. Part II examines the biggest copyright governance issue confronting peer-to-peer networks: casual piracy. Part III explains how a bifurcated licensing scheme can allow content providers to benefit from DRM without incurring its usual costs. Note that some

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6. See infra Part II.A.
7. This article does not address massive copyright infringement (high-volume bootlegging or use of Darknets) because such criminal activity is, in the author’s opinion, better enforced by federal authorities. Darknets are private networks of trusted users, often associated with the sharing of copyrighted material. Material initially distributed through Darknets often winds up on open file sharing networks. See generally J.D. LASICA, DARKNET: HOLLYWOOD’S WAR AGAINST THE DIGITAL GENERATION (2005). This article is directed at sharing songs digitally with personal contacts. This issue is discussed more fully infra in Part II.
8. See infra Part I.
9. See id.
10. See infra Part I.D.
music distributors and labels have begun to adopt this licensing structure.\footnote{Music label EMI has announced that it will offer music both with and without DRM, available on Apple iTunes. EMI's DRM-free singles will cost more than the DRM counterpart. Full albums will be sold without DRM. Press Release, EMI, EMI Music Launches DRM-free Superior Sound Quality Downloads Across its Entire Digital Repertoire (Apr. 2, 2007), available at \url{http://www.emigroup.com/Press/2007/press18.htm}.}

I. PREVIOUS DRM IMPLEMENTATIONS

The music industry’s previous attempts to use DRM have not been effective.\footnote{See infra Part I.A, I.B.} Instead, DRM has exposed the industry to bad publicity and lost the trust of some consumers.\footnote{See infra Part I.C.}

A. The Microsoft Zune

In the fall of 2006, Microsoft unveiled its portable digital music device, the Zune.\footnote{Press Release, Microsoft, Microsoft Zune Delivers Connected Music and Entertainment Experience (Sept. 14, 2006), available at \url{http://www.microsoft.com/presspass/press/2006/sep06/09-14ZuneUnveilingPR.mspx}.} Like the industry-dominating Apple iPod,\footnote{Jenna Wolf, Hear Today, Gone Tomorrow, BOSTON HERALD, Apr. 9, 2006, at Edge, 7 (“Apple has sold more than 42 million iPods since they went on sale in 2001, making it the most popular portable MP3 player.”).} the Zune features the ability to play libraries of music, but, in addition, the Zune allows users to transmit songs wirelessly to other Zune owners.\footnote{Press Release, Microsoft, \textit{supra} note 14.} To protect against wholesale copying, Microsoft employs a DRM scheme that causes transferred songs to “expire” after either three plays or three days, whichever comes first.\footnote{Id.} Despite innovative advertising of Zune, critics were unimpressed\footnote{See posting of Dwight Silverman to Houston Chronicle Tech Blog, \url{http://blogs.chron.com/techblog/archives/2006/11/here_a_zune_the_1.html} (Nov. 12, 2006, 09:59 EST) (rounding up reviews of the Zune and describing critical response as “[m]ixed, and shall we say, \textit{not altogether kind}”).} and its initial sales were unremarkable.\footnote{See Ina Fried, Study: Zune Fails to Crack Top 10 in Sales, CNET NEWS.COM, Jan. 4, 2006, \url{http://news.com.com/Study+Zune+fails+to+crack+top+10+in+sales/2100-1041_3-6147422.html}.} For example, \textit{New York Times} technology writer David Pogue described the Zune as “a killer idea diluted by a ham-handed execution.”\footnote{David Pogue, \textit{Brilliant Ideas That Found a Welcome}, N.Y. TIMES, Dec. 28, 2006, at C1.}
B. The Sony BMG Rootkit

Microsoft should have expected bad press from overly restrictive DRM, especially because, just one year earlier, music label Sony BMG experienced even worse press regarding copy protection found on some of its compact discs. In 2005, Sony BMG released several records encrypted with computer code that prevented consumers from making excessive copies of purchased records. The DRM raised little if any notice until computer analyst Mark Russinovich noted oddities in his computer’s functioning. Upon some investigation, he discovered that one of his recently purchased compact discs “hid” a computer program onto his operating system. Van Zant’s album “Get Right with the Man” had secretly planted a “rootkit” onto his computer. A rootkit is a “set of tools designed to conceal running processes.” He wrote a blog entry describing how he discovered the rootkit, and within hours hundreds of viewers had visited his site.

Before long, the mainstream media caught wind of the story, bringing the words “DRM” and “rootkit” into pop culture. The assumption was that this was a terrible public relations fiasco that

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23. Id.
24. VAN ZANT, GET RIGHT WITH THE MAN (Sony Records 2005).
25. Russinovich, supra note 22.
26. Wikipedia.org, Rootkit, http://en.wikipedia.org/wiki/Rootkit (last visited Feb. 26, 2007). Rootkits are most often associated with hackers because they run without a user’s knowledge. Id. For DRM purposes, the reason for concealing the process is to prevent the user from shutting down the program that prevents copying. Id. Russinovich showed that by merely prefixing “$sys$” to a program file name, the program could be run without the user’s knowledge. Russinovich, supra note 22.
27. See Russinovich, supra note 22. Digg.com and Slashdot.org had links to Russinovich’s blog entry the same day it was posted. See posting of ScuttleMonkey to Slashdot, http://it.slashdot.org/article.pl?sid=05/10/31/2016223 (Oct. 31, 2005, 19:04); posting of Burnsey to Digg, Sony, Rootkits and Digital Rights Management Gone Too Far, http://www.digg.com/security/Sony_Rootkits_and_Digital_Rights_Management_Gone_Too_Far (Oct. 31, 2005). The tech-savvy audiences of Digg and Slashdot were enraged: calls to boycott Sony and threats of class-action lawsuits were not uncommon. See, e.g., posting of Indytx (825419) to Slashdot, http://it.slashdot.org/comments.pl?id=166915&threshold=1&commentsort=0&mode=thread&cid=13922517 (Nov. 1, 2005, 08:45).
would cost Sony and its artists dearly. According to market tracker Nielsen SoundScan, however, the discs with DRM suffered little if any decline when “compared with other medium selling titles at similar points in their release cycles.” Moreover, sales of the Van Zant album, the album most commonly associated with the rootkit, actually increased.

C. Effects on Marketing and Promotion

If DRM does not necessarily result in lower sales, why should the music industry be concerned with the issue? For artists, the problem with DRM is that it limits the use of their music. As Damian Kulash, singer in the band OK Go, describes the problem: “A record that you can’t transfer to your iPod is a record you’re less likely to listen to, less likely to get obsessed with and less likely to tell your friends about.” OK Go’s label, EMI, wanted to test DRM software on the band’s album because its audience is comprised of primarily college students. College students are more likely to trade rather than buy albums, so DRM-protected albums presumably would result in higher sales. Kulash, however, sees limited trading as necessary to gain exposure and buzz, and thus disapproves of DRM. Other bands, recognizing the danger of limiting use of their music, have told their fans how to get around DRM protection in order to load

31. Id. Cf. Angela Pacienza, Copy-Protected CDs Turning Music Fans Off Record Buying: Retailers, CANADA.COM, Nov. 20, 2005, http://www.canada.com/national/nationalpost/news/story.html?id=9682a973-f0e4-4610-819f-f96bf087ec43&p=1 (“It’s becoming a regular occurrence in CD shops across the country: an irate customer comes in complaining the CD they bought won’t play on their computer, and worse yet, they can’t transfer the tunes to their iPod.”).
33. Id. (noting that college students usually have access to high-bandwidth connections that facilitate digital music sharing).
34. Id.
35. Id.
songs on iPods. While Kulash may have a precise opinion on DRM, however, most artists do not even know what DRM means.

D. Interference with Consumer Interests

When consumers purchase music, there is an expectation that the purchase entitles the consumer to a set of legal rights. Property rights have significant rhetorical power in American political discourse; a lack of respect for property rights leads to distrust of the legal apparatus, which in turn reduces voluntary compliance with the law. If there is a lesson to be learned from the Sony BMG rootkit incident, “it should be that people want their demands for respect and autonomy to be taken more seriously.” This is a challenge, because DRM should stop non-fair use copyright infringement and simultaneously grant enough room for legitimate users to use the content without undue hindrances. It is unclear whether such a balance is even possible, however, with the uniform application of DRM.

II. CASUAL PIRACY OR PRIVATE SHARING

Some content providers view DRM as necessary to protect the future viability of the music industry. The Sony BMG rootkit incident did not change the attitude of Recording Industry Association
of America ("RIAA") President Cary Sherman. He expressed no hesitation about the implementation of DRM in music recordings. Compared with other copyright-dependent industries, he said that the music industry's DRM schemes were not overly restrictive. He recognized that the next major legal issue to face the industry would be from private sharing—what many call "casual piracy." In an August 2005 presentation to the RIAA, CEO Mitch Bainwol displayed a slide saying: "Key point: Burning and ripping are becoming a greater threat than [Peer-to-Peer networks]." Even with legal victories against peer-to-peer ("P2P") file sharing sites, consumers can still use legitimate means to share music illegitimately. For example, twenty-eight percent of Internet users have used email or instant messaging to send or receive media files. Growth of the digital music marketplace will mean a corresponding increase in such sharing.

A. Legal Uncertainty

The legal status of locally sharing legitimately purchased music is unclear. There is a law that provides immunity for non-

44. Id. ("There is nothing unusual about technology being used to protect intellectual property. You can't simply make an extra copy of a Microsoft operating system, or virtually any other commercially-released software program for that matter. Same with videogames. Movies, too, are protected. Why should CDs be any different?").
45. Id. ("How many burns are you allowed of a movie? None. How many of a videogame? None. You get the idea. Even the CDs with content protection allow consumers to burn 3 copies or so for personal use. The idea is not to inhibit personal use, but to discourage (not prevent, you can never prevent) copying well beyond personal use.").
46. Id.; see also Zeller, supra note 37 ("After years of battling users of free peer-to-peer file-sharing networks (and the software companies that support them), the recording industry now identifies 'casual piracy'—the simple copying and sharing of CD's with friends—as the biggest threat to its bottom line.").
47. Id.
50. Compare Electronic Frontier Foundation, Prelude to a Fake Complaint, http://www.eff.org/IP/Apple_Complaint.txt (last visited Mar. 27, 2007) (stating that "all the major record labels still believe that private sharing of songs from your CDs with friends is copyright infringement") with FAQ, RIAA Website, http://www.riaa.com/news/newsletter/062503_b.asp (last visited Mar. 27, 2007) (responding to the question of whether consumers have the right to make copies from their own CDs: "It depends on the circumstances. Certainly, consumers may be able to make a limited number of copies for their own personal use.").
commercial copying of music, but it does not apply to digital music. Given the fact that there is no statute specifically governing noncommercial copying of MP3s, it could constitute fair use, which is an affirmative defense to copyright infringement. However, in 2005, the Seventh Circuit rejected the argument that a file sharer’s use of a P2P network to share thirty songs constituted fair use. The logic behind such a holding was based upon the principle that copyright holders should be able to broadly control downstream duplications of their copyrighted material. The bottom line is that the law favors the copyright holder with respect to sharing.

Arguments that “sharing” benefits the music industry in the form of higher profits rest on the assumption that copyright is a liability rule, where infringement triggers a penalty. Given that copyright is generally regarded as a property right, these arguments have been afforded little weight in court. Non-fair use of copyrighted works requires ex ante negotiation, and the copyright holder can deny use at her sole discretion.

B. Interaction of Legal and Digital Control of Copyright

What should the music industry do to address casual piracy? Despite technical legal uncertainty, the law generally favors the copyright holder. The real issue for the industry is how to use social

51. See The Home Audio Recording Act, 17 U.S.C. § 1008 (2000) (creating immunity from direct infringement “on the noncommercial use by a consumer of such a device or medium for making digital musical recordings or analog musical recordings.”). Giving a friend a record to rip onto MP3 or sharing an MP3 should be mere non-commercial use and therefore immune.
52. A&M Records v. Napster, Inc., 239 F.3d 1004 (9th Cir. 2001) (affirming the district court ruling that the Home Audio Recording Act did not apply to MP3s).
54. BMG Music v. Gonzalez, 430 F.3d 888 (7th Cir. 2005).
55. UMG Recordings, Inc. v. MP3.com, Inc., No. 00 Civ. 472 JSR, 2000 U.S. Dist. LEXIS 13293 (S.D.N.Y. Sept. 6, 2000). MP3.com allowed subscribers to access music over the Internet. Id. at *2. Subscribers could only listen to legitimately purchased albums. Id. Subscribers proved ownership of albums with a verification service. Id. The plaintiffs won on the theory that “defendant [was] re-playing for the subscribers converted versions of the recordings it [had] copied, without authorization, from plaintiffs’ copyrighted CDs.” Id. at *3.
57. UMG Recordings, 2000 U.S. Dist. LEXIS 13293, at *11 (“Copyright, however, is not designed to afford consumer protection or convenience but, rather, to protect the copyright holders’ property interests.”)
58. See In re Aimster Copyright Litigation, 334 F.3d 643 (7th Cir. 2003).
59. See supra Part II.A.
norms and technological restrictions to protect its interests. People voluntarily comply with laws to the extent they are perceived as fair. Technological restrictions have the inevitable side effect of interfering with legitimate uses of music, which in turn triggers a perception of unfairness and decreases voluntary compliance. Arguments to wholly abandon such restrictions are unpersuasive because they completely ignore the interests of copyright holders.

III. BIFURCATED LICENSING

The solution for sharing should not be addressed at the downstream level, but rather at the initial sale of the music. The purchase of music, like any other copyrighted work, is really about the sale of a license. The purchaser of a compact disc is not granted unlimited rights to use the contents as he pleases, as full copyright ownership is not transferred to the purchaser. As such, the extent of the purchaser’s rights should be reflected in the price. An album with technological restrictions, therefore, would cost less than an unrestricted album. The practical consequence of such a policy is that prices for unrestricted media would rise, the prices for restricted media would decrease, or some combination of the two would happen. The increased cost absorbs any incidental private copying, however, which addresses the concern of casual piracy. Licensing both restricted and unrestricted versions of music can be termed “bifurcated licensing.”

A. Implementation

Bifurcated licensing is not intended to act as a form of price discrimination that distinguishes buyers based on their ability to pay (or the utility gained from their purchase). Instead, it is a market-based mechanism whereby purchasers can choose the extent of copyright laws applicable to their specific purchase. An ordinary user can opt for technologically restricted content, which makes sense for the user who plans to play the music in a limited fashion, such as on only one computer and one associated MP3 player. The user’s limited

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use could be controlled by content providers in the digital restriction scheme.

The technologically sophisticated user, on the other hand, can opt for more expensive unrestricted content. Such users often have several computers and multiple devices with which to play music. Content providers can treat such purchases like the sale of unrestricted music today, but exercise leniency with respect to private sharing. Copyright holders can enjoy the marketing benefits of sharing with bifurcated licensing. While some unauthorized copying will occur, these losses can be offset with the higher cost associated with unrestricted music.

B. Lessons from the DVD

To see how a bifurcated licensing scheme could help when it comes to the distribution of digital media, consider the case of DVDs encrypted with the DRM known as Content Scramble System, or CSS. Copyright holders can enforce their encryption efforts through the Digital Millennium Copyright Act (DMCA). CSS led to litigation involving individuals who posted the computer code to break open CSS. Once an encryption mechanism is broken and there is a need to break that encryption, there is no effective legal remedy for the content provider. With CSS, there was a need for users of the computer operating system Linux to circumvent encryption because they could not view legally purchased DVDs on their computers. The movie industry recognized the danger of broken encryption, because it would not only allow Linux users to view DVDs but also allow other users to access DVD content on any computer system. What started out as a technical necessity evolved into a mechanism to allow a broad array of unauthorized uses. The music industry should learn from the experience of the movie industry and create a digital format that is

63. As a viable alternative, the unrestricted version could apply a license that permits broad reproduction and distribution. A Creative Commons license could allow for greater exposure for up-and-coming bands. See generally Creative Commons, http://creativecommons.org (last visited Mar. 27, 2007).
64. See Universal City Studios, Inc. v. Corley, 273 F.3d 429, 436-37 (2d Cir. 2001).
65. Digital Millennium Copyright Act: Circumvention of Copyright Protection Systems, 17 U.S.C § 1201 (2000); see also id. §§ 1203, 1204.
66. Corley, 273 F.3d at 435.
67. Although Corley lost his case, the code to decrypt DVDs (deCSS) is widely available via Google or any major search engine. See Google Search for “DECSS,” http://www.google.com/search?hl=en&q=decss (last visited Mar. 27, 2007).
68. Corley, 273 F.3d at 437.
69. Id. at 438.
actually user friendly, which would help to avert litigation against consumers.

A bifurcated licensing scheme can help to reduce litigation because allowing consumers to choose between unrestricted and restricted content destroys the need for illegal decryption in the first place. A person would have no motivation to either break the encryption or encourage others to break the encryption when the far simpler way to get an unrestricted copy is to simply spend a few extra bucks. Preventing consumers from decrypting and disseminating decryption code in the end will only protect the integrity of the encryption.

The choice offered in a bifurcated licensing scheme allows the ordinary consumer (who purchases cheaper, restricted content) to play songs in accordance with protection schemes that have been approved by the content providers themselves. Technologically demanding consumers, on the other hand, can purchase unrestricted content for a premium. This defeats the efforts of hackers who seek to break copy protection schemes. If consumers can opt for an unrestricted version of an album, there is no sympathy for the cheapskate who wishes to break restrictions.

C. Common Objections

The most salient concern regarding the sale of unrestricted music is backflow: what stops the unrestricted content from being widely distributed among non-purchasers? This concern fails to acknowledge that the vast majority of digital music is already unrestricted.\(^70\) Any approach to address backflow must be both practical and feasible. Bifurcated licensing allows content providers to recoup the costs of inevitable sharing and copying from the higher price tag associate with unrestricted music, while at the same time dictating the terms of sharing and copying for the majority of users. This licensing scheme gives control back to the copyright holders while being realistic about perfect enforcement. Furthermore, the scheme empowers consumers by giving them a choice, which should lead to increased voluntary compliance because of the perceived fairness of the market.

One downside to a bifurcated licensing scheme is that it would break the uniform pricing of music. This creates the problem that

\(^70\) Steve Jobs, Thoughts on Music (Feb. 6, 2007), http://www.apple.com/hotnews/thoughtsonmusic (Apple research found that 97% of the music loaded onto Apple digital music players is unrestricted).
people might misperceive higher priced music as better.\textsuperscript{71} There are, however, existing mechanisms to correct for such misperceptions. Music critics provide opinions as to what music the (presumably knowledgeable or at least reputable) critic deems noteworthy. Furthermore, this enhances the importance and prestige of industry-sponsored award shows because such awards provide powerful signaling cues to what music is “good.” The need to determine what music to purchase further strengthens the value of online discussion sites as consumers seek the opinions of like-minded peers. In all, these activities will more deeply engage music listeners and promote the long-term stability of the music industry.

IV. CONCLUSION

Offering both restricted and unrestricted content at appropriate prices is imperative for the music industry. There are already trends moving in this direction.\textsuperscript{72} The music industry should embrace bifurcated licensing and implement the pricing scheme on its own terms. This scheme preserves the primacy of the copyright holder. Waiting too long to recognize the importance of offering consumers a choice could result in a cultural shift detrimental to the interests of copyright holders, as seen with video sharing sites.\textsuperscript{73} Offering a choice benefits both the industry and the consumer.

\textsuperscript{71} Gretchen B. Chapman & Eric J. Johnson, Incorporating the Irrelevant: Anchors in Judgments of Belief and Value, in \textit{HEURISTICS AND BIASES: THE PSYCHOLOGY OF INTUITIVE JUDGMENT} 120 (Thomas Gilovich et al., eds. 2002). Heuristics are mental shortcuts that people use to make judgments with imperfect information. \textit{Id.} These mental shortcuts have the side effect of creating biases, such as perception that more expensive products are superior to cheaper ones. \textit{Id.}

\textsuperscript{72} See, e.g., eMusic, \texttt{www.emusic.com} (last visited Mar. 27, 2007) (offering unrestricted MP3s for a lower price than Apple iTunes).

\textsuperscript{73} The term “tolerated use” was coined by Professor Tim Wu when describing the legal landscape of video sharing site YouTube.com. \textit{See} Tim Wu, \textit{Does YouTube Really Have Legal Problems?}, \texttt{SLATE.COM.}, Oct. 26, 2006, \texttt{http://slate.com/id/2152264} (“[M]uch of the copyrighted material on YouTube is in a legal category that is new to our age. It’s not ‘fair use,’ the famous right to use works despite technical infringement, for reasons of public policy. Instead, it’s in the growing category of ‘tolerated use’—use that is technically illegal, but tolerated by the owner because he wants the publicity.”).