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P2P: The Path to Prosperity

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P2P: THE PATH TO PROSPERITY*

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I. INTRODUCTION

Although the acronym P2P stands for peer-to-peer, it also stands for path to prosperity. This powerful technology will transform the entertainment industry and deliver it, and the Nation's artists and consumers, into a new age of cultural and economic abundance. But first, the entertainment industry must embrace the technology, and learn how to profit from it. Unfortunately, the path to prosperity has been detoured by the entertainment industry's relentless efforts to demonize the technology (along with those who develop and provide it)[1] and to legislatively and judicially eviscerate P2P in its infancy.[2]

II. THE TECHNOLOGICAL IMPERATIVE

Digital technology in general and the Internet in particular have been referred to as disruptive technologies.[3] This reference is inaccurate: Digital technologies and the Internet are transformational technologies. The word

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1. In a recent debate, Matt Oppenheim, the RIAA's senior vice president of business and legal affairs, compared "an individual who illegally distributes music on a peer-to-peer network" to a "bank robber wearing a mask when holding up a teller." Declan McCullagh, *Piracy and Peer-to-Peer*, CNET (July 7, 2003), *at* http://news.com.com/2010-1027-1023325.html.

2. *See* discussion *infra* Part V.

3. *See, e.g., The Internet As Disruptive Technology*, TELESIAN TECHNOLOGY, *at* http://www.telesian.com/newsnotes/archive/news0019-2.cfm?pf=y (last visited Mar. 3, 2004) (quoting from SHARI L.S. WORTHINGTON & WALT BOYES, E-BUSINESS IN MANUFACTURING: PUTTING THE INTERNET TO WORK IN INDUSTRIAL ENTERPRISE (ISA Press, 2002)).

"disruptive" implies a temporary pause, and then a return to normal.[4] Conversely, transformational technologies disrupt the old normal and abet the transition to a new and far different normality. Because we equate technology with progress, we are prone to forget that every technology has inherent negative aspects, and that every new order undermines the foundations of the old.

One need only look at the internal combustion engine for an example of a transformational technology that, in its infancy and even today, is sometimes perceived as disruptive. The automobile gave us incredible personal freedom, but mass adoption of the internal combustion engine also brought inherent and unavoidable side effects: highway deaths and injuries, urban sprawl, neighborhood disruption, the voracious consumption of nonrenewable resources, pollution, and global warming. Society mitigates the collateral effects of this technology through law, business models, and improvements in the technology itself[5]–but we can never eliminate them completely.

Likewise, those who already use the Internet regularly now take it for granted, rely on it heavily, and view its disappearance as unthinkable, despite the fact that mass utilization of the Net is barely a decade old.[6] Citizens will not readily give up the new freedoms of the Net regardless of the collateral damage inherent in our transition to a digital civilization.

Like any powerful technology, the Internet has inherent positive and negative aspects. The same ability to post e-mails and information anonymously that enhances freedom of expression in totalitarian nations

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4. "Disruption" is defined as "an act of delaying or interrupting the continuity." *Overview of "disruption"*, WORDNET, *at* http://www.cogsci.princeton.edu/cgi-bin/webwn2.0?stage=1&word=disruption (last visited Apr. 2, 2004).

5. On the legal front, every state has minimum emissions standards to limit automotive air pollution and mandatory vehicle registrations to keep unduly dangerous vehicles off the road. Automobile manufacturers, in turn, do their parts by producing vehicles that conform to examples of these state requirements. *See, e.g.*, *Clean Vehicles*, The Alliance of Automobile Manufacturers, *at* http://www.autoalliance.org/environment/cleanvehicles.php (last visited Apr. 2, 2004) (describing voluntary initiatives that exceed government requirements). New technological developments such as hybrid electric vehicles, wherein an internal combustion engine is paired with an electric motor to increase fuel economy, further alleviate the aforementioned burdens inherent in an automotive society.

6. Although research institutions had used online networks since the 1970s, the World Wide Web was not released until 1992, the same year that the number of computers connected to the Internet passed one million. "The WWW [burst] into the world and the growth of the Internet explode[d] like a supernova. What had been doubling each year, now doubles in three months." *Internet History and Microprocessor Timeline*, COMPUTER HISTORY MUSEUM, *available at* http://www.computerhistory.org/exhibits/internet_history/internet_history_90s.page (last visited Apr. 2, 2004).

also facilitates the surreptitious activities of terrorists and pedophiles.[7] The same massive databases that facilitate global commerce and government efficiency are also vulnerable to assaults on security, and can erode personal privacy.[8]

Digital technology allows for the perfect reproduction of infinite number of copies of copyrighted media of all types, as well as near-instantaneous distribution through the Internet to a global audience, at a marginal cost approaching zero.[9] This aspect of digital technology promises tremendous potential cost savings for both content distributors and end users, but also renders enforcement of traditional copyright law difficult to impossible.[10] Copyright law may promise certain exclusive rights of reproduction and distribution to authors and owners, but digital technology severely undermines the ability to make good on that pledge.

III. THE POWER OF EXPONENTIAL CHANGE

P2P is the natural and inevitable result of the evolution of the Internet. P2P is not some feature of or add-on to the Internet, but is the inherent blueprint of this network of networks. P2P results from the intersection of personal computers with extremely fast processors and huge hard drives with wired and wireless broadband networks. Moore's Law states that the computing power and speed of microprocessors doubles roughly every eighteen months.[11] Thus, every year and a half ratchets upward another notch on the digital Richter scale. Digital technology brings with it an exponential rate of change, and we are already well past the tipping point for the transformation of the traditional entertainment industry business model. Applying Moore's law, it will soon be possible to carry a lifetime collection of audio content in a shirt pocket, and to transfer the content in the time it takes for a morning cup of coffee—for less than the cost of a moderately priced stereo.

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7. *See* Tom Spring, *Will Anonymous E-mail Become a Casualty of War?*, CNN.COM (Feb. 13, 2002), *at* http://www.cnn.com/2002/TECH/internet/02/13/anonymous.email.idg (reporting that "[m]ost anonymous e-mail proprietors admit their products can be tools for terrorists, pedophiles, and scammers.").

8. *See, e.g., Who Gets to See Your Records?*, BERKELEY LAB, *at* http://www.lbl.gov/Education/ELSI/Frames/privacy-prying-f.html (last visited Apr. 2, 2004) (explaining how many third parties may access an individuals health records without his or her knowledge).

9. *See* Joseph P. Liu, *Copyright Law's Theory of the Consumer*, 44 B.C. L. REV. 397, 421 (2003).

10. *See id.* at 417.

11. *See Webopedia*, WEBOPEDIA.COM *at* http://www.webopedia.com/TERM/M/Moores_Law.html (defining "Moore's Law").

Digital transformation—and its effect on the entertainment industry—is just in its infancy. In a recent interview Mark Andreessen, who launched the Mosaic World Wide Web ("www") browser ten years ago, founded Netscape, and gave rise to the Internet age, observed, "Any new technology tends to go through a 25-year adoption cycle. . . . With the Internet, we're really 10 years into what will ultimately look like a 25-year cycle from invention to full implementation."[12] In other words, far greater changes are yet to come than we have witnessed so far.

While P2P has made circumvention of the exclusive rights granted to copyright owners easier for the masses,[13] P2P software is but one link in a long chain of digital technologies that can be used as tools for copyright infringement—often without detection. Virtually every personal computer sold today, even the lowest price model, comes equipped with a CD burner for the reproduction of digital media, an Ethernet port for broadband connectivity, and a large hard drive for storing vast amounts of data.[14] In 2002, blank, burnable CDs ("CD-Rs") outsold prerecorded CDs by more than a 2-1 ratio in United States.[15] In combination with "ripping" software bundled with new computers,[16] these optical disks allow for quick and easy duplication of complete CDs in full audio format.[17] Cable and DSL broadband services provide fast connectivity between PCs. And portable media players like Apple's iPod provide a means by which consumers can take copyrighted media with them wherever they go. Not surprisingly, manufacturers of personal computers are not marketing newer and faster models to the consuming public based on their ability to solve logarithmic equations faster: They are advertised for their ability to "rip, mix and

12. Joanna Glasner, *Conversation with Mark Andreessen*, WIRED NEWS (Feb. 14, 2003), *at* http://www.wired.com/news/business/0,1367,57661,00.html. Mark Andreessen launched the Mosaic World Wide Web ("www") browser 10 years ago, founded Netscape and gave rise to the Internet age. *Id.*

13. For example, some report that the instant messenger and file exchange service Madster cloaks its users' activities by offering to encrypt traded files. *See* Paul Festa, *Court: Anonymous P2P No Defense*, CNET (June 30, 2003), *at* http://news.com.com/2100-1025-1022462.html?tag=nl.

14. *See* Dwight Silverman, *How to Buy a PC; Deals Await PC Shoppers But Here Are Some Key Tips*, HOUS. CHRON., Nov. 29, 2003, (Business), at 1.

15. Total units of CDs sold in 2002 was 803.3 million. *2002 Yearend Statistics*, Recording Industry Association of America, *at* http://www.riaa.com/news/marketingdata/pdf/year_end_2002.pdf.

16. "Ripping" is defined as "[d]igitally extracting audio tracks from a CD which can then be stored as a file on your computer." *High-Tech Dictionary Definition*, COMPUTERUSER.com, *at* http://www.computeruser.com/resources/dictionary/definition.html?lookup=8023 (last visited Apr. 3, 2004).

17. *See* Hiawatha Bray, *As Many Join Burning Boom, CD Sales Slide Consumers Need Not Break Law to Benefit*, BOSTON GLOBE, Apr. 7, 2003, at C15.

burn."[18]

With a voracious appetite for content, consumers seldom distinguish between authorized or licensed material and unlicensed material. Copyright infringement, therefore, is an almost unavoidable byproduct of the intuitive use of these products. Although some consumers are aware of infringement, few are steeped in the hazy complexities of copyright law. Often, infringement is not dependent on an act but on the intent accompanying that act, or on an additional subsequent act. For example, if 12-year old Cindy burns a backup copy of her favorite Britney Spears CD, she is not engaging in an infringing act.[19] However, that same act accompanied by an intent to give the copy to a third party turns it into infringement;[20] and if Cindy gives the copy to her friend Jane in exchange for Jane's new soccer ball, Cindy has crossed the line into commercial piracy.[21] If waiving a magic wand would and make P2P disappear from the face of the earth, digital copyright infringement wouldn't miss a beat.[22] The absence of P2P would not even halt Internet infringement.[23] P2P software is largely just a combination of two common digital technologies: a search engine and a file transfer capability.[24] Moreover, it is hardly the only efficient means for transmitting media files across the Internet. As the *New York Times* later revealed, the 2002 Grammy Awards' demonstration of "P2P piracy" was actually a demonstration of the highly efficient file transfer capabilities of AOL's Instant Messenger software, which is not P2P since transferred data is routed through AOL servers.[25]

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18. Jason Brooks, *Will Apple's Rip-Mix-Burn Tune Change?*, EWEEK (Apr. 14, 2003), *at* http://www.eweek.com/print_article/0,3668,a=40358,00.asp. "When Apple began not only encouraging people to Rip. Mix. Burn their favorite CD tracks, but also selling them the tools that made it all easy, the 'different'-thinking computer company seriously ticked off the record business." *Id.*

19. 17 U.S.C. § 1008 (2002).

20. 17 U.S.C. § 106(3) (2002).

21. *See* MELVILLE B. NIMMER & DAVID NIMMER, 4-15 NIMMER ON COPYRIGHT § 15.01 (2003).

22. Appellee Streamcast Network Inc.'s Opening Brief to the Ninth Circuit Court of Appeals at 45–46, Metro-Goldwyn-Mayer Studios, Inc. v. Grokster Ltd. (01-08541 SVW) (filed Sep. 17, 2003) *available at* http://www.eff.org/IP/P2P/MGM_v_Grokster/20030917_grokster_appeal_brief.pdf.

23. *See id.*

24. *See generally* Aric Jacover, Note, *I Want my MP3! Creating a Legal and Practical Scheme to Combat Copyright Infringement on Peer-to-Peer Internet Applications*, 90 GEO. L.J. 2207, 2213–2218 (2002) (describing how peer-to-peer technology works, including centralized and decentralized networks).

25. Neil Strauss, *The Pop Life: Downloading Files and Storms*, N.Y. TIMES, Mar. 7, 2002, at E3.

IV. P2P AND CREATORS: PROMOTION OR DISPLACEMENT?

The Internet has now delivered us into an era of unprecedented artistic abundance and the promise of direct connectivity between artists and their audience.[26] If artists are able to realize the full possibilities of digital reproduction and distribution technologies, they can translate this empowerment into greater freedom and enhanced economic rewards.[27] In the potential new entertainment industry paradigm, traditional record companies as well as new market entrants, will continue to provide such important functions as financing, production, and touring but the balance of power between record labels and artists will shift toward the musician.[28] On the other hand, if record labels succeed in stifling technological innovation by limiting new competition, and successfully transferring their physical goods business model to the virtual landscape of the Internet, then the future for most musical artists may be even bleaker than the present. In that unwelcome scenario, artists would have failed to realize the potential freedoms and riches of the digital era and find instead that the disadvantageous record club compensation model has become the standard for Internet remuneration.

Major record labels have refused to consider options for monetizing distribution of their content via P2P networks because they blame the advent of P2P file-sharing for recent declines in CD sales.[29] Of course, it is likely that some individuals have forgone purchasing a CD after obtaining the sought after content, without permission, from another computer user. At the same time, a variety of other (and far more plausible) factors have resulted in lower CD sales. For example, the major record labels have undergone considerable consolidation (a trend that continues with the proposed Sony-BMG merger)[30] and have incurred significant financial debt with the merger wave. This in turn has resulted in fewer overall releases and smaller budgets for marketing and artist development.[31] Other

26. *See* Press Release, mobileStorm, Interscope Geffen A&M Records and Infinite Mobility Launch "My Music" New Service Provides PDA Users with Direct Handheld Access to Individual Artists, *available at* http://mobilestorm.com/press/press1.html (last visited Sept. 26, 2004).

27. *See* Jenny Toomey, *The Future of Music*, 10 TEX. INTELL. PROP. L.J. 221, 233 (2002).

28. *See id.* at 234.

29. *See* Jon Healey, *File-Sharing Company Can't Sue on Antitrust*, L.A. TIMES, July 4, 2003, at C1.

30. Boris Groendahl & Adam Pasick, *Music Labels Set for Photo Finish in Merger Race*, U.S.A. TODAY, Nov 6., 2003, *available at* http://www.usatoday.com/money/media/2003-11-06-music-merger_x.htm.

31. Christopher Walsh, *Commercial Studios Offer Alternative to Major Labels*, BILLBOARD, Dec. 13, 2003, at 47.

potential causes include the end of the vinyl LP to CD conversion era, commercial radio consolidation, and a shift in consumer preferences from pure audio media towards the audiovisual. While CD sales have declined in the last few years,[32] DVD sales have more than doubled in the same time span[33]—leaving the corporate parents of the big record labels and movie studios better off overall. That consumer preference shift has been exacerbated by the record industry's inflexible pricing practices.[34] Many media observers have noted that today one can buy the DVD of an entire movie, with better quality audio and a host of additional features, for less than the CD of that movie's soundtrack.[35] Vivendi Universal, seeking to restore the perceived value proposition, announced to great fanfare in the fall of 2003 that it would be substantially cutting the prices of many of its CDs.[36] But, the other major labels failed to follow suit, retail outlets protested, and the consumer has seen little benefit from this abortive effort to realistically re-price the CD.[37] On balance, most objective studies have concluded that P2P file-sharing promotes CD sales more than it displaces them.[38] For example, a May 2002 Jupiter Research Study[39] found that file-sharing boosted sales more than it displaces them and concluded that music sellers should devote their resources to online marketing and distribution, rather than trying to eradicate "the phantom threat of filesharing."[40]

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32. *See* Recording Industry Association of America, *2003 Yearend Statistics*, *at* http://www.riaa.com/news/newsletter/pdf/2003yearEnd.pdf (demonstrating decreases in units shipped in 2000–2001, 2001–2002 and 2002–2003 of -6.4%, -8.9% and -7.1%, respectively).

33. *See id.* (showing increases in DVD Video units sold in 2000–2001, 2001–2002 and 2002–2003 of 139,4%, 38.4% and 64.1%, respectively).

34. *See* Chris Nelson, *CD Sales Rise, But Industry Is Too Wary to Party*, N.Y. TIMES, Feb. 23, 2004, at C1.

35. *See, e.g.*, *Not-so-Jolly Rogers; The Music Industry*, ECONOMIST.COM (Mar. 13, 2004), *available at* LEXIS (describing the fact that Warner Brothers decision to lower the price of DVDs increased DVD sales, but also made CDs less desirable).

36. Press Release, Universal Music Group, Universal Music Group, World's Largest Music Company, Dramatically Reduces CD Prices (Sept. 3, 2003), *available at* http://www.universalmusic.com/News.aspx?NewsId=182.

37. Michael A. Borthers, *Revolt in Vain Unless CD Prices Drop for Consumers*, SPRINGFIELD NEWS-LEADER (Springfield, Mo.), Mar. 18, 2004, at 1C.

38. Matt Richtel, *Access to Free Online Music is Seen as a Boost to Sales*, N.Y. TIMES, May 6, 2002, at C6.

39. *See* Press Release, Jupiter Research, Congressman Rick Boucher to Challenge Music Industry on Digital Anti-Piracy Technologies at Seventh Annual Jupiter and Billboard Plug In (May 13, 2002), *available at* http://www.jupiterresearch.com/xp/jmm/press/2002/pr_051302.html; *see also* File Sharing: To Preserve Market Value, Look Beyond Easy Scapegoats, Jupiter Research (Adam Sinnreich, Lead Analyst), May 2, 2002.

40. *Id.*

Similarly, an August 2002 Forrester Research report[41] found that digital music lovers, those who download the most, increased their CD purchases on a net basis as a result of exposure to new music.[42] Additionally, a 2003 TEMPO study[43] reported that about 40 million Americans downloaded a music file over a one-month period, and that the vast majority of this music-loving population (about three-quarters) reported that their motivation for downloading music files was to sample music before making a CD purchase. Even the most pessimistic study of P2P file sharing, conducted by University of Texas at Dallas Professor Stan Liebowitz, reported that the evidence to date was inconclusive, and that at most P2P file sharing might displace about twenty percent of CD sales at some time in the future.[44] The same study, however, did not consider how much of the short fall could be made up or exceeded by new online services and physical products.[45]

In any event, the impact of P2P file sharing on musical artists may well be differentiated. Internet network expert, Tim O'Reilly, has written that,

> Piracy is a kind of progressive taxation, which may shave a few percentage points off the sales of well-known artists (and I say "may" because even that point is not proven), in exchange for massive benefits to the far greater number for whom exposure may lead to increased revenues. . . . Lowering the barriers to entry in distribution, and the continuous availability of the entire catalog rather than just the most popular works, is good for artists, since it gives them a chance to build their own reputation and visibility, working with entrepreneurs of the new medium who will be the publishers and distributors of tomorrow.[46]

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41. *See* Jane Weaver, *Study: Downloads to save Music Biz. Pay Services Will Help Industry Recover, New Report Says*, MSNBC.COM (Aug. 12, 2002), *available at* http://msnbc.msn.com/id/3073260 (citing report by Forrester analyst Josh Bernoff, *Downloads Save the Music Business*, Forrester Research, August 2002). "Global music revenues will continue to decline for the next few years, but the industry will recover as fee-based digital downloads flourish . . ." *Id.*

42. *Id.*

43. *Quarterly Digital Music Study, TEMPO: Keeping Pace with Digital Music Behavior, Reveals Downloaders Believe Their Actions Don't Hurt Artists* (March 14, 2003), *available at* http://www.angusreid.com/pdf/media/mr030314-2revis.pdf.

44. Stan J. Liebowitz, *Will MP3 Downloads Annihilate the Record Industry? The Evidence So Far, in* ADVANCES IN THE STUDY OF ENTREPRENEURSHIP, INNOVATION, AND ECONOMIC GROWTH (Gary Libecap, ed. JAI Press 2003), *available at* http://www.utdallas.edu/~liebowit/knowledge_goods/records.pdf).

45. *See id.*

46. Tim O'Reilly, *Piracy is Progressive Taxation, and Other Thoughts on the Evolution of*

This perspective has significant support in the artists' community. For example, in a February 2, 2003 Los Angeles Times article, Op-Ed singer-songwriter Janis Ian wrote,

> The Internet is the only outlet for many artists to be heard by an audience bigger than whoever shows up at a local coffeehouse. The Internet allows people like me to gain new fans; if only 10% of those downloading my music buy my records or come to my shows, I've just gained enough fans to fill Carnegie Hall twice over.[47]

John Snyder, the President of Artist House Records, a Board member of the National Academy of Recording Arts and Sciences ("NARAS"), and a thirty–two time Grammy nominee, later wrote,

> If your music is not being downloaded, then you're in trouble. If you can't give it away, you certainly can't sell it . . . . I would argue that the future of music is multimedia, the future of multimedia is DVD, and the future of music companies is software. In five years, record labels will be software companies and I don't think they know that yet. The music business will be saved by someone from the software business who can impose a new business model on music assets.[48]

The strained relationship between record labels and artists also influences artists' views on P2P.[49] Recording Artists' Coalition founder and Eagles' leader, Don Henley, reportedly told an October 2002 Atlanta concert crowd, "Download all you want. The record companies have been ripping off artists for years. Go ahead. I'd rather lose money to you than them. I don't have a contract with you."

Some who represent artists in their negotiations with labels and studios also believe that file sharing is a net plus, and a large potential source of future revenues. In a December 12, 2002 speech in Los Angeles, noted entertainment attorney Ken Hertz observed:

> File sharing is NOT piracy. . . . File sharing is tens of millions of music fans swapping copies of things they wouldn't otherwise buy. An ASCAP or BMI like pool of money allocated

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Online Distribution, OPENP2P.COM (Dec. 11, 2002), *at* http://www.openp2p.com/pub/a/p2p/2002/12/11/piracy.html.

47. Janice Ian, *Don't Sever a High-Tech Lifeline for Musicians*, L.A. TIMES, Feb. 2, 2003, at M5.

48. John Snyder and Ben Snyder, *Embrace File–Sharing, Or Die*, SALON.COM (Feb. 1, 2003), *at* http://www.salon.com/tech/feature/2003/02/01/file_trading_manifesto/print.html.

49. *See* Katie Dean, *Rappers in Disharmony on P2P*, WIRED NEWS (Oct. 1, 2003), *at* http://www.wired.com/news/mp3/0,1285,60650,00.html.

> in an equitable way amongst copyright owners is the only solution that could be of benefit to creators, consumers and copyright owners. Compulsory blanket licensing for non-commercial file sharing is the equivalent of loosening a tourniquet tied around the entertainment industry's neck. The problem is that we can't give consumers what they want. The symptom is that they can get it without our help. We can either engage in futile attempts to eliminate their supply, or we can monetize their demand.[50]

P2P file sharing functions as a sampling service for musical singles in an era when the physical single has largely disappeared from the record shops of America—a deliberate withdrawal that began long before digital distribution emerged.[51] Big Champagne CEO Eric Garland brought this point home in a March 2003 interview:

> Generally speaking, the biggest myth about music online is that people are stealing CDs on the Internet. The truth is, to me, more distressing. Statistically speaking, people almost never downloaded albums. They download singles. Think about that: We're' trying to sell a product for $17 that you can't give away for free![52]

While the movie industry too has overlooked the potential economic advantages of P2P, it cannot make the same claim of economic harm from P2P file sharing as the recording industry. Over the past several years, the movie studios have enjoyed record profits, due, in part, to a huge increase in DVD sales.[53]

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50. Ken Hertz, 2002 Bill of Rights Award Recipient, Address at the ACLU Bill of Rights Dinner, Los Angeles, (Dec. 12, 2002) (transcript *available at* http://www.xeni.net/images/boingboing/speech.htm).

51. *See* Katie Dean, *I'll Take My Music a la Carte*, WIRED NEWS (Sept. 4, 2003) *at* http://www.wired.com/news/print/0,1294,60282,00.html ("[T]he music industry has drastically reduced the number of singles shipped. At its peak in 1997, 66.7 million CD singles were shipped to retailers. The numbers have rapidly declined since then. In 2002, the industry shipped 4.5 million singles."); *see also* B. J. Richards, Note, *The Times They Are A-Changin': A Legal Perspective on How the Internet is Changing the Way We Buy, Sell, and Steal Music*, 7 J. INTELL. PROP. L 421, 449 (2000) ("[W]ith changes in radio format and the extinction of 45s, the Internet may be the best way for people to explore music. The hope is that once the digitally disseminated single impresses a consumer, he will then want to buy the entire album.").

52. Jeff Silberman, Big Champagne/Tracking the Downloading Revolution, The Network (Mar. 7, 2003) *available at* http://www.bigchampagne.com/TN_BIGCHAMPAGNE.pdf (Big Champagne is a company which tracks P2P file sharing activities for the major record labels. In 2003, Big Champagne reported that it signed an agreement to incorporate its P2P surveys into a service that will help radio stations determine which music is most popular for play list selection purposes.).

53. *See, e.g.*, The News Corporation Limited Earnings Conference Call Final, FD (Fair

Despite the complete lack of evidence of contemporary harm, the movie industry has been in the vanguard of those favoring to constrain technology, lest it be victimized at some point in the future.[54] Yet, the movie side of Hollywood lacks credibility when it predicts doom and gloom. After all, this is the same industry that predicted the VCR would be its Boston Strangler,[55] sued to prevent its manufacture and distribution, and escaped this self-destructive wish by a single Supreme Court vote.[56] Rather than being a tool for piracy, the VCR became the means by which the industry built a new source of revenue that eclipsed box office receipts within a decade.[57]

Moreover, both technical and economical differences act to place the movie studios in a different position than record labels. First, movie files are more difficult to download than music files. Movies are much larger, take much longer to download, and require much more room to store.[58] The technology has not yet developed to a point where consumers can download a movie with the ease they can drive to the local video store. Second, rather than being dependent on a single physical product, the movie industry derives revenues from theatrical box office, syndication to premium and broadcast TV, and sales of videotapes and DVDs.[59] The movie industry has aggressively decreased the pricing and expanded the features of DVDs to enhance their perceived value among consumers, and has been appropriately rewarded for that initiative.[60]

Disclosure) Wire, Event Brief of Q4 2003, Aug. 13, 2003, *available at* 2003 WL 60028373 (reporting that News Corporation's DVD sales led the entertainment conglomeration "to a second consecutive year of record profitability").

54. Carolyn Lochhead, *Silicon Valley Dream, Hollywood Nightmare; Technology, Copyright Law Clash in Congress, Courts*, S.F. CHRON., Sept. 24, 2002, at A1.

55. Penny Pagano, *Valenti: Film Industry's Master Lobbyist*, L.A. TIMES, Sept. 3, 1985, (Calendar), at 6 (quoting MPAA President Jack Valenti's statement that "The videocassette recorder is to the American film producer and the American public as the Boston Strangler is to the American Woman at home alone.").

56. *See* Sony Corp. v. Universal City Studios, Inc., 464 U.S. 417 (1984).

57. Lochhead, *supra* note 54.

58. *See generally* Peter Biddle et al., *The Darknet and the Future of Content Distribution* (2002) *available at* http://crypto.stanford.edu/DRM2002/darknet5.doc (last visited Sept. 26, 2004) (discussing the various "costs" associated with downloading content on the Internet, including the availability of bandwidth space).

59. *See* Entertainment and Electronic Media, INDUSTRYPRO.COM *at* http://www.industrypro.com/reports/chpt32electronicentertainmentmedia.pdf (last visited Mar. 14, 2004).

60. *See* Recording Industry Association of America, *supra* note 32 (showing a marked increase in the sales of DVDs as opposed to CDs).

V. THE LEGISLATIVE AND LITIGATION LANDSCAPE

Rather than monetize digital distribution through the power of P2P technologies, the Entertainment Industry has elected to attack it—on both legislative and judicial fronts. The technology industry continues to fight under the motto: "since you can't beat us, how about joining us." Sadly, the fight is costly, has produced casualties, and now resembles a civil war between Northern and Southern California—Silicon Valley vs. Hollywood—complete with traitors, spies, and sneak attacks.[61]

On the legislative front, the initiative that sparked this conflict was the "Consumer Broadband and Digital Television Promotion Act",[62] introduced in 2002 by Ernest Hollings, the Senate Commerce Committee Chairman. This bill, a high priority for the Motion Picture Association of America ("MPAA"), would have authorized the Federal Communications Commission ("FCC") to establish security system standards for all digital hardware and software capable of reproducing digital media in the event the manufacturers of such products and copyright interests failed to reach agreement on such technical standards within one year following the bill's enactment.[63] This proposal also would have also required Internet Service Providers ("ISPs") to store and transmit with integrity any such security measure used in conjunction with copyrighted material that passed through its networks.[64] Upon introduction, the proposal was immediately and strongly opposed by computer hardware, software, and consumer electronic interests on the grounds that mandatory government standards were inappropriate for the fast-changing technological realm, and that the measure would result in hardware and software that would cost consumers more but function less capably.[65]

Additionally, Los Angeles area Representative Howard Berman introduced proposed legislation called the "P2P Piracy Prevention Act"[66] in 2002. This proposal would have excused a copyright owner from any criminal or civil liability for impairing the unauthorized distribution, display, performance or reproduction of his work on a publicly accessible P2P network. The shield from liability would have been available to copyright owners after they gave prior notice of their intent to use certain

61. *See* Lochhead, *supra* note 54.

62. S. 2048, 107th Cong. (2d Sess. 2002).

63. Declan McCullagh, *Anti-Copy Bill Hits D.C.*, WIRED NEWS (Mar. 22, 2002) *at* http://www.wired.com/news/politics/0,1283,51245,00.html.

64. S. 2048, 107th Cong. (2d Sess. 2002).

65. *See* McCullagh, *supra* note 63.

66. H.R. 5211, 107th Cong. (2d Sess. 2002).

impairment technologies to the Department of Justice ("DOJ"), provided that the actual out-of-pocket damages to any user of a P2P network or software did not exceed $50 per impairment.[67] The bill also would have authorized an aggrieved computer owner to bring an action for wrongful impairment against the copyright owner provided that prior notification of their intent to sue was provided to the Department of Justice,[68] which would then have a limited amount of time to investigate the complaint.[69] A variety of groups strongly criticized this proposal for its potential to undermine network and computer security, and provide millions of entities with an overly broad and vaguely worded loophole through which they might engage in "hacking" activities that could wreak substantial economic and infrastructure damage.[70]

Although their sponsors did not reintroduce the Hollings and Berman initiatives in the 108th Congress, the bills incited other legislative proposals to counter alleged overreaching by Hollywood.[71] Representatives Rick Boucher of Virginia and Zoe Lofgren of California each proposed legislation to amend the Digital Millennium Copyright Act ("DMCA"), allowing for circumvention of access control technologies to facilitate "fair use" of copyrighted materials, and making clear that consumers have a right to make a backup copy of digital media they have purchased.[72] The Boucher proposal also would write the Supreme Court's "*Betamax* standard" into copyright law by clarifying that it is not a violation to manufacture, distribute or make non-infringing use of any hardware or software product capable of making significant non-infringing use of a copyrighted work.[73] Not surprisingly, Hollywood opposes these proposals[74] while a broad coalition of computer and telecommunications firms, library associations, and cyber libertarian and consumer organizations back them.[75] Coming from the opposite direction, Rep.

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67. *Id.* § 514(b)(1)(C).

68. *Id.* § 514(d)(1)(A).

69. *Id.*

70. *See, e.g., Intellectual Property Theft Online: Hearing on H.R. 5211 Before the House Judiciary Comm. Subcomm. on Courts, the Internet, and Intellectual Property*, 107th Cong. (2002) (testimony of Gigi B. Sohn, President, Pubic Knowledge, a nonprofit public interest organization).

71. *Two Proposed Bills Would Weaken DMCA 1201*, DRM WATCH (Oct. 3, 2002) *at* http://www.drmwatch.com/legal/article.php/3103711.

72. *Id.*

73. *Id.*

74. *See* Grant Gross, *Bill Would 'Protect' Consumers from DMCA*, INFOWORLD.COM, (Mar. 5, 2003) *at* http://infoworld.com/article/03/03/05/HNdmca_1.html.

75. *Two Proposed Bills Would Weaken DMCA 1201*, *supra* note 71.

Joseph Pitts introduced a bill seeking nothing less than to prohibit the distribution of P2P file-trading software in interstate commerce.[76] So far, the Congressional bias toward gridlock on complex technological controversies has kept all these proposals from advancing.

On the litigation front, after prevailing in the judicial demise of Napster,[77] Hollywood turned its attention against the creators and distributors of the new generation of decentralized P2P applications that emerged from Napster's ashes.[78] Here, the Entertainment Industry juggernaut has fared less well. Specifically, Hollywood's efforts to hold the creators and distributors of P2P software liable whenever users directly infringe copyrights has been met with judicial rejection and skepticism.[79] First, a Dutch appellate court rejected claims by the Industry's local trade association that Kazaa BV—creators of the first "FastTrack-based" P2P file sharing application—should be secondarily liable, holding that Kazaa BV bore no responsibility when others use its software to infringe copyrights.[80] In its decision, the Netherlands Supreme Court upheld findings by the lower court that (1) the software could be used to exchange non-infringing digital files, and (2) given the decentralized nature of the application, any judicial ban on distribution of the software would not prevent existing software users from continuing to exchange digital files, whether or not they were infringing.[81]

Echoing the Netherlands courts, a Federal District Court in Los Angeles rejected Hollywood's efforts to impose liability against another distributor of a FastTrack P2P application (Grokster) and a Gnutella-based P2P application (StreamCast Networks).[82] The District Court, in granting summary judgment to defendants, limited its decision to "current" versions of the software at issue.[83] Nonetheless, the Ninth Circuit agreed to hear Hollywood's appeal, and the case continues at the appellate level.[84]

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76. H.R. 2885, 108th Cong. (1st Sess. 2003).

77. A & M Records, Inc. v. Napster, Inc., 284 F.3d 1091 (9th Cir. 2002).

78. *See, e.g.*, Metro-Goldwyn-Mayer Studios, Inc. v. Grokster Ltd., 259 F. Supp. 2d 1029 (C.D. Cal. 2003).

79. *Id.* at 1046.

80. John Borland, *Ruling Bolsters File-Traders Prospects*, CNET NEWS.COM, Mar. 28, 2002, *at* http://news.com/2100-1023-870396.html; *see also* Benny Evangelista, *Kazaa Not Liable for Copying Acts*, S.F. CHRON., Mar. 29, 2002, at B5.

81. *See, e.g.*, Jon Healey, *Record Labels Lose Court Case on Privacy*, L.A. TIMES, Dec. 20, 2003, at A1.

82. *Grokster*, 259 F. Supp. 2d 1029.

83. *Id.* at 1033.

84. Metro-Goldwyn-Mayer Studios, Inc. v. Grokster Ltd., 269 F. Supp. 2d 1213 (C.D. Cal. 2003).

Facing defeat in the United States, Hollywood has opened another litigation front in Australia against Sharman Networks Limited, provider of the popular P2P application—the Kazaa Media Desktop (KMD)—which last year reached distinction as the most downloaded software application of all time.[85] Although Hollywood had added Sharman as a defendant in the *Grokster/StreamCast* litigation[86] and had engaged in extensive discovery, the Entertainment Industry opened the Australian front not with the filing of a complaint, but with early morning raids at Sharman's offices and the homes of its executives to seize documents using an ex parte procedure known as Anton Pillar.[87] To obtain the extraordinary search and seizure order, the Australian arms of the major record labels represented to the Australian courts that Sharman's critical documents were under imminent threat of destruction, and implied that Sharman itself had distributed copyrighted content on P2P networks without permission.[88] Regrettably, the record labels failed to inform the Australian court that similar liability claims had been rejected in the Netherlands and the United States, and that the documents they sought had been voluntarily produced in the United States litigation.[89]

Aside from the record labels' unseemly litigation conduct, the United States litigation has produced at least one legal ruling that, if upheld, could have significant ramification beyond the file sharing debate. When the industry sued Sharman in the United States, Sharman moved to dismiss on personal jurisdiction grounds.[90] Sharman cited the fact that it did no business and had no personnel in the United States.[91] Rather, Sharman simply operated a website in another country from which anyone could download its P2P software application at no cost.[92] Nonetheless, the District Court found that it could exercise jurisdiction over Sharman because some number of California residents had downloaded the application and because the residents' use of the application allegedly

85. *See* Kazaa *at* http://www.kazaa.com/us/index.htm (last visited Mar. 9, 2004).

86. *See Grokster*, 269 F. Supp. 2d 1213.

87. Abby Dinham, *Sharman's Raided Evidence Ruled Admissible*, ZDNET.COM, Mar. 4, 2004, *at* http://zdnet.com.com/2100-1104_2-5169201.html.

88. *Id.*

89. *See* James Pearce, *Sharman to Challenge Court Order*, CNET NEWS.COM, Feb. 9, 2004, *at* http://news.com.com/2100-1027_3-5156239.html.

90. Jennifer Norman, *Staying Alive: Can the Recording Industry Survive Peer-to-Peer?*, 26 COLUM. J.L. & ARTS 371, 389 (2003).

91. *See* Metro-Goldwyn-Mayer Studios, Inc. v. Grokster Ltd., 243 F. Supp. 2d 1073, 1084 (C.D. Cal. 2003).

92. *See id.* at 1086.

harmed California entertainment businesses.[93] If such logic were applied by foreign courts, virtually any business with a website could be subjected to worldwide personal jurisdiction. In that case, the Internet would pose the greatest challenge to the power and autonomy of individual nation-states since the invention of the legal entity known as the corporation. Turnabout is not just a hypothetical threat: Dow Jones, the parent company of the *Wall Street Journal*, recently lost a challenge to the jurisdictional validity of a libel suit brought in Australia, where standards are less protective than our First Amendment, because of a news item made available from a U.S. server to a handful of online subscribers "down under."[94]

Finally on the litigation front, record labels have pursued U.S. litigation against individuals who use P2P software to directly infringe copyrights.[95] Besides the public relations disaster that resulted from suing their own customers, the recording industry faced another challenge: how to identify people sharing copyrighted music without authorization.[96] With most P2P applications, the Internet Protocol ("IP") address for a user with files available for distribution can be identified.[97] Translating that IP address into the name and address of a live person is another matter.[98] Because most IP addresses are dynamic (they change on a daily basis), only an Internet Service Provider ("ISP") can provide the name of a person having a particular IP address at a particular point in time.[99]

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93. *See id.* at 1087, 1090.

94. *See* Gutnick v. Dow Jones & Co., Inc. [2003] VSC 79 (Mar. 21, 2003), *available at* http://www.austlii.edu.au/au/cases/vic/VSC/2003/79.html (citing the earlier High Court decision in Dow Jones & Co., Inc. v. Gutnick (2002) 194 A.L.R. 433, upholding the jurisdiction of the Supreme Court of Victoria).

95. *See* Jon Healey, *Participants' Distrust Exposed in Piracy Battle*, L.A. TIMES, Dec. 22, 2003, at C1.

96. *See* Recording Indus. Ass'n of Am., Inc. v. Verizon Internet Services, Inc., 69 U.S.P.Q.2d (BNA) 1075, 1076, 2003 U.S. App. LEXIS 25735 (D.C. Cir. 2003); *see also* Healey, *supra* note 95.

97. *See id.* An Internet Protocol address is defined as "[t]he unique identification of the location of an end-user's computer, the IP address serves as a routing address for email and other data sent to that computer over the Internet from other end-users." *See* Register.com, Inc. v. Verio, Inc., No. 00-9596, 356 F.3d 393, 2004 U.S. App. LEXIS 1074 at *37 n.4 (2d Cir. Jan. 23, 2004).

98. *See generally Recording Indus. Ass'n of Am.*, 69 U.S.P.Q.2d (BNA) at 1076 (describing how the RIAA, or anyone for that matter, can obtain individuals' screen names and their IP addresses on its own, but only the ISP, Verizon in this case, can link these two pieces of information to actual names and addresses).

99. *See* Pac Bell Internet Servs. v. Recording Indus. Ass'n of Am., No. C03-3560SI, 2003 U.S. Dist. Lexis 21659 at *7 n.3 (N.D. Cal. Nov. 26, 2003).

Using the subpoena provision of the DCMA,[100] the recording industry issued subpoenas to dozens of ISPs, seeking the identity of hundreds of P2P users prior to filing any legal action.[101] One ISP—Verizon—refused to comply and sought judicial relief.[102] After suffering a loss in the lower court, the United State Court of Appeals for the D.C. Circuit ruled unanimously that section 512(h) of the DMCA did not give the recording industry power to issue pre-litigation subpoenas requiring Verizon to identify individuals associated with IP addresses.[103] In the meantime, other ISPs had complied with the subpoenas, leading to hundreds of lawsuits against peer–to–peer users.[104] In one of the first settlements, the RIAA coerced $23,000 from a 12-year-old girl living in a New York City public housing project.[105]

The appellate decision blocking pre-litigation subpoenas slowed, but has not stopped the recording industry's campaign against its customers. Recently, the RIAA has filed several lawsuits naming "Doe" defendants and have subpoenaed ISPs to learn their identities through the traditional subpoena process.[106] Whether this action will prove successful remains to be seen. Even the RIAA concedes that it cannot sue the millions it claims infringe copyrights with P2P software.[107] Most believe that the actions against "direct infringers" are intended to dissuade P2P use by the masses, thus lowering advertising revenue for distributors of P2P software. The fact that the recording industry has not taken similar legal actions against those who exchange copyrighted music with other equally effective technologies, including instant messenger and email, lends support to this belief.[108]

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100. 17 U.S.C. § 512(h).

101. *See* Amy Harmon, *Subpoenas Sent To File-Sharers Prompt Anger And Remorse*, N.Y. TIMES, July 28, 2003, at C1.

102. *Recording Indus. Ass'n of Am.*, 69 U.S.P.Q.2d (BNA) at 1075.

103. *See id.* at 1081.

104. *See* Harmon, *supra* note 101.

105. *See* Adam Liptak, *Ideas and Trends; The Music Industry Reveals Its Carrots and Sticks*, N.Y. TIMES, Sept. 14, 2003, § 4 (Late Edition), at 5; *see also* Benny Evangelista, *Downloading Teens Star in Superbowl Ad*, S.F. CHRON., Jan. 31, 2004, at A1 (reporting that sixteen teenagers sued by the recording industry subsequently appeared in a commercial for Apple's iTunes).

106. John Schwartz, *Music Industry Returns to Court, Altering Tactics on File Sharing*, N.Y. TIMES, Jan. 22, 2004, at C1.

107. *See, e.g.*, Benny Evangelista, *RIAA Warns 204 More People it Plans to Sue; This Time, Alleged File–Sharers Get Advance Notice*, S.F. CHRON., Oct. 18, 2003, at B1 (reporting the RIAA was targeting those who share a large number of files).

108. *See generally* Schwartz, *supra* note 106 (noting that the harshness of the suits has resulted in "some bad publicity," but has also been successful in decreasing "file trading" and boosting public awareness). *But see generally* Lyle Denniston & Chris Gaither, *Record Industry*

VI. ANOTHER MISSED OPPORTUNITY—OR MONETIZATION?

To date the entertainment industry has missed many opportunities to get ahead of the digital curve and realize the tremendous opportunities to create and monetize new digital business models. Nearly a decade ago, record labels ignored attempts by the head of their own national trade association, the RIAA, to apprise them of the coming tsunami. As recounted in a recent article:

> In fact, [Hilary] Rosen tried to steer the labels toward the online future long before they saw it coming. In the mid-'90s, Rosen brought [technology guru Esther] Dyson to a conference of music executives to brief them on how technology would transform their business. Dyson described for them the inevitability of digital delivery, an eventuality Rosen says she had begun to understand but wanted her bosses to hear from an outsider. But as Dyson spoke, the label executives became defensive, then furious. By all accounts, the meeting devolved into a shouting match.[109]

From MP3.com to the latest versions of P2P applications, each legal assault against new technology has driven the online audience to a newer technology that is even more difficult to control and monetize.[110] Yet the labels don't seem to understand yet that Moore's Law is more powerful than copyright law. They don't seem to understand that this intuitive consumer utilization of technology should be monetized, not criminalized. They don't seem to understand that lawsuits are no substitute for multiple innovative business strategies to deliver music as service rather than product. And they don't seem to understand that the best means of regaining control is to concede that the control they once enjoyed is gone forever. Instead, the labels mimic Mickey Mouse in the *Sorcerer's Apprentice* segment of the classic animated film *Fantasia*. In that cartoon Mickey conjures up a walking broomstick to draw water from the castle well. But Mickey has not learned the magic spell to make it stop, and a flood begins to ensue. So Mickey grabs an ax and begins to chop away—and each swing of the ax just doubles the number of uncontrollable

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Loses Round, BOSTON GLOBE, Dec. 20, 2003, at A1 (quoting Verizon's associate general counsel describing the D.C. Appellate Court's ruling as a victory for privacy in other forms of peer-to-peer digital exchange, like instant message and e-mail).

109. Matt Bai, *Hating Hilary*, WIRED 11.02 (Feb. 2003), *available at* http://www.wired.com/wired/archive/11.02/hating_pr.html.

110. *See generally* Peter K. Yu, *The Copyright Divide*, 25 CARDOZO L. REV. 331, 384–401 (2003) (reviewing the record industry's responses to peer-to-peer music file-sharing technology and the development of new peer-to-peer technologies).

broomsticks and accelerates the pace of the flooding.

VII. P2P AS THE PATH TO PROSPERITY

A recent study[111] of investment opportunities in digital media lists the following benefits that would accompany a shift of sound recording distribution from physical to virtual:

- No manufacturing costs.
- No minimum economical production run, an astonishing benefit for a record industry that claims to lose money on ninety percent of its releases.
- A sharp reduction in distribution costs, with savings further increased through P2P adaptation because "the P2P network basically turns the PCs of participating consumers into storage units of tracks for sale."
- No inventory costs.
- No costs for returns of unsold merchandise, another astounding change for an industry that now sees twenty to forty percent of all releases returned from CD retailers.
- Better opportunities for new artists, especially due to the elimination of minimum production runs to facilitate distribution or CD sales to turn a profit.
- A sharp reduction in transaction costs with customers and greatly enhanced ability for the labels to engage in direct marketing and data gathering.[112]

As described above, P2P has an economic benefit over other on-line models: utilization of P2P distribution models provides additional and very substantial costs savings over central-server models. When consumers enter into a paying relationship with services that use P2P for commercial distribution, they basically bargain to share a portion of their bandwidth for Internet connectivity and their hard drive for content storage in exchange for a substantially lower cost of service. A series of white papers, available at the CenterSpan Communications website,[113] documents the magnitude of these savings over central server distribution models—bandwidth

111. Phil Leigh, Raymond James & Associates, Investment Opportunities in Digital Media (Feb. 10, 2003), *available at* http://www.insidedigitalmedia.com/about.php.

112. *Id.*

113. *See A Content-Centric Content Delivery Strategy: the Secure, Mediated Distributed Network as Best Value for Rich Downloadable Content and On-Demand Streaming*, CENTERSPAN (Dec. 12, 2002), *available at* http://www.centerspan.com/technology/new_content_whitepaper.pdf. CenterSpan was a Portland, Oregon based company that developed technology for a centrally mediated P2P media distribution network protective of copyright interests; it sought bankruptcy protection in 2003 after failing to convince major entertainment industry interests to license content for distribution.

distribution costs savings of about two-thirds for file downloads and ninety percent for streaming media ("webcasts").[114] P2P also pushes content out to the edges of the Internet where it can be assembled and transmitted quickly, an especially important feature for large media files like games and videos. While a number of webcasters have begun the transition to P2P business models,[115] major labels and studios have largely chosen to ignore the potential benefits of P2P. Unfortunately, Hollywood has automatically associated P2P with piracy rather than prosperity. Placing content, especially DRM-protected content, on a P2P network does not lead to loss of control over that content but to regaining control over consumer wants and expectations by adopting an economic model that can satisfy market demand for a breadth of quality-assured and conveniently accessible media at the lowest possible price—regardless of whether the pricing relationship is charge per unit, limited subscription, or "all you can eat."

For example, Brilliant Digital Entertainment, Inc., a Los Angeles-based business partner of Sharman Networks, announced in 2003 that it had surpassed the 75 million license mark for content downloaded across music, game/software and video categories.[116] These copyright–protected and secure files were downloaded via their Altnet TopSearch technology by users of the Kazaa Media Desktop software.[117] More than 25,000 units of secure games and software had been sold even when the same version was available for free in an un-secure format,[118] certainly indicating that manufacturers can "compete with free." Also, in late 2002, Microsoft used Altnet to distribute copies of its new Windows Media 9 audio and video software to Kazaa users, in a demonstration of both improved reproduction capabilities and anti-piracy features.[119] Commenting on the experiment, the Director of Microsoft's Windows Media division said, "[w]e're really interested in how peer-to-peer networks can be used for the legitimate

114. *Id.*

115. In 2001, AllCast released a customized version of its streaming broadcast software that considerably reduced bandwidth costs for webcasters by employing a "peer-to-multi-peer" technique. "With this method, users distribute the content to each other rather than receiving it all from one central place and so it reduces bandwidth requirement and with it the cost of Webcasting." Craig Johnston, *Net Radio Audience Ready for More*, RADIO WORLD (Oct. 10, 2001), *at* http://www.rwonline.com/reference-room/special-report/rwx-webwatch1.shtml.

116. Press Release, Brilliant Digital, Altnet Surpasses 75 Million Licenses Generated for Secure Content in Peer to Peer Environment (Mar. 17, 2003), *at* http://www.brilliantdigital.com/content.asp?skin=BDE1&ID=793.

117. *See id.*

118. *Id.*

119. *See* Jon Healey, *Microsoft Finds Marketing Outlet in Kazaa*, DETROIT NEWS (Oct. 21, 2002), *at* http://www.detnews.com/2002/technology/0210/21/technology-617514.htm.

distribution of content . . . the number of [authorized] downloads has been pretty promising and actually has been surprisingly high."[120] In 2004, Altnet continues to be the leading legitimate distribution channel in the world for licensed media content, adding such additional offerings as the leading "Bollywood" Indian film releases[121] as well as the catalog of Artemis records, one of the top U.S. independent labels.[122]

P2P can also provide the platform for new entertainment ventures. In 2002 digital broadcaster Pseudo.com released an advertiser-supported weekly TV show starring rap star Ice-T to Kazaa's sixty million registered users.[123] Pseudo.com President Edward Salzano urged his colleagues to embrace this new distribution model, saying, "[t]he entertainment industry has to get it together and use the technology to their advantage."[124]

The economic and technological benefits of P2P are so compelling that it will surely play a major, if not dominant, role in digital media distribution. As wired and wireless broadband becomes ubiquitous, and storage becomes ever denser and cheaper, content will reside on all manner of devices beyond the PC. Nor is P2P limited to the Internet. Indeed, cable and satellite TV set top boxes equipped with large hard drives may well become the primary platform for digital media storage and retransmission within closed, proprietary networks.

VIII. THE LOGIC OF COMPULSORY LICENSING TO BENEFIT ARTISTS

Compulsory blanket licensing for non-commercial file sharing should be legislated as a means of monetizing consumer demand. The revenues generated from such licensing would supplement revenues collected through various paid digital media services. And these revenues could be substantial—a $1 per month supplemental levy on ISP subscribers in the U.S. and Canada alone would generate upwards of $2 billion per year. Given the broad range of devices and activities that it could apply to, even an extremely modest levy could generate large new income streams.

Such a compulsory license has ample precedent in prior public sector

120. Jon Healey, *Microsoft Using Kazaa as a Marketing Portal*, L.A. TIMES, Oct. 21, 2002, § 3 (Business), at 1.

121. Nicole Manketelow, *Kazaa's Premiere*, SYDNEY MORNING HERALD, Dec. 6, 2003 at 3.

122. Press Release, ALTNET.COM, Altnet To Sell Grammy-Winning Music Via P2P Software Including Kazaa and Grokster (Feb. 13, 2004), *at* http://biz.yahoo.com/P2040213/52579.html.

123. *See* Stefanie Olsen, *Pseudo Spins Hip-Hop TV Show on Kazaa*, CNETNEWS.COM (Mar. 6, 2003), *available at* http://news.com.com/2100_1027_991396.html.

124. *Id.*

responses to new media technologies as diverse as the piano roll, radio, cable and satellite television, and the digital audio tape recorder.[125] Blank music CD-Rs are already subject to a U.S. levy meant to compensate rights holders and creators, just as hard drive storage is in Canada and optical disc "burners" in Germany are similarly levied.[126] Further, the compulsory license solution has the support of major P2P software distributors, such as Sharman Networks.[127] In spring 2002, Sharman Networks suggested to the U.S. Congress that it give consideration to the development of an Intellectual Property User Fee ("IPUF") to monetize consumers' inevitable reproduction and distribution of digital media.[128]

The IPUF concept is grounded in the belief that all parties who facilitate and derive economic benefit from consumers' non-commercial reproduction and distribution of copyrighted media should be considered as potential contributors to the compulsory revenue pool.[129] That pool should be distributed directly and proportionately to rights holders and creators based on statistical sampling surveys that measure such utilization through means respectful of individual privacy. IPUF furthers the Constitutional directive of promoting the progress of science and the useful arts through the provision of economic incentives, while recognizing that enforcement of the exclusive rights to control reproduction and distribution of copyrighted works is problematic in the digital era.[130]

Professor Neil Netanel, of the University of Texas School of Law, advocated an approach similar to the IPUF at a conference held at American University's Washington College of Law in October 2002. Professor Netanel proposed "allowing unrestricted noncommercial P2P file sharing in return for imposing a levy on P2P-related services and products."[131] This levy, which he dubbed a "Noncommercial Use Levy" ("NUL"), would be imposed on such parties as ISPs, manufacturers of

125. *See* Robert P. Merges, *Compulsory Licensing vs. the Three "Golden Oldies,"* The Cato Institute (Jan. 15, 2004), *at* http://www.cato.org/pubs/pas/pa508.pdf.

126. Indeed, in December 2003, the Canadian Copyright Board declared that downloading copyrighted sound recordings from the Internet was legal and subjected computer hard drives to the levy to compensate rights owners for this activity. John Borland, *Canada Deems P2P Downloading Legal*, NEWS.COM (Dec. 12, 2003), *at* http://news.com.com/2100-1025-5121479.html.

127. *See* Letter from Philip S. Corwin, attorney for Sharman Networks, to Senator Joseph R. Biden, Jr., Chairman of the Senate Foreign Relations Committee (Feb. 26, 2002), *at* http://www.ipuf.org/ipuf/BidenReportLetterBA.htm.

128. *See id.*

129. *See id.*

130. *See id.*

131. Neil Weinstock Netanel, *Impose a Noncommercial Use Levy to Allow Free Peer-to-Peer File Sharing*, 17 HARV. J.L. & TECH. 1, 4 (2003).

computers, "a variety of burning" devices, consumer electronics products, storage media, and commercial providers of P2P software.[132] In return, individuals' copying, distribution, and noncommercial adaptations and modifications of such shared digital content would be granted clear legal protection from charges of copyright infringement.[133]

By emphasizing monetization over criminalization, a compulsory license approach seeks to adapt to, rather than suppress, consumers' intuitive use of their new hardware and software tools for media storage and transmission. Additional compulsory license initiatives would also remove many of the obstacles that have frustrated the broad range of content offerings on paid digital services. For example, despite the corporate affiliations between the largest music publishers and the record labels, obtaining online publishing rights for paid services has been a constant roadblock that a new and appropriately designed compulsory license would remove.

IX. A MIXED USE BUSINESS MODEL

By compelling the diversification of music sector revenues beyond its primary dependence on the twenty–year–old technology of the CD, and by providing new revenue streams through both compulsory licensing and paid online services, the digital upheaval will greatly benefit the recording industry over the long term. This is not to say that the sale of hard goods will end—just that the hard goods sold will be new and improved.

One of the greatest mistakes the recording industry has made is to repeat the mantra, in service to their myopic anti-piracy campaign, that a digital download using P2P software is equivalent to stealing a CD.[134] It is most certainly not the same thing: P2P is primarily a singles sampling, and not a CD replacement, service. In addition, there are inherent qualitative differences between a full audio file and one that has undergone dramatic compression to facilitate its transfer over the Internet. Whether it is in MP3, Windows Media, or any other compression format, the audio file is shrunk by tossing out three-quarters or more of the data contained in a WAV file on a CD.[135] Such files are more like FM than CD quality. They sound fine through a portable player's headphones or small computer

132. *Id.*

133. *Id.*

134. Becky Barrow, *Girl Sued for Downloading Tunes on Net*, DAILY TELEGRAPH (London), Sept. 10, 2003, at 1.

135. *See* Kimberly D. Simon, *Establishing Accountability on The Digital Frontier: Liability For Third Party Copyright Infringement Extends To Manufacturers Of Audio Compression Software*, 52 SYRACUSE L. REV. 921, 924 (2002).

speakers, but their reduced audio quality is readily apparent on any good quality stereo.

Rather than telling consumers that MP3s are equivalent to a CD and that they are "pirates" for downloading them, the industry would do much better to adopt a marketing campaign that recognizes their sampling function and the limits of audio compression, for example, say something along the lines of "You've heard the MP3, now buy the full quality CD."

But the CD itself may be an endangered species—not because of downloads, but because the industry is moving quickly away from that aging format and toward higher quality multimedia optical discs that can restore the perception of value to music purchasers. Both Super Audio CD (SACD) and DVD-Audio discs provide substantially higher and "warmer" sound quality than traditional CDs, have multi-channel capabilities that can be exploited both on home theater systems and new players being installed in automobiles, plus the capacity to carry additional content such as lyrics, photos, band interviews and music videos. And, unlike CDs, they also are protected by DRM technologies—although compressing their very large files for Internet distribution would defeat their entire qualitative purpose for existence. As consumers are educated as to the capabilities of these new hard goods, the industry can expect to benefit from a long-term product conversion wave similar to that which accompanied the transition from vinyl to CD. In this context, Internet file sharing of compressed audio becomes the perfect, low-cost promotional medium for stimulating the sale of high quality recordings.

X. CONCLUSION

The daily news informs us that transformational technologies continue to propagate at an exhilarating pace:

Intelligent buffers that find and store digital media for later consumption, and that can be networked in the same way as computers, are today exemplified by the TiVO and Replay TV personal video recorders ("PVRs").[136] They soon will extend their reach to audio media, as consumer electronics manufacturers will provide similar devices to exploit the coming age of digital FM broadcasts. With this technology, radio itself will become a source of digital copies.

WiFi connectivity will soon free users from the physical constraints of wired networks and make anti-piracy campaigns even more difficult to

136. *See, What is Tivo?*, TIVO.COM, *at* http://www.tivo.com/1.0.asp (last visited Mar. 4, 2004); *see also Features & Benefits*, ReplayTV, *at* http://www.digitalnetworksna.com/dvr/5500/features.asp (last visited Mar. 4, 2004).

prosecute. Ultra-fast wireless services allow downloads on the go at speeds up to ten times as fast as dial-up modems.

New optical disc copying systems from Sony and Phillips will allow between thirty and one hundred hours of music to be burned onto a single disc.[137] Dismissing expressions of concern from his colleagues at Sony Music, Mike Tsurumi, a President of Sony Consumer Electronics, opined, "The music companies need to change their business models."[138]

Because technology advances simply cannot be curtailed by the entertainment industry, the entertainment industry must learn to compete against them and find new ways to monetize them. Simply relying on congressionally mandated copyright monopolies is no longer enough to ensure profitability: The day will come, (if it has not already arrived) when technology simply bypasses the legal ability to grant and enforce copyright monopolies. P2P networks provide opportunities that surpass the growing pains associated with the formation of new business models. The sooner the entertainment industry begins to embrace P2P, the sooner it will find itself on a new path to prosperity.

137. Barry Fox, *Music Companies Fear New 100-Hour Discs*, NEWSCIENTIST.COM (Mar. 14, 2003), *at* http://www.newscientist.com/news/news.jsp?id=ns99993490.

138. *Id.*