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WRITING THE WRONG: WHAT THE E-BOOK INDUSTRY CAN LEARN FROM DIGITAL MUSIC'S MISTAKES WITH DRM

Priti Trivedi*

INTRODUCTION

In January of 2010 Apple announced the launch of the iPad, a tablet personal computer with Internet, email, and digital media capability.¹ Many of the iPad's features were already available on other Apple devices such as the iPhone and iPod Touch.² One feature was unique: the iPad doubles as a handheld electronic book reader ("e-reader").³ This marks Apple's first foray into the growing market for electronically published books ("e-books") and e-readers, a market that includes Amazon's Kindle device, Sony's line of Readers, and the Barnes & Noble Nook.⁴ Some commentators were disappointed to learn that Apple is using digital rights management ("DRM") technology

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¹ See Brian Heater, Apple Launches iPad Tablet, iBook Bookstore, PCMAG, Jan. 27, 2010, http://www.pcmag.com/article2/0,2817,2358480, 00.asp.

² See Ben Patterson, *The iPad Arrives, and It's Basically a Big iPhone*, YAHOO! TECH, Jan. 27, 2010, http://tech.yahoo.com/blogs/patterson/64350.

³ See Heater, supra note 1.

⁴ See Staci D. Kramer, *How Do E-Readers Stack Up With iPad In The Mix? Use Our Chart As A Guide*, PAIDCONTENT, Jan. 29, 2010, http://paidcontent.org/article/419-how-do-e-readers-stack-up-with-ipad-in-the-mix-use-our-chart-as-a-guide/.

to encrypt e-books bought through the iBook store,⁵ especially since Apple announced last year that it would sell DRM-free music through its iTunes store.⁶ This is at least in part due to the fact that some book publishers insist on DRM encryptions in order to discourage copyright infringement.⁷ Best-selling authors may face the biggest risk from the technological advances that make copyright infringement easier on the Internet than it was with tangible goods.⁸

Yet technological advances that increase the speed or efficiency of copying printed material have affected the publishing industry since Johannes Gutenberg's invention of the movable type printing press in the middle of the fifteenth century.⁹ Machine printing led to lower prices and an increase in the supply of books and ease of access to literature, scholarly works, and religious texts.¹⁰ However, the larger audience and relative ease of dissemination also heightened the need for copyright protection.¹¹ "Printing forced legal definition of what

⁵ See Alex Pham, Apple to Wrap Digital Books in FairPlay Copy Protection, L.A. TIMES, Feb. 15, 2010, available at http://latimesblogs. latimes.com/technology/2010/02/apple-ibooks-drm-fairplay.html.

⁶ See Changes Coming to the iTunes Store, http://www.apple.com/ pr/library/2009/01/06itunes.html (last visited Jan. 6, 2009).

⁷ See Joshua Benton, Amazon Gives Publishers Easier Control Over DRM in Kindle ebooks, NIEMAN JOURNALISM LAB, Jan. 21, 2010, http://www.niemanlab.org/2010/01/amazon-quietly-lets-publishers-remove-drm-from-kindle-ebooks/ ("Many book publishers . . . have been hesitant to offer their works digitally without DRM, fearing . . . a free supply of all books available for download via file-sharing networks.").

⁸ "I'd be really worried if I were Stephen King or James Patterson or a really big bestseller that when their books become completely digitized, how easy it's going to be to pirate them," said novelist and poet Sherman Alexie. Matt Frisch, *Digital Piracy Hits the E-Book Industry*, CNN, Jan. 1, 2010, http://edition.cnn.com/2010/TECH/01/01/ebook.piracy/index.html.

⁹ See Elizabeth L. Eisenstein, The Printing Revolution in Early Modern Europe 84 (Cambridge Univ. Press 1983).

¹⁰ *Id*.

¹¹ Id. See generally Mark G. Tratos, Entertainment on the Internet: The Evolution of Entertainment Production, Distribution, Ownership, and Control in the Digital Age, 930 PRACTICING L. INST. 259 (2008) (discussing recent copyright litigation and legislation as applied to digitized content).

belongs in the public domain . . . The terms 'plagiarism' and 'copyright' did not exist for the minstrel. It was only after printing that they began to hold significance for the author."¹²

Today, copyright law continues to provide legal definitions and protections for authors.¹³ American law recognizes the value of allowing an author certain measures of control over how and when her work is published, copied, or used.¹⁴ These rights are designed to incentivize authors to create new works¹⁵ and provide valuable protection against infringement, since copyright infringers can be held liable for their actions.¹⁶

Like the invention of the printing press, the Internet drastically changed the way that media content can be copied and disseminated.¹⁷ Consequently, copyright law faces new challenges in a territory ill-suited for conventional protection.¹⁸

¹² ELIZABETH L. EISENSTEIN, THE PRINTING PRESS AS AN AGENT OF CHANGE: COMMUNICATION AND CULTURAL TRANSFORMATIONS IN EARLY MODERN EUROPE 120–21 (Cambridge Univ. Press 1979) (discussing how authors began to want and ask for control over their work, particularly over copying and dissemination).

¹³ See Digital Millennium Copyright Act, 17 U.S.C. § 101 (1998). "Author" denotes the person, persons, or institution that created the work, whether it is in print or not. *Id*.

¹⁴ See 17 U.S.C. § 106. Subject to certain exemptions, authors have exclusive rights of reproduction, distribution, performance, and preparation of derivate works. *Id.*

¹⁵ Promoting the progress of science and the useful arts is the constitutionally stated goal of copyright law. *See* U.S. CONST. art. 1, § 8, cl. 8.

¹⁶ See 17 U.S.C. § 501.

¹⁷ See United States v. Am. Soc'y of Composers, Authors, and Publishers, 559 F. Supp. 2d 332, 334–35 (S.D.N.Y. 2008) ("[T]he Internet has grown from its relatively obscure roots to become a major information and entertainment medium that rivals television and radio. It has transformed our culture in innumerable ways, changing how we shop, how we watch television and movies, and how we listen to music.").

¹⁸ See JESSICA LITMAN, DIGITAL COPYRIGHT 30 (Prometheus Books 2001) (describing the "threat and promise" of the Internet); see also Random House v. Rosetta Books LLC (150 F. Supp. 2d 613) (struggling with the extension of the traditional copyright and royalty scheme into Internet publishing).

Between the Kindle, the Nook, the Reader, the iPad, and a myriad of applications for other mobile devices, millions of people have access to published works on any topic in mere moments, and are able to carry a library of hundreds of volumes in a small, portable object.¹⁹

Now is a critical time for the electronic trade publishing industry. The market for e-books and e-book readers has blossomed in the last two years,²⁰ and the rate of e-book piracy is similarly rising.²¹ Amazon's Kindle, which once dominated the market as the "iPod of e-books,"²² now has stiff competition. The e-book reader market has grown to include Sony (which launched two new readers in 2009),²³ Microsoft, which does not use a dedicated device,²⁴ the Barnes & Noble Nook,²⁵ and Apple itself.²⁶ Amazon, Microsoft, Sony, and Apple currently use licensing models and protect files with DRM.²⁷ However, the ebook industry has the opportunity to learn from the successes and failures of the online music industry and take a proactive approach to using current technology in a way that balances the

¹⁹ For more detailed information about these devices see *infra* note 174 and accompanying text.

²⁰ See International Digital Publishing Forum, Wholesale eBook Sales Statistics, *available at* http://www.idpf.org/doc_library/industrystats.htm (last visited Nov. 30, 2009).

²¹ See Andrew Savikas, Ebook Piracy is Up Because Ebook Demand is Up, O'REILLY TOOLS OF CHANGE FOR PUBLISHING, May 12, 2009, http://toc. oreilly.com/2009/05/ebook-piracy-is-up-because-ebo.html.

²² Christopher Null, *Amazon's Kindle: The iPod of E-Books?*, YAHOO! TECH, Nov. 19, 2007, http://tech.yahoo.com/blogs/null/59794.

²³ See Claudine Beaumont, Sony Launches Touch-Screen e-Book Reader, TELEGRAPH, Aug. 25, 2009, available at http://www.telegraph.co.uk/ technology/sony/6089080/Sony-launches-touch-screen-ebook-reader.html.

²⁴ See Microsoft Reader F.A.Q., Microsoft, http://www.microsoft.com/ reader/info/support/faq/general.aspx (follow hyperlink "What is Microsoft Reader with ClearType?") (last visited Feb. 20, 2010).

²⁵ See Nook Product Page, Barnes & Noble, http://www.barnesandnoble. com/nook/ (last visited Feb. 20, 2010).

²⁶ See Heater, supra note 1.

²⁷ See Dan Cohen, Kindle's DRM Rears Its Ugly Head and it is Ugly, June 19, 2009, GEARDIARY, http://www.geardiary.com/2009/06/19/kindles-drm-rears-its-ugly-head-and-it-is-ugly/.

rights and needs of both consumers and authors.²⁸

Of the three major media industries—music, publishing, and video—music was the first to deal with the intricacies of DRM.²⁹ It is not difficult to see why. The file size of individual songs is much smaller than that of a book or film.³⁰ Thus, songs are much easier to share over the internet in licensed systems such as iTunes or unlicensed peer-to-peer networks such as Napster.³¹ Music was available in digital form years before e-books hit the consumer market.³² The music industry has already felt the results of the market and has been forced to change and adapt to consumer demands³³ with some online retailers, including giants Amazon and iTunes, doing away with DRM-protected music files altogether.³⁴

This Note will address the most important hurdles that the music industry has had to address—new technologies and DRM's inability to sufficiently combat piracy—and recommend policies that the e-book trade publishing industry could employ to better deal with these issues.³⁵ Part I of this Note examines

²⁹ See generally Tratos, supra note 11.

 32 *Id*.

³³ See Yuko Noguchi, Freedom Override by Digital Rights Management Technologies: Causes in Market Mechanisms and Possible Legal Options to Keep a Better Balance, 11 INTELL. PROP. L. BULL. 1, 5 (2006).

³⁴ See Changes Coming to the iTunes Store, supra note 6.

³⁵ This note focuses on trade publishing—namely, the books and authors that consumers would recognize from the New York Times bestseller lists or

²⁸ For a description of the "Wild West" analogy of the Internet, see Matt Haber, *Tarnation! Experts Agree Internet like "Wild West" Since at Least 1994*, N. Y. OBSERVER, Nov. 14, 2008, *available at* http://www.observer. com/2008/media/tarnation-experts-agree-internet-wild-west-least-1994. The "Wild West" of the Internet took the music industry by surprise, which led to a more reactive approach of lawsuits and technological lockdowns like DRM. *Id.* Music rights holders had very little time in which to react before peer-topeer file sharing networks hit fever pitch levels of piracy. *Id.* Thus, their methods were largely reactionary. Book piracy has not reached that level yet, so publishers have a narrow window of time to shape policy proactively.

³⁰ See Digital Music Distribution, MASSACHUSETTS INSTITUTE OF TECHNOLOGY ALFRED P. SLOAN SCHOOL OF MANAGEMENT, Mar. 3, 2002, *available at* http://shumans.com/digital-music.pdf.

³¹ *Id.* at 2.

and evaluates DRM and its history with the music industry. Part II recounts the specific challenges facing the electronic trade publishing industry and the choices made thus far by the biggest names in e-book retail, namely, Amazon, Sony, Barnes & Noble, and Apple. Part III discusses the lessons learned by the music industry—the confusion created by lack of proper notice, the importance of interoperability, and openness to adapting to new models—and makes recommendations on how the electronic publishing industry should respond in these pivotal times.

I. DIGITAL RIGHTS MANAGEMENT TECHNOLOGY AND THE MUSIC INDUSTRY

The music industry's history with DRM is ongoing, as DRM is still in use by some music retailers.³⁶ However, the relationship has evolved a great deal from the early days of DRM, and some music retailers—including Apple and Amazon—sell digital music without DRM protections.³⁷ To fully understand this history, it is important to first examine what DRM is, how licensing models are used, and how DRM has been received by consumers.

their local bookstore—because those works are both more likely to be purchased through commercial e-book services and trade publishers are more likely to seek compensation for access to their content. For a definition of trade publishing, see BookJobs.com, *About Publishing: Types of Publishing*, http://www.bookjobs.com/page.php?prmID=8. (last visited Feb. 19, 2010). Academic publishing has its own history and relationship with digital copyright protection. *See* Roy Bixler, *Digital Copyright Issues in Academic Publishing*, GROKLAW, Feb. 14, 2006, http://www.groklaw.net/article.php? story=20060214105203232.

³⁶ See Changes Coming to the iTunes Store, *supra* note 6 (explaining that some protected music is still available on iTunes).

³⁷ See id. (reporting that Apple now sells DRM-free music); Jacqui Cheng, *Amazon Announces Long-Rumored DRM-Free Music Store*, ARS TECHNICA, May 16, 2007, http://arstechnica.com/old/content/2007/05/ amazon-announces-drm-free-music-store.ars.

A. What is DRM, and How is it Used?

DRM is a general term that refers to technology that allows rights holders to control access to and use of digital content by placing predetermined restrictions on the file itself.³⁸ Depending on the strength and the complexity of the technology used, DRM offers retailers varying levels of control over how media files are used.³⁹ Among other things, it can restrict how the files are used, how and whether the files are copied, how and whether the files are modified, how many times the files can be installed on different computers, and how long the file remains on the computer.⁴⁰ In part, DRM is used to give exclusivity to digital content that is otherwise easily copied and distributed.⁴¹ Digitally protecting the file or requiring that it be used in a specific player encourages brand loyalty and allows the rights holders control over the file's use.⁴²

This control is often exerted through licensing schemes, since selling a file outright to a consumer could end the rights holder's control over the file under the First Sale Doctrine of the Copyright Act.⁴³ Rights holders grant a license to content

⁴¹ See Noguchi, supra note 33, at 11.

⁴² These models primarily encourage brand loyalty by forcing the consumer to use the file in a specific way. *See* Electronic Frontier Foundation, *The Customer is Always Wrong: A User's Guide to DRM*, http://www.eff.org/pages/customer-always-wrong-users-guide-drm-online-

music/ (last visited Feb. 20, 2010) [hereinafter *The Customer is Always Wrong*]. Songs purchased from the iTunes store will likely be played on an iPod since songs protected by iTunes' FairPlay DRM will not play in any other music player. *Id*.

⁴³ 17 U.S.C. § 107. Generally, the first sale doctrine allows the purchaser of a lawfully obtained, copyright protected item to sell, transfer, or give it away without permission of the copyright owner. *See* Anthony Reese, *The First Sale Doctrine in the Era of Digital Networks*, 44 B.C. L. REV. 577, 580 (2003).

³⁸ Declan Mcccullagh & Milana Homsi, Leave DRM Alone: A Survey of Legislative Proposals Relating to Digital Rights Management Technology and Their Problems, 2005 MICH. ST. L. REV. 317, 318 (2005).

³⁹ Noguchi, *supra* note 33, at 5.

⁴⁰ See Nicola Lucchi, Countering the Unfair Play of DRM Technologies, 16 TEX. INTELL. PROP. L. J. 91, 93 (2007).

providers that includes the right to license copies of the digital file to consumers.⁴⁴ When consumers purchase a media file from these rights holders, they are actually purchasing a license to access the content provider's copy of the file.⁴⁵ Therefore, the consumer does not own a copy of the song, e-book, or video.⁴⁶ Ownership of the file would allow the consumer a great deal of control over how she used it.⁴⁷ Instead, licensing schemes reserve certain rights and control to the content provider, who is often still connected to the user after "purchase."⁴⁸ Thus, even when multiple content providers license copies of the same file, each can profit from the sale of the content and build customer loyalty by requiring the use of a dedicated player in order to use the files.⁴⁹

B. How has DRM been Received?

DRM encryption of copyright-protected works has sparked

⁴⁹ Noguchi, *supra* note 33.

⁴⁴ Steve Jobs, *Thoughts on Music*, APPLE, Feb. 6, 2007, http://www.apple.com/hotnews/thoughtsonmusic/.

⁴⁵ See Amazon Kindle: License Agreement and Terms of Use, http://www.amazon.com/gp/help/customer/display.html?nodeId=200144530 (last visited Feb. 20, 2010). For examples of these licensing schemes, see James D. Nguyen, *The New Deal: Content Licensing Provisions for Evolving Media*, PRACTICING LAW INSTITUTE 141 (2009).

⁴⁶ See John Bickerton, Stock Media Licensing Explained, UNIQUETRACKS, http://www.uniquetracks.com/stock_media_licensing_ explained.html (last visited Feb. 10, 2010).

⁴⁷ 17 U.S.C. § 107. "Under the first sale doctrine, however, in most circumstances the distribution right is extinguished" after sale. Robert H. Rotstein, et al, *The First Sale Doctrine in the Digital Age*, 22 INTELL. PROP. & TECH. L.J. 23 (2010).

⁴⁸ Ali Matin, Digital Rights Management (DRM) in Online Music Stores: DRM-Encumbered Music Downloads' Inevitable Demise as a Result of the Negative Effects of Heavy-Handed Copyright Law, 28 LOY. L.A. ENT. L. REV. 265, 268 (2008). Amazon uses its "Whispernet" wireless access feature to stay connected to individual Kindle devices. Geoffrey A. Fowler, Kindle's Orwellian Moment, WALL ST. J., July 17, 2009, available at http://blogs.wsj.com/digits/2009/07/17/an-orwellian-moment-for-amazonskindle/.

several heated debates. Copyright law addresses the pre-existing, inherent tensions between rights holders, retailers (when those two parties are not the same entity) and consumers.⁵⁰ Rights holders and retailers focus on making a profit and preserving their interests in copyright-protected work,⁵¹ whereas most consumers want quality media files and the freedom to use their purchased goods as they wish.⁵² These goals clash when the rights holders choose to enforce their rights by requiring retailers to use licensing schemes and/or DRM technology that limits the manner in which consumers may enjoy the files that they purchase and believe that they own.⁵³

In the early 2000s, rights holders and some academics promoted the use of DRM technology to prevent piracy of copyright-protected content.⁵⁴ The possibility of stopping copyright infringement before it occurred was a dizzying prospect, and piracy-fearing rights holders grabbed at the

⁵⁰ See H. Shayne Adler, *Pirating the Runway: The Potential Impact of the Design Piracy Prohibition Act on Fashion Retail*, 5 HASTINGS BUS. L.J. 381, 383 (2009); *see also* Campbell v. Acuff-Rose Music, 510 U.S. 569, 575 (1994) (discussing history of the need for copyright protection and the need to allow use of copyrighted material).

⁵¹ Niva Elkin-Koren, *Making Room for Consumers Under the DMCA*, 22 BERKELEY TECH L.J. 1119, 1124–28 (2007).

⁵² See Jon M. Garon, What if DRM Fails? Seeking Patronage in the iWasteland and the Virtual O, 2008 MICH. ST. L. REV. 103, 104 (2008); Elkin-Koren, supra note 51, at 1124.

⁵³ Dana P. Jozefcyk, *The Poison Fruit: Has Apple Finally Sewn the Seed* of its Own Destruction?, 7 J. ON TELECOMM. & HIGH TECH L. 369, 380 (2009) Also, consumers' belief that they own the licensed good can raise issues of consumer protection and notice. *See infra* note 208 and accompanying text. An examination of the terms of use employed by iTunes reveals a list of restrictions on the use and copying of the files but does not make it clear that the consumer does not own the media file(s) purchased through the iTunes store. *See* Jozefcyk at 380.

⁵⁴ See Karen Coyle, *The Technology of Rights: Digital Rights Management*, http://www.kcoyle.net/drm_basics1.html (last visited Feb. 19, 2010); Stefan Bechtold, *Digital Rights Management in the United States and Europe*, 52 AM. J. COMP. L. 323, 323 (2004) ("Compared to traditional copyright law, DRM promises an unprecedented degree of control over the entire distribution chain and the usage of digital content.").

opportunity to require that retailers protect their content.⁵⁵ According to CEO Steve Jobs, Apple would not have been able to negotiate landmark licensing rights with four of the biggest music retailers in the world unless the songs were protected from piracy and illegal copying by FairPlay DRM.⁵⁶

Many consumers, on the other hand, resent DRM.⁵⁷ Some of those who are willing to pay for copyright-protected online content argue that they are being unfairly punished by the restrictions imposed by DRM.⁵⁸ The most common consumer complaints are the lack of interoperability between dedicated players and the inability to copy files for backup purposes.⁵⁹ Some say DRM use presumes that people will pirate music, and resent it for that reason.⁶⁰ Largely, consumers see DRM as an unfair block that prevents law-abiding purchasers from using content they paid for as they wish, but that allows people who downloaded content illegally to use the same works however they want.⁶¹ Legal and technology commentators have also

⁵⁹ See TELEREAD, supra note 58; see also The Customer is Always Wrong, supra note 42.

⁵⁵ See Jobs, supra note 44 (discussing how record companies required DRM protection before they would agree to license music).

⁵⁶ Id.

⁵⁷ See Douglas Lichtman, Everyone Hates DRM, MEDIA INSTITUTE, June 25, 2009, http://www.mediainstitute.org/new_site/IPI/062509_EveryoneHates DRM.php.

⁵⁸ See How eReader's DRM Punished Me for Buying My Books Legally, Nov. 30, 2008, TELEREAD, http://www.teleread.org/2008/11/30/howereaders-drm-punished-me-for-buying-my-books-legally/ (hereinafter TELEREAD); Brenna Lyons, *Does DRM/security Affect The E-book Experience*, EBOOKS & EPUBLISHING, http://ebooks.epicauthors.com/?p=104 (last visited Feb. 12, 2010).

⁶⁰ See Lev Grossman, *The Battle Over Music Piracy*, TIME, May 24, 2007, *available at* http://www.time.com/time/magazine/article/0,9171, 1625209,00.html.

⁶¹ "DRM is so rage-inducing, even to ordinary, legal users of content, that it can even drive the blind to download illegal electronic Bibles." Nate Anderson, *Landmark Study: DRM Truly Does Make Pirates of Us All*, ARS TECHNICA, May 27, 2009, http://arstechnica.com/tech-policy/news/2009/05/landmark-study-drm-truly-does-make-pirates-out-of-us-all.ars [hereinafter *Pirates of us all*] (last visited Feb. 21, 2010).

expressed disapproval for many DRM schemes,⁶² particularly in light of the anti-circumvention provisions of the Digital Millennium Copyright Act ("DMCA").⁶³ After aggressive lobbying from rights holders in the music, software, and entertainment industries, Congress passed the DMCA.⁶⁴ Effective October 28, 1998, the DMCA criminalized the production and/or the dissemination of technology that circumvents DRM technology whether there is an infringement of copyright law or not.⁶⁵ The DMCA also provides that no person may intentionally alter or remove copyright management information (in essence, DRM) or knowingly distribute content which has been stripped of copyright management information or whose copyright management information has been altered without the authority of the copyright owner.⁶⁶ In November of 2006, the DMCA was revised to exempt education, outmoded technology, and literary works distributed in e-books when all existing e-book editions of the work contain access controls that prevent the enabling either of the book's read-aloud function or of screen readers that render the text into a specialized format.⁶⁷

Criminalizing any circumvention of DRM technology

⁶² Lawrence Lessig, Jessica Litman, and The Electronic Frontier Foundation are among the notable professionals and organizations who have published articles criticizing the current use of DRM technology to prevent copyright infringement. *See generally* LAWRENCE LESSIG, FREE CULTURE: HOW BIG MEDIA USES TECHNOLOGY AND THE LAW TO LOCK DOWN CULTURE AND CONTROL CREATIVITY (Penguin Press, 2004); JESSICA LITMAN, DIGITAL COPYRIGHT 111 (Prometheus Books. 2001); Electronic Frontier Foundation, *How Doesn't DRM Work?*, http://www.eff.org/ deeplinks/2004/06/how-doesnt-drm-work (last visited Feb. 21, 2010).

⁶³ 17 U.S.C. § 1201 (1998).

⁶⁴ See McCullagh & Homsi, supra note 38, at 372.

⁶⁵ 17 U.S.C. § 1201 (1998).

⁶⁶ See Propet USA v. Shugart, No. C06-0186-MAT at 3 (W.D. Wash. Dec. 13, 2007) (order denying plaintiff's renewed motion for judgment as a matter of law and motion for a new trial).

⁶⁷ U.S. COPYRIGHT OFFICE, RULEMAKING ON EXEMPTIONS FROM PROHIBITION ON CIRCUMVENTION OF TECHNOLOGICAL MEASURES THAT CONTROL ACCESS TO COPYRIGHTED WORKS (2008), *available at* http://www.copyright.gov/1201/2006/index.html.

criminalizes both the conduct of pirates and the conduct of those who break DRM protections to legally use content under the fair use provision of the Copyright Act.⁶⁸ Legal scholars argue that DRM use increases the weight and power of copyright law to dangerous levels⁶⁹ and may circumvent copyright law by blocking access to work that is already in the public domain, which should be freely accessible to everyone.⁷⁰

Detractors are quick to point out that even the use of complicated DRM technology has had little to no effect at stopping media piracy.⁷¹ Illegally-copied files are shared on peer to peer ("P2P") networks every day,⁷² and there are few, if any, DRM technologies that have not been cracked, sometimes within days of release.⁷³ Files that withstand hacking are still

⁶⁹ See Matin, supra note 48, at 266.

⁷⁰ See Chris Walters, *B&N Wraps Public Domain Books in DRM to Protect Authors' Copyrights. What?*, CONSUMERIST, July 29, 2009, http://consumerist.com/2009/07/bn-wraps-public-domain-books-in-drm-toprotect-authors-copyrights-what.html.

⁷¹ The Electronic Frontier Foundation, a vocal opponent of DRM, partnered with ten other organizations to insist to the International Telecommunications Union that DRM does not work and does not stop piracy. *See* Electronic Frontier Foundation, *Digital Rights Management: A Failure in the Developed World, a Danger to the Developing World,* http://www.eff.org/wp/digital-rights-management-failure-developed-world-danger-developing-world (last visited Feb. 10, 2010).

⁷² See Michael A. Einhorn & Bill Rosenblatt, Peer-to-Peer Networking and Digital Rights Management: How Market Tools Can Solve Copyright Problems, 52 J. COPYRIGHT SOC'Y U.S.A 239, 255–56 (2005) ("[W]ell over 90% of files traded on P2P networks appear to be nothing more than unchanged copyright [material] that were previously ripped and uploaded without authorization.").

⁷³ Nate Anderson, *Hacking Digital Rights Management*, ARS TECHNICA, July 18, 2006, http://arstechnica.com/apple/news/2006/07/drmhacks.ars [hereinafter, *Hacking DRM*] (describing a history of DRM hacks and how

⁶⁸ See Michael S. Sawyer, *Filters, Fair Use & Feedback: User Generated Content Principles and the DMCA*, 24 BERKELEY TECH. L.J. 363, 380 (2009). Fair use should allow for unauthorized, compensation-free, anonymous use of copyright- and DRM-protected works for specific nonprofit, educational, or commenting purposes. *See* 17 U.S.C. § 106 (1998); *see also* Tim K. Armstrong, *Digital Rights Management and Fair Use*, 20 HARV. J.L. & TECH. 49, 56–59 (2006).

susceptible to piracy through the analog hole or a low-fidelity form of copying.⁷⁴ Some hackers claim that the technology is not cracked for profit, but rather to make a statement about the inefficacy and inappropriateness of DRM, and as such the circumvention of those protections is celebrated rather than condemned.⁷⁵ Others break the protection in order to make and share or profit from illegal copies.⁷⁶ This Note does not focus on those who fully intend to break the law, but rather those who do so out of lack of understanding of or frustration with DRM.

Authors' reactions to DRM are mixed.⁷⁷ Some presumably favor DRM and require it as a condition of licensing their books to retailers.⁷⁸ Others fight to electronically publish and license their work through Amazon or Sony e-book readers without

⁷⁵ See Hacking DRM, supra note 73. Many of these claims are spurious at best, since instructions on how to hack the content and post it on P2P sites are available all over the internet. See infra note 89 and accompanying text.

⁷⁶ The rapid appearance of material that has only been released in DRMprotected files indicates that there are users who break DRM encryption in order to share or distribute those files. "[M]ost users simply engage [P2P] software in order to find music and movies that have been 'ripped' and uploaded . . . for free taking by others." Einhorn & Rosenblatt, *supra* note 72, at 240.

⁷⁷ See Diane Zimmerman, Living Without Copyright in a Digital World, 70 ALB. L. REV. 1375, 1379 (2007).

⁷⁸ *Id*.

quickly they occurred); Mark Wilson, *Kindle DRM Hacked (That Was Easy)*, GIZMODO, Dec. 17, 2007, http://gizmodo.com/333415/kindle-drm-hacked-that-was-easy (last visited Feb. 21, 2010).

⁷⁴ GEEKTONIC, *Keeping the Analog Hole Open*, http://www.geektonic. com/2009/08/keeping-analog-hole-open.html. The "analog hole" is a term that describes a low-fidelity method of copying; for example, recording a song off of the radio or recording a film with a video camera brought into the movie theater. *See* Liza Daly, *The Analog Hole: Another Argument Against DRM*, O'REILLY TOOLS OF CHANGE FOR PUBLISHING, Oct. 23, 2008, http://blogs.oreilly.com/cgi-bin/mt/mt-search.cgi?blog_id=40&tag=analog% 20hole&limit=20. All digital content must be converted to analog form in order to be listened to or looked at. *Id*. Thus, if someone really wants to make an illegal copy of material and does not care about the quality, it is still possible to make a recording of copyright-protected material and disseminate it. *Id*.

DRM protection.⁷⁹ Some of these authors are concerned that DRM is driving readers away⁸⁰ while others object to DRM on legal or policy grounds.⁸¹ Still other authors choose not to license their work at all, whether it is protected or not.⁸²

So why did the tide turn against DRM? What has provoked an almost uniformly negative response? An examination of the music industry's experience with DRM offers some insight.

C. DRM and the Online Music Industry

The music industry has had a turbulent relationship with DRM.⁸³ Initially, both Microsoft and Apple protected their media files with some version of DRM.⁸⁴ Microsoft had a proprietary file format for its Windows Media Player (.wma files), which could only be played in a limited number of platforms.⁸⁵ Apple encrypted the content sold through iTunes

⁷⁹ Cory Doctorow, for example, is leading a movement for authors to withhold content from retailers that will encrypt it with DRM. Andrew Savikas, *At TOC: Cory Doctorow to Publishers: Demand Option To *Not* Use DRM*, O'REILLY TOOLS OF CHANGE FOR PUBLISHING, Feb. 10, 2009, http://toc.oreilly.com/2009/02/at-toc-cory-doctorow-to-publis.html.

⁸⁰ See Jon Noring, The Perils of DRM Overkill for Large Publishers, TELEREAD, http://www.teleread.org/publishersdrm.htm (last visited Feb. 19, 2010) ("When onerous DRM is used, or proprietary devices required, this will create substantial consumer resistance, driving readers away, some of whom will gravitate towards pirated editions.").

⁸¹ Lawrence Lessig has been a vocal opponent of DRM, as has Cory Doctorow. Lessig wrote an entire book (*Free Culture*) about his views on DRM which he distributed under a Creative Commons License. It is also available for purchase through Amazon. Paul Glazowski, *If You Wrote a Book Bashing DRM, Would You Be Cool With Kindle Store Sales?*, MASHABLE, Sept. 28, 2008, http://mashable.com/2008/09/28/free-culture-kindle/.

⁸² See Zimmerman, supra note 77 at 1378–79.

⁸³ See Steve Gordon, *The Slow Death of DRM*, REGISTER, Feb. 9, 2007, http://www.theregister.co.uk/2007/02/09/steve_gordon_drm/.

⁸⁴ See Microsoft Releases Windows Media Audio and Video 8, CDRINFO, Mar. 29, 2001, http://www.cdrinfo.com/Sections/News/Details.aspx?News Id=1232; Jozefcyk, *supra* note 53 at 375.

⁸⁵ See Microsoft Releases Windows Media Audio and Video 8,

with its proprietary FairPlay DRM.⁸⁶ Newer music retailers such as eMusic and Amazon, who had the benefit of witnessing the consumer backlash against the DRM protection on those formats, do not protect their files with DRM.⁸⁷

Even with DRM protections in place, it does not take long for illegal digital copies of music files to spread quickly across the Internet.⁸⁸ In fact, one does not even need to be computersavvy to break DRM protection because there is a proliferation of DRM-circumvention technologies available on the Internet.⁸⁹ Programs such as "DRM Dumpster" and "Tunebite" offer to strip DRM from protected files so that consumers can use protected files in ways that violate the original license agreements.⁹⁰ These programs are available for purchase and download online, and there is one for almost every popular DRM format.⁹¹ Using one of these programs to circumvent DRM technology is, in many circumstances, a violation of the DMCA⁹² and is likely also a violation of the music retailer's

CDRinfo.com, Mar. 29, 2001 http://www.cdrinfo.com/Sections/News/ Details.aspx?NewsId=1232.

⁸⁶ Jobs, *supra* note 44; Jozefcyk, *supra* note 53, at 375–6 (outlining how FairPlay works with AAC files and conversion).

⁸⁷ Jasmine France, *Top 5 Online Music Stores*, CNET, July 17, 2008, http://news.cnet.com/8301-17938_105-9992592-1.html.

⁸⁸ See Jobs, supra note 44 ("The problem, of course, is that there are many smart people in the world, some with a lot of time on their hands, who love to discover such [ways to break DRM] and publish a way for everyone to get free (and stolen) music. They are often successful in doing just that, so any company trying to protect content using a DRM must frequently update it with new and harder to discover secrets.").

⁸⁹ See, e.g., Manage Media on Any Device, http://www.network worldme.com/v1/news.aspx?v=1&nid=1839&sec=serversstorage (last visited Feb. 20, 2010); *Remove DRM Protection*, http://undrm.info/remove-DRM-protection/ (last visited Feb. 20, 2010).

⁹⁰ Id.

⁹¹ See Remove DRM Protection, supra note 89.

⁹² See Digital Millennium Copyright Act, 17 U.S.C. § 1201 (2006); see also The Customer is Always Wrong, supra note 42 ("Breaking [DRM protection] . . . may expose you to liability under the Digital Millennium Copyright Act (DMCA) even if you're not making any illegal uses.").

terms of use.⁹³

Once the protection is broken, the music files can be placed on P2P file sharing networks and rapidly disseminated to consumers who have not paid anything to access the file.⁹⁴ File sharing on such networks illustrates the difficulties faced by retailers and rights holders of digital media. Sharing an intangible good (the digital version of an album) is very different from sharing a tangible good (a compact disc or cassette tape).⁹⁵ Unlike tangible goods, which are only in the possession of one person at a time, file sharing allows two or ten or a thousand people to have an album at the same time when only one person has paid for it.⁹⁶ Sharing a purchased album with that many anonymous downloaders may or may not fit under the first sale doctrine.⁹⁷ Unlike theft of tangible goods, these download transactions leave the original owner with a copy of the file. Thus, P2P users may not even view these transactions as theft,⁹⁸ a perception that seriously undermines copyright protection.

Music industry professionals and the Recording Industry Association of America ("RIAA") reacted to illegal file sharing with almost fanatical force, pursuing litigation against P2P

⁹³ See discussion infra Part III(B)(1).

⁹⁴ See Einhorn & Rosenblatt, supra note 72.

⁹⁵ See generally Mark A. Lemley, *What's Different About Intellectual Property?*, 83 TEX. L. REV. 1097 (2005) (discussing the basic differences between intellectual and real property, including rivalrous use).

⁹⁶ See Einhorn & Rosenblatt, supra note 72.

⁹⁷ See Nate Anderson, "Can I Resell My MP3s?": The Post-Sale Life of Digital Goods, ARS TECHNICA, Dec. 17, 2008, http://arstechnica.com/techpolicy/news/2008/12/post-sale-life.ars/1; Electronic Frontier Foundation, First Sale, Why it Matters, Why We're Fighting For It, EFF, Aug. 9, 2007, http://www.eff.org/deeplinks/2007/08/first-sale-why-it-matters-why-were-fighting-it.

⁹⁸ See Jonathan Handel, Uneasy Lies the Head that Wears the Crown: Why Content's Kingdom is Slipping Away, 11 VAND. J. ENT. & TECH. L. 597, 612 (2009) ("[I]f you steal something tangible you deny it to the owner. For instance, a purloined DVD is no longer available for the merchant to use. However, if you misappropriate content in intangible form, it is still there for others to use.").

networks and individual consumers alike.⁹⁹ In 2000, Steve Heckler, a senior vice president at Sony Pictures Entertainment, proclaimed that the music industry would take "aggressive steps" to stamp out Napster and other P2P file sharing networks that would "transcend the individual user[s]."¹⁰⁰ Several recoding labels pursued litigation against Napster.¹⁰¹ The landmark Supreme Court decision in *MGM v. Grokster*¹⁰² supported the viability of such litigation by imposing secondary liability for P2P networks that "distribut[e] a device with the object of promoting its use to infringe copyright, as shown by clear expression or other affirmative steps taken to foster infringement"¹⁰³ The music industry's litigious attack on P2P networks led to new restrictions and liabilities for P2P networks named in lawsuits; for example, Napster now charges for file sharing and Grokster has been stripped of its P2P software.¹⁰⁴ However, the continued existence of file sharing

¹⁰⁰ M.A. Anastasi, *Sony Exec: We Will Beat Napster*, DAILY FORTY-NINER, Aug. 17, 2000, *available at* http://www.nyfairuse.org/sony.xhtml.

¹⁰¹ See A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004 (9th Cir. 2001).

⁹⁹ The RIAA sent letters to college students who downloaded content from P2P networks. Meg Margo, *The RIAA P2P Lawsuit Letter Sent to College Students*, CONSUMERIST, Mar. 2, 2007, http://consumerist.com/2007/ 03/the-riaa-p2plawsuit-letter-sent-to-college-students.html. It has also pursued litigation against P2P networks Napster, Kazaa, and LimeWire. *See, e.g.*, Robert C. Piasentin, *Unlawful? Innovative? Unstoppable? A Comparative Analysis of the Potential Legal Liability Facing P2P End-Users in the United States, United Kingdom, and Canada*, 14 INT'L J.L. & INFO TECH. 195, 201 (2006); Associated Press, *Music Publishers Sue Owner of Web File-Sharing Program*, N.Y. TIMES, Aug. 5, 2006, *available at* http://www.nytimes.com/ 2006/08/05/technology/05patent.html?_r=1&ref=technology&pagewanted=p rint.

¹⁰² 545 U.S. 913 (2005).

¹⁰³ *Id.* at 919. The court unanimously decided that Grokster could be held liable for inducing copyright infringement by third parties. *Id.*

¹⁰⁴ See Napster Plans, http://www.napster.com/index.html?darwin_ttl= 1267225241&darwin=s0210C (follow "Napster Plans" link) (last visited Jan. 30, 2010); Grant Gross, *Grokster Shuttled in Court Settlement*, PCWORLD, Nov. 7, 2005, http://www.pcworld.com/article/123448/grokster_shuttered_ in_court_settlement.html.

networks and torrent sites indicates that litigation has not had the intended deterrent effect on file sharing or copyright infringement as a whole.¹⁰⁵

Digital music piracy had a significant and negative impact on the music industry.¹⁰⁶ In 2001, the recording industry experienced its first drop in sales in ten years,¹⁰⁷ and the RIAA blamed Internet and online piracy.¹⁰⁸ However, a closer look at the data reveals that illegal downloads may not be the sole or main cause of the drop in profits,¹⁰⁹ and that the pirates that the RIAA feared are a key part of the music-buying demographic.¹¹⁰ The RIAA finally abandoned its litigation strategy and decided to pursue only the most egregious cases of file-sharing, choosing instead to pursue an agreement with internet service providers (ISPs) to police infringers.¹¹¹

D. Profile: iTunes

To best examine the complicated history of the music industry and DRM, it is only appropriate to look to Apple's iTunes program. The iTunes Music Store controls roughly 83

 109 *Id*.

¹⁰⁵ There are currently dozens of P2P and torrent sites still functioning. *See* Paul Gil, *The Top 35 Torrent Sites of 2010*, ABOUT, http://netfor beginners.about.com/od/peersharing/a/torrent_search.htm.

¹⁰⁶ See Brian Hiatt and Evan Serpick, *The Record Industry's Decline*, ROLLING STONE, June 28, 2007, *available at* http://www.rollingstone.com/ news/story/15137581/the_record_industrys_decline.

¹⁰⁷ See R. Scott Raynovich, News Flash: Music Industry Still Lost, SEEKING ALPHA, Nov. 9, 2008, http://seekingalpha.com/article/104906-news-flash-music-industry-still-lost; see also Hiatt & Serpick, supra note 106.

¹⁰⁸ George Ziemann, *RIAA Statistics Don't Add Up to Piracy*, AZOZ, Dec. 11, 2002, http://www.azoz.com/music/features/0008.html (second updated article).

¹¹⁰ Rachel Shields, *Illegal Downloaders 'Spend the Most on Music,' Says Poll*, INDEPENDENT, Nov. 1, 2009, *available at* http://www.independent.co. uk/news/uk/crime/illegal-downloaders-spend-the-most-on-music-says-poll-1812776.html.

¹¹¹ Bill Rosenblatt, *RIAA Drops Lawsuit Campaign*, DRM WATCH, Dec. 24, 2008, http://www.drmwatch.com/legal/article.php/3793161.

percent of the United States online music market share¹¹² and more than 90 percent of the hard-drive based player market.¹¹³ This is in large part because iTunes has the biggest catalog of media files,¹¹⁴ which includes music, movies, television shows, and audiobooks.¹¹⁵ Even Apple's competitors acknowledge that iTunes and the iPod are models for the rest of the digital media industry.¹¹⁶ Apple's dominance in the online music market is also due in part to its clean, user-friendly interface and its branding with the other highly successful Apple products.¹¹⁷

iTunes managed to grow into an extremely successful business despite employing a proprietary DRM protection called FairPlay that was incompatible with other devices until 2009.¹¹⁸ FairPlay consists of layers of security keys that were designed to withstand hacking and limit the damage if the file was hacked.¹¹⁹ Media files purchased through the iTunes store could only be played on Apple hardware (such as iPods) or on computers

¹¹⁶ See David Kravets, *Like Amazon's DRM-Free Music Downloads? Thank Apple*, WIRED, Sept. 25. 2007, http://www.wired.com/entertainment/music/news/2007/09/drm_part_one (revealing that even Warner Music Group chairman Edgar Bronfman, Jr. considers the iPod the "default model" and iTunes the "download model" in online music).

¹¹⁷ *Id.* According to Bronfman, "consumers are more loyal to the iPod than to any particular artist . . . Never before in the history of content has the hardware been more valuable than the software." *Id.*

¹¹⁸ Jobs, *supra* note 44; *see* Changes Coming to the iTunes Store, *supra* note 6. Apple could have chosen to license Microsoft's Windows Media Player DRM, which is a route that other music retailers such as Yahoo! and AOL chose to follow. Jozefcyk, *supra* note 53, at 374–75. Instead, Apple developed its own DRM. *Id*.

¹¹⁹ See Daniel Eran, *How FairPlay Works: Apple's iTunes DRM Dilemma*, ROUGHLYDRAFTED, Feb. 26, 2007, http://www.roughlydrafted. com/RD/RDM.Tech.Q1.07/2A351C60-A4E5-4764-A083-FF8610E66A46. html.

¹¹² Complaint at 355, Somers v. Apple, 258 F.R.D. 354 (N.D.Cal. 2009) (No. C 07-06507 JW).

¹¹³ *Id.* at 356.

¹¹⁴ *Id*.

¹¹⁵ See Apple: iTunes: Everything You Need to Be Entertained, http://www.apple.com/itunes/ (last visited Feb. 20, 2010).

equipped with iTunes software.¹²⁰ In addition, unprotected files imported into the iTunes software program are automatically encoded to play in the iTunes program or on an iPod.¹²¹ The encryption also restricts playback of files purchased from the iTunes store to five computers, each of which must be authorized by the purchaser to play the files.¹²²

Since FairPlay-protected files cannot be played on portable music players that are not iPods, music retailers called on Apple to license its proprietary software and thus level the playing field by allowing consumers to play the music from Apple's superior catalog on the portable music device of their choice.¹²³ Apple refused, citing security concerns over leakage of FairPlay's technology secrets and the difficulty of monitoring leaks with multiple licensees.¹²⁴ According to Apple, this could have harmed Apple's ability to guarantee DRM protection to the "Big Four" rights holders that own the huge catalog of music that Apple licenses.¹²⁵

Enforcing these rights came at a high cost. Due to its inflexibility regarding licensing of its DRM technology, Apple has been the subject of multiple antitrust suits alleging unfair competition and control over too much of the market.¹²⁶ Apple enforced its rights in FairPlay by bringing suits against the creators of a Linux program that broke Apple DRM in an attempt to make iPods compatible with open source software¹²⁷

¹²⁷ See Bill Rosenblatt, Apple Shuts Down iPod Interoperability Effort,

¹²⁰ See Nicola F. Sharpe & Olufunmilayo B. Arewa, Is Apple Playing Fair? Navigating the iPod FairPlay DRM Controversy, 6 Nw. J. TECH & INTELL. PROP. 332, 335 (2007).

¹²¹ Jozefcyk, *supra* note 53, at 374 (explaining the piracy loopholes inherent in iTunes).

 $^{^{122}}$ *Id*.

¹²³ *Id.* at 387.

¹²⁴ *Id.* at 380.

¹²⁵ Id.

¹²⁶ See, e.g., Somers v. Apple, 258 F.R.D. 354 (N.D. Cal. 2009) (charging Apple with violating antitrust laws by forcing consumers to use an iPod); Slattery v. Apple Computer, 2005 WL 2204981 (N.D. Cal. 2005) (alleging class action damages for violating anti-trust laws by forcing consumers to buy the iPod).

and against RealNetwork's Harmony program, which cracked the FairPlay code in an attempt to make songs from the RealPlayer store playable on iPods.¹²⁸

Apple's concerns about DRM protection and honoring its agreement with the "Big Four" gave way to DRM-free music in early 2009.¹²⁹ Apple claims they shifted policy because of the music industry's desire for flexibility.¹³⁰ Steve Jobs had earlier hypothesized that only a small percentage of the music on iPods was protected with DRM and insinuated that DRM was an unnecessary precaution forced on Apple bv record companies,¹³¹ which may support this flexibility claim. The iTunes store now offers iTunes Plus downloads, which are unencumbered by FairPlay.¹³² Previously purchased music that is protected with FairPlay can also be upgraded to Plus.¹³³ The announcement that iTunes would be selling DRM-free music evoked a strong reaction from the Internet community.¹³⁴ Though

¹³² See Changes Coming to the iTunes Store, supra note 6, at 387.

¹³³ See iTunes Store: iTunes Plus Frequently Asked Questions, http://support.apple.com/kb/HT1711 (last visited Feb. 20, 2010).

¹³⁴ See Apple to End Music Restrictions, *supra* note 130 (reporting that Apple agreed to sell some music without DRM protection); Brad Stone, *Want*

DRMWATCH, http://www.drmwatch.com/legal/article.php/3789056 (discussing Apple shutting down iPodHash, a Linux program designed to make the iPod interoperable with Linux systems); Jo Best, *Real v. Apple Music War: iPod Freedom Petition Backfires*, Aug. 18, 2004, SILICON, http://hardware.silicon.com/storage/0,39024649,39123271,00.htm.

¹²⁸ See Jozefcyk, supra note 53, at 381 (discussing how Apple, instead of litigating, chose to redesign the iPod to render Harmony unplayable on the iPod).

¹²⁹ See Changes Coming to the iTunes Store, *supra* note 6 (announcing a DRM-free iTunes music store).

¹³⁰ Apple to End Music Restrictions, BBC NEWS, Jan. 7, 2009, http://news.bbc.co.uk/2/hi/technology/7813527.stm [hereinafter Apple to End Music Restrictions].

¹³¹ See Jobs, supra note 44. Jobs cited statistics on purchases from the iTunes store and concluded that "[t]his means that only 22 out of 1000 songs, or under 3% of the music on an average iPod, is purchased through the iTunes store and protected with a DRM. It's hard to believe that just 3% of the music on the average iPod is enough to lock users into buying only iPods in the future." *Id*.

two of the "Big Four" record companies had already agreed to allow Amazon to sell their songs without DRM protection,¹³⁵ now eight million of the ten million songs on iTunes have been opened up to a new level of compatibility with other players.¹³⁶ Apple also introduced three different price points for songs, based in part on DRM protection or lack thereof.¹³⁷

This new flexibility leads to two conclusions: first, that Apple is bowing to consumer demand for unprotected music and adapting its model so that the DRM technology it so vigorously protected is eliminated; second, that powerful rights holders like the "Big Four" have realized that an iron grip on the use of media files does not necessarily lead to less piracy or higher profits, and may in fact be hindering the achievement of those goals.

II. E-BOOKS AND E-READERS

There are many similarities between the digital music industry and the e-book industry.¹³⁸ Both are media industries suffering from economic losses; music industry sales are declining¹³⁹ and the publishing industry is also losing money.¹⁴⁰ Most significantly, both industries employ DRM protection and licensing schemes to maintain control of content after it is sold.¹⁴¹ It is this similarity that makes the music industry a good

¹³⁹ See Hiatt & Serpick, supra note 106.

¹⁴⁰ Peter Olson, *A Long Winter*, PUBLISHER'S WEEKLY, Jan. 5, 2009, http://www.publishersweekly.com/article/CA6626103.html.

¹⁴¹ See infra Part III(B)(1) (discussing iTunes (music) and Amazon (e-

to Copy iTunes Music? Go Ahead, N.Y. TIMES, Jan. 6, 2009, available at http://www.nytimes.com/2009/01/07/technology/companies/07apple.html (reporting on DRM-free music and the new pricing structure).

¹³⁵ See Kravets, supra note 116 (claiming that Amazon's DRM-free music store is in part due to Apple's history).

¹³⁶ Stone, *supra* note 134.

¹³⁷ See Apple Staggers iTunes Price Points, MARKETING VOX, http://www.marketingvox.com/apple-staggers-itunes-price-points-042694/.

¹³⁸ See Jayram Moorkanikara, *The Ebook Revolution Cometh*, NEW UNIVERSITY, Jan. 4, 2010, http://www.newuniversity.org/2010/01/opinion/ the-ebook-revolution-cometh/.

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model for the publishing industry to follow. However, there are also several issues unique to the trade e-book industry that must be considered.

A. The Unique Issues Facing Electronic Publishers

Despite the large overlap between the issues concerning trade e-books and their digital music counterparts, these two mediums differ in a few key ways: demand, portability, and hindsight. First, there is a higher demand for music files than for ebooks.¹⁴² Second, hard copies of books have always been portable and easy to share.¹⁴³ Music, however, only truly became portable in a handheld device with the Walkman in 1979.¹⁴⁴ Portability is not an issue for today's music fans, as consumers can now listen to songs on their computers, portable music players, cell phones, and/or portable gaming systems.¹⁴⁵ Finally,

books) terms of use and license conditions).

¹⁴² In 2008, e-book sales comprised 1.5% of the \$6.8 billion in sales. Ylan Q. Mui, *E-books Holiday Charge*, WASH. POST, Nov. 5, 2009, *available at* http://www.washingtonpost.com/wpdyn/content/article/2009/11/ 04/AR2009110404834.html. That same year, Nielsen reported that there were over a billion digital tracks sold and 65.8 million digital albums. Jonathan Skillings, *Music Sales for 2008 Ride Digital Coattails*, CNET, Jan. 1, 2009, http://news.cnet.com/8301-1023_3-10130206-93.html.

¹⁴³ Robert McCrum, *E-Read All About It*, OBSERVER, Jan. 15, 2006, *available at* http://www.guardian.co.uk/books/2006/jan/15/ebooks. technology (describing books as "highly efficient 'random access device[s]'").

¹⁴⁴ Sony launched the Walkman, the first portable music player of its kind, in 1979. Sony History, *Why No Record Function?*, http://www.sony. net/Fun/SH/1-18/h2.html (last visited Mar. 2, 2010).

¹⁴⁵ iTunes is available for download onto computers and the iPhone. *See Editor's Review: Apple iTunes 9.0.3.15*, CNET, Sept. 21, 2008, http://download.cnet.com/Apple-iTunes/3000-2141_4-10235268.html. Many Verizon Wireless phone support V CAST Music, a software that allows MP3 playback on mobile phones. Verizon Wireless, Entertainment and Apps From Verizon Wireless, http://products.verizonwireless.com/index.aspx?id=fnd_music&lid=//global//entertainment+and+apps//music (last visited Feb. 25, 2010). The Sony PSP handheld gaming device can also play music. *See Playstation Network: PSP System Features*, http://us.playstation.com/psp/

since the market for e-books developed later and more slowly than that of the digital music industry, trade e-book publishers have the benefit of experience and already know, or should already understand, the limits of DRM technology.¹⁴⁶

Many of the differences between the music and publishing industries work in favor of the e-book industry. The first, and possibly most important difference, is that even prior to the digitization of both media, it was much easier to copy an album than it was to copy an entire book.¹⁴⁷ Copying music was as simple as pressing the "record" button on your stereo when you heard the first few bars of your favorite song on the radio or using a dual tape deck to record from cassette to cassette.¹⁴⁸ Compact discs made copying music even easier, especially since computer programs, such as Windows Media Player and iTunes, can automatically "rip" compact discs into digital files, which can then be easily and cheaply shared.¹⁴⁹ The ripped digital files may not be as high fidelity as the compact disc version, but the files can be burned onto new compact discs or uploaded onto portable music players with an ease that makes copying music an efficient use of the consumer's time.¹⁵⁰

Prior to e-books, widespread copying of pirated books required a considerable investment of time and money.¹⁵¹ Even

features/ps_psp_multimedia_features.html (last visited Mar. 2, 2010).

¹⁴⁶ The Analysis section of this paper discusses why publishers should have realized this. *See infra* Part III.A.

¹⁴⁷ See David Silversmith, *The Thin Line Between Copying and Stealing*, INTERNET EVOLUTION, Apr. 27, 2009, http://www.internetevolution.com/author.asp?section_id=715&doc_id=175911.

¹⁴⁸ See John Tehranian, Infringement Nation: Copyright Reform and the Law/Norm Gap, 2007 UTAH L. REV. 537, 549 (2007) ("[I]ndividuals would record songs from the radio, duplicate their friends' albums on cassettes, or swap mix tapes.").

¹⁴⁹ Ben Patterson, *How to Rip a CD as MP3s*, CNET, Sept. 20, 2005, http://www.cnet.com/1990-7899_1-6329586-1.html (explaining how to rip CDs into both Windows Media Player and iTunes). Ripping is the term for how the software copies the content from the CD and reformats it as digital files. *Id*.

¹⁵⁰ The entire process takes only a few minutes. See id.

¹⁵¹ See Victor S. Calaba, Quibbles 'N Bits: Making a Digital First Sale

with the advent of high-speed photocopiers the process required more hardware than a computer and often yielded a lower quality copy.¹⁵² Accordingly, the higher cost and lower quality product likely made copying books less attractive than copying music.

The Internet does for the electronic publishing industry what the printing press did for the "traditional" publishing industry: it revolutionizes the way that rights holders and retailers offer access to copyright-protected material.¹⁵³ Consumers now have unprecedented access to a vast library of electronic books¹⁵⁴ with the added benefit of technological tools. For example, consumers can use "search" functions that target specific words or phrases or use e-readers with wireless access to download more books or surf the web.¹⁵⁵ These technological advances have also made illegal copying and distribution easier than ever before.¹⁵⁶ Now, copying e-books is faster and yields a higher quality result.¹⁵⁷ In response, rights holders have attempted to increase control over published works; some authors refuse to allow their works to be published electronically,¹⁵⁸ and many works that are available electronically are only available in a format protected by DRM technology.¹⁵⁹

¹⁵² *Id.* at 8–9.

¹⁵⁷ Coyle, *supra* note 54.

¹⁵⁸ See Zimmerman, supra note 77 at 1378–79 (discussing "Naysayers" who do not allow for digital distribution of their books).

¹⁵⁹ See Zimmerman, supra note 77; Einhorn & Rosenblatt, supra note 72, at 239 ("As a general preventative measure against copyright

Doctrine Feasible, 9 MICH. TELECOMM. & TECH. L. REV. 1, 7-8 (2002).

¹⁵³ See Zimmerman, supra note 77.

¹⁵⁴ Both the Kindle and the Nook stores offer thousands of books. *See infra* note 175.

¹⁵⁵ *Id*. All four major readers have search features and Internet access. *See infra* note 164.

¹⁵⁶ Coyle, *supra* note 54 ("With the digital file, the economics are slanted very much towards making copies."); Mark G. Tratos, *The Evolution of Entertainment Production, Distribution, Ownership, and Control in the Digital Age*, 896 PRACTICING L. INSTITUTE 133, 158 (2007) ("The danger of digitally stored data is that it can be easily read and reproduced by other digital devices so perfectly as to seem flawless to the human senses.").

As e-book and e-book readers become more popular and attract new readers, demand for e-books and e-book piracy are on the rise.¹⁶⁰ Both the demand for, and cost of, e-books rose dramatically from 2002 to 2008,¹⁶¹ which is likely due to the fact that there are now many more e-books available.¹⁶² A large library of trade e-books and the availability of lightweight, affordable e-book readers have brought the electronic publishing industry model closer to that of the digital music industry.

B. The Current Status of the E-Book Giants

Though there are many e-book retailers, this Note will focus on the four that also sell handheld readers—namely, Amazon, Sony, Barnes & Noble, and Apple. These retailers each use different protection schemes. Amazon uses a powerful DRM scheme to protect the copyrighted content available through its library,¹⁶³ while Sony and Barnes & Noble use an open source system called ePub.¹⁶⁴ While ePub does not employ traditional DRM,¹⁶⁵ it does allow for a "layer" of DRM protection to be

infringements through digital technologies including P2P, copyright owners often use digital rights management (DRM) techniques to encrypt content or otherwise restrict access.").

¹⁶⁰ Savikas, *supra* note 21; Motoko Rich, *Print Books are Target of Pirates on the Web*, N.Y. TIMES, May 11, 2009, at B1.

¹⁶¹ See INTERNATIONAL DIGITAL PUBLISHING FORUM, INDUSTRY STATISTICS, *available at* http://www.idpf.org/doc_library/industrystats.htm.

¹⁶² See Savikas, supra note 21.

¹⁶³ See Daniel McCartney, Amazon Feared the Bad, Crushed the Good, and Made the Bad Worse, PUBLIC KNOWLEDGE, Mar. 18, 2009, http://www.publicknowledge.org/node/2034; Dan Cohen, *supra* note 27. The Kindle applications for smartphones such as the iPhone also include this technology. *Id*.

¹⁶⁴ For a side-by-side comparison, see *E-book Reader Matrix*, MOBILEREADWIKI, http://wiki.mobileread.com/wiki/E-book_Reader_Matrix (last visited Feb. 22, 2010).

¹⁶⁵ David Rothman, Sony and the Adobe DRM Alliance: New Reason for Amazon to Get Publishers to Drop 'Protection'?, TELEREAD, Aug. 26, 2009, http://www.teleread.org/2009/08/26/sony-and-the-adobe-drm-alliance-new-reason-for-amazon-to-get-pubs-to-drop-protection/.

applied to the base software.¹⁶⁶ Each of these retailers has chosen to attach that layer of DRM.¹⁶⁷ Thus, Sony's e-books can be compatible with any platform that uses ePub software.¹⁶⁸ Commentators have called on Amazon to "unlock" its encrypted software and join the ranks of e-book sellers using ePub.¹⁶⁹ Apple reportedly will not be using ePub-based software either, and will instead encrypt its iBooks with FairPlay DRM.¹⁷⁰

Barnes & Noble launched its own e-reader, the Nook, in October of 2009.¹⁷¹ The Nook also uses DRM, but supports multiple reader formats and allows for book "sharing"—one user can lend a book to another person with the Nook software for up to two weeks.¹⁷² The original user cannot access the book during that time.¹⁷³ Like Kindle, Nook software can be used on

¹⁶⁹ See O'Reilly, supra note 168; Nate Anderson, New Petition Demands an End to Kindle DRM, Faces Long Odds, ARS TECHNICA, Aug. 4, 2009, http://arstechnica.com/tech-policy/news/2009/08/new-petition-demands-anend-to-kindle-drm.ars.

¹⁷⁰ Alex Pham, *Apple to Wrap Digital Books in FairPlay Copy Protection*, L.A. TIMES, Feb. 15, 2010, *available at* http://latimesblogs. latimes.com/technology/2010/02/apple-ibooks-drm-fairplay.html.

¹⁷¹ Dan Costa, *Barnes & Noble Launches the 'Nook' E-Reader*, PCMag, Oct. 21, 2009, http://www.pcmag.com/article2/0,2817,2354518,00.asp.

¹⁷² See Christina Jones, Barnes & Noble Releases Info about New Nook eReader, DIGITAL J., Oct. 26, 2009, http://www.digitaljournal.com/article/281083; Beschizza, supra note 168.

¹⁷³ Thomas Ricker, *Barnes & Noble Nook LendMe Feature is Severely Limited, Assumes You Have Friends*, ENGADGET, Oct. 23, 2009, http://www.

¹⁶⁶ See HarperCollins, Help Basic Adobe EPUB eBooks, http://www. harpercollinsebooks.com/CB681A87-80BB-45B2-B849-53A06D2E5930/10/ 133/en/Help-FAQ-Format410.htm#question-431 (last visited Feb. 19, 2010).

¹⁶⁷ See MOBILEREADWIKI, supra note 164.

¹⁶⁸ Brad Stone, *Sony Plans to Adopt Common Format for E-Books*, N.Y. TIMES, Aug. 12, 2009, *available at* http://www.nytimes.com/2009/08/13/ technology/internet/13reader.html?_r=3. Sony also plans to launch another reader, the Daily Edition, and claims that its business model will involve consumer ownership, not consumer licensing, of books bought through the store. Rob Beschizza, *Sony, B&N Promise to Rekindle Rights for Book Owners*, BOINGBOING, Nov. 13, 2009, http://boingboing.net/2009/11/13/ sony-bn-promise-to-r.html; Tim O'Reilly, *Why Kindle Should Be an Open Book*, FORBES, June 23, 2009, http://www.forbes.com/2009/02/22/kindle-oreilly-ebooks-technology-breakthroughs_oreilly.html.

smartphones and other media devices.¹⁷⁴ The Nook's strongest feature is its extensive library of available books,¹⁷⁵ which makes it a worthy rival of the Kindle.¹⁷⁶

After much anticipation, Apple entered the market in 2010.¹⁷⁷ As of this writing, the iPad has only been available to the public for a month,¹⁷⁸ so predictions about Apple's role in the e-book market are mostly speculation. However, Apple has already announced that its iBooks will be encrypted with DRM and has complicated the current book pricing structure,¹⁷⁹ signaling that it

¹⁷⁷ See Heater, supra note 1.

¹⁷⁸ The iPad went on sale on April 3, 2010. *Apple iPad Goes On Sale*, TELEGRAPH, Apr. 3, 2010, http://www.telegraph.co.uk/technology/apple/7545812/Apple-iPad-goes-on-sale.html. At the time of the publication of this article, Apple had not released hard data of how many iBooks it has sold for profit. Staci D. Kramer, *Apple iPad Sales Pass 1 Million Mark; iBooks Not Flying Off Shelves*, PAIDCONTENT, May 3, 2010, http://paidcontent.org/article/419-apple-ipad-sales-pass-1-million-mark-ibooks-not-flying-off-shelves/.

¹⁷⁹ Apple's negotiations with Macmillan, a large publishing house, set off a price war between Amazon and Macmillan. *See* Ben Parr, *Apple v*. *Amazon: The Great E-book War Has Already Begun*, MASHABLE, Jan. 30, 2010, http://mashable.com/2010/01/30/amazon-macmillan/.

engadget.com/2009/10/23/barnes-and-noble-nook-lend-me-feature-is-severely-limited-assumes/ ("You also can't read the title yourself during the loaner period.").

¹⁷⁴ See Amy Gilroy, Barnes & Noble Unveils Nook e-Reader, TWICE, Oct. 21, 2009, http://www.twice.com/article/365836-Barnes_Noble_Unveils _Nook_e_Reader.php.

¹⁷⁵ The Barnes & Noble library consists of about 700,000 volumes. The Amazon library is just under 310,000. *See* Rob Pegoraro, *B&N Repeats Amazon's E-Book Errors on E-books*, WALL ST. J., July 26, 2009, at G02; *see also Kindle DX Writes New e-book Chapter*, STAR (JORDAN), July 5, 2009 (2009 WLNR 12782316).

¹⁷⁶ Reviewers on both sides of the Nook vs. Kindle debate agree that the Nook presents a formidable challenge to the Kindle. *See* Charlie Sorrel, *Barnes & Noble Unveils Kindle-Killing, Dual-Screen Nook E-Reader*, WIRED, Oct. 20, 2009, http://www.wired.com/gadgetlab/2009/10/barnes-nobles-kindle-killing-dual-screen-nook-e-reader-leaked/; Scott Anthony, *Nook: Too Soon to Call it a Kindle-Killer*, Oct. 21, 2009, HARV. BUS. REV., http://blogs.harvardbusiness.org/anthony/2009/10/nook_too_soon_to_call_it_a _kin.html.

is likely to have as strong a presence in the e-book market as it does in the digital music market. DRM is still a part of the e-book business model, and retailers still claim an obligation to use it.¹⁸⁰

III. ANALYSIS AND RECOMMENDATION

Between DRM protections, incompatible players, licensing agreements, and the availability of free, illegally copied digital media, purchasing and using content legally is not as attractive a prospect to consumers as it should be.¹⁸¹ Well-designed, well-marketed interfaces like iTunes suggest that in order to be successful, the legal way to download and consume online-based media content should also be the easiest way to do it.¹⁸²

Piracy may be inevitable,¹⁸³ but that does not mean that there is nothing that lawmakers or the industry can do to minimize its effects. E-book publishers should make it easier for consumers to legally purchase electronic media than to download illegal material, and respect the basic rights of the parties involved. Transparency in sales and licensing transactions helps balance the interests of consumers as well as rights holders.¹⁸⁴ Apple's success demonstrates that consumers will be loyal to a particular service as long as it is easy to use and has quality content.¹⁸⁵ Thus, e-book publishers should focus on providing notice to consumers of licensing terms, developing branding of their content, and promoting access to that content.

¹⁸⁰ See Beschizza, supra note 168 ("We're obligated to have DRM but we don't pull content back.").

¹⁸¹ "The piracy landscape will change for the better once illegal services are taken out and replaced with legal ones. 'For the vast bulk of the market, convenience is the driver.'" Sandy Brown, *Why File-Sharing Piracy Will Never Die*, STREET, June 30, 2005, http://www.thestreet.com/print/story/10230312.html.

 $^{^{182}}$ *Id*.

¹⁸³ See generally Einhorn & Rosenblatt, supra note 72.

¹⁸⁴ See Matin, supra note 48 at 266; Einhorn & Rosenblatt, supra note 72, at 239.

¹⁸⁵ See Kravets, supra note 116.

Balancing the interests of rights holders and consumers does not require undermining the market for digital media or excessive government regulation of consumer confusion and copyright problems. Retailers should remain free to set marketing and pricing policies.¹⁸⁶ Some digital media industry groups, such as the RIAA, advocate for more legislation or shifting the responsibility for enforcement of copyright law on third parties, such as internet service providers (ISPs).¹⁸⁷

Restrictive DRM protection and the enforcement-throughlitigation approaches have not worked well for the music industry.¹⁸⁸ In fact, the music industry is already moving away from these techniques¹⁸⁹ and looking to new models that can balance the interests of consumers, rights holders, and retailers. E-book retailers are still in the beginning phase of this process, as Amazon, Sony, Barnes & Noble and Apple all currently use DRM.¹⁹⁰ The future of e-book piracy and related digital copyright issues may hinge on the decisions that these retailers and that e-book publishers make in the coming year, as these business decisions can and do have an effect on the public's perception of copyright.¹⁹¹

¹⁸⁶ Einhorn & Rosenblatt, *supra* note 72 at 239.

¹⁸⁷ Bill Rosenblatt, *RIAA Drops Lawsuit Campaign*, DRMWATCH, Dec. 24, 2008, http://www.drmwatch.com/legal/article.php/3793161. This is being considered in the United Kingdon, but raises too many privacy concerns to be a strong contender in the United States. Monica Horten, *UK Music Companies Demand ISP Liability in Copyright Law*, IPTEGRITY, Jan. 28, 2009, http://www.iptegrity.com/index.php?option=com_content&task=view &id=235&Itemid=9.

¹⁸⁸ See supra note 105 and accompanying text.

¹⁸⁹ Matin, *supra* note 48, at 266.

¹⁹⁰ See Rothman, supra note 165.

¹⁹¹ See generally Solveig Singleton, The DMCA Dialectic: Towards Constructive Criticism, PROGRESS & FREEDOM FOUNDATION, May 2006, available at http://www.pff.org/issues-pubs/pops/pop13.11dmca.pdf (discussing how DRM and DMCA issues affect the government as well as the content industry).

A. To DRM or not to DRM?

The publishing industry is split on DRM usage.¹⁹² As more products and services enter the market, the important questions are whether to use DRM and which rights and actions DRM should be designed to protect and allow. In deciding whether or not to use DRM, e-book publishers must understand the limits of DRM. For example, DRM cannot stop piracy or illegal use of media files.¹⁹³ No DRM scheme, no matter how complicated and intricate, is unbreakable.¹⁹⁴ Even if an unbreakable encryption could be devised, it would likely be unmarketable.¹⁹⁵ Therefore, there is no DRM technology that can completely eliminate piracy. Those who choose to break the law will do so, even if the content is free already.¹⁹⁶

Another formidable obstacle facing all of the digital media industries is the culture of free content that file sharing and rampant piracy have created.¹⁹⁷ A large percentage of those

¹⁹⁵ *Id*.

¹⁹² See Rafe Needleman, Amazon Adds Optional DRM for Kindle Publishers, CNET, Jan. 22, 2010, http://news.cnet.com/8301-19882_3-10439 335-250.html (discussing how small publishers can choose to employ the DRM protection, while large publishers submit works that are already encrypted).

¹⁹³ Universal Pictures' executive Jerry Pierce has admitted as much in the digital film context, and other types of media are unlikely to fare better. *See* Wolfgang Gruener, *Universal Pictures "DRM Does Not Stop Piracy"*, TG DAILY, Aug. 4, 2006, http://www.tgdaily.com/trendwatch-features/27 917-universal-pictures-drms-do-not-stop-piracy#close.

¹⁹⁴ See Ed Felten, Why Unbreakable Codes Don't Make Unbreakable DRM, FREEDOM TO TINKER- CENTER FOR INFORMATION TECHNOLOGY POLICY, Dec. 3, 2002, http://freedom-to-tinker.com/blog/felten/why-unbreakable-codes-dont-make-unbreakable-drm.

¹⁹⁶ See Andy Greenberg, *Free? Steal it Anyway*, FORBES, Oct. 16, 2007, http://www.forbes.com/2007/10/16/radiohead-download-piracy-tech-internet-cx_ag_1016techradiohead.html (discussing how "hardcore pirates" will distribute even free content on P2P sites).

¹⁹⁷ See Nate Anderson, *Music Labels Losing Sales Over DRM*, Nov. 28, 2005, ARS TECHNICA, http://arstechnica.com/old/content/2005/11/5635.ars (discussing how a new generation of young people are being raised in a culture of free online content); Handel, *supra* note 98, at 614.

downloading and using digital media content, either legally or illegally, are young, computer-savvy consumers.¹⁹⁸ They are also a key marketing demographic for music, video, and e-book products and services.¹⁹⁹ The current generation of digital media consumers has always had access to free content and is opposed to paying for it.²⁰⁰ Thus, retailers are trying to sell content to a consumer base that is not in the habit of paying for digital media and does not necessarily equate digital piracy with theft.²⁰¹ As such, these consumers are less likely to pay for digital media and more likely to view DRM as a nuisance to be circumvented rather than a legitimate protection to be honored.²⁰²

However, there are benefits to using DRM protection.²⁰³ Even though DRM does not combat piracy, it is still an effective tool for branding content and thus allowing multiple retailers to sell the same song or book in different "packaging."²⁰⁴ The music industry has demonstrated that using DRM can be an effective way to convince large rights holders to release digital versions of their content, which can then be enjoyed by the

¹⁹⁸ This was illustrated by the backlash against Metallica when the band brought suit against Napster. *See* Robin Andrews, *Copyright Infringement and the Internet: An Economic Analysis of Crime*, 11 B.U. J. SCI. & TECH. L. 256, 280–81 ("Particularly when the targeted group is among those most likely to be distrustful of copyright owners, namely teenagers and young adults, this type of adversarial approach is likely to hinder any attempts to restructure social norms on intellectual property rights.").

¹⁹⁹ Id.

²⁰⁰ See Rich, supra note 160. Richard Sarnoff, chairman of the company that owns Random House, said, "If iTunes had started three years earlier, I'm not sure how big Napster and the subsequent piratical environments would have been, because people would have been in the habit of legitimately purchasing at pricing that wasn't considered pernicious." Id. (emphasis added); see Handel, supra note 98, at 614.

²⁰¹ See Handel, supra note 98, at 612

²⁰² See supra note 58 and accompanying text.

²⁰³ See Ernest Miller, Why Use DRM if it Doesn't Work?, COPYFIGHT, May 7, 2004, http://copyfight.corante.com/archives/003559.html; see also Bob Young, DRM Debate Misses Important Point, LULUBLOG, Nov. 23, 2009, http://lulublog.com/2009/11/23/drm-debate-misses-important-point-% E2%80%94-the-goal-is-author-success/comment-page-1/.

²⁰⁴ See Noguchi, supra note 33, at 5.

public.²⁰⁵ In deciding whether or not to employ a DRM scheme, retailers would do well to carefully consider what the DRM will be designed to do and how successful that scheme is likely to be. The trend in the digital music industry has already shifted towards unprotected files.²⁰⁶

B. Three Lessons—Notice, Interoperability, and a New Model of Control

In order for the e-book industry to effectively use DRM protection, it needs to consider the legal and policy issues faced by the music industry and to employ a proactive plan to better address customer protection and piracy.²⁰⁷ The three major lessons learned from the ongoing analyses of music's DRM models are the significance of notice to consumers in aligning expectations, the importance of interoperability between playback devices, and the necessary willingness on the part of rights holders to adapt to new models of dissemination and content control. Any successful provider of online media must address each of these factors, particularly if licensing models continue to be the standard business model.²⁰⁸

These recommendations apply equally to retailers that do not use DRM schemes. Even if DRM is not used as an anti-piracy tool, it is important to reduce consumer confusion, protect the rights of artists and rights holders, and promote interoperability with services that do use DRM.

1. Notice

Notice plays a large role in consumer protection law and is

²⁰⁵ See Jobs, supra note 44 (discussing how FairPlay reassured rights holders and allowed Apple to license music from all of the Big Four record companies).

²⁰⁶ See Matin, supra note 48, at 272.

²⁰⁷ See Haber, supra note 28.

²⁰⁸ See generally Nika Aldrich, A System of Logo-Based Disclosure of DRM of Download Products, 8 J. HIGH TECH. L. 57 (2008) (suggesting the importance of notice to consumers when retailers use DRM schemes).

an important tool in reconciling consumer expectations with the product or service being offered.²⁰⁹ Much of the frustration that consumers feel about DRM-protected licensing schemes stems from a lack of understanding of how licensing schemes work.²¹⁰ Consumers are not properly informed of what they are purchasing and what rights they have to use the content.²¹¹ Retailers often protect licensed content with DRM to digitally enforce the control it retains in the licensing model.²¹² Consumers perceive DRM as infringing on their rights, even though they do not actually have those rights when they purchase licensed content.²¹³ If a consumer believes that a licensing scheme is the same as buying the content outright, he will be sorely (and predictably) disappointed to learn that he cannot use the content any way that he wishes.²¹⁴ This works against the rights holder, because that frustration is often cited by consumers as the reason that they listen to or watch pirated works and why they do not wish to purchase DRM-protected media.²¹⁵

Part of this perception problem is due to confusing language in the terms and conditions contract to which the consumer must agree before purchasing the content, if they read them at all.²¹⁶

²¹² See generally Zimmerman, supra note 77.

²¹³ See Cohen, supra note 211.

²¹⁵ See Anderson, supra note 61; Elkin-Koren, supra note 51, at 1130.

²¹⁶ Joseph P. Mello, *Consumers Should Read Before Clicking "I Accept,"* TECHNEWSWORLD, Feb. 22, 2005, http://www.technewsworld.com/story/ 40777.html?wlc=1259906019. Clickwrap and clickthrough licenses are commonly used in online purchases. The consumer is asked to read the terms and conditions of sale and then click on "I Accept" or "I Decline."

²⁰⁹ See Elkin-Koren, supra note 51, at 1130 (discussing the consumer protection approach and consumer expectations).

 $^{^{210}}$ *Id*.

²¹¹ See, e.g., Dan Cohen, *KindleGate: Confusion Abounds Regarding Kindle's Download Policy*, GEARDIARY, June 21, 2009, http://www.gear diary.com/2009/06/21/kindlegate-confusion-abounds-regarding-kindle-download-policy/.

²¹⁴ See Nate Anderson, *Music Labels Losing Sales Over DRM*, ARS TECHNICA, Nov. 28, 2005, http://arstechnica.com/old/content/2005/11/5635.ars.

Online retailers use clickwrap licenses, which prevent the consumer from completing the purchase unless he agrees to the license.²¹⁷ Clickwrap licenses are routinely accepted without reading.²¹⁸

An examination of the terms of sale and terms of use employed by rights holders offers insight into the causes of this problem. For example, though the version of the iTunes Store's Terms and Conditions at the time of publication of this article does outline all the ways in which the consumer may use iTunes content,²¹⁹ the relevant section is still called the "Terms of Sale."220 The consumer must scroll through four other categories of agreements before reaching the awkwardly titled "Licensed Application End User License Agreement," which does clearly state that the products made available through the store are licensed, not sold.²²¹ The licensing language is explicit, but seems to contradict the other sections of the Terms and Conditions, all of which refer to the transaction between the iTunes Store and the consumer as a "purchase," not even "purchase of a license."²²² Whether that language is intentionally confusing is unclear, but the average consumer would likely not realize that "purchase" in this context is different from

Consumers rarely decline because doing so often means that they cannot purchase the product. *Id*.

²¹⁷ See id.

²¹⁸ See Electronic Frontier Foundation, *EFF Launches TOSBack–A* '*Terms of Service' Tracker for Facebook, Google, eBay,and more*, EFF, June 4, 2009, http://www.eff.org/press/archives/2009/06/03-0 ("Most web users don't read [terms of service] policies or understand that they are constantly changing."). Courts have examined clickwrap licenses and found them to be enforceable if properly structured. See generally Hotmail Corp v. Van Money Pie, Inc., 1998 U.S. Dist. LEXIS 10729 (N.D. Cal. 1998) (enforcing the validity of a clickwrap license); *see also* Hill v. Gateway 200, 105 F.3d 1147 (7th Cir. 1997).

²¹⁹ Apple, iTunes Store Terms and Conditions, Apple.com, http://www. apple.com/legal/itunes/us/terms.html (follow "Terms of Sale" and scroll down to "Usage Rules") (last visited Feb. 10, 2010).

²²⁰ *Id.* (follow "Terms of Sale").

²²¹ Id. (follow "Licensed Application End User License Agreement").

²²² *Id*.

purchasing a tangible item. The Usage Rules do clearly delineate how the consumer may use the product, but again, this may not make sense to a consumer who believes that the transaction is a purchase.²²³

By contrast, Amazon's License Agreement and Terms of Use uses clear language to explain how the Kindle's shrinkwrap license agreement works.²²⁴ Amazon's explicit use of the term "License Agreement" in the document name²²⁵ and the agreement's superior organization makes the agreement more consumer-friendly. The "Digital Content" section explains that the right is non-exclusive and that the content can only be used on the Kindle device and for personal, non-commercial use.²²⁶ It also has a dedicated section for restrictions on use (which includes circumvention of DRM) and also explains the scope of the agreement on subscription services.²²⁷ The language is straightforward and the agreement includes definitions of what constitutes content, software, and other key terms.²²⁸ It does not, however, specifically mention that there is DRM protection on the files, save for a brief mention of "protections of the Device."229

A consumer could read the entire Terms of Use for most digital media services and not understand how purchasing the license is different from purchasing the content outright.²³⁰ Understanding what these agreements mean can also be difficult for a novice digital media consumer.²³¹ The widespread sale of

²²³ See Cohen, supra note 211.

²²⁴ Amazon.com, Amazon Kindle: License Agreement and Terms of Use, http://www.amazon.com/gp/help/customer/display.html?nodeId=20014 4530 (last visited Feb. 1, 2010).

²²⁵ *Id*.

²²⁶ *Id*.(follow "Digital Content").

²²⁷ See id.

²²⁸ *See id*.

²²⁹ See id (follow "Software," then "No Reverse Engineering").

²³⁰ See Craig Zieminski, Game Over for Reverse Engineering: How the DMCA and Contracts Have Affected Innovation, 13 J. TECH. L. & POL'Y 289, 332–34 (2008).

 $^{^{231}}$ *Id*.

digital media started less than fifteen years ago, so "novice" describes an appreciable percentage of consumers.²³²

Of these services, Amazon most effectively explains the nature of the purchase and consumers' rights regarding the licensed content. Yet, even Amazon's customers complain of confusing terms and language.²³³ The Terms of Use for digital media must be clearer and align the services provided with consumer expectations. If these licensing schemes provide a service that is substantially different from the average consumer's expectations with regard to control of content, the terms of use will have to be more direct and serve to retrain customers on how much control each party has in the transaction.

2. Interoperability

Interoperability does not require that all e-book and e-reader retailers use the same DRM schemes.²³⁴ Retailers could achieve interoperability while each continued to use proprietary technology; what is needed is compatibility, not uniform, identical protections. Adobe's ePub software, which allows layering of proprietary DRM over the base program and is compatible with all other ePub software, is an excellent example of a platform that retailers could build on and is already used by Sony, Barnes & Noble, and Apple.²³⁵

Each retailer could use their own proprietary DRM

²³² Microsoft incorporated MP3 support into its Windows Media Player program in 1997 and the first portable media players did not appear until 1998. See Jack Ewing, *How MP3 Was Born*, BUS. WEEK, Mar. 5, 2007, *available at* http://www.businessweek.com/globalbiz/content/mar2007/gb2007 0305_707122.htm.

²³³ Cohen, *supra* note 211; Cohen, *supra* note 27.

²³⁴ See generally Aaron K. Perzanowski, *Rethinking Anticircumvention's Interoperability Policy*, 42 U.C. DAVIS L. REV. 1549, 1554 (2009) (defining interoperability and explaining that different systems can be interoperable).

²³⁵ See HarperCollins E-book and Audio Frequently Asked Questions, http://www.harpercollinsebooks.com/CB681A87-80BB-45B2-B849-53A06 D2E5930/10/133/en/Help-FAQ-Format410.htm#question-431 (last visited Feb. 20, 2010).

technology to brand their content and include software on the readers that decodes the DRM used by other e-book retailers on their readers.²³⁶ By charging for these services, the retailers could continue to promote interoperability while continuing to make profits and build their own brands. Amazon, for example, could charge a fee of \$3.00 to decrypt a book purchased from Barnes & Noble or Sony and allow it to be read on the Kindle device. Likewise, Sony could charge extra for books purchased through the Amazon store. Under this scheme, the consumer experience would be streamlined, retailers would retain control over their devices, and the focus of market competition would shift from which retailer has the most license agreements with publishers to which retailer has the device with the best features and service. Then, market forces would determine which company was the most successful, just as they do now with physical bookstores. Rights holders would be incentivized to license books to more retailers and DRM protections could be used in the more effective ways outlined above.²³⁷

An interoperability scheme would increase economic efficiency, render the market more competitive, and encourage innovation.²³⁸ The current situation favors large retailers, like Amazon, Barnes & Noble, and Apple, who have the negotiating power to license a larger market share of books from trade publishers.²³⁹ Interoperability would allow smaller retailers to

²³⁹ Barnes & Noble has the most e-books available. Pegoraro, *supra* note

²³⁶ Watermarking has also been suggested as a more "gentle" alternative to DRM for this purpose. *See* Jon Healey, *Watermarks: A Friendlier DRM*?, L.A. TIMES, May 28, 2009, *available at* http://latimesblogs.latimes.com/technology/2009/05/watermarks-drm-file-sharing.html.

²³⁷ This scheme would be analogous to the music industry in that the compatible platform would act as the "mp3" of e-books. MP3 files can be read on almost any player. *See* Perzanowski, *supra* note 234, at 1594 (suggesting that MP3 files are compatible with "all portable players, including the iPod"). Text does not have this kind of base platform.

²³⁸ See Perzanowski, supra note 234, at 1549. This also leaves room for store tie-ins, just as Barnes & Noble is currently doing with the Nook. Barnes & Noble Nook Overview, http://www.barnesandnoble.com/nook/ features/ (last visited Feb. 20, 2010). Bringing a Nook into a Barnes & Noble store activates certain features that have free content and deals. *Id*.

enter the market and compete without suffering the same problems that smaller music retailers faced when iTunes dominated the music catalog. Thus, any potential antitrust concerns that may arise from the type of collective agreement that interoperability might require should not be prohibitive²⁴⁰ since the Supreme Court has already determined that economic efficiency and competition are the key issues in antitrust suits.²⁴¹

3. Adapting to New Models

A willingness to adapt to new models would also help the ebook industry. The music industry did not respond to new technologies, like P2P networks, quickly or effectively enough. Rights holders' and the RIAA's responded to Napster and Grokster by barricading its content behind restrictive DRM and by trying to litigate P2P networks out of existence.²⁴² Instead of adapting to the changes that the Internet brought, the music industry first tried to continue doing business as it always had, and consequently, it took years for successful online music

^{175.} Amazon controls 90% of the e-book market. Rory Maher, *Here's Why Amazon Will Win the EBook War: Kindle Already Has 90% eBook Market Share*, TBIRESEARCH, Jan. 13, 2010, http://www.tbiresearch.com/amazon-selling-90-of-all-e-books-2010-1.

²⁴⁰ A similarity can be drawn to when the American Society of Composers, Authors, and Publishers (ASCAP), who controlled 80% of the music licensed for performance, was sued for violations of the Sherman Antitrust Act. *See* Broadcast Music, Inc. v. CBS, 441 U.S. 1 (1979); Michael Einhorn, *Blanket Licenses and Consent Decrees*, Musician's Network Portal, http://www.get-it-all.net/indie50-Blanket_Licensing_and_ Consent_Decrees.htm (last visited Feb. 20, 2010). Similarly, Amazon controls a significant market share of e-book rights. *See* Maher, *supra* note 239. In *BMI*, the Supreme Court found that the issuance of blanket licenses did not violate the Sherman Act. *BMI*, 441 U.S. at 7.

²⁴¹ Justice White stated that the proper inquiry as to whether such control was permitted focuses on whether the effect is designed to "increase economic efficiency and render markets more, rather than less, competitive." *Broadcast Music*, 441 U.S. 1 at 20 (1979); Einhorn, *supra* note 240. That is, in essence, what an interoperability scheme would achieve.

²⁴² See Piasentin, supra note 99.

services to develop.²⁴³ In order to succeed as a thriving industry, publishers and retailers should not try to control customer actions, but rather adapt and adopt policies that work with current and emerging technologies.²⁴⁴ Some in the trade publishing industry still refuse to embrace the rising popularity of e-books.²⁴⁵ Fear of the fall of traditional publishing may have driven publishers to negotiate higher book prices with Apple than they had with Amazon and to still seek DRM,²⁴⁶ and may thus keep the industry stagnant.

That kind of fear is not the answer. It is counterproductive and contrary to the spirit of copyright law; it discourages consumers from purchasing content legally and disincentivizes trade authors from producing and selling work.²⁴⁷ This is especially important in the e-book industry because authors, unlike musicians, do not have revenue streams other than their books to market their work.²⁴⁸

²⁴³ iTunes was not launched until 2003, six years after the passage of the DMCA. *See* Digital Millennium Copyright Act, 17 U.S.C. § 101 (1998); John Borland, *Apple Unveils Music Store*, CNET, Apr. 28, 2003, http://news.cnet.com/Apple-unveils-music-store/2100-1027_3-998590.html? tag=mncol;txt.

²⁴⁴ See Garon, supra note 52, at 151. ("The purveyors of media... must stop railing at the public and begin to conform their expectations to the expectations of the public as part of the effort to find an enforceable and defensible line in the sand.").

²⁴⁵ See Ben Hill, Hachette Chief Hits Out at e-Books, FIN. TIMES, Aug. 30, 2009, available at http://www.ft.com/cms/s/0/0df31226-958d-11de-90e0-00144feabdc0.html?nclick_check=1; Mike Masnick, Publishers Lashing Out at Ebooks, TECHDIRT, Sept. 2, 2009, http://www.techdirt.com/articles/20090901/0218556067.shtml.

²⁴⁶ See Rich Adin, We're Running as Scared as We Can, TELEREAD, Feb. 2, 2010, http://www.teleread.org/2010/02/02/we%E2%80%99rerunning-as-scared-as-we-can/. Macmillan Publishing won the battle with Amazon to raise book prices on the Kindle as well, and it may only be a matter of time before other publishers follow suit. *Id*.

²⁴⁷ See Jessica Litman, The Demonization of Piracy, Address to the Tenth Conference on Computers, Freedom & Privacy (April 6, 2000) *available at* http://www-personal.umich.edu/~jdlitman/papers/demon.pdf.

²⁴⁸ Though album sales dropped, revenue from concert ticket sales increased. *See* Ben Sisario, *Music Sales Fell in 2008, But Climbed on the*

Adapting to the current online media climate involves sales and marketing techniques already familiar to retailers. Once everyone has access to quality content, the distinguishing factors in the market will be the products, services, and features offered by each retailer. Piracy will become less attractive not through restrictive DRM, but through features and benefits that cannot be found on P2P sites.²⁴⁹ For example, the Nook recognizes when it is in a Barnes & Noble store and activates access to exclusive content and discounts.²⁵⁰ Amazon has created a free Kindle application that allows books purchased through the Kindle store to be read on a PC or an iPhone.²⁵¹ Apple has cultivated incredible brand loyalty.²⁵² Attractive, competitively priced extras can lure more consumers to pay for legal content and prefer legal downloads to illegal ones,²⁵³ which would benefit retailers, publishers, and consumers alike.

CONCLUSION

Online piracy took the music industry by surprise, and the consumer backlash against DRM protections forced most retailers to innovate in order to remain competitive and discourage copyright infringement.²⁵⁴ The industry trend towards

Web, N.Y. TIMES, Dec. 31, 2008, *available at* http://www.nytimes.com/ 2009/01/01/arts/music/01indu.html.

²⁴⁹ See Andrew Savikas, *Content is a Service Business*, O'REILLY TOOLS OF CHANGE FOR PUBLISHING, July 13, 2009, http://toc.oreilly.com/2009/07/ content-is-a-service-business.html (discussing advice from musician Trent Reznor on how to compete with pirated media).

²⁵⁰ Nook Features, http://www.barnesandnoble.com/nook/features/?cds2P id=30195 (last visited Feb. 19, 2010).

²⁵¹ See Yardena Arar, Amazon Kindle for PC E-Book Software, PC WORLD, Nov. 16, 2009, available at http://www.washingtonpost.com/wp-dyn/content/article/2009/11/11/AR2009111100393.html.

²⁵² See Stephen Withers, Apple Tops for Brand Loyalty: Report, ITWIRE, Sept. 12, 2008, http://www.itwire.com/opinion-and-analysis/core-dump/ 20603-apple-tops-for-brand-loyalty-report.

²⁵³ See Savikas, supra note 249.

²⁵⁴ Examples of those innovations include pricing tiers and DRM-free content. *See supra* note 6.

DRM-free music is now better aligned with consumer expectations and consumer protection principles, although the licensing model still exerts an unnecessarily high level of control over the content.²⁵⁵

Unless the e-book industry can similarly adapt to the current digital media climate and adopt a proactive, rather than a reactive, approach, it will face the same obstacles and setbacks as the music industry.²⁵⁶ E-book publishers and retailers need to recognize the pitfalls of DRM and find new ways to combat digital copyright infringement and public apathy towards copyright law, or risk driving consumers to alternative and illegal means.

²⁵⁵ See generally Elkin-Koren, supra note 51.

²⁵⁶ See Kirk Biglione, DRM for Books: Will Publishers Learn Anything From Music's Mistakes?, MEDIALOPER, June 25, 2007, http://medialoper. com/drm-for-books-will-publishers-learn-anything-from-the-music-industrys-mistakes/.