Denver Sports & Entertainment Law Journal

Volume 4
Issue 1 *Spring 2008*

Article 5

2008

Music 2.0 - The Future of Delivering Music Digitally

David Ratner
false

Music 2.0 - The Future of Delivering Music Digitally

MUSIC 2.0 – THE FUTURE OF DELIVERING MUSIC DIGITALLY

By David Ratner - University of Denver, J.D. 2008

INTRODUCTION

No discussion of the current state of the music industry is complete without noting the prolific file-sharing, downloading, and streaming that continues to replace hard-copy music sales.[1] Major record labels are entrenched in combat against illegal downloading and, while the labels have won a number of major battles,[2] they are losing the war.[3] The long-term viability of the modern music industry requires adaptation to a revised business model that encourages legal behavior by establishing a new norm.

A new system for delivering music to end users must embrace developing technology and adapt to the law instead of relying on the law to combat change. A variety of proposals suggest changing the law or permitting infringement as viable solutions to illegal music consumption.[4] The most successful model for the future of digital music delivery is a subscription service offering legal access to music online in a format tailored to the desires of consumers.

Part I of this article explains the history of copyright law and application of the law to the duplication of copyrighted works. Part II recounts litigation that applied

---

[1] Geoff Duncan, *U.S. CD Sales Down 20 Percent*, DIGITAL TRENDS, March 22, 2007, http://news.digitaltrends.com/news/story/12526/us_cd_sales_down_20_percent (documenting recent sales data that digital music downloads are resulting in a decrease in revenue traditionally generated by CD sales).

[2] *See* discussion of copyright rulings in the digital age *infra* Part II.

[3] The number of downloads continues to increase despite the industry's efforts to stem illegal activity. *See* Hiawatha Bray, *Record firms crack down on campuses*, THE BOSTON GLOBE, March 8, 2007, http://www.boston.com/business/technology/articles/2007/03/08/record_firms_crack_down_on_campuses/ (The music industry concedes that illegal downloading remains rampant despite widespread legal action against music piracy.).

[4] *See* comparisons to other proposals *infra* Part V.E.

copyright law to digital rights in the 21st century. Part III clarifies the basics of music copyright and relates the law to online use and the legislation that attempts to control that use. Part IV delves into the current state of online music delivery and sets the stage for development of a successful system for the future. In Part V, this article explains what a successful music delivery system will look like, offers a rationale for implementing this system, and compares the system to other proposals. The implicit conclusion is that the music industry must adapt to the changing habits of its audience and embrace a new model that accepts these realities.

I. COPYRIGHT HISTORY

Copyright is constitutionally created and dates back to the founding of the nation. The United States Constitution grants Congress the power "[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."[5] The founding fathers could never have envisioned the winding path copyright would take in the ensuing years and the increasing difficulty of adapting copyright law to twenty-first century technology.

Although the "Authors" the Constitution referred to were likely authors of literary works, copyright easily applies to musical compositions as well. Unlike the written word, the delivery and enjoyment of music has undergone vast changes. While most people still consume literary works by reading a printed page, the delivery of music has rapidly gone from strictly live performance to phonograph recordings to digital recordings to internet

[5] U.S. CONST., art. I, § 8, cl. 8.

distribution. This continuum of constantly transforming mediums makes music copyright one of the complex areas of copyright law.[6]

A. Copyrighted Music

Congress first added musical compositions to the list of copyrightable works in 1831, protecting only printed or "sheet" music.[7] This change was relatively effective until the creation of the player piano at the end of the 19th century. The player piano was the first device that could produce the sounds of music, threatening the rights of copyright holders. Congress responded to the player piano with the Copyright Act of 1909.[8] The 1909 Act protected the physical reproduction of music as an embodiment of the music, therefore providing protection under copyright law.[9]

The 1909 Act created strict parameters for protecting a work, only protecting works that were published and had a notice of copyright included on the publication.[10] In the ensuing years advancing technology allowed music to be recorded (and played back), leading to new questions about the scope of copyright. The creation of phonographic recordings made music infinitely more accessible to the average consumer. The creation of the cassette tape allowed a consumer to make copies of those recordings. The law had to change.

B. The 1976 Changes

---

[6] Lydia Pallas Loren, *Copyright in the Digital Age: Reflections on Tasini and Beyond: Untangling the Web of Music Copyrights*, 53 CASE W. RES. L. REV. 673, 679 (2003).
[7] *Id.* (citing Act of Mar. 3, 1897, ch. 392, 29 Stat. 694).
[8] *See* Robert P. Merges, *One Hundred Years of Solicitude: Intellectual Property Law, 1900-2000*, 88 CALIF. L. REV. 2187, 2192 (2000) (recounting how Congress stepped in when the Supreme Court refused to interpret a piano roll as a musical composition).
[9] *Id.*
[10] *See* MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 7.10 (2007), for a discussion of blah, blah, blah RULE 1.2(e)

Throughout these advancements the bulk of copyright law remained largely static. Congress executed minor alterations and updates but did not fully overhaul the code until the Copyright Act of 1976. Most significantly, the 1976 Act protected "all works of authorship fixed in any tangible medium of expression."[11] This encompassed all "musical works, including any accompanying words."[12] The sweeping language of this Act extended protection to virtually all authors and composers, whether their work was "fixed" on paper, in a sound recording, or any other medium.

Furthermore, the Act granted to the copyright holder the exclusive right to make copies[13] and to distribute copies to the public.[14] This development presented vast implications for music copyrights, outlawing the copying of musical recordings. It coincided with the explosion of popularity of cassette tapes, an alternative to vinyl records that could be recorded and copied with a common home player. Suddenly, musical recordings were easily duplicable but it was ostensibly illegal to do so.

The legality of copying a recording was tested in a case about copying in a comparable medium: video. Just as the cassette tape had allowed users to copy music, the video cassette recorder (VCR) allowed copying of television and movies.[15]

C. *Sony v. Universal*

In *Sony v. Universal*, television and motion picture rights holders sued Sony, the maker of the Betamax VCR, for contributing to the infringement of Universal's television

[11] 17 U.S.C.A. § 102(a) (2007).
[12] 17 U.S.C.A. § 102(a)(2) (2007).
[13] 17 U.S.C.A. § 106(1) (2007).
[14] 17 U.S.C.A. § 106(3) (2007).
[15] Brett J. Miller, *The War Against Free Music: How the RIAA Should Stop Worrying and Learn to Love the MP3*, 82 U. DET. MERCY L. REV. 303, 307 (2005).

shows and movies.[16] Although users could makes copies of copyright-protected shows and movies with the Betamax, the United States Supreme Court did not find Sony liable for contributory infringement.[17] The Court found that "time-shifting" – recording a program in order to watch it at a later time – was fair use of the content and therefore not an infringement of copyright.[18]

The *Sony* ruling extended the fair use doctrine to new technology and set the stage for litigating future battles between the purveyors of technological advancement and the rights holders who claim the technology infringes their copyrights.[19] It is noteworthy that Universal and the other video entertainment companies should be grateful that the Court ruled against them. The resulting market for videos and, subsequently, DVDs allowed these companies to earn immense profits from a previously nonexistent market (and a market they brought suit to prevent from ever developing).

Sony created a complete defense to contributory infringement by minting the staple article of commerce doctrine.[20] This doctrine maintains that if an article is capable of substantial non-infringing use its manufacturer or distributor is not liable for infringement executed with the device.[21] Henceforth, litigants repeatedly referenced *Sony* when defending new technology's uses as they relate to the rights of copyright holders.[22]

---

[16] Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 419-20 (1984).
[17] *Id.* at 434.
[18] *Id.* at 446, 449.
[19] Merges, *supra* note 8, at 2204.
[20] Kelly M. Maxwell, *Software doesn't Infringe, Users do? A Critical Look at MGM v. Grokster and the Recommendation of Appropriate P2P Copyright Infringement Standards*, 13 COMMLAW CONSPECTUS 335, 343-44 (2005) (citing *Sony*, 464 U.S.at 440-42).
[21] *Sony*, 464 U.S. at 440-42.
[22] *See* A&M Records v. Napster, Inc. and MGM Studios, Inc. v. Grokster Ltd. *infra* Part II.A.,C., for a discussion of blah, blah RULE 1.2(e)

Technology continued to advance and offer new and previously untested ways to infringe copyrights. Specifically, digital encoding and transfer allowed average users to make identical copies of musical works and distribute those copies via the Internet at a minimal cost. These new uses gave rise to a new generation of legal battles.

II. COPYRIGHT RULINGS IN THE DIGITAL AGE

By the end of the twentieth century most consumers purchased their music on compact discs (CDs) which store music as digital data. The proliferation of the personal computer presented the opportunity for the average user to transfer music from CD to computer hard drive. This allowed an individual to store his music as digital files on his computer. Peer-to-Peer (P2P) technology emerged as a fast and convenient way to share these files, facilitating the copying and distribution of copyrighted musical works.[23]

A. Napster

Napster was a free software application that allowed users to share their music files with other Napster users.[24] With the Napster program, users could search and find music files on any other connected Napster user's computer and freely download those files.[25] This permitted the transfer of exact copies of music files to countless users. In essence, one person could legally purchase a piece of music (for example, on CD), transfer it to his computer, make it available through Napster, and millions of other Napster users could acquire the music at no cost. Not surprisingly, this enraged the owners of music copyrights and they soon brought suit in federal court.

---

[23] Maxwell, *supra* note 20, at 344.
[24] A&M Records v. Napster, Inc., 239 F.3d 1004, 1011 (9th Cir. 2001).
[25] *Id.*

A coalition of record companies sought an injunction against Napster for contributorily and vicariously infringing their copyrights.[26] The companies maintained that Napster was specifically intended for infringing use and that Napster users' rampant copying left Napster with dirty hands.[27] More significantly, they claimed Napster was encouraging and assisting this infringement.[28]

Napster countered that its users were engaged in fair use[29] and that Napster was used for sampling and space-shifting, two permissible fair uses.[30] Napster relied on *Sony* to assert that it could not be found liable for contributory infringement. Specifically, Napster cited *Sony*'s staple article of commerce doctrine.[31]

The Ninth Circuit Court of Appeals found that Napster's conduct met both prongs of the test for contributory infringement: knowledge and material contribution.[32] First, Napster had sufficient knowledge of the infringing uses of its software. Next, Napster provided the "site and facilities" which allowed users to locate and download copyrighted music files.[33] Napster was unable to succeed on the *Sony* defense and the court enjoined Napster, spelling its demise.[34]

B. Aimster

Although the record companies successfully killed Napster, its popularity and notoriety spawned a number of subsequent applications anxious to capture the Napster

---

[26] *Id.* at 1019.
[27] *Id.* at 1013.
[28] *Id.* at 1019.
[29] *Id.* at 1014.
[30] *Id.* at 1017.
[31] *Id.* at 1020.
[32] *Id.* at 1022.
[33] *Id.*
[34] *Id.* at 1029.

audience. Napster's liability hinged on its servers' involvement with the transfer of copyrighted files. Therefore, post-Napster programs attempted to facilitate file transfers without centralized servers.[35] This "direct P2P" allowed users to trade files directly and ostensibly did not contribute to any infringing activity by its users.

Aimster was built around instant messaging, allowing users to exchange files when linked by an instant messenger service.[36] Aimster collected and organized user information on its server but it did not host copies of files exchanged by its users.[37] Nonetheless, record companies sued Aimster for contributing to the infringement of their copyrighted works.[38]

The Seventh Circuit Court of Appeals found that Aimster could not successfully claim it did not have knowledge of the infringing acts of its users.[39] Furthermore, the court held that Aimster materially contributed to these infringing acts because the software did not have sufficient non-infringing uses.[40] Finding that Aimster satisfied the test for contributory infringement, the Seventh Circuit upheld the district court's injunction and put Aimster out of business.[41]

C. Grokster

After two successful challenges by the record companies, the next generation of P2P software was built around the previous court decisions. Aware that a legal application would have to avoid knowledge of infringing use and not contribute to the

---

[35] Miller, *supra* note 15, at 311.
[36] *In re* Aimster Copyright Litig., 334 F.3d 643, 646 (7th Cir. 2003).
[37] *Id.*
[38] *In re* Aimster Copyright Litig., 252 F. Supp. 2d 634, 639 (N.D. Ill. 2002).
[39] *Aimster*, 334 F.3d at 650.
[40] *Id.* at 653.
[41] *Id.* at 655.

infringing acts of its users, the Grokster system operated with no central server exchanging information or files among users.[42] A Grokster user's computer communicated directly with other Grokster users' computers via indexing "supernodes."[43]

Although Grokster pled that it did not have knowledge of infringing use of its software, the United States Supreme Court found that 90 percent of the files available for download were protected by copyright.[44] Grokster was significantly disadvantaged by the advertising and promotion of its infringing use, including the unabashed pursuit of former Napster customers who could not access free downloads because of Napster's demise at the hands of the Ninth Circuit.[45] The Supreme Court held that the *Sony* defense could not be used where the defendant's statements or actions were directed towards promoting infringement.[46]

More significantly, the *Grokster* Court found that "evidence of 'active steps . . . taken to encourage infringement'. . . overcomes the law's reluctance to find liability when a defendant merely sells a commercial product suitable for some lawful use."[47] Regardless of contributory infringement, the Court held Grokster liable for inducing its users to infringe copyrights.[48] This blow to the defendants was a significant victory for content owners. By upholding inducement liability, the Court made clear that "the

---

[42] MGM Studios, Inc. v. Grokster Ltd., 545 U.S. 913, 920 (2005).
[43] *Id.* at 921.
[44] *Id.* at 922.
[45] *Id.* at 925.
[46] *Id.* at 935.
[47] *Id.* at 936 (citing Oak Industries, Inc. v. Zenith Electronics Corp., 697 F. Supp. 988, 992 (ND Ill. 1988)).
[48] *Id.* at 937 (adopting the inducement rule (need cite here?) for copyright to find liability for the infringing acts of third parties).

distribution of a product can itself give rise to liability where evidence shows that the distributor intended and encouraged the product to be used to infringe."[49]

The *Grokster* decision was the knockout punch in the initial round of litigation over P2P software. Although some, like Napster, have been reinvented as fee services that legally compensate copyright owners, the record industry continues to stymie the success of subsequent P2P programs in the shadow of *Grokster*.

D. RIAA Litigation

Although record companies successfully struck down many of the more commercially successfully P2P systems, consumers continue to share files and infringe copyrighted works through P2P networks.[50] Therefore, the Recording Industry Association of America (RIAA) began a campaign of suing individual infringers.

On September 8, 2003 the RIAA sued 261 of its own customers for sharing songs on P2P networks and has since filed, threatened, or settled legal action against more than 20,000 users.[51] Many of the lawsuits demanded tens or hundreds of thousands of dollars in damages and virtually all the accused settled with the RIAA, usually for about $4,000.[52]

The first of these cases to actually go to trial was heard in the United States District Court for the District of Minnesota in October 2007.[53] Jammie Thomas was accused of downloading and distributing 25 songs via the KaZaA network, which

---

[49] *Id.* at 940 n.13.
[50] Maxwell, *supra* note 20, at 336 n.8 (citing congressional hearings (same as "possible" congressional hearings? Please verify source) testifying to the pervasiveness of infringement through downloading and its detrimental effects on the music industry).
[51] ELECTRONIC FRONTIER FOUNDATION, RIAA V. THE PEOPLE: FOUR YEARS LATER (2007), http://w2.eff.org/IP/P2P/riaa_at_four.pdf.
[52] *See id.*
[53] Capitol Records v. Thomas, No. 06-1497 (D. Minn. Oct. 5, 2007).

Thomas denied.[54] After the parties presented their cases, Judge Michael Davis instructed the jury that simply making a file available for electronic distribution violated the copyright owner's rights.[55] The jury could therefore find Thomas guilty of infringement in the absence of any proof that any other users shared Thomas' copyrighted works. This was a significant blow to Thomas' case and ultimately led to the guilty verdict against her.

Judge Davis' jury instruction essentially allowed the jury to convict Thomas without requiring the plaintiff to show the copying, transfer, or distribution of any copyrighted material. This victory for the RIAA set an intimidating precedent for others accused of file-sharing but the ruling may not stand for long. A number of other trials were set to address this issue in the months following the *Thomas* decision.[56]

III. MUSIC RIGHTS IN THE DIGITAL WORLD

One cannot conduct an accurate examination of the future of music delivery without examining the legal structure that content providers and users are operating within. Although a complete analysis of copyright law is beyond the scope of this article,[57] understanding some recent developments in digital copyright is crucial to a comprehensive examination.

---

[54] Eric Bangeman, *First RIAA trial gets underway*, ARS TECHNICA, Oct. 2, 2007, http://arstechnica.com/news.ars/post/20071002-first-riaa-trial-gets-under-way-with-jury-selection.html.

[55] Eric Bangeman, *Debate over "making available" jury instruction*, ARS TECHNICA, Oct. 4, 2007, http://arstechnica.com/news.ars/post/20071004-debate-over-making-available-jury-instruction-as-capitol-v-thomas-wraps-up.html.

[56] Greg Piper, *RIAA Wins First P2P Jury Trial*, WASHINGTON INTERNET DAILY, Oct. 5, 2007.

[57] This article will not delve into theories of copyright law or proposals for amending the code, instead focusing on systematic changes to the music industry business model to bring digital music delivery within the current law.

A. Basics of Music Copyright

A brief overview of basic music copyrights will inform this conversation moving forward. A music copyright is divided into two separate and distinct works. The first, the "original work" defined in the Copyright Act, is the musical composition: the underlying music, such as the chord progression, instrumentation, and lyrics.[58] The individual or entity who owns this right retains the license to perform it publicly. This is commonly referred to as a "publishing right" and was traditionally assigned to a publishing company for administration.

The second, the sound recording right, results from the "fixation of a series of musical, spoken, or other sounds"[59] and is separate from the music composition or performance of the work. The owner of the sound recording right can distribute copies of the work. The sound recording right is commonly referred to as the "master" and was traditionally owned by the record company that produced the work.

Congress created a compulsory license for performing a copyrighted work and subsequently distributing it.[60] Once a work has been released or "distributed to the public" any other person may make and distribute recordings of the work.[61] One who obtains such a "mechanical license" must simply pay a statutory licensing fee for this right.[62]

---

[58] *See* 17 U.S.C.A. § 102(a)(2) (2007).
[59] 17 U.S.C. A. § 101 (2007).
[60] *See* 17 U.S.C.A. § 115(a)(1) (2007).
[61] 17 U.S.C.A. § 115(a)(1) (2007).
[62] *See generally* HFA Online, Harry Fox Agency, http://www.harryfox.com (The Harry Fox Agency is the primary provider of mechanical licenses and the website provides information on obtaining a license and paying the statutory fee.).

While these rights seem straightforward, they were conceived and defined in the pre-digital age and do not easily adapt to the electronic transmission of music that is commonplace today.

B. Digital Rights & Licenses

Although Congress has attempted to update copyright law in concert with advancing technology, the results inadequately address current issues. A "digital phonorecord delivery" (DPD) is defined as the digital transmission of a sound recording resulting in a specifically identifiable reproduction.[63] So downloading a piece of music or obtaining it through a P2P file-sharing network results in a DPD.

To legally offer a download of a copyrighted musical work, the download service must secure at least four licenses: (1) the publishing right holder's right to reproduce and distribute the composition; (2) the sound recording right holder's right to reproduce and distribute the recording; (3) the publishing right holder's right to authorize public performances of the composition; and (4) the sound recording right holder's right to authorize public performances of the digitally transmitted sound recording.[64] A download service should also secure licenses for performance rights, although it is presently unclear whether this is mandatory.[65]

In contrast, streaming music does not result in a DPD because a permanent copy of the work is not transmitted to the recipient. Streaming is real-time distribution of

---

[63] 17 U.S.C.A. § 115(d) (2007).
[64] Carlos Ruiz de la Torre, *Towards the Digital Music Distribution Age: Business Model Adjustments and Legislative Proposals to Improve Legal Downloading Services and Counter Piracy*, 3 VAND. J. ENT. & TECH. L. 503, 506 (2006).
[65] *Id.* at 507. Rights holders maintain that a DPD is a public performance and therefore requires licensing but the Copyright Office holds that a DPD does not implicate performance rights and that it is an exercise of the reproduction right. *Id.* at 507 n.11.

media through the simultaneous transfer of data over the Internet.[66] Streamed media is transmitted by a server and received in real-time by the end-user.[67]

Streaming differs from downloading in two important respects: (1) the music "performance" occurs during the file transfer and (2) once the transfer/performance is complete, no copy of the file remains on the user's hard drive.[68] Therefore, a person or entity streaming a copyrighted musical work must obtain the performance licenses but not necessarily the reproduction licenses.[69] Nonetheless, licensing bodies that stand to profit from online streaming argue that streaming does result in a copy, however temporary, and therefore must be appropriately licensed.[70]

C. The Digital Millennium Copyright Act

A number of events towards the end of the 20th century led Congress to pass multi-faceted legislation addressing a variety of digital copyright issues. The Digital Millennium Copyright Act (DMCA) included two key provisions that directly implicate liability and rights for online music. First, internet service providers (ISPs) were granted a safe harbor against copyright liability for complicity in online infringement.[71] The Act laid out specific procedures for ISPs to receive information about allegedly infringing

---

[66] StreaminMedia.com, Streaming Media Explained, http://www..streamingmedia.com/whatisstreaming.asp
[67] *Id.*
[68] Matt Jackson, *From Broadcast to Webcast: Copyright Law and Streaming Media*, 11 TEX. INTELL. PROP. L.J. 447, 450 (2003).
[69] AL KOHN & BOB KOHN, KOHN ON MUSIC LICENSING 1332-33 (3rd ed. 2002).
[70] *Id.* at 1328-32.
[71] *See* 17 U.S.C.A. § 512 (2007).

material and block access for its users.[72] The Act also provided for subpoenas, requiring ISPs to divulge the identity of the alleged infringers.[73]

Second, the DMCA included a wide-reaching provision banning circumvention of digital rights management (DRM).[74] Digital rights management describes a system created to protect copyrights of digital media by "enabling secure distribution and/or disabling illegal distribution of that media."[75] Typically, a DRM system either encrypts data so as to limit access to only authorized users or marks the content so it cannot be freely distributed.[76] The DMCA bans acts circumventing DRM[77] as well as the distribution of any tools or technologies used for circumvention.[78]

The DMCA has garnered criticism since its passage and has undoubtedly affected the progression of technology and the present state of content delivery. Copyright scholar Jessica Litman describes the Act as the result of interest group negotiation which benefits major stakeholders at the expense of the general public.[79] It grants copyright holders sweeping new rights while imposing liability on ordinary citizens for noncommercial and noninfringing behavior on the theory that it will help to prevent piracy.[80]

The Electronic Frontier Foundation (EFF), a nonprofit organization addressing free speech, privacy, and innovation in the digital arena, similarly lambastes the DMCA for falling short in its implementation. The EFF claims that the DMCA chills free

---

[72] *See id.* § 512(g).
[73] *See id.* § 512(h)(1).
[74] *See* 17 U.S.C.A. § 1201 (2007).
[75] DRM Watch, http://drmwatch.webopedia.com/TERM/D/DRM.html (defining DRM).
[76] *Id.*
[77] 17 U.S.C.A. § 1201(a)(1) (2007).
[78] *See id.* § 1201(a)(2), (b).
[79] JESSICA LITMAN, DIGITAL COPYRIGHT 144-45 (2001).
[80] *Id.* at 145.

expression by implying that ISPs should block potentially infringing online content and censor discussions of DRM.[81] The EFF further asserts that the DMCA has been used to deter legitimate innovation and competition under the guise of stopping piracy.[82]

Innovation has nonetheless persisted as internet users continue to access online music for personal use. In spite of court decisions finding online music providers guilty of copyright violations and Congressional legislation favoring music rights holders, developers continue to roll out technological advancements for internet music delivery. Although legal models have emerged, no system successfully satisfies the music industry's needs and consumers' desires.

IV. MUSIC 2.0 – THE STATE OF ONLINE MUSIC DELIVERY

No one can dispute the pervasiveness of the Internet in the modern world and its influence on everyday life, from information gathering to consumerism to communication. The term "Web 2.0" has taken hold to describe the next stage of internet

---

[81] ELECTRONIC FRONTIER FOUNDATION, UNINTENDED CONSEQUENCES: SEVEN YEARS UNDER THE DMCA (2006), http://www.eff.org/wp/unintended-consequences-seven-years-under-dmca

> ([The DMCA] has been used by a number of copyright owners to stifle free speech and legitimate scientific research. . . Bowing to DMCA liability fears, online service providers and bulletin board operators have begun to censor discussions of copy-protection systems, programmers have removed computer security programs from their websites, and students, scientists and security experts have stopped publishing details of their research.)

Id.

[82] *Id.* Examples include hardware maker StorageTek suing an independent service operator (ISO) that repaired StorageTek hardware, Storage Technology v. Custom Hardware Engineering, 421 F.3d 1307, 1309-10 (Fed. Cir. 2005), and printer maker Lexmark banning Static Control Components from reverse engineering Lexmark efforts to hinder aftermarket toner vendors, Lexmark v. Static Control Components, 387 F.3d 522, 529 (6th Cir. 2004).

technologies and utilization.[83] One of the people claiming responsibility for coining this term asserts that Web 2.0 describes applications that harness collective intelligence, treat users as co-developers, support lightweight programming models, and offer a rich user experience.[84]

In the wake of *Grokster* and the DMCA, online music technology is taking on all of these "2.0" characteristics. Many music applications now function as part of online communities where users share their likes and dislikes and collaborate to spread the word about artists, harnessing their collective tastes and knowledge.[85] Some of these same social networking sites allow open source development of music applications[86] and successful businesses are creating music applications for other sites that allow musicians to sell their music and fans to collect it.[87] These applications tend to be straightforward and user-friendly, suggesting a transformation towards Music 2.0.

The larger powers within the music industry, including the major record labels and the RIAA, must embrace this transformation towards a Music 2.0 business model and offer legal avenues for purchasing music, encouraging a norm of paying for music instead

---

[83] Tim O'Reilly, *What is Web 2.0*, O'REILLY NETWORK, Sept. 30, 2005, http://www.oreillynet.com/lpt/a/6228.

[84] *Id.* (covering the meaning of "2.0" and the creation of an annual conference (Web 2.0 Summit, http://www.web2con.com) to discuss the topic).

[85] A primary example is MySpace, a social networking website that connects individuals, almost always includes music content as part of the application, and has become a major marketing medium for musicians and bands. *See* http://myspace.com.

[86] Facebook allows any interested party to code "widgets" to mesh with its application and Google recently announced an open source toolkit for building social networking applications. Bryan Gardner, *Google's Latest Efforts Test the Open Waters*, WIRED, Nov. 9, 2007, http://www.wired.com/techbiz/it/news/2007/11/google_open.

[87] Snocap partners with record labels and social networks to offer widget-based music stores embedded in independent social networking sites. Pete Cashmore, *Snocap's MySpace Music Player*, MASHABLE, July 26, 2006, http://mashable.com/2006/07/26/snocap-napster-founder-selling-unprotected-mp3s-on-myspace/.

of stealing it. Presenting an overview of the current state of digital music delivery informs a discussion of a business model that will spell success for the music industry in the future.

A. The Ever-Increasing Pace of Technological Development

Technology seems to develop at an exponentially increasing rate, offering new inventions long before the old ones have out-lived their usefulness. Traditional mail gave way to the facsimile which was then replaced by email. Never satisfied with the speed of delivery, many emailers utilize instant messaging systems to get an immediate response when email takes too long. Similarly, text messaging has become a ubiquitous use of cell phone technology when leaving a voice mail seems too tedious.

The breakneck speed of technology is especially evident in the development of digital music delivery. There is a seemingly endless supply of applications offering users access to online music through a variety of systems and schemes. One source highlights almost 100 of the most popular music websites, grouped into categories such as music sharing applications, social networks, music discovery tools, music marketplaces, and music search engines.[88]

The pace of technological innovation explains why legislation has so far failed to address pertinent issues involving recent technology. The legislative process is a slow-moving behemoth that is consistently reactive and rarely proactive. It took Congress at least ten years to draft and pass the Copyright Act of 1976 and the Telecommunications

[88] Mashable.com, Online Music: 90+ Essential Music and Audio Websites, July 6, 2007, http://mashable.com/2007/07/06/online-music/.

Act of 1996 was obsolete soon after its implementation.[89] As noted above, the DMCA is widely reviled for its close-minded approach and lack of foresight.[90] Technology adapts to the law more often and more readily than the law is able to react to changing technology.[91]

B. Streaming

The cases described above all addressed music delivery systems that relied on downloading content via P2P systems.[92] Streaming media has become a dominant format for listening to music because it does not make a copy of the musical work and therefore avoids infringing the right of reproduction.[93]

Although a streamed song does not create a copy of the song on the recipient's computer, some users have the technology to make copies of streamed songs.[94] However, most consumers do not possess the software necessary to save streamed content and therefore cannot make digital copies.[95]

Current delivery systems utilize streaming in various formats and functions to legally deliver content without infringing copyrights. The challenge in creating a successful application has been developing a device that offers all the features consumers demand without crossing the line into illegal content delivery.

---

[89] CNN.com, Legislation can't keep pace with technology, http://www.cnn.com/2005/TECH/10/17/wireless.legislation/index.html.
[90] *See* discussion of the DMCA *infra* Part III.C.
[91] *See* supra Part II.C (Grokster was developed with an eye towards the *Napster* and *Aimster* decisions. Post-*Grokster* innovations are similarly created to not run afoul of the Supreme Court's 2005 *Grokster* decision.).
[92] *See supra* Parts II.A-C. (*Napster*, *Aimster*, and *Grokster*).
[93] *See supra* Part III.B. for explanation and discussion of the licenses required for streaming.
[94] Jackson, *supra* note 68.
[95] Jackson, *supra* note 68 n.8..

C. Downloading

Legal download applications have proven to be some of the most successful entrants into the online music world. By obtaining licenses from the music rights holders and charging users to download the works, these services offer consumers a safe and legal way to obtain digital music.

The clear leader in retail music downloads is Apple's iTunes Store, with an almost 80 percent market share.[96] iTunes is a software application that allows users to find and download songs in Apple's .aac format.[97] Although iTunes previously only offered downloads with DRM, Apple has recently come to agreements with certain record labels to offer DRM-free music files.[98]

iTunes and other services offer DRM-free downloads because of consumer backlash against technical control over a purchased product. Downloaders want the right to use their downloaded file in any way they choose if they have legally purchased it.[99] The anti-DRM movement received a huge boost of public support when Sony sold copy-protected CDs that surreptitiously installed DRM technology onto personal computers[100]

---

[96] Top 10 Reviews, iTunes Review 2008, http://music-download-review.toptenreviews.com/itunes-review.html.
[97] Apple.com, Apple - iTunes - iTunes Store - Music, http://www.apple.com/itunes/store/music.html (last visited date).
[98] iTunes Review 2008, *supra* note 96.
[99] Paul Resnikoff, *Resnikoff's Parting Shot: The French Hammer*, DIGITAL MUSIC NEWS, Nov. 25, 2007, http://www.digitalmusicnews.com/stories/112507parting (asserting that consumers want to own their music, not rent it).
[100] Molly Wood, *DRM This, Sony!*, CNET.COM, Nov. 3, 2005, http://www.cnet.com/4520-6033_1-6376177-1.html (simply playing the CD installed the anti-priacy software, affecting all legal consumers instead of targeting infringers).

which was found to make users vulnerable to attack by hackers.[101] DRM is most prevalent in files offered for downloadable purchase but DRM-free files are becoming increasingly available in the retail market.

Skeptics may assert that downloaders rally against DRM because they want to share their files illegally. Once a DRM-free file is legally downloaded it may be shared through direct digital transfer or P2P networks and the downloading service that sold the file is powerless to prevent these infringing acts. This situation strikes at the heart of the debate over how to make music available online. How can consumers obtain content easily and legally without threatening the viability of the music industry that seeks to profit from the transaction?

D. On-The-Go Services

As the popularity and feasibility of streaming and downloading have played out in the marketplace, some online music providers conceived a model that marries these two functionalities into a subscription service which allows the user to stream tracks and, for a flat fee, download songs to a PC or portable player. These "on-the-go" services have been praised for allowing users to sample music that interests them and own music that they like.[102] These developments are a significant step towards establishing a successful model for Music 2.0.

---

[101] BBC NEWS, *Anti-Piracy CD problems vex Sony*, http://news.bbc.co.uk/2/hi/technology/4511042.stm (the patch Sony included on the CDs to protect against infringement left users' computers open to attack).

[102] Edward C. Baig, *Music Subscription Services Can Be a Good Deal*, USATODAY.COM, May 25, 2005, http://www.usatoday.com/tech/columnist/edwardbaig/2005-05-25-subscriptions_x.htm..

On-the-go services allow the user to download as many tracks as the user desires for a monthly subscription fee.[103] Downloaded music can then be transferred to a compatible device (although there are limitations on which devices are supported by which services).[104] Users can enjoy the music as long as they continue their subscription but as soon as the subscription is cancelled, the music is no longer playable.[105] Similarly, portable devices must be synced up with the user's PC at regular intervals or the music on the device will similarly become unplayable.[106] These "tethered" downloads generally cannot be burned to CD or otherwise transferred to other users.[107] All this functionality is accomplished through DRM.

While on-the-go services have enjoyed some success, their long-term viability and profitability are hamstrung by their limitations. Some artist catalogs are currently unavailable through on-the-go services and different services have deals with different record labels. More significantly, the DRM involved with offering these services is unattractive to consumers who want to truly "own" the music they pay for.[108]

The successes and shortcomings of on-the-go services can help develop a music delivery model that will enjoy widespread acceptance, use, and profitability. By learning

---

[103] Jasmine French & Troy Dreier, *Understanding the on-the-go subscription services*, CNET.COM, June 20, 2005, http://reviews.cnet.com/4520-6450_7-6246843-1.html.
[104] CNET.com, Music Subscription Services Summary, http://reviews.cnet.com/4520-6450_7-6246843-7.html?tag=nav(last visited date)..
[105] Xeni Jardin, *Napster-to-Go reviewed, math done*, BOING BOING, Feb. 13, 2005, http://www.boingboing.net/2005/02/13/napstertogo-reviewed.html..
[106] Steve Corn, *Streaming and Tethered Downloads: An Explanation*, ROYALTYWEEK, http://www.royaltyweek.com/article/Streaming-and-Tethered-Downloads:--An-Explanation-46.html.
[107] *Id.*
[108] Resnikoff, *supra* note 99. Our culture of consumerism establishes the notion that a consumer who pays for an item should own that item outright without any "strings attached" and this conception carries over into the world of online music resulting in widespread condemnation of DRM.

from industry desires and consumer reaction, a service can be created that will allow artists and labels to profit while offering end users attractive and easily accessible content.

V. A MODEL FOR THE FUTURE

The music industry acknowledges the challenges of digital distribution but has failed to find a viable solution.[109] As one prominent major label executive confessed: "[T]he world has changed. And the music industry has not."[110] We must first acknowledge that the model will have to change, that revenue streams will not mirror the era of cassettes and CDs, and that a new delivery system will alter the structure of the music business as we know it. The goal is to develop a business model that focuses on encouraging legal behavior instead of punishing illegal acts. While the largest entities may resist these changes, adjusting the model and embracing Music 2.0 is clearly preferable to disintegration of the entire system.

A. The Subscription Service

A new system for music delivery must be created with an eye towards the successes and failures of the past. The decades-long prosperity of selling cassettes and CDs teaches us that consumers want to own their music and they are willing to pay for it. Arguments made by now-defunct P2P systems asserted that digital music delivery allows

---

[109] *See* Meghan Dougherty, *Voluntary Collective Licensing: The Solution to the Music Industry's File-Sharing Crisis?*, 13 J. INTELL. PROP. L. 405, 408 (2006) (professing the value of file-sharing and stating that the challenge facing the music industry is to design a system that compensates artists while legally delivering the product to consumers – the challenge of creating Music 2.0).

[110] Lynn Hirschberg, *The Music Man*, N.Y. TIMES, Sept. 2, 2007, *available at* http://www.nytimes.com/2007/09/02/magazine/02rubin.t.html?_r=1&adxnnl=1&oref=slogin&adxnnlx=1194719907-Zcad3ykMUzga1ay5kEuyIQ.

fans to sample a wide variety of music before deciding which works they want to keep.[111] The mediocre success of on-the-go services implies that users are not anxious to pay for content when it comes with DRM that renders it useless once they cease paying their monthly fees.[112]

A number of voices within the music industry establishment have floated the idea of a subscription model that will give users access to all the content that would traditionally be available in a bricks-and-mortar music store.[113] For a flat fee, subscribers will have access to a virtually unlimited catalog of music and be able to utilize that catalog with any device: computer, television, car radio, cell phone.[114] Subscription fees will be pooled and then paid out to rights holders on an equitable basis dependent on the popularity of each artist.[115]

This subscription model holds the greatest promise of success for a number of reasons, not the least of which is that it has support from some major label executives.[116]

---

[111] A&M Records v. Napster, Inc., 239 F.3d at 1013 (stating Napster's contention that its users are engaged in sampling, a fair use where users sample a piece of music before purchasing it).

[112] Resnikoff, *supra* note 99; *see* Alexandra Osorio, *Digital Progress Disappoints British Retailers, DRM-Free Demands Surface*, DIGITAL MUSIC NEWS, Nov. 20, 2007, http://digitalmusicnews.com/stories/112007uk (British music retailers advocate DRM-free formatted music).

[113] Hirschberg, *supra* note 110 (citing Columbia co-chairman Rick Rubin's support for a subscription service); Seth Mnookin, *Universal's CEO Once Called iPod Users Thieves. Now He's Giving Songs Away*, WIRED, Nov. 27, 2007, http://www.wired.com/entertainment/music/magazine/15-12/mf_morris (explaining Universal CEO Doug Morris' "Total Music" project).

[114] Hirschberg, *supra* note 110.

[115] *See generally* Corn, *supra* note 106 (explaining royalty distribution systems for subscription services).

[116] Hirschberg, *supra* note 110; Mnookin *supra* note 113. The Total Music plan from Doug Morris of Universal includes DRM and is attached to a player, *id.*, which is a significant detriment and not in agreement with the subscription service proposed in this article. The Total Music proposal is discussed *infra* Part V.E.

Major label support means that the service can include all the most popular acts and it may also spell the end of the RIAA lawsuits for file-sharing. Although the major labels have been most resistant to change,[117] they also have the power to lead the industry into a new era. It is fair to say that if the majors lead, others will follow.

The ideal subscription model will resemble an on-the-go service without DRM. Users will be able to stream and download limitless amounts of music without fear that they will lose access to their music if they stop paying. This satisfies users' desires to own their music while maintaining a revenue stream for artists, labels, and publishers who depend on that income to keep the industry alive.

B. The Rationale

i. Decreased revenue is better than no revenue

A DRM-free subscription service may be tough for some members of the industry to accept because it could translate into a drop in revenue and decreased control over the product. Any Music 2.0 model for online music delivery is unlikely to surpass the profits generated by CD sales. The market for music CDs was "the biggest boon the music business has ever known" and one major label executive admitted that record companies will never again realize similar profit margins.[118]

---

[117] In an interview, Universal's Doug Morris "rail[ed] against criminal-minded college students and low-life punks who steal [] music" and "admit[ed] to being fairly ignorant about technology," Mnookin *supra* note 113, leading others to characterize Morris as "a tech-unfriendly . . . executive caught flat-footed at the beginning of a massive digital disruption," Digital Music News, Tech-Unfriendly Morris Defends Early Digital Inaction, Nov. 26, 2007, http://www.digitalmusicnews.com/stories/112607morris. Such antiquated attitudes resist change in favor of maintaining the status quo.

[118] Mnookin, *supra* note 113.

While there is still some debate about the true effect online distribution has on music sales,[119] most accept that digital delivery is crippling CD sales. Recent figures show that CD sales continue to decline and that trend is not likely to reverse.[120] Instead of battling to save a sinking ship, the music industry should adopt a new revenue model and set its sights on the future. Content owners and providers will be much happier with a stable income stream that may be somewhat less profitable than no income from an extinct model.

Without brick-and-mortar stores and the traditional marketing mediums, the influence and spending power of the major players will also change. In the past, major labels wielded the power to make superstars, swaying the public taste and selling millions of albums.[121] The end of these windfall profits may spell the demise of multi-million dollar record deals and juggernaut superstars.[122] Nonetheless, artists will still find success

---

[119] Ken Fisher, *Study: P2P effect on legal music sales "not statistically distinguishable from zero,"* ARS TECHNICA, Feb. 12, 2007, http://arstechnica.com/news.ars/post/20070212-8813.html (illegal music downloads have had no noticeable effects on the sale of music);
Press Release, Forrester, Downloads Did Not Cause The Music Slump, But They Can Cure It, Reports Forrester Research (August 13, 2002) *available at* http://www.forrester.com/ER/Press/Release/0,1769,741,FF.html (piracy is not responsible for the drop in music sales).

[120] Michael Arrington, *Good News! CD Music Sales Down 20% from 2006*, TECHCRUNCH, March 21, 2007, http://www.techcrunch.com/2007/03/21/good-news-cd-music-sales-down-20-from-2006/ (in one week in March 2007 CD sales were down 20% from the same week in 2006 and while legal music download sales may be increasing by 50% each year industry revenue is estimated to be down 25% overall); Duncan, *supra* note 1 (citing Nielsen SoundScan statistics that sales of music CDs in the first quarter of 2007 were down 20% from the same period in 2006).

[121] This may still hold true in the digital future as new opportunities, such as ringtones, present labels with new revenue streams. Mnookin, *supra* note 113 (explaining that, in 2006, Universal Music Groups second-, third-, and fourth-biggest digital revenue generators were all cell phone companies).

[122] *See* Paul Resnikoff, *Resnikoff's Parting Shot: Superstar Leftovers*, DIGITAL MUSIC NEWS, Nov. 14, 2007, http://www.digitalmusicnews.com/stories/111407parting

and stars will continue to emerge in the digital medium. Accepting an online subscription model for distribution is a matter of adjusting the scale of success. Interests in the music business will continue to make money but revenues may not reach the inflated levels seen in the CD era.

ii. Digital distribution costs less

The decreased income generated through a digital distribution model will be offset by decreased costs. A significant portion of the cost of a CD relates to the physical product so digital distribution will significantly reduce costs. On average, a CD that costs a consumer $16.98 is marked up $6.23 (37%) by the retailer so the actual cost is only $10.75.[123] Of that wholesale cost, $4.94 (46%) is attributed to production of the CD and packaging, shipping, and distribution of the physical item.[124] By producing music for online delivery instead of CD sale, labels will save almost half their upfront costs and can therefore afford to earn less through a subscription system.

No business looks to decrease revenues, but when upfront costs are diminished a decline in gross revenue can result in similar net profits. Record labels and rights holders can calculate the money they will save by not producing and selling a physical product (CDs) to help set the price for a subscription service that will continue to generate the necessary income.

iii. Consumers will pay for legal music

(explaining that the influence previously exerted by major labels made them indispensible to superstardom).

[123] CD Cost Breakdown, CNN.com, http://cgi.cnn.com/interactive/entertainment/0101/cd.price/frameset.exclude.html.

[124] *Id.*

One reason P2P and illegal downloading has proliferated is because consumers lack options for obtaining the music they want in the format they want it in (DRM-free). Creating a legal outlet for obtaining DRM-free music will decrease illegal file-sharing simply by offering content on a broad scale and through legitimate means.[125]

Many users who download illegally do so due to a lack of other options. Until recently, the majority of for-sale downloads were laced with DRM that consumers did not want to pay for. A small percentage of users will continue to trade music illegally but the majority will be willing to adopt a subscription model that is simple, legal, and safe.[126]

Both cassettes and CDs can be copied with readily available consumer technology. Yet the record industry ultimately supported and Congress passed the Audio Home Recording Act of 1992 (AHRA) which placed a tax on devices capable of making copies of recorded music.[127] The profits of that tax are then paid to content owners and content owners therefore relinquish their right to file infringement suits.[128] Although some consumers continued to copy CDs, rampant copying never emerged to threaten rights holders' profits. Most consumers purchased CDs and supported the industry's market structure.

Similarly, a subscription service may not wipe out all illegal copying but offering a legal route will be attractive to most consumers. It is reasonable to expect that some users will continue to download music illegally even if most consumers adopt a legal streaming model. Wiping out all illegal copying is not a realistic goal but limiting file-

---

[125] Resnikoff, *supra* note 99 (explaining that other industries have successfully battled piracy by presenting legal, paid alternatives that make illegal avenues seem more costly).
[126] *Id.*
[127] Lewis Kurlantzick & Jacqueline Pennino, *The Audio Home Recording Act and the Formation of Copyright Policy*, 45 J. COPYRIGHT SOC'Y U.S.A., 497, 501 (1998).
[128] 17 U.S.C.A. §§ 1001-1010 (2007).

sharing by offering an attractive and legal way for users to access music is feasible and the best available solution for delivering digital music content. The objective is to adapt the music industry's business model to promote a legal way for consumers to access content.

C. Brass Tacks – How the Subscription Model Works

i. Everything for a price, DRM-free

The subscription model allows for multiple entities to offer competing subscription services. The keys to a successful model are a limitless catalog in a DRM-free format. A limitless catalog requires the involvement of all major and independent labels where all artists offer all their music. The underlying idea is to present a portal for consumers to find everything they want and need. If a service delivers every piece of music a consumer is searching for, he will have significantly less motivation to search it out and download it from an illegal (and less secure) source.[129]

Similarly, all rights holders must be willing to offer their music in a DRM-free format. Again, this deters users from pursuing illegal paths to access music by presenting a legal way to obtain the same product for a reasonable price. This also addresses the main shortcoming of current on-the-go services. On-the-go services are gaining popularity and increasing revenue,[130] forging deals with major industry players, and expanding into new mediums.[131] Their success is only thwarted by consumers' perception

---

[129] *See* Resnikoff, *supra* note 99 (maintaining that consumers want access to the full catalog of available music and that they are willing to pay for it).

[130] Alexandra Osorio, *RealNetworks Boosts Revenues Considerably, Ups Subscribers*, DIGITAL MUSIC NEWS, October 30, 2007, http://www.digitalmusicnews.com/stories/103007real.

[131] Press Release, RealNetworks, MTV Networks, RealNetworks and Verizon Wireless Join Forces to Offer a New Integrated Digital Music Experience (Aug. 21, 2007),

that they are not getting what they pay for (because DRM tethers their music to the service). Once the greater powers within the music industry accept this Music 2.0 model for content delivery and allow consumers to own their digital music outright, the tide will shift towards decreased illegal file-sharing and increased revenue through legal means.

ii. Change the attitude: be open

The success of the subscription model also depends on changing attitudes. The music industry has suffered from the popularity of digital music delivery because it has been resistant to change and unwilling to accept a new model.[132] The RIAA lawsuits evidence the industry's attitude that digital users have become the enemy and its plan to engage in combat with the changing format for music consumption. Members of the music industry must be open to change and should embrace the passion that users exhibit when they voraciously consume digital music content.

One way to manifest a more open attitude is for subscription services to welcome the increasingly popular trends in open software development. For example, Google's Android platform for mobile devices will be a prime avenue for music delivery. Android is an open Linux platform which invites developers to create applications to run on compatible mobile devices.[133] Software designers are invited to participate in the "open

---

available at http://www.realnetworks.com/company/press/releases/2007/rhap_announcement.html.

[132] *See* Hirschberg, *supra* note 110. Columbia's Rick Rubin admits that major labels are "stuck in the dark ages," that the paradigm is shifting, and that the model of the music business that Columbia currently subscribes to "is done." *Id.*

[133] Erick Schonfeld, *Breaking: Google Announces Android and Open Handset Alliance*, TECHCRUNCH, Nov. 5, 2007, http://www.techcrunch.com/2007/11/05/breaking-google-announces-android-and-open-handset-alliance/.

handset alliance project"[134] and digital music delivery will benefit by working in concert with these projects and not with the traditional proprietary attitude.

iii. Royalties and revenue

Rights holders are understandably concerned with how they will be adequately compensated when music is accessed through a subscription service. There are a variety of potential methods for collecting royalties and calculating disbursements. A subscription service model could successfully allot amassed revenue through any one of the following possibilities.

Performance rights organizations (PROs) such as ASCAP, BMI, and SESAC currently exist to collect performance rights royalties on behalf of rights holders.[135] PROs are in the business of profiting from and paying artists and publishers for the use of music. Therefore, PROs should be capable of monitoring online music delivery through subscription services and compensating rights holders accordingly.

Some proposals suggest a system to measure online music use by counting the number of times a song is either streamed or downloaded.[136] Every song would be marked with a unique digital identification number and then a central registry would track usage based on the embedded ID.[137] The shortcoming of this structure is that it involves DRM (to embed the identification number), could be hacked or altered by users, and will lack support from consumers because, as noted above, consumers want their music files DRM-free.

---

[134] What is Android?, Google.com, http://code.google.com/android/what-is-android.html.
[135] Royalties, Music Boot Camp, http://musicbootcamp.com/royalties-ascap-bmi-sesac-socan/(last visited date)..
[136] Katherine L. McDaniel, *Accounting for Taste: An Analysis of Tax-and-Reward Alternative Compensation Schemes*, 9 TUL. J. TECH. & INTELL. PROP. 235, 254 (2007).
[137] *Id.* at 255 (citing WILLIAM W. FISHER III, PROMISES TO KEEP 203 (2004)).

An alternative model for calculating royalties could institute a monitoring system that tracks representative users' music consumption and aggregates data to divvy up royalties. This model would be based on the Nielsen television ratings system which collects viewing information to determine what programs television viewers are watching.[138] Data collecting agencies would monitor the streaming and downloads of representative subscription service users to model what music consumers were accessing and subsequently assist in allotting royalty payments to the appropriate parties.

Another option for computing royalties would require all subscription services to report their customers' aggregated use for disbursement to the appropriate parties. This raises some privacy concerns and would have to be orchestrated with care to protect user information. It might also require monitoring and coordination by a central agency.

There are many ways to determine usage and allocate revenue generated by music subscription services. Different services may institute different models or the major players in the music industry may join forces to choose a preferred path. Subscription services have great potential to allow for the collection of adequate royalties by rights holders.

iv. Alternative revenue streams

Although the subscription service will generally replace traditional CD sales, artists and labels will still have potential income streams from alternative methods of delivery. Some consumers will still want to own a physical product and will be willing to pay for the artwork and liner notes that accompany a traditional album. Artists and labels

[138] Collecting & Processing Data, Nielsen Media Research, http://www.nielsenmedia.com/nc/portal/site/Public (click Inside TV Ratings, then Ratings & Data, then Collecting & Processing the Data).

can offer CDs, box sets, and other products and continue to generate revenue through this medium.

Other consumers recognize the sonic shortcomings of standard digital formats (such as .mp3 and .aac)[139] and will pay for uncompressed digital files to maintain high music quality standards. Artists are already taking advantage of this profit stream by offering high quality downloads directly to the consumer.[140] Artist also sell their music on memory sticks or USB flash drives, allowing consumers to purchase a physical item that contains a high quality digital version of the music they desire.[141]

These alternative Music 2.0 revenue streams will allow artists and labels to continue to generate income from sales outside of the subscription service, supplementing their subscription service royalties. The subscription service does not have to be the sole way for consumers to access music but must be embraced throughout the music industry to transform the model, decrease illegal file-sharing, and ensure the viability of artists and rights holders in the future.

D. The Legal Framework

---

[139] Joel Selvin, *MP3 music - it's better than it sounds*, SFGATE.COM, Aug. 8. 2007, http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2007/08/08/DDEJR7KN11.DTL (explaining that the compression involved in creating an .mp3 file greatly reduces the quality of the recording).

[140] *See* RADIOHEAD, In Rainbows, http://www.inrainbows.com/Store/index2.html (hugely successful band Radiohead offered its new album only through its website, either via download or by purchasing a discbox for later delivery); Saul Williams album produced by Trent Reznor, Free Download, JIVE NEWS, http://www.jivemagazine.com/forum/showthread.php?t=17187 (poet, artist, and musician Saul Williams released his most recent album solely via digital download).

[141] BOING BOING,,http://www.boingboing.net/2005/11/16/barenaked-ladies-rel.html (the band Barenaked Ladies released their 2005 album on a USB flash drive which included video and audio clips).

A subscription service with the full support of music rights holders is inherently legal because it relies on voluntary licensing of the reproduction and performance rights to the music. Artists, labels, and publishing companies will consent to the use of the music and will profit therefrom. This will shift the music industry's stance from confrontational (suing P2P systems and users, protecting music with increasingly aggressive DRM) to accommodating (supplying a desired product to willing consumers).

As noted above, some infringement can still be expected by subscribers who turn around and distribute downloaded music they legally obtained.[142] In the unlikely event that a rights holder granting rights to a subscription service sued the subscription service for contributory infringement, the subscription service could find protection under the staple article of commerce doctrine.[143] Subscription services would argue that any infringing use of the service is a minimal use, therefore protecting the viability of the model.

Subscription services are further protected by the safe harbor provisions of the DMCA.[144] The DMCA provides a safe harbor for the subscription service and the internet service provider in the event that subscription service subscribers illegally distribute materials accessed through the service. As long as the subscription services have the support and involvement of the rights holders there should be no legal barriers to the implementation of the system.

E. Comparisons to other proposals

[142] *See supra* Part V.B.iii.
[143] *See* Sony v. Universal, 464 U.S. 417, 440-42 (1984), for a review of this doctrine.
[144] 17 U.S.C.A. § 512 (2007).

The downward spiral of music industry profits and the increase in anti-infringement litigation has prompted a number of Music 2.0 proposals for the future of music content delivery. The subscription service builds on some of these suggestions and leaves room for others while offering the most direct and efficient way to stem the current crisis.

i. Universal's Total Music

Universal Music Group CEO Doug Morris is reportedly spearheading a major label subscription service to compete with the industry-leading iTunes-iPod combo.[145] Morris has successfully enlisted the involvement of three of the four major labels (Universal, Sony BMG, and Warner) but Total Music exhibits the old-world thinking that continues to prevent the major labels from succeeding in the digital marketplace.

Morris' Total Music will almost certainly require some form of DRM and, more significantly, will come pre-installed on a device.[146] Hardware makers would pay a monthly subscription fee for each device sold and pass that cost on to consumers.[147] Consumers would have access to the major labels' catalogs through these devices.[148]

There are numerous problems with the Total Music proposal. While major labels own almost 90 percent of the music sold in the U.S.,[149] any subscription service must offer the entire universe of available music in order to deter illegal file-sharing. Furthermore, tying the service to the device means that consumers will have to pay for

---

[145] Ronald Grover & Peter Burrows, *Universal Music Takes on iTunes*, BUSINESSWEEK, Oct. 22, 2007, *available at* http://www.businessweek.com/magazine/content/07_43/b4055048.htm?chan=search.
[146] Mnookin, *supra* note 113 (based on the author's in-depth interview with Morris).
[147] Grover & Burrows, *supra* note 145.
[148] *Id.*
[149] Mnookin, *supra* note 113; Grover & Burrows, *supra* note 145.

the service with each device they buy (mp3 player, cell phone, gaming system, etc.) which disproportionately benefits the labels at the expense of consumers. Finally, and significantly, continuing to include DRM will prevent full adoption of the service because, as noted above, consumers want to own their music outright.[150]

Total Music has the right idea: offer consumers unlimited access to a vast catalog for a set fee.[151] But Total Music's central purpose is to regain control over music content, not to forge a new model for allowing users to access music.[152] A successful model must allow for the inclusion of the entire catalog of available music in a DRM-free format directly to consumers.

ii. Legislative proposals

As noted above, the legislative process is ill-equipped to keep pace with the advancement of technology.[153] The development legislation can involve drawn out negotiations producing results that are quickly out of date. Furthermore, it is difficult to draft laws with imbedded flexibility to adapt to unforeseen and unpredictable future changes. Finally, the halls of legislatures are filled with lobby groups whose financial might can overwhelm less organized and influential parties.[154]

---

[150] Resnikoff, *supra* note 99.
[151] *See* Mnookin, *supra* note 113.
[152] K.C. Jones, *Universal's 'Total Music' Plan To Challenge Apple's iTunes*, INFORMATIONWEEK, Oct. 15, 2007, http://www.informationweek.com/news/showArticle.jhtml?articleID=202402961 (stating that Total Music is an effort to shore up profits and regain control lost in the transition to the downloading model).
[153] *See supra* Part IV.A.
[154] *See* Litman, *supra* note 79 (citing the strong industry influence in the drafting and passage of the DMCA).

Respected voices discussing the future of copyright law have proposed altering the entire copyright system.[155] Some of these suggestions advocate opening access to all copyrightable works[156] while others create a new scheme of licenses with varying degrees of protection.[157] These proposals are not feasible solutions. Such a drastic overhaul of an entire national legal framework would require years (and perhaps decades) of debate. The current predicament requires a more immediate resolution that functions within the existing framework.

Less sweeping recommendations generally fail to address all the issues or lack a comprehensive solution. One suggestion to develop a new copyright infringement standard for secondary liability offers a practical and adequate set of elements for evaluating alleged infringement[158] but would fail to actually prevent or deter infringing acts. The RIAA's unsuccessful attempts to discourage downloading by bringing suits for infringement prove that illegal downloaders are undeterred by the threat of prosecution.[159]

---

[155] *See generally* Creative Commons, http://creativecommons.org (Creative Commons is a revolutionary system allowing authors, scientists, artists, and educators to mark their creative work with the freedoms they want it to carry, essentially altering one's copyright from "all rights reserved" to "some rights reserved"); *see* What is Copyleft?, GNU Project, Free Software Foundation, http://www.gnu.org/copyleft/copyleft.html (Copyleft is a method for making a software program (or other work) free and requiring all derivatives works of the software to be free).
[156] What is Copyleft?, *supra* note 155.
[157] Choose a License, Creative Commons, http://creativecommons.org/license.
[158] Maxwell, *supra* note 20.
[159] Richard Menta, *RIAA Suits May Actually Promote File Sharing*, MP3NEWSWIRE.NET, May 3, 2005, http://www.mp3newswire.net/stories/5002/advertise.html.

The law has generally proven ineffective in addressing rampant online infringement.[160] Solutions should focus on compensating artists and rights holders by delivering content that consumers can access legally. Instead of changing the law to uphold the old model, the model should shift towards offering a content delivery system that functions within the current legal framework.

iii. Licensing Schemes

A successful Music 2.0 model for the future of online music delivery requires content owners to license their works. It is unfeasible for individual copyright holders to personally deliver their music to consumers and they must therefore license their works to a system with a variety of offerings. The subscription service intrinsically relies on content owners (particularly the majors) to license their wares in exchange for adequate compensation. A variety of licensing schemes have been proposed.

One article suggested a mandatory licensing system relying on a congressional commission to determine the license and requiring copyright holders to petition for their royalties.[161] While it is certainly reasonable to expect Congress to take this step, major rights holders are not likely to relinquish the power to set the price for their future profits. The industry currently operates with a statutory license for the use of copyrighted musical

---

[160] *See* Thomas Mennecke, *RIAA's Grand Total: 10,037 - What are Your Odds?*, SLYCK, May 2, 2005, http://www.slyck.com/news.php?story=769 (finding that it is more likely for the average person to die of external injuries – such as car accident, motorcycle accident, plane crash, murder, etc. – than for an illegal downloader to be sued by the RIAA).

[161] Julie Zankel, A Little Help with Sharing: A Mandatory Licensing Proposal to Resolve the Unanswered Questions Surrounding Peer-to-Peer Liability for Contributory Copyright Infringement in the Wake of Grokster, 80 S. CAL. L. REV. 189, 215-16 (2006).

compositions on CDs, records, tapes, and certain digital configurations,[162] but the proposed mandatory license would be on a much larger scale and could potentially generate much greater revenues.

The mandatory licensing system proposal also requires the content owner to petition for the royalty.[163] Copyright holders may reject this burden as an unreasonable expense. However, this does raise the issue of PROs responsible for collecting royalties on behalf of content owners.

As mentioned above, a licensing scheme could give rise to PROs managing applicable royalties.[164] Voluntary collective licensing, not mandatory licensing, is more likely to comport with music industry goals and the PROs could easily adapt their business to collect royalties generated through a subscription system.[165]

iv. Levies, tariffs, and taxes

Imposing a levy, tariff, or tax is a reasonable way to generate revenue based on consumer behavior. Some proposals suggest implementing a levy on the hardware used to access digital music[166] and the bandwidth necessary to obtain it.[167] The "noncommercial use levy" would apply to any consumer product or service whose value is substantially enhanced by P2P file-sharing and then allow unrestricted P2P file-sharing in return.[168]

---

[162] *See supra* Part III.A. (describing mechanical licenses); Mechanical Licensing, Harry Fox Agency, http://www.harryfox.com/public/licenseMechanical.jsp.
[163] Zankel, *supra* note 161, at 216.
[164] *See supra* Part V.C.iii.
[165] Miller, *supra* note 15, at 324.
[166] Neil Weinstock Netanel, *Impose a Noncommercial Use Levy to Allow Free Peer-to-Peer File Sharing*, 17 HARV. J.L. & TECH. 1, 4 (2003).
[167] *Id.*; Miller, *supra* note 15, at 327.
[168] Netanel, *supra* note 166.

One shortcoming of this proposal is its indiscriminate application to users regardless of their innocence or guilt of copyright infringement. While it would feasibly raise revenue significant enough to offset the industry's losses from illegal file-sharing,[169] it would extract these proceeds from purchasers and users of computers whether they downloaded music or not. This inequitable expense is unjust and also unlikely to generate support from those who would be unfairly assessed a fee for an activity in which they did not participate.

The solution is not to set up a system which permits illegal acts and simply pays the victims through tax-generated revenue. It is preferable to give consumers a safe and legal way to access music which compensates rights holders. Most users will choose this option, resulting in a decrease in illegal file-sharing, an increase in revenue, and a Music 2.0 model for the music industry to continue to prosper in concert with emerging technology.

VI. CONCLUSION

Decreasing revenue and evolving consumer habits require a revision of the music industry's current business model. The industry has adapted to technological developments in the past (the player piano, cassette tapes, CDs) and retained its stature by reworking delivery systems and altering the framework for distributing music content to consumers. The development of digital music consumption mirrors historical changes but the industry relentlessly continues to resist the welcoming attitude towards change that eventually proved successful in the past.

[169] *Id.*

The wild success of Napster evidenced the public's voracious appetite for online music, yet the industry responded by posturing against this new form of music consumption (and a potential revenue stream). Rights holders have continued to use the law to lash out against any digital music delivery that does not comport with the old model. Although major labels have succeeded at silencing some P2P file-sharing applications and extracting penalties from individual users, consumer habits continue to demand a new system for acquiring music.

A subscription service offers the best option for the music industry to maintain its stature and continue to profit from end users' appetites. The success of subscription services (and the continued viability of the music industry) requires an evolved attitude toward music consumption and acceptance of a revised model. The future of music depends on adapting to a new business model that offers an attractive and legal avenue for users to obtain music according to their desires: offering all available music in a DRM-free format.

Clinging to outdated conceptions of entitlements and enforcing an obsolete model will not ultimately result in the survival of the music industry. The industry must embrace a model that encourages legal behavior and offers an attractive product. These are the parameters of Music 2.0.