COPYRIGHT AND INNOVATION: THE UNTOLD STORY

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Copyright has an innovation problem. Judicial decisions, private enforcement, and public dialogue ignore innovation and overemphasize the harms of copyright infringement. Just to pick one example, "piracy," "theft," and "rogue websites" were the focus of debate in connection with the PROTECT IP Act (PIPA) and Stop Online Piracy Act (SOPA). But such a debate ignores the effect of copyright law and enforcement on innovation. Even though innovation is the most important factor in economic growth, it is difficult to observe, especially in comparison to copyright infringement.

This Article addresses this problem. It presents the results of a groundbreaking study of 31 CEOs, company founders, and vice presidents from technology companies, the recording industry, and venture capital firms. Based on in-depth interviews, the Article offers original insights on the relationship between copyright law and innovation. It also analyzes the behavior of the record labels when confronted with the digital music revolution. And it traces innovators' and investors' reactions to the district court's injunction in the case involving peer-to-peer (p2p) service Napster.

The *Napster* ruling presents an ideal setting for a natural experiment. As the first decision to enjoin a p2p service, it presents a crucial data point from which we can trace effects on innovation and investment. This Article concludes that the *Napster* decision reduced innovation and that it led to a venture capital "wasteland." The Article also explains why the record labels reacted so sluggishly to the distribution of digital music. It points to retailers, lawyers, bonuses, and (consistent with the "Innovator's Dilemma") an emphasis on the short term and preservation of existing business models.

The Article also steps back to look at copyright litigation more generally. It demonstrates the debilitating effects of lawsuits and statutory damages. It gives numerous examples of the effects of personal liability. It traces the possibilities of what we have lost from the *Napster* decision and from copyright litigation generally. And it points to losses to innovation, venture capital, markets, licensing, and the "magic" of music.

The story of innovation in digital music is a fascinating one that has been ignored for too long. This Article aims to fill this gap, ensuring that innovation plays a role in today's copyright debates.

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INTRODUCTION

Copyright has an innovation problem. Judicial decisions, private enforcement, and public dialogue ignore innovation and overemphasize the harms of copyright infringement. Just to pick one example, "piracy," "theft," and "rogue websites" were the focus of debate in connection with the PROTECT IP Act (PIPA) and Stop Online Piracy Act (SOPA).¹

Missing from this debate is the effect of copyright law and enforcement on innovation. Innovation is the most important factor in economic growth. It promises new business models and methods of communication, entertainment, and commerce.

Innovation, however, is difficult to observe, especially in comparison with copyrighted works that have been infringed. It also is subject to the challenging task of hypothesizing the path not taken. The benefits of technologies abandoned by innovators or not funded by investors are far from clear. Innovation also threatens copyright holders, whose business models come under direct attack. Innovation, in short, is crucial, threatening, and neglected.

This Article addresses this problem. It presents the results of a groundbreaking study of 31 CEOs, company founders, and vice

^{1.} Preventing Real Online Threats to Economic Creativity and Theft of Intellectual Property Act of 2011, S. 968, 112th Cong. (2011); Stop Online Piracy Act, H.R. 3261, 112th Cong. (2011).

presidents (VPs) from technology companies, the recording industry, and venture capital firms. Based on in-depth interviews, the Article offers original insights on the relationship between copyright law and innovation. It also analyzes the behavior of the record labels when confronted with the digital music revolution. And it traces innovators' and investors' reactions to the district court's injunction in the case involving peer-to-peer (p2p) service Napster.²

The *Napster* ruling presents an ideal setting for a natural experiment. Although other legal decisions have addressed secondary liability (imposed on actors who assist others in committing infringement), *Napster* arguably had the most direct effect. It was the first decision to enjoin a p2p service. And it presented the story of a service's meteoric rise to eighty million users and similarly precipitous descent into shutdown, bankruptcy, and personal liability.

What specifically was the effect of the *Napster* decision (and similar rulings) on innovation and investment in digital music? It is difficult to offer a blanket conclusion flowing from logic and analytical reasoning alone. Some have argued that the decision harmed innovation.³ Others have claimed that copyright liability like that imposed in the *Napster* case promoted innovation.⁴

Based on comprehensive interviews with 31 leaders in the digital music space (24 CEOs, presidents, or company founders, and 7 VPs from technology companies, the recording industry, and venture capital

^{2.} A&M Records, Inc. v. Napster, Inc., 114 F. Supp. 2d 896 (N.D. Cal. 2000).

^{3.} Cyrus Farivar, *Attorney Helps Software Creators*, DAILY CALIFORNIAN, (Apr. 11, 2001), http://archive.dailycal.org/article/5222/attorney_helps_software_creators (Fred von Lohmann concludes that, because of *Napster*, "we're going to see less innovation" and "[w]e're going to see more and more people not building new technologies"); *Peter Wayner Interviews Lawrence Lessig*, SLASHDOT (Jan. 16, 2002, 1:15 PM), http://tech.slashdot.org/story/02/01/15/2040217/peter-wayner-interviews-lawrence-lessig (Lawrence Lessig links "dramatic change" from *Napster* that "must have had an effect" on innovation.).

^{4.} See Peter S. Menell, Indirect Copyright Liability and Technological Innovation, 32 Colum. J.L. & Arts 375, 378 (2009) (noting that "[t]here is ample evidence that copyright liability has spurred all sorts of technological innovation . . . such as digital rights management and content identification (filtering)" and "anonymity features and darknets," and that "[t]he development and commercialization of these technologies suggests that the cloud of liability has not throttled the digital innovation pipeline"); see generally Stop Online Piracy Act: Hearing on H.R. 3261 Before the H. Judiciary Comm., 112th Cong. (2011) (statement of Michael P. O'Leary, Senior Executive Vice President, Global Policy & External Affairs, on Behalf of the Motion Picture Ass'n of Am., Inc.), available at http://judiciary.house.gov/hearings/pdf/O'Leary%2011162011.pdf ("Contrary to naysayers' claims, strong copyright law promotes innovation.").

firms), I found remarkable consistency on several main themes.⁵ Many respondents (with all quotes in this Article anonymous given the sensitive nature of the information) believed that the *Napster* decision reduced innovation and that it led to a venture capital "wasteland."

Respondents also underscored the record labels' sluggish response to the distribution of digital music, which was explained by retailers, lawyers, bonuses, and an emphasis on the short term and preservation of existing business models. They discussed the use of copyright litigation as a business model in which the validity of allegations was not directly relevant. And they offered numerous examples of the effects of personal liability.

Part I of this Article offers background on the Napster service and litigation. It explains how Napster was the first p2p service to gain widespread acceptance and discusses the litigation, including the district court and Ninth Circuit rulings on liability and injunctive relief.

Part II explores the consequences of the *Napster* ruling. It relays respondents' views that the decision stifled innovation in digital music services. It also presents evidence of a venture capital "wasteland" after the decision. It imagines what would have happened if the court had reached a different conclusion. It responds to the reaction of some observers that the decision paved the way for the "legal" alternative of iTunes. And it shows how the decision cemented the labels' litigation strategy.

The Article also engages in an exhaustive analysis of the record labels' response to Napster. There is a broad consensus, which includes many in the industry, that the labels did not respond as quickly as they could have to Napster, other p2p services, and digital music distribution generally. But there is less agreement on the reasons for this.

After asking leading officers from the (then-existing five) record labels—Bertelsmann Music Group (BMG), EMI, Sony, Universal Music Group, and Warner Music Group—I paint a picture of the situation in which the labels found themselves. Part III introduces constraints that faced the industry. For starters, retailers did not want to give up their distribution platforms, and the labels were subject to a "maze of rights" accompanying copyrighted works.

The labels also presented a textbook example of the Innovator's Dilemma. This theory asserts that large, well-established companies are less likely to embrace disruptive innovations that threaten to cannibalize their existing business models. In contrast, small startup companies are more likely to pursue disruptive innovations. My interviews uncovered a vast array of evidence that the labels suffered from the Innovator's

Dilemma. Respondents pointed to an overriding emphasis on the short term, on meeting quarterly goals at the expense of long-term objectives, and on a litigation Ponzi scheme.

Part IV turns from the built-in hurdles facing the labels to choices they made that delayed the pivot to digital distribution. It highlights the role that lawyers (who emphasized litigation and the harms from infringement) played in the companies. It describes how the labels' technology VPs were ignored. It points to labels' treatment of retailers—not end-users—as their customers. And it reveals the flaws in the labels' "bulletproof models."

Part V then steps back to look at copyright litigation more generally. It shows how, regardless of the merits, the mere filing of lawsuits often achieves the labels' objectives. It underscores the dramatic effects of statutory damages, which can reach billions of dollars. It offers firsthand accounts of innovators who found themselves on the receiving end of personal lawsuits. It shows how the labels exploited a lack of legal clarity to promote their goals. And it highlights some of the industry's threats to innovators who sought to create legal alternatives to distribute digital music.

Part VI tackles head-on the fundamental challenge posed by the consideration of copyright's effect on innovation. We cannot discern innovation that has not taken place. And for that reason, today's debate takes place almost exclusively along the lines of "theft" and the "massive" piracy of copyrighted works.

Part VII introduces innovation into this inquiry, setting forth a best estimate of what we have lost from the *Napster* decision and from copyright litigation in the music industry. It imagines the innovation that we could have had, as well as the additional venture capital that could have flowed into the industry. It points to lost markets of vast audiences ripe for the taking but not harnessed. It shows the lost licensing opportunities from onerous terms offered to innovators. And it remarks, wistfully, on the "lost magic" of music, with generations appreciating not the wonder of music but the fear of piracy and theft.

The story of innovation in digital music is a fascinating one that has not yet been explored sufficiently. This Article aims to fill this gap. By harnessing the insights of those most likely to know about innovation effects, the Article offers a new perspective on today's copyright debates.

I. PIRACY, THEFT, AND "ROGUE WEBSITES"

Today's copyright debates focus on piracy, theft, absolute property, and "rogue websites." The effects of aggressive copyright law and enforcement on innovation typically are either not discussed at all, or play at most a tangential role.⁶ Although a catalog of piracy and theft quotes could fill an article, this Part provides representative examples from three groups: copyright holders in the SOPA/PIPA context, administration officials, and artists.

A. SOPA/PIPA Reactions

Chris Dodd—former senator, and current chairman and CEO of the Motion Picture Association of America (the trade association representing the major Hollywood studios)—was on the front lines of the dialogue concerning SOPA and PIPA. When, in response to a blackout and protests involving 7,000 websites⁷ and 4.5 million petition signers,⁸ the House and Senate delayed the legislation, Dodd lamented that "there will continue to be a safe haven for foreign thieves; American jobs will continue to be lost; and consumers will continue to be exposed to fraudulent and dangerous products peddled by foreign criminals." In contrast, he "applaud[ed] those leaders in Washington who have chosen to stand with the millions of hard working Americans all across this nation whose livelihoods are threatened by foreign criminal websites designed to steal."

Dodd also scoffed at the belief by "[s]ome in the tech community" that "even if their website is being used to house stolen copyrighted content, that's not their problem," wondering if they would "give the same answer if their sites were being used to distribute child

^{6.} Several commentators raised the specter of harms to innovation in the context of SOPA and PIPA. See Brad Burnham, The PROTECT IP Act Will Slow Start-up Innovation, UNION SQUARE VENTURES (June 23, 2011), http://www.usv.com/2011/06/the-protect-ip-act-will-slow-start-up-innovation.php; Tim Donnelly, Why Start-ups Are Scared of SOPA, INC. (Nov. 17, 2011), http://www.inc.com/articles/201111/why-start-ups-are-scared-of-the-stop-internet-piracy-act.html.

^{7.} Zach Carter, *Google Joins Online SOPA Protest*, Huffington Post (Jan. 17, 2012, 2:47 PM), http://www.huffingtonpost.com/2012/01/17/google-joins-online-sopa-protest n 1210990.html.

^{8.} Deborah Netburn, *Google Says 4.5 Million People Signed Anti-SOPA Petition Today*, L.A. TIMES (Jan. 18, 2012, 4:00 PM), http://latimesblogs.latimes.com/technology/2012/01/google-anti-sopa-petition.html.

^{9.} Kara Swisher, *The Full Valenti: Dodd Trades His Olive Branch to Tech for a Howitzer, After SOPA/PIPA Gets Delayed*, ALLTHINGSD (Jan. 20, 2012, 11:32 PM), http://allthingsd.com/20120120/the-full-valenti-dodd-trades-his-olive-branch-to-tech-for-a-howitzer-after-sopapipa-gets-delayed/?mod=googlenews.

^{10.} *Id*.

pornography or computer viruses or phish for personal financial information."¹¹

Nor was Dodd alone. Representative Lamar Smith (R-TX), the SOPA sponsor, explained that the bill "does not 'threaten online freedoms,'" but "does threaten the profits generated by those who willfully steal intellectual property by trafficking in counterfeit or pirated goods." Smith stated that "[t]he problem of rogue sites is real, immediate, and widespread," with "IP theft cost[ing] the U.S. economy more than \$100 billion annually" and "the loss of thousands of American jobs." Similarly, Senator Sherrod Brown (D-OH) worried that "illegal file sharing and unauthorized copying of digital material prevents musicians . . . from reaping the fruits of their labor" and "has the potential to stifle artistic creativity and compromise electronic innovation." ¹⁴

Another commentator stated that SOPA and PIPA were "a big deal" because they would allow the "rule of law" to "finally catch up with the drove of pirates stalking the Internet 'high seas' who currently steal from America with impunity." And even the *New York Times* lamented that "[p]iracy's cost is measured in less innovation and less economic activity, as creators lose hope of making a living from their creations." ¹⁶

B. Administration Statements

Assertions of piracy and theft were not unique to the debate over SOPA and PIPA. In fact, they have been proclaimed from the highest levels of the United States government. President Barack Obama stated that "[i]t's not right when another country lets our movies, music, and software be pirated." Commerce Secretary Gary Locke highlighted

^{11.} Ted Johnson, *Dodd Cites "Moral Failure" of "Piracy Apologists*," VARIETY (Nov. 16, 2011, 4:13 PM), http://www.wilshireandwashington.com/2011/11/dodd-cites-moral-failure-of-piracy-apologists.html.

^{12.} Lamar Smith, *Defending SOPA*, NAT'L REV. ONLINE (Dec. 1, 2011, 4:00 AM), http://www.nationalreview.com/articles/284535/defending-sopa-lamar-smith.

^{13.} *Id.*

^{14.} Sherrod Brown, *Letter to Constituent*, PROPUBLICA (Jan. 20, 2012), http://projects.propublica.org/sopa/B000944.

^{15.} Scott Cleland, *Why Anti-Piracy Legislation Will Become Law*, FORBES (Nov. 2, 2011, 5:44 PM), http://www.forbes.com/sites/scottcleland/2011/11/02/why-anti-piracy-legislation-will-become-law/.

^{16.} Editorial, *Going after the Pirates*, N.Y. TIMES, Nov. 26, 2011, http://www.nytimes.com/2011/11/27/opinion/sunday/going-after-thepirates.html? r=1.

^{17.} Chloe Albanesius, *Obama Tackles Piracy, Startups in State of the Union*, PCMAG.COM (Jan. 24, 2012, 10:17 PM), http://www.pcmag.com/article2/0,2817,2399309,00.asp.

the "rampant piracy of music, and of intellectual property," and warned that "'[p]iracy is flat, unadulterated theft' and it should be dealt with accordingly."¹⁸

Vice President Joe Biden has spoken out even more strongly and consistently against piracy, announcing that "piracy is theft. Clean and simple." According to Biden, piracy is "no different than smashing a window at Tiffany's and grabbing [merchandise]." To similar effect, as a senator, Biden stated that "every day thieves steal millions of dollars of American intellectual property from its rightful owners" and that "it's a crime." In fact, Biden added, IP is "an immensely valuable resource, and failing to protect it is equivalent to letting coal be stolen from our mines, water taken from our streams and our rivers, and oil out of the ground." Biden lamented that "[w]e don't approach it as if it were a natural resource being stolen."

In addition, administration officials Victoria Espinel (IP enforcement coordinator), Aneesh Chopra (U.S. chief technology officer), and Howard Schmidt (special assistant to the President) explained the need for legislation to confront "online piracy," which "is a real problem that harms the American economy, and threatens jobs for significant numbers of middle class workers." Piracy "harms everyone from struggling artists to production crews, and from startup social media companies to large movie studios." And while the administration is "strongly committed to the vigorous enforcement of intellectual property rights, existing tools are not strong enough to root out the worst online pirates beyond our borders."

^{18.} Gary Locke, U.S. See'y of Commerce, Remarks at Intellectual Property Enforcement at Belmont University (Aug. 30, 2010), available at http://www.commerce.gov/news/speech/2010/08/30/remarks-intellectual-property-enforcement-belmont-university-nashville-tennes.

^{19.} Greg Sandoval, *Biden to File Sharers: "Piracy is Theft*," CNET (June 22, 2010, 8:50 AM), http://news.cnet.com/8301-31001 3-20008432-261.html.

^{20.} Id

^{21.} Evaluating International Intellectual Property Piracy: Hearing Before the S. Comm. on Foreign Relations, 108th Cong. 3 (2004) (statement of Sen. Joe Biden), available at http://ftp.resource.org/gpo.gov/hearings/108s/96570.txt.

^{22.} *Id*.

^{23.} *Id.* at 3–4.

^{24.} Victoria Espinel et al., *Combating Online Piracy while Protecting an Open and Innovative Internet*, White House, https://petitions.whitehouse.gov/response/combating-online-piracy-while-protecting-open-and-innovative-internet (last visited Sept. 4, 2012).

^{25.} *Id.*

^{26.} Id.

C. Artists

In addition to administration officials, and lobbyists and politicians in the context of SOPA and PIPA, some artists have lamented the "piracy" of their works. To be clear, many artists applaud the widespread distribution of their music and encourage fans to sample their works. For example, bands such as Coldplay, Nine Inch Nails, Radiohead, R.E.M., and Saul Williams have released "free" or "pay what you want" albums.²⁷ Other musicians, however, have focused on theft and piracy.

Britney Spears, for example, said that file-sharing was "the same thing" as someone "go[ing] into a CD store and steal[ing] a CD" since "people [are] going into the computers and logging on and stealing our music." And Dr. Dre lamented that Napster was "just a new high-tech way of [b]ootlegging." ²⁹

Continuing the analogies, Lars Ulrich analogized Napster to "[w]alk[ing] into a record store, grab[bing] what you want and walk[ing] out," with the difference that the phrase "file's done" is replaced by "you are under arrest." And Paul Stanley from Kiss stated that just as someone who "grab[s] an album and leave[s] a store" is "put . . . in handcuffs," file-sharing is "like me stealing your car and telling you I'm sharing your transportation." 31

In short, an array of politicians, artists, and other figures has vigorously and consistently emphasized copyright infringement by employing the strong language of theft and piracy.

^{27.} Coldplay to Give Away Live Album, Coldplay.com (May 1, 2009, 9:00 AM), http://www.coldplay.com/newsdetail.php?id=388; Jaymis Loveday, Making It as a New Artist: Trent Reznor and Techdirt Founder on What to Do Now, Create Digital Music (July 9, 2009), http://createdigitalmusic.com/2009/07/making-it-as-anew-artist-trent-reznor-and-techdirt-founder-on-what-to-do-now/; Jared Moya, R.E.M. to Offer New Album 'Accelerate' for FREE – Sort of, ZeroPaid (Mar. 13, 2008), http://www.zeropaid.com/news/9326/rem_to_offer_new_album_accelerate_for_free_sort_of/; Jared Moya, Saul Williams Follows Radiohead's Lead, Lets Fans Decide What to Pay, ZeroPaid (Dec. 19, 2007), http://www.zeropaid.com/news/9155/saul williams follows radioheads lead lets fans decide what to pay/.

^{28.} Lisa M. Bowman, *Superstars Blast File Swapping*, CNET (Sept. 25, 2002, 9:00 PM), http://news.cnet.com/Superstars-blast-file-swapping/2100-1027 3959537.html.

^{29.} Meshack Blaq, *Dr. Dre: Break Em' Off*, Kronick, http://www.kronick.com/2.0/issue31/drdre.shtml (last visited Sept. 5, 2012).

^{30.} Lars Ulrich, Drummer, Metallica, Address Before S. Judiciary Comm. on Downloading Music on the Internet (July 11, 2000), available at http://transcripts.cnn.com/TRANSCRIPTS/0007/11/se.01.html.

^{31.} Kiss Talks about Music Piracy, DEVTOPICS, http://www.devtopics.com/kiss-talks-about-music-piracy/ (last visited Sept. 4, 2012).

II. NAPSTER: BACKGROUND

Napster was the first peer-to-peer (p2p) service to gain a vast audience, peaking at 80 million users.³² This Part first describes the service, situating it in the context of p2p networks. It then presents the opinion of the district court enjoining Napster before turning to the Ninth Circuit's affirmance.

A. The Service

The defining characteristic of a p2p network is that the transfer of files is performed directly between users.³³ Such a system stands in contrast to the client-server model, in which the data flows from server to client.³⁴ In the client-server model, computer users request information from websites (servers) that is delivered to their computers (clients).³⁵

File-sharing on a p2p network is often facilitated by the compression of music into a digital file format known as MPEG Layer-3 (MP3), which speeds up transfers between computers. ³⁶ Networks that contain p2p architecture offer advantages over those implementing a client-server model. For starters, p2p scales more quickly and cheaply. ³⁷ Instead of clients lining up at the gates of a server, users rely only on their broadband connection, drive space, and local content to send files to and receive files from each other. ³⁸ In addition, p2p networks are more fault-tolerant and can handle a higher load than client-server models. ³⁹

On the other hand, p2p networks significantly increase the likelihood and extent of copyright infringement. Users' easy and

^{32.} Brad King, *The Day the Napster Died*, Wired (May 15, 2002), http://www.wired.com/gadgets/portablemusic/news/2002/05/52540?currentPage=all.

^{33.} JAMES D. MCCABE, NETWORK ANALYSIS, ARCHITECTURE, and DESIGN 180 (2d ed. 2003).

^{34.} *Id.*

^{35.} *Id.* at 180–81.

^{36.} E.g., Yiman Zhang, Establishing Secondary Liability with a Higher Degree of Culpability: Redefining Chinese Internet Copyright Law to Encourage Technology Development, 16 PAC. RIM L. & POL'Y J. 257, 262 (2007).

^{37.} Brief of Respondents at 7, *MGM Studios Inc. v. Grokster, Ltd.*, 545 U.S. 913 (2005) (No. 04-480), 2005 WL 508120.

^{38.} *Id.*

^{39.} *Id.*

instantaneous access to files vastly heightens the potential for widespread infringement. 40

The Napster service in particular worked as follows. First, a user downloaded from Napster's website its MusicShare software, which allowed access to the network.⁴¹ Second, the user specified files to be shared with others, and—when the user was online—the list of files was supplied to Napster.⁴² Third, the user searched for other users' files.⁴³ Finally, to transfer a copy of the file, the user received the Internet address of the "host user" (who had the files) from the Napster servers, connected to the host user, and downloaded a copy of the file directly from the other computer in a "peer-to-peer" fashion.⁴⁴

Napster was a "hybrid" p2p network, which meant that part of its operation was centralized. In particular, each peer deposited an index of files on the Napster central server, which aggregated the files into one giant index. ⁴⁵ The peers then consulted the central server to find requested information. ⁴⁶ The p2p aspect occurred when the peers conducted the subsequent file transfer between themselves. ⁴⁷

Napster introduced the world at large to the potential of p2p. 48 It scaled with astounding ease and swiftness. Only a year after its launch in 1999, the network was swapping three billion MP3 music files a month, a feat that could not have been duplicated with client-server architecture. 49

As discussed more fully below in the context of the decreasing ability to monetize p2p networks, litigation over the Napster system encouraged developers to migrate away from hybrid p2p networks to a more decentralized architecture, one set up to prevent an owner's knowledge of, and control over, the activities of peer computers.⁵⁰

^{40.} See For Students Doing Reports, RIAA, http://www.riaa.com/faq.php (last visited Sept. 8, 2012).

^{41.} A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004, 1011 (9th Cir. 2001).

^{42.} *Id.* at 1011–12.

^{43.} *Id.* at 1012.

^{44.} *Id*.

^{45.} See generally Tim Wu, When Code Isn't Law, 89 VA. L. Rev. 679, 720 (2003).

^{46.} *Id.* at 722.

^{47.} *Id.* at 717.

^{48.} Benny Evangelista, *Napster Names CEO, Secures New Financing*, S.F. CHRON., May 23, 2000, at C1.

^{49.} Wu, *supra* note 45, at 710–11.

^{50.} See infra notes 133–139 and accompanying text.

B. The Ruling

In December 1999, A&M Records and seventeen other record companies sued Napster for contributory and vicarious copyright infringement in the United States District Court for the Northern District of California.⁵¹

1. DISTRICT COURT OPINION

The court in *A&M Records, Inc. v. Napster, Inc.*⁵² began its analysis by concluding that Napster's users were liable for direct infringement.⁵³ It observed that "virtually all Napster users engage in the unauthorized downloading or uploading of copyrighted music."⁵⁴ The court also denied Napster's defense based on fair use since (1) the use was not transformative or personal, (2) the copyrighted works were creative, (3) the users copied the entire work, and (4) the Napster service reduced CD sales.⁵⁵

The court next found that the plaintiffs demonstrated a likelihood of success on their claim for contributory infringement. Napster's actual knowledge was revealed through its notice of more than 12,000 infringing files as well as a document asserting "the need to remain ignorant of users' real names and IP addresses 'since they are exchanging *pirated* music.'"57

In addition to actual knowledge, the company had constructive knowledge because its executives, who had recording industry experience and had previously enforced IP rights, downloaded copyrighted songs and "promoted the website with screen shots listing infringing files." Moreover, Napster materially contributed to the infringing activity since its services were crucial to finding and downloading desired music. ⁵⁹

The court also found that it was likely that Napster would ultimately be held vicariously liable. ⁶⁰ The company benefited from an increase in users that resulted from the availability of copyrighted

^{51.} A&M Records, Inc. v. Napster, Inc., 114 F. Supp. 2d 896, 900 (N.D. Cal. 2000).

^{52. 114} F. Supp. 2d 896 (N.D. Cal. 2000).

^{53.} *Id.* at 911.

^{54.} *Id.*

^{55.} *Id.* at 912–13.

^{56.} *Id.* at 920.

^{57.} *Id.* at 918 (emphasis in original).

^{58.} *Id.* at 919.

^{59.} *Id.* at 919–20.

^{60.} *Id.* at 921.

works.⁶¹ And it had the "right and ability to supervise its users' infringing conduct."⁶² Vital to this control was the architecture of hybrid p2p systems. Because it managed a centralized search index, Napster could observe peers' activities and eject users from the system.

The district court granted the plaintiffs' motion for a preliminary injunction against Napster. 63 It prohibited Napster from "engaging in, or facilitating others in copying, downloading, uploading, transmitting, or distributing plaintiffs' copyrighted musical compositions and sound recordings." 64

2. NINTH CIRCUIT

The Ninth Circuit affirmed the district court's ruling. 65 It upheld the lower court's findings on direct infringement, fair use, and vicarious liability. 66 It also affirmed the contributory infringement holding, though it did not agree that Napster "failed to demonstrate that its system is capable of commercially significant noninfringing uses," finding that the lower court "improperly confined the use analysis to current uses, ignoring the system's capabilities." 67 Despite this disagreement, the court found that the record supported the district court's conclusion that plaintiffs "would likely prevail in establishing that Napster knew or had reason to know" of infringement. 68

In terms of relief, the Ninth Circuit held that the injunction was "overbroad" since it "place[d] on Napster the entire burden of ensuring that 'no copying, downloading, uploading, transmitting, or distributing' of plaintiffs' works occur on the system." The appellate court put the burden on the plaintiffs to "provide notice to Napster of copyrighted works and files containing such works available on the Napster system before Napster has the duty to disable access to the offending content." The court thus ordered the district court to modify its injunction.

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61. Id.
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^{62.} *Id.* at 921.

^{63.} *Id.* at 927.

^{64.} Id

^{65.} A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004, 1029 (9th Cir. 2001).

^{66.} *Id.* at 1013–17, 1022–24.

^{67.} *Id.* at 1021.

^{68.} *Id.*

^{69.} *Id.* at 1027.

^{70.} *Id.*

^{71.} Id. at 1029.

3. MODIFIED INJUNCTION

On remand, the district court modified the injunction, requiring the plaintiffs to provide notice to Napster of the title, artist, and file name for each of the allegedly infringed copyrighted works.⁷² Napster was then required to prevent the "downloading, uploading, transmitting, or distributing" of files within three days of receiving notice.⁷³

Napster had installed a new filter that analyzed a file's contents "using audio fingerprinting technology" that "was not vulnerable to textual variations in file names." But the district court declared that Napster's efforts were "not good enough until every effort" was made to "get zero tolerance." The standard was "to get it down to zero." The district court concluded that "Napster was not in satisfactory compliance with the modified preliminary injunction" and thus needed to "disable its file transferring service."

The Ninth Circuit found that it was not an abuse of discretion for the lower court to order Napster to "keep its file transferring service disabled" because it could not reach zero infringement. And the appellate court affirmed the modified injunction and shutdown of Napster, finding that even though Napster "was able to prevent sharing of much of plaintiffs' noticed copyrighted works," there was evidence that infringement "still occurred in violation of the modified preliminary injunction." Napster filed for bankruptcy and shut down in 2002.

III. NAPSTER: AFTERMATH

Based on my interviews with innovators, investors, and record label officials, it is abundantly clear that the consequences of the

^{72.} *A&M Records, Inc. v. Napster, Inc.*, No. C 99-05183 MHP, C 00-1369 MHP, 2001 WL 227083, at *1 (N.D. Cal. Mar. 5, 2001).

^{73.} *Id.* at *1–2.

^{74.} A&M Records, Inc. v. Napster, Inc., 284 F.3d 1091, 1097 (9th Cir. 2002). Fingerprinting technology converts the content of a work into a unique digital identification mark. Lionel S. Sobel, DRM as an Enabler of Business Models: ISPs as Digital Retailers, 18 BERKELEY TECH. L.J. 667, 681 (2003).

^{75.} A&M Records, Inc., 284 F.3d at 1097.

^{76.} *Id.*

^{77.} *Id.* at 1096.

^{78.} Id. at 1098.

^{79.} *Id.* at 1096.

^{80.} Meghan Collins, *Napster Files for Bankruptcy: Music-Swapping Internet Site, Offline since July 2001, Seeks Chapter 11 Protection*, CNNMONEY (June 3, 2002, 1:25 PM), http://money.cnn.com/2002/06/03/news/companies/napster_bankrupt/.

Napster service and the *Napster* decision were profound. Software developers who planned to offer digital music innovations were stopped dead in their tracks from the injunction and its implications. Investors faced the prospect of personal liability and even bankruptcy. And the record labels, though they won the *Napster* battle, still confronted a gut-wrenching war against a digital music tidal wave that threatened their business models.

Most of the interviews highlighted the momentous effects of the introduction of the Napster service. Record label officials viewed Napster as "terrifying" and "devastating." It was a "sudden shock to the system" with the labels being "thrown into a world they were not prepared for." As one respondent summarized: "Napster enabled anarchy."

A. New Business Model

The most fundamental change introduced by the Napster service was the development of a new business model. In particular, Napster allowed users to access music singles rather than multi-track CDs. It also offered music that could be accessed on the Internet. One innovator explained that "[p]rior to Napster, it was virtually impossible to get music from the Internet" since "you had to use file transfer protocol [FTP]."

This had significant drawbacks in that "most people didn't know how to use it" or the FTP servers were "unreliable" since they "would either be busy or turned off."

Napster allowed users to download files from the Internet, and its peer-to-peer nature permitted the rapid transfer of files, even when many simultaneously desired the same songs.

Napster also "broke the concept of bundling," serving as a "tipping point culturally" since it allowed consumers to "find music that was not in an album format." The service showed that "there was a huge amount of material out there that just was out of stock" that "you couldn't get, or was bundled in an album."

^{81.} Interview with Participant "I" (Nov. 30, 2011) (on file with author).

^{82.} Interview with Participant "P" (Dec. 16, 2011) (on file with author).

^{83.} Interview with Participant "O" (Dec. 12, 2011) (on file with author).

^{84.} Interview with Participant "G" (Nov. 28, 2011) (on file with author).

^{85.} Interview with Participant "N" (Dec. 12, 2011) (on file with author).

^{86.} *Id.*

^{87.} Interview with Participant "O," *supra* note 83.

^{88.} Interview with Participant "L" (Dec. 6, 2011) (on file with author).

^{89.} Interview with Participant "AA" (Apr. 24, 2012) (on file with author).

Napster and other p2p services "revealed that consumers really wanted to listen to *all* music" and the labels were "not providing that choice." Consumers had been forced to buy albums and were "burned" if "they only wanted a single."

One respondent explained that CDs had "very little content other than maybe one good song," and (less delicately) that the record companies were "selling 1 pound of shit in a 10 pound bag." Another similarly pointed to the labels' reliance on their "old cozy world," in which they "loved loading up albums with crappy songs and forcing people to pay \$12 or \$15." ⁹³

Consumers "were just tired of overpaying and spending twenty dollars when they only wanted one song." Napster "blew open the doors" to let users decide. The record labels, in contrast, were in no rush to offer consumers this à la carte option, as it showed that "the emperor had no clothes."

In addition to expanding the options by which users could consume music, Napster proved to the labels that a market for the distribution of digital music existed. As one innovator explained: "The threat of the Napsters of this world, or Groovesharks or LimeWires or PirateBay [other p2p services] . . . that's the only thing that got the industry to do anything." Without those services, the record labels "would have set the parking brake and done nothing." In particular, the "forcing function of the Internet compell[ed] them to embrace something" rather than "just go[ing] through what they're doing right now," which involved "get[ting] new laws passed."

To similar effect, a record industry official explained that there "was clearly a strong demand that was proven by Napster" and that "absent Napster coming onto the scene . . . the music industry would not have moved forward" but "would be another five to ten years behind where it is today." ¹⁰⁰

Though Napster showed labels the possibilities of digital music innovation, one innovator lamented that "the trailblazers are the ones

- 90. *Id*.
- 91. Interview with Participant "L," supra note 88.
- 92. Interview with Participant "C" (Nov. 15, 2011) (on file with author).
- 93. Interview with Participant "W" (Apr. 12, 2012) (on file with author).
- 94. Interview with Participant "N," supra note 85.
- 95. Interview with Participant "L," supra note 88.
- 96. *Id.*
- 97. Interview with Participant "K" (Dec. 5, 2011) (on file with author).
- 98. *Id.*
- 99. *Id.*
- 100. Interview with Participant "D" (Nov. 15, 2011) (on file with author).

with the arrows in their back." Related to Napster's fate was the fate of innovation in digital music.

B. Stifled Innovation

Many participants discussed the effect of the *Napster* decision on innovation. To be sure, several respondents thought the court reached the correct decision. One thought the decision "was a positive" since it "took an unfair competitor out of the marketplace." Another believed it did not "stop[] innovation" because of the development of other p2p services such as Gnutella and direct-to-consumer marketing platform Topspin. A third "didn't disagree" with the decision. 104

But others stated that the breadth of the decision—combined with personal liability¹⁰⁵ and the rejection of apparently reasonable attempts to filter for copyrighted content—had a direct effect on innovation. One innovator lamented that "the minute the *Napster* decision came out," it "put such a chilling effect on everything." The innovator, who had introduced a service that he believed was "completely legal to the letter and to the spirit" of the law, still "got hit across the head with a hammer." Another participant, speaking even more broadly, concluded that "from 2000 to 2010, even to this day, there really hasn't been new innovation in digital music other than iTunes."

Filtering, which automatically detects and blocks certain types of content, was one technology that did not develop as fully as it could have. While YouTube has made progress in its use of filtering to block copyrighted files, more widespread attention to the issue could

- 101. Interview with Participant "N," supra note 85.
- 102. Interview with Participant "D," supra note 100.
- 103. Interview with Participant "H" (Nov. 29, 2011) (on file with author).
- 104. Interview with Participant "W," supra note 93.
- 105. See infra notes 417–445 and accompanying text.
- 106. Interview with Participant "F" (Nov. 23, 2011) (on file with author).
- 107. Id.
- 108. Interview with Participant "N," supra note 85.
- 109. Mehan Jayasuriya et al., Forcing the Net through a Sieve: Why Copyright Filtering Is Not a Viable Solution for U.S. ISPs, in 1 BROADBAND AND CABLE INDUSTRY LAW at 221, 227–28 (PLI Intellectual Prop. Course Handbook Ser. No. G-993, 2010).
- 110. Kimberly Hill, YouTube's Extra 5 Minutes Could Buy More Than Time, TECHNEWSWORLD (July 30, 2010, 10:53 AM), http://www.technewsworld.com/story/70525.html; Steven Horowitz, How Karmin & Other Viral Stars Turn YouTube Covers into Major Label Deals, BILLBOARD.COM (Feb. 11, 2012, 9:00 PM), http://www.billboard.com/features/how-karmin-other-viral-stars-turn-youtube-1006157152.story#/features/how-karmin-other-viral-stars-turn-youtube-1006157152.story.

have offered additional promise, years earlier. Absent the *Napster* ruling, there "would have been a lot more eyes and attention" and "a lot of innovation on filtering." ¹¹¹

One innovator, who offered a service that was "able to block close to 100%" of the files the labels requested, lamented that he was "getting set up by the RIAA [The Recording Industry Association of America, the trade group representing the major record labels] or the labels" with an "ultimatum" that "you cannot have any of our material being downloaded on our website—100%." He worried that "if you can't do 100%," then "you are out of business" and even face the possibility of a personal lawsuit. 113

Relatedly, even a respondent who thought "Napster came out the correct way" believed that "many more dollars would have gone into different delivery mechanisms to allow consumers easier access" if the court had concluded that Napster was legal.¹¹⁴

One innovator thought expansively about how, if the court had come out the other way, "every television broadcast, every piece of music ever created, [and] every image ever taken" could be "available unfettered to all of the devices we have," including the PC, mobile phone, and tablet. In addition, "everything would be brought" to each user. The respondent concluded that, if Napster had won, "I guarantee you, it would be a \$50 billion market right now."

In addition to these losses, the *Napster* decision also (as discussed below¹¹⁸) discouraged new ideas and resulted in numerous missed opportunities, including the labels' failure to adopt new business models.

C. Counterfactual: A Legal Napster

Perhaps the greatest difficulty in determining the effects of law on innovation is tracing the counterfactual of what would have happened if a court had decided a particular case differently. There is no ready-made template that can be inserted to test this hypothesis. One challenge is the difficulty of controlling for all the other factors that could have influenced the outcome.

^{111.} Interview with Participant "J" (Nov. 30, 2011) (on file with author).

^{112.} *Id.*

^{113.} *Id*

^{114.} Interview with Participant "U" (Jan. 18, 2012) (on file with author).

^{115.} Interview with Participant "F," *supra* note 106.

^{116.} *Id.*

^{117.} *Id*

^{118.} See infra Part VII.A.

For that reason, interviews with leading officials provide some of the best available evidence regarding what could have happened if the *Napster* decision had come out the other way. Again, we cannot know with certainty what would have happened. But the reactions of those who have thought about these issues as much as anyone and who were key players at the highest levels are instructive. The responses are even more telling given the consistency of responses across the spectrum from technology innovators to record label officials to venture capitalists.

1. FORCED NEGOTIATION

One consistent theme was that a court decision in favor of Napster would have forced the parties to negotiate. Because the court ordered the shutdown of Napster, the labels had no incentive to sit down with Napster or any other p2p service to try to work together to create an authorized service. 119

One respondent thought the decision made the labels "more entrenched" and "more difficult to deal with in terms of any kind of reasonable licensing scheme" since they "won in court" and thus decided to "suck everybody dry as much as" they could. 120

Another said that *Napster* "made clear from the get-go that content owners were not interested in negotiating over their content but were going to play hardball." He analogized it to the theory of deterrence, explaining that the "more likely someone is to actually create a punishment, the less strong the punishment has to be" and that "the stronger the punishment is, the less likely it has to be to be deterred." The record labels "did both," coming down "with great certainty and with incredible force," which "absolutely had reverberations through the VC community." 123

In contrast, if the labels had lost, they would have had no choice other than negotiation. The labels would not be able to "just kill these guys" by "taking them to court" and "[taking them] down in no

^{119.} Other factors, of course, could have affected negotiations. For example, one respondent noted an attempt from "at least one major music label" to "construct a deal with Napster to create a new model" that "would provide Napster with legitimate access to copyrights," but that was abandoned "the minute Napster got the investment from Bertelsmann." Interview with Participant "V" (Feb. 22, 2012) (on file with author).

^{120.} Interview with Participant "W," *supra* note 93.

^{121.} Interview with Participant "EE" (May 25, 2012) (on file with author).

^{122.} *Id.*

^{123.} *Id.*

time."¹²⁴ Napster would still have been operational, with millions of users. And a mutually acceptable path through the digital music minefield, even if challenging, was possible. One innovator explained that a decision favoring Napster "would have . . . forced the labels and the innovators to come together and come up with a real solution."¹²⁵ A representative of the record labels similarly agreed that "if Napster [had] won," it "might have pushed them to the negotiating table faster."¹²⁶

In addition, the labels "ended up with almost a classic definition of a Pyrrhic victory because they thought 'OK we won,'" but even though they shut down Napster, "then you had KaZaA, LimeWire, Morpheus, BitTorrent, and everything under the sun," a version of "global whack-a-mole." The innovator concisely stated the problem: "Essentially you have no coherent way to directly stop the piracy but the precedent gives you the illusion that you can stop it." In fact, the labels "were under this naïve view that they would be able to put the genie back in the bottle."

2. NO LOST GENERATION

Another common refrain was the effect of the decision on generations of consumers. One innovator imagined the "different world we would live in right now" if Napster had been licensed. ¹³⁰ In that case, we would not have lost "generations" of consumers and would not have suffered from "short-term thinking." ¹³¹ Similarly, the consequences of the *Napster* decision and the labels' piracy campaign was to "create a generation of kids who don't see [infringement] as a bad thing," with this result flowing from the labels' failure to adopt new business models. ¹³²

^{124.} Interview with Participant "CC" (May 8, 2012) (on file with author).

^{125.} Interview with Participant "J," supra note 111.

^{126.} Interview with Participant "T" (Jan. 18, 2012) (on file with author).

^{127.} Interview with Participant "Y" (Apr. 19, 2012) (on file with author).

^{128.} *Id.*

^{129.} *Id.*

^{130.} Interview with Participant "Q" (Dec. 21, 2011) (on file with author).

^{131.} Id

^{132.} Interview with Participant "U," supra note 114.

3. UNDERGROUND P2P

A third consistent theme was that the *Napster* decision pushed p2p services underground and in the direction of more decentralized architectures.

Because the court found that Napster officials had knowledge of and control over copyrighted works—on account of their awareness of files on the central index—subsequent p2p systems were designed to avoid the use of central servers. The next p2p wave of the KaZaA and Grokster systems, for example, lacked central servers, instead creating more decentralized networks. 133

While such a development reduced the likelihood of liability, it made it more difficult for the labels to make money from the services. One innovator explained that the result of the *Napster* decision was that file-sharing "went underground and grew tremendously," with the result that the labels "did themselves a huge disservice and lost billions and billions of revenue." Another record label official elaborated, concurring that the *Napster* decision "drove peer-to-peer further underground." ¹³⁵

This was a setback for attempts to monetize p2p systems. Napster and the labels, for example, had entered into discussions to create an authorized service. Several of the participants discussed an offer by which Napster agreed to give the labels a \$1 billion payment as well as a monthly fee of \$4.95 for users' unlimited downloading. Napster would pay the labels the fee, which would then be allocated based on the number of downloads per artist and label. 137

The centralized Napster service would have provided "really good statistics about where the money needed to go" since the centralization allowed content holders to observe the use of copyrighted works. ¹³⁸ Another respondent similarly noted that the decision took a file-sharing service "where the labels could have made money" and "taken the vast majority of the profits" and pushed it underground so it "couldn't have

^{133.} MICHAEL A. CARRIER, INNOVATION FOR THE 21ST CENTURY: HARNESSING THE POWER OF INTELLECTUAL PROPERTY AND ANTITRUST LAW 114–15 (2009).

^{134.} Interview with Participant "N," supra note 85.

^{135.} Interview with Participant "G," supra note 84.

^{136.} See Interview with Participant "F," supra note 106; Interview with Participant "H," supra note 103; Interview with Participant "N," supra note 85; see also Napster Offers Labels \$1 Billion Settlement Deal, BILLBOARD.COM, http://www.billboard.com/news/napster-offers-labels-1-billion-settlement-780133 story#/news/napster-offers-labels-1-billion-settlement-780133 story#/news/napster-offers-labels-1-billion-settlement-1-billion-settlement-1-billion-settlement-1-billion-settlement-1-billion-

^{780133.}story#/news/napster-offers-labels-1-billion-settlement-780133.story (last visited Sept. 26, 2012).

^{137.} Interview with Participant "N," supra note 85.

^{138.} Interview with Participant "G," supra note 84.

any opportunity to share in the revenue." The parties' inability to negotiate an agreement regarding a centralized—and more trackable—p2p system was a lost opportunity.

4. A CANCELLED BLANK CHECK

One innovator described a particularly generous offer to the labels. This respondent discussed a service that "absolutely" tried to avoid copyright issues. The service had investors who had "deep entertainment interests," and it was "first of kind" in putting "compliance procedures in place" and running its operation so that "everything it did was architected to comply with the DMCA [Digital Millennium Copyright Act]." But even though the service "never ever ever touched a piece of content" and had only a "database of links" of which it did not have knowledge, the labels sued it, claiming that the DMCA safe harbor "doesn't exist." 142

The service "had significant interest from top-tier VCs—really the top of the top." But the consensus among these VCs was that the company needed to "take care of this litigation." The service was "deeply tied by our investors to the entertainment industry" and was not "raising the flag of piracy." The service was "the entertainment industry" and was not "raising the flag of piracy."

As a result, "after they sued us, our opening offer to them was: 'You guys made your point; we will charge anything you want to charge, and you can take any percentage you want to take." ¹⁴⁶ In effect, "you win, we lose, we will go to work for you." ¹⁴⁷ The labels stood to benefit from such an offer, as the company had "several million users, spending an average of ninety minutes per day on the service to deliver to the labels." ¹⁴⁸ The respondent thought: "Let's make money, and let's just have a negotiation over what, if anything, you will let our little company keep for delivering these users." ¹⁴⁹ It was "literally an offer of a blank check."

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139. Interview with Participant "N," supra note 85.
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^{140.} Interview with Participant "BB" (Apr. 30, 2012) (on file with author).

^{141.} *Id.*

^{142.} *Id.*

^{143.} *Id.*

^{144.} *Id.*

^{145.} *Id.*

^{146.} *Id.*

^{147.} *Id.*

^{148.} *Id.*

^{149.} *Id.*

^{150.} *Id.*

The labels, however, were not interested. Their response was: "No, we want you to turn it off." ¹⁵¹ But as the innovator explained, "of course, our response was that we can't because if we turn it off, we lose the millions of users." ¹⁵² Even though the service was "offering those people," the labels "just wanted us dead." ¹⁵³

The innovator explained that they met with "the supposed tech gurus at each of the record labels, most of whom were totally ignorant, and were like old-school marketing people that had just come up through the ranks as enforcers and A&R [artist and repertoire]." These individuals only knew "what we thought was just rhetoric"—that "you're a thief, you're a pirate." The respondent concluded that the record label officials were "irrational actors." 156

5. INNOVATION

If the *Napster* decision had come out the other way or the parties had reached an agreement, it seems almost certain there would have been more innovation in the digital distribution of music. As discussed above, respondents explained that the decision (1) had a chilling effect on innovation, (2) limited developments in technology such as filtering, (3) stifled "different delivery mechanisms" that would have led to new ways for consumers to access music, and (4) resulted in numerous missed opportunities. ¹⁵⁷

D. Venture Capital's Importance

Interview subjects were consistent in describing the significant effect of the *Napster* decision not only on innovation but also, and relatedly, on venture capital funding.

Venture capital is crucial to startups, providing funding and guidance at the earliest stages of a company's development. Venture capitalists (VCs) provide money and play an active role in the company's operations, typically occupying a position on the board of

^{151.} *Id.*

^{152.} Id.

^{153.} *Id.*

^{154.} *Id.*

^{155.} *Id.*

^{156.} *Id.*

^{157.} See supra notes 102–118 and accompanying text.

^{158.} NAT'L VENTURE CAPITAL ASS'N, VENTURE IMPACT: THE ECONOMIC IMPORTANCE OF VENTURE CAPITAL-BACKED COMPANIES TO THE U.S. ECONOMY 11 (2011), available at http://www.nvca.org/index.php?option=com_docman&task=doc download&gid=786.

directors. 159 One respondent explained that VCs play a pivotal role for small companies, which "come up with the new approaches" in "any field that has been highly innovative. 160

Another noted that the history of technology startups over at least the past two decades showed that "there is virtually not an instance of a company that has become meaningfully large" that "didn't require some degree of capital from professional investors." Without venture capital, innovation would be "stifled by orders of magnitude." 162

Venture capital played a crucial role in the creation of companies such as Amazon, Apple, Cisco, Facebook, FedEx, Google, Home Depot, Microsoft, and Skype. 163 One VC explained that venture capital and angel investors play a "key role" in the "very, very risky situation" of needing to invest millions of dollars without knowing if particular innovations will work or be accepted in specific markets. 164

Innovation requires "risk and creativity," and venture capital "funds risk." This VC explained that "you don't see creativity and risk happen a lot in big companies" since "employees in big companies are on a track; they're trying to get promoted." The people that want to spend a career in a company are not compensated for a lot of risk and creativity" but are "compensated for growing their own P&L [profit & loss] of their business unit by X% a year" rather than "investing for the future, causing a loss in their business unit to have a big outcome five years later." In contrast, "it takes entrepreneurs who want to take that risk" and "entrepreneurs need capital to be able to take that risk. This is "where all the innovation has come from over and over and over again."

Finally, and most generally, venture capital is indispensable to the economy. While investment in venture-backed companies was less than 0.2% of U.S. Gross Domestic Product (GDP) in 2008, those companies employed 11% of the U.S. private-sector workforce and generated revenue equal to 21% of U.S. GDP. 170

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159. Id.
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^{160.} Interview with Participant "X" (Apr. 18, 2012) (on file with author).

^{161.} Interview with Participant "EE," supra note 121.

^{162.} *Id.*

^{163.} NAT'L VENTURE CAPITAL ASS'N, supra note 158, at 10.

^{164.} Interview with Participant "X," supra note 160.

^{165.} Interview with Participant "W," supra note 93.

^{166.} *Id.*

^{167.} *Id.*

^{168.} *Id.*

^{169.} *Id*.

^{170.} NAT'L VENTURE CAPITAL ASS'N, supra note 158, at 4.

E. Venture Capital's Wasteland

Venture capital funding in the area of digital music fell significantly after the *Napster* decision. One VC explained that "it became a wasteland" with "no music deals getting done." Another noted that *Napster* "cast a pall over companies getting funded." A third explained that "there was no venture capital going into music companies because there was a lot of debris from companies strewn about." In fact, "the graveyard of music companies was just overflowing." After *Napster*, it was "a scorched earth kind of place" in which "nobody touched anything." As a result, there was a "lost decade after the *Napster* decision."

Venture capitalists were much less likely to invest in digital music as a result of the decision. "Legitimate investment" decreased because no "venture capitalist or entrepreneur was going to invest" in the area, which was "too risky." One innovator explained that "certainly the lawsuit scared away lots of people who wanted to do interesting things with music but were scared away from investing in it basically for a decade." ¹⁷⁸

Another respondent explained that there "absolutely" would have been more investment if Napster had won. ¹⁷⁹ "Of course" the injunction affected investment in digital music. ¹⁸⁰

One difficulty that has previously plagued those trying to trace the relationship between venture capital funding and copyright law in the music industry has been the confluence of factors that could have reduced funding in the early 2000s. One cause might have been the *Napster* decision, but another might have been the bursting of the tech bubble in the early 2000s.

I asked respondents to distinguish between the two potential causes, and many pointed to the distinct effects of copyright law. One innovator explained that venture capital "absolutely" declined as a result of the *Napster* decision. ¹⁸¹ He elaborated: "Any VC I would go

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171. Interview with Participant "U," supra note 114.
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^{172.} Interview with Participant "B" (Nov. 3, 2011) (on file with author).

^{173.} Interview with Participant "F," supra note 106.

^{174.} *Id.*

^{175.} *Id.*

^{176.} *Id.*

^{177.} Interview with Participant "N," supra note 85.

^{178.} *Id.*

^{179.} Interview with Participant "R" (Jan. 10, 2012) (on file with author).

^{180.} Id

^{181.} Interview with Participant "F," supra note 106.

to—the first thing they would say is: 'Music business? You're crazy.'"182

Other respondents focused on the uncertainty the labels employed to powerful effect. The labels would choose "when and where" they would sue, choosing to "knock on your door at any time. This "put such a cloud over the whole industry that VCs didn't want to invest and entrepreneurs decided it wasn't worth it."

F. Effect on iTunes

Despite the effects on innovation and VC funding, some have argued that at least the *Napster* decision paved the way for iTunes. By issuing an injunction against Napster, the argument went, the court made possible the "legal" iTunes. For example, Russell Frackman, lead counsel for the labels in *Napster*, has contended that "without the Napster suit, iTunes would never have existed" since "[t]here would have been no incentive for people to pay money for music." ¹⁸⁶

Professors Jerome Reichman, Graeme Dinwoodie, and Pamela Samuelson similarly observed that "the district court in *Napster* correctly foresaw" that "shutting down firms such as Napster effectively removed barriers to the entry of fee-based music distribution systems" such as iTunes. ¹⁸⁷ The *Napster* ruling "arguably helped to support the formation of a new business model that may benefit consumers and competition in the long run." ¹⁸⁸

Finally, one commentator observed that "[t]he solutions advanced by the courts in *Napster* and *Grokster*¹⁸⁹ essentially brought stability to the evolving online intellectual property environment" and "[t]his led to the launching of the booming pay-per-download business model pioneered by Apple's iTunes Store." ¹⁹⁰

^{182.} *Id.*

^{183.} See infra Part VI.E.

^{184.} Interview with Participant "N," supra note 85.

^{185.} *Id.*

^{186.} Eriq Gardner, Russell Frackman Q&A: 'Without the Napster Suit, iTunes Would Never Have Existed,' HOLLYWOOD REP. (Dec. 11, 2009, 10:49 AM), http://reporter.blogs.com/thresq/2009/12/russell-frackman-interview-napster.html.

^{187.} Jerome H. Reichman et al., *A Reverse Notice and Takedown Regime to Enable Public Interest Uses of Technically Protected Copyrighted Works*, 22 Berkeley Tech. L.J. 981, 1018 (2007).

^{188.} *Id.*

^{189.} MGM Studios, Inc. v. Grokster, Ltd., 545 U.S. 913 (2005).

^{190.} Lyombe Eko, *American Exceptionalism, the French Exception, Intellectual Property Law, and Peer-to-Peer File Sharing on the Internet,* 10 J. MARSHALL REV. INTELL. PROP. L. 95, 130 (2010).

These arguments appear plausible. And it is hard to show otherwise absent specific evidence. For that reason, I posed the question to the interview subjects. A few supported these arguments. One, for example, stated that "if Napster had won, I'm not sure [Apple's CEO] Steve Jobs would have spent the money he needed to spend to develop [iTunes]." ¹⁹¹

But most, each of whom was on the front lines of digital music innovation, were skeptical. One called the argument "bogus." That innovator explained that if the labels had won the case against the first MP3 player, the Rio, "we wouldn't have any iPods today." But the "reason why iTunes is popular" is "because the iPod was popular." Another believed that Apple achieved success only from the "100% proprietary end-to-end Steve Jobs-owned ecosystem that he created himself and pushed through the labels based on his personal relationships." And one respondent thought the *Napster* ruling harmed digital music by "locking" us into "the Apple ecosystem." 196

If the court had found that Napster was legal, Apple could have "tap[ped] into that peer-to-peer network" and allowed downloads while collecting metadata that could have been used by the record labels. ¹⁹⁷ For example, iTunes could have instructed a user that downloaded a low-fidelity MP3 that it could "sell [a] high-fidelity version of the same song for 99 cents." ¹⁹⁸

Going back before the decision to the service itself, many participants believed that the existence of the Napster service played a central role in the development of iTunes. iTunes "would not have existed without Napster," according to one innovator, since the "composition" and "business model" of iTunes was a "direct result of the Napster experience and the lawsuit that followed." In fact, iTunes benefited not only from Napster but also from "the years of Gnutella and Grokster and LimeWire and all those underground networks." The success of the p2p networks convinced the labels to "finally figure out that they couldn't stop this stuff" so "they had to do a deal." 201

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191. Interview with Participant "AA," supra note 89.
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^{192.} Interview with Participant "J," supra note 111.

^{193.} *Id.*

^{194.} *Id.*

^{195.} Interview with Participant "Q," supra note 130.

^{196.} Id.

^{197.} Interview with Participant "F," supra note 106.

^{198.} *Id.*

^{199.} Interview with Participant "N," supra note 85.

^{200.} Id.

^{201.} Id.

Another respondent agreed that "[t]he existence of Napster facilitated iTunes" and that "[i]f Napster had not existed, iTunes would likely not have launched in the form that we eventually saw" since the labels would not have "approved . . . disaggregation." 202

G. Effect on iPods

Napster affected not only iTunes, but also Apple's iPod. The iPod is the most successful MP3 player of all time, cherished because of its size and portability. In October 2001, Apple released the iPod, offering "1,000 songs in your pocket," and in July 2002, it introduced the second-generation iPod, capable of "holding up to 4,000 songs." ²⁰³

It was not until April 28, 2003, however, that Apple launched the iTunes Music Store. ²⁰⁴ iTunes' success is well-known, with Apple selling one million songs in the first week, fifty million within a year, and ten billion within seven years. ²⁰⁵ But even before Apple launched iTunes, the iPod enjoyed significant success. There were 600,000 iPods sold between October 2001 and December 2002, and an additional 400,000 by June 2003. ²⁰⁶

Interview respondents traced the success of the iPod to Napster. The iPod was popular because it enabled access to vast supplies of music, much of which was downloaded illegally. The iPod caused "more and more piracy." One record label official explained that until 2003, the iPod "wouldn't play any legal music at all" and that users "needed to rip a CD or acquire [music] through some other illegal source."

On its website, the RIAA agreed that "there was virtually no legal digital market in 2003" and that "North American sales of blank CDs shot up by more than 30 percent in 2002," which "outstripp[ed] sales of music CDs by a more than 2-to-1 margin." Referring obliquely to

^{202.} Interview with Participant "R," supra note 179.

^{203.} Apple Press Info: iPod + iTunes Timeline, APPLE, http://www.apple.com/pr/products/ipodhistory/ (last visited Sept. 3, 2012).

^{204.} *Id.*

^{205.} Id.

^{206.} Id.

^{207.} Interview with Participant "J," supra note 111.

^{208.} Interview with Participant "D," supra note 100.

^{209.} RIAA, supra note 40.

^{210.} Some Facts about Music Piracy, RIAA, http://www.riaa.com/newsitem.php?id=6828D54B-0FE6-99BE-E8C2-E8C854C48DE9 (last visited Sept. 3, 2012).

the iPod, the RIAA noted that "[a]t the same time, sales of MP3 players jumped 56 percent." ²¹¹

Finally, another interview respondent concluded that it is "hard to imagine that the iPod would have been successful without the unlicensed distribution that came from Napster and the alternatives to Napster." Larger music collections "led to a bigger market for media players." ²¹³

H. More Litigation

The Napster service played a role in the development of iTunes and the iPod. And while many respondents explained that the *Napster* decision was not responsible for the introduction of iTunes, it was a precursor to the industry's litigation against digital music targets. As a result of the *Napster* decision, the labels became "more aggressive with litigation." There was "always one guy at the top of the hit list," such as "Napster, KaZaA, Grokster, LimeWire, and Grooveshark." ²¹⁵

The *Napster* experience "emboldened everyone to go to litigation" even though some record label officials thought they would obtain only "[P]yrrhic victories."²¹⁶ These victories were "very profitable" for a few years since it was "a lot easier to sue someone and collect money than it was to sell downloads."²¹⁷ But even though the labels pursued litigation because "innovation was being thrust at the incumbents," this is "never a good business plan."²¹⁸

In terms of timing, the labels had an "odd incentive" in that they "don't license you if you don't have traffic." In contrast, "if you have traffic," then "they want to get paid for 'infringement' and the longer it takes to license you, the larger the 'infringement' number they can justify charging you."

In short, if the *Napster* decision had come out the other way, the music industry would look far different than it does today. The labels and Napster very well could have hammered out an agreement that harnessed the capacity of Napster's user base that would have (1)

^{211.} Id.

^{212.} Interview with Participant "A" (Nov. 1, 2011) (on file with author).

^{213.} *Id*.

^{214.} Interview with Participant "L," supra note 88.

^{215.} Id.

^{216.} Interview with Participant "I," supra note 81.

^{217.} *Id.*

^{218.} Interview with Participant "AA," supra note 89.

^{219.} Interview with Participant "Q," supra note 130.

^{220.} Id

allowed the labels to monetize the widespread downloading of music files, (2) continued to keep users engaged with music, and (3) reduced litigation, potentially enhancing innovation.

IV. LABELS: CONSTRAINTS

The story of digital music innovation and copyright cannot be told without a close examination of the response of the record labels. To be clear, the "labels" occupied different places in the organizational flow chart at the various companies. Some, such as EMI, were standalone companies, while most were conglomerates. ²²¹ In other words, the record labels—responsible for the marketing, promotion, and development of artists—were often just one division of large multibillion-dollar conglomerates. I refer in this Article to the "record labels" to make clear that I am focusing on the divisions of the companies that dealt with issues of music distribution.

There is widespread consensus that the labels did not respond as quickly to the digital music revolution as they could have. There is less agreement as to the reasons why. This Part describes the reasons that the labels were unable to quickly adopt a model for the distribution of digital music.

It first focuses on retailers. It then discusses the "maze" of rights that has plagued music. The Part next looks at the challenges stemming from the companies themselves. It then introduces the Innovator's Dilemma and applies the concept to the industry. It closes with a discussion of the labels' focus on the short term to the exclusion of the long term.

A. Retailers

The response of the labels to the Napster service cannot be considered in a vacuum. For starters, they had a close relationship with music retailers. As early as the mid-1990s, the labels made most of their money from physical goods and "had their costs in the distribution channel down to nothing." Some felt they were able to do this by "beat[ing] on the record merchandisers so badly" that they "were

^{221.} Shortly before this Article went to print, Universal acquired EMI. Vanessa Mock & Ethan Smith, EU Clears Universal-EMI Merger, Sets Tough Conditions, WALL St. J., Sept. 21, 2012, http://online.wsj.com/article/SB10000872396390444165804578009780588806980.htm.

^{222.} Interview with Participant "B," supra note 172.

always on the verge of going out of business because the record companies took all the margins." ²²³

The retailers nonetheless had power. Walmart and Tower Records "complained the loudest about digital distribution" and "put out a manifesto that they would not do digital." An industry official explained that "major retailers who were at that time responsible for 99% of sales pressured the record companies to make sure that music was not available cheaper online (e.g., through Napster) than if they bought it in the store."

Related to retailers' role in distribution was the simple fact that the labels had access to—and sunk significant costs in—trucks. One label "spent a billion dollars on trucks to distribute their CDs." Another respondent explained that the major labels were different because "they had trucks." This mattered because "no one else could put a CD in every record store in the country on the day of release."

B. Maze of Rights

Similarly affecting labels were the artists themselves. Many artists "were nervous about the new digital distribution and the shares they would receive of the profits," and "many of their representatives pressured labels not to screw up their physical sales." In fact, artists had contracts that provided for the sale of CDs, which made it difficult to disaggregate the rights to sell online.

Even more generally constraining the labels were the "maze of rights" in the field. Record labels tend to own the sound recording rights, which cover the recording of a song, while music publishers own the rights to the musical composition (music and lyrics).²³⁰ There are "a lot of layers to music rights," which has led to difficulties in "get[ting] all the stars to line up."²³¹

- 223. Id
- 224. Interview with Participant "D," supra note 100.
- 225. Interview with Participant "T," supra note 126.
- 226. Interview with Participant "C," supra note 92.
- 227. Interview with Participant "I," supra note 81.
- 228. Id.
- 229. Interview with Participant "T," supra note 126.
- 230. *E.g.*, Michael J. Perlstein, *Music Publishing, in* Counseling Clients in the Entertainment Industry at 1373 (PLI Intellectual Prop. Course Handbook Ser. No. 930, 2008); Tom Flint, *On The Record: Running Your Own Record Label: Part 3*, Sound on Sound, Nov. 2002, *available at* http://www.soundonsound.com/sos/nov02/articles/diylabel3.asp.
 - 231. Interview with Participant "V," supra note 119.

Any piece of music has "tons of stakeholders," with it taking "only one copyright holder" to "derail" the entire process. ²³² The labels themselves did not know "who owns what" since the "older contracts were vague or unclear." ²³³

Nor could the labels find the rights holders "even if [they] kn[e]w who they were." One respondent noted that even with a "unanimous vote of support from the national music publishers associations," it was only able to find "thirty to forty percent of the rights holders" on the publishing side, which did not even take into account the "similar problem on the sound recording side." Even if those in the technology industry were "perfect," they would "still come up with less than half" the required rights. Another record label official explained that it was "not clear" who had the rights to distribute music over the Internet, with "six people clearing rights for six months." 237

A final industry representative noted that the existence of sound recordings and musical compositions makes "licensing and new business development extremely complicated." Such a result was just a "historical fluke" in that "copyrights were created in music before sound recordings were invented," and once there were sound recordings, they did not get "all the same rights" given to the underlying music." As a result, the record companies and artists "had to depend on sales versus use to make any money." The official believed that observers did not "realize how fundamentally that has dictated the business strategies of the last ten years."

The observations made by the interview subjects overlapped with those that have been offered in the literature. One commentator, for example, worried that "even assuming perfect knowledge of the whereabouts of rights-holders," there is still "uncertainty over which rights must be licensed." As a result, "overly-cautious online music purveyors" are required to "license all rights," which is "an illogical outcome that potentially overcompensates rights-holders." ²⁴³

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232. Interview with Participant "J," supra note 111.
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^{233.} Id.

^{234.} Interview with Participant "G," supra note 84.

^{235.} Id.

^{236.} Id.

^{237.} Interview with Participant "E" (Nov. 23, 2011) (on file with author).

^{238.} Interview with Participant "T," *supra* note 126.

^{239.} Id.

^{240.} Id.

^{241.} Id.

^{242.} John Eric Seay, *Legislative Strategies for Enabling the Success of Online Music Purveyors*, 17 UCLA ENT. L. REV. 163, 170 (2010).

^{243.} Id.

A second commentator similarly observed, in the context of remix music, that the acquisition of sound recordings "often depends entirely on the whim of the copyright owner." The "rates demanded by copyright owners are often exorbitant" and "far beyond what most remix artists can afford, especially before they even know if their work will be commercially successful." Obtaining the necessary permissions quickly becomes a scavenger hunt of such gigantic proportion and expense" that it is "easier never to create remix music in the first place."

Finally, the maze of rights led to a lack of trust in the industry, with the many rights-holders—publishers, writers, artists, and record companies—often at odds with one another.²⁴⁷ Despite this maze, one respondent explained that "if your very existence depended" on clearing rights, "you'd figure out how to make this stuff happen."²⁴⁸

C. Companies

The maze of rights has been accompanied by a maze of top officials in many of the companies. Many of the record companies were not set up ideally to pivot quickly to take advantage of new technological opportunities.

Most of the companies with record labels were large conglomerates of which the labels were just components. The sheer size of the companies made it hard to adapt quickly. There was "no coordination across the company." Leading officials were always "discovering [the Internet] anew," which led to "having to start from scratch." Delays also came from centralization, which is "always a problem in a big company" since "the independent operating units are always suspicious of the center taking over something from them." 251

Other companies were bogged down in administrative bureaucracy. One record label official lamented the need to get fourteen

^{244.} Robert M. Vrana, Note, *The Remix Artist's Catch-22: A Proposal for Compulsory Licensing for Transformative, Sampling-Based Music*, 68 WASH. & LEE L. REV. 811, 847 (2011).

^{245.} Id.

^{246.} Id

^{247.} Interview with Participant "T," supra note 126.

^{248.} Interview with Participant "CC," *supra* note 124.

^{249.} Interview with Participant "I," supra note 81.

^{250.} Id.

^{251.} Id.

signatories on any deal, with "more than eight" having "no clue" as to how digital distribution worked. 252

Coordination also was slowed by "political problems" in certain companies.²⁵³ According to one industry official, "there were competing executives at the very top trying to prove they're the guys who should do this."²⁵⁴ Everyone "wanted to be the savior of the business."²⁵⁵

Nor were some of the companies on the cutting edge of technological progress. One record company "had an edict" that every computer "purchased at the whole company worldwide had to be signed off individually by the CFO." And one presentation in which a respondent was involved could not even take place because employees were not able to connect to the Internet from their office. 257

D. Innovator's Dilemma: General

The final—and most fundamental—constraint facing the labels was the Innovator's Dilemma. Clayton Christensen famously showed how leading companies have been successful in implementing "sustaining" innovations but have failed to keep pace with disruptive, radical innovations. ²⁵⁸

Disruptive innovations displace existing business models by creating simpler, more convenient, and cheaper products that appeal to new or less-demanding customers. "Sustaining innovations, in contrast, improve existing products and involve incremental" improvement. 260

Why are established firms slow to respond? Because of their investments in employees, equipment, and materials linked to the

^{252.} Interview with Participant "H," supra note 103.

^{253.} Interview with Participant "I," supra note 81.

^{254.} *Id.*

^{255.} Id.

^{256.} Id.

^{257.} *Id.*

^{258.} CLAYTON M. CHRISTENSEN, THE INNOVATOR'S DILEMMA: WHEN NEW TECHNOLOGIES CAUSE GREAT FIRMS TO FAIL 42 (1997).

^{259.} CLAYTON M. CHRISTENSEN & MICHAEL E. RAYNOR, THE INNOVATOR'S SOLUTION: CREATING AND SUSTAINING SUCCESSFUL GROWTH 32 (2003). Disruptive innovations often present radical breakthroughs but sometimes represent advances in business models, as seen through Amazon.com's competition with Barnes & Noble. Constantinos Markides, *Disruptive Innovation: In Need of Better Theory*, 23 J. Product Innovation Mgmt. 19 (2006).

^{260.} Christensen, *supra* note 258, at 39–40; *see* Carrier, *supra* note 133, at 27.

existing technology.²⁶¹ Sustaining innovations allow leading firms to service existing customers and to raise their share prices by increasing growth.²⁶² In contrast, disruptive technologies result in speculative future markets of less interest, and greater threat, to established companies.²⁶³ Finally, sustaining innovations are consistent with good management practices that include tracking rivals and investing in more profitable products.²⁶⁴

Firms entering a market, on the other hand, hold an advantage over established firms in pursuing disruptive innovations, which do not generate value in the existing network. ²⁶⁵ Entrants have more flexibility and are not burdened "by human and physical assets geared to highly specific production." ²⁶⁶ Such firms, in short, "have every economic incentive to overturn the existing order" and "little to lose" in pursuing disruptive innovation. ²⁶⁷

E. Innovator's Dilemma: Labels

The Innovator's Dilemma played a central role in the labels' reaction to Napster and digital music generally. Many respondents, both inside and outside the companies, noted that the labels were hamstrung by the Innovator's Dilemma. One executive explained that "it's always easier for a startup to do something new" than it is for an "established," "entrenched" company. That's why you see, as a result of "technology shifts, . . . brand new companies [becoming] the market leaders."

The labels had little incentive to change. They "just weren't going to change it if they didn't have to." One respondent explained that they "couldn't see the forest for the trees" and "were so sure that this

^{261.} James M. Utterback, Mastering the Dynamics of Innovation: How Companies Can Seize Opportunities in the Face of Technological Change 163 (1994).

^{262.} CHRISTENSEN, *supra* note 258, at 98, 132–33.

^{263.} See id. at 147.

^{264.} *Id.* at 98.

^{265.} Id. at 55.

^{266.} UTTERBACK, supra note 261, at 164.

^{267.} *Id.* at 161. *Cf.* Rebecca M. Henderson & Kim B. Clark, *Architectural Innovation: The Reconfiguration of Existing Product Technologies and the Failure of Established Firms*, 35 ADMIN. Sci. Q. 9, 13 (1990) (describing architectural innovation, which emphasizes the use of "existing core design concepts in a new architecture" and results in established firms facing "a surprising degree of difficulty in adapting to [the] innovation").

^{268.} Interview with Participant "I," supra note 81.

^{269.} Id

^{270.} Interview with Participant "C," supra note 92.

was some sort of passing fancy" that "if they just buried their head[s] in the sand long enough," the problem would "go away." 271

One innovator remarked that, as early as 1995, the labels believed that "if we don't like a given distribution technology, we just won't license our content to it, and it will go away." The innovator had explained to the labels that they would have a problem because the decentralized technology is similar to a "global game of whack-a-mole" and they would "be better served by being in control" of the technology and framing consumers' expectations. Their response, however, was not enthusiastic: "yeah, yeah, whatever." The labels believed that "if we don't like a given distribution technology, we just won't like a given distribution technology.

As a classic example of the Innovator's Dilemma, the labels were measuring "new business models" against "the existing margins they were experiencing with physical sales." The difficulty is that "you're comparing what you're earning on those products to any new proposal that people come around with." It is not a surprise that the labels did not embrace the new business models since "the problem with legacy businesses" is that nearly all the revenue came from physical goods.

Just to give one example, before iTunes offered 99-cent singles, one label was "adamant" that "the single should be priced at \$3.25." The reason was that if customers bought "two or three," then they would "make up lost sales on the album by the sale of singles." The respondent's reaction was: "You're out of your mind" since "people aren't going to pay \$3.25 for a single."

One innovator situated the labels' response to Napster in the historical setting in which the labels "fought cassettes, eight-track tapes before that," and CDs. ²⁸¹ They "fought every one of those things every step of the way until later they adopted them." ²⁸² Ironically enough, the labels "made billions more by reselling the same music that was on vinyl" on eight-tracks and then cassettes and CDs. ²⁸³

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271. Id.
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^{272.} Interview with Participant "Y," supra note 127.

^{273.} *Id.*

^{274.} *Id.*

^{275.} Interview with Participant "T," supra note 126.

^{276.} Id

^{277.} Interview with Participant "S" (Jan. 11, 2012) (on file with author).

^{278.} Interview with Participant "AA," supra note 89.

^{279.} *Id.*

^{280.} *Id.*; see also Interview with Participant "CC," supra note 124 (explaining being "dumbfounded" at a \$3.49 downloadable single).

^{281.} Interview with Participant "N," supra note 85.

^{282.} Id.

^{283.} Id.

A record label official stated simply that "big companies are not in the business of innovating." ²⁸⁴ In contrast, "new companies" or those with "the original founder there" are more likely to innovate. ²⁸⁵ Similarly, "smaller companies have been able to get in and do things that disrupt the incumbents."

Another explained that the "biggest hindrance to innovation" was "the content companies and their lack of engagement with legitimate platforms." An additional innovator, referring to the labels, made clear that "there will be technological and business innovation if you have nothing to do with the dinosaurs."

A final respondent explained that the labels are "struggling with a business model that's falling apart in the modern world" and are "trying to hang onto everything they can rather than looking out five, ten, fifteen, twenty years and saying, 'Where's the world going and how do we position ourselves to be partners with these artists and companies that are distributing music in a new way?" The labels should not have been hesitant to "make everybody successful even if it meant less for [them]" since it is "better than going out of business."

F. Innovator's Dilemma: The Short Term and Bonuses

One indication of the Innovator's Dilemma is provided by the labels' focus on the short term. The labels favored the "short term over the long term," which led to the long term "being viewed as a series of short terms." "All rewards," according to this record company official, "go to the short term." "292

One reason for the emphasis on the short term stems from the officials themselves. One respondent noted that company officers focus on bonuses "based on how they did compared to last year." He continued: "You never see someone getting a bigger bonus for doing

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284. Interview with Participant "P," supra note 82.
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^{285.} Id

^{286.} Interview with Participant "AA," supra note 89.

^{287.} Interview with Participant "D," supra note 100.

^{288.} Interview with Participant "A," supra note 212.

^{289.} Interview with Participant "W," supra note 93.

^{290.} Id.

^{291.} Interview with Participant "I," supra note 81.

^{292.} Id

^{293.} Interview with Participant "AA," supra note 89.

less revenue."²⁹⁴ Instead, there are "organizational and institutional incentives to try to recreate last year's business going forward."²⁹⁵

Another pointed to executives "focused on the short term—their stock, their cash compensation year after year, their own personal P&L—and not the greater good of the company." For example, each country "has its own manager who's only worried about his own compensation." The respondent lamented that "until somebody at one of these labels from the top changes the way they run top to bottom, they're going to keep going through this wrenching pain that causes them to think short term and not long term." ²⁹⁸

Another respondent explained how the bonus system discouraged the adoption of new business models. There is "a lot of paralysis around decision making" in the transition from "one set of product services to the next set of undefined services."²⁹⁹ The reason is that "no one is so smart about the future that they can say that something will definitely happen."³⁰⁰ As a result, "incumbent senior executives whose bonuses are at risk and who have bosses to report to" are not "willing to take the career risk of being wrong."³⁰¹

One innovator gave the example of someone who was a "head tech guru at one of the major labels" who understood that "the world is changing" and "the record business as it exists now is probably going away." But the respondent conceded that "it's been good to me and my family and it's what I know." 303

Nor is this example unique. One respondent noted that the labels' heads of digital distribution were "well-compensated, risk-averse, old-time music professionals" who "had their heads in the sand" but concluded they would "be retired" before p2p technology developed. 304 And another explained that there were many officials "who figured they could stick around another five to ten years and make money. 305 These officers "didn't have an interest in serving their consumers" and

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294. Id.
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^{295.} Id

^{296.} Interview with Participant "W," supra note 93.

^{297.} Id.

^{298.} Id.

^{299.} Interview with Participant "AA," supra note 89.

^{300.} Id.

^{301.} *Id.*

^{302.} Interview with Participant "BB," *supra* note 140.

^{303.} *Id*

^{304.} Interview with Participant "CC," supra note 124.

^{305.} Interview with Participant "BB," supra note 140.

"didn't have an interest in growing their business or industry," but were "ignorant people just hanging on." 306

G. Innovator's Dilemma: The Short Term, Continued

In addition to employee bonuses and compensation, two additional examples of the emphasis on the short term are provided by litigation and fees collected from startups. The first example is copyright litigation, which the labels viewed as a short-term "Ponzi scheme" by which settlements "paid for the ongoing [litigation] strategy." But the "problem" with this strategy was that "once you stop suing new people," there are "no new settlements to pay for the ongoing" litigation. ³⁰⁸

Another short-term "solution" involved one-time infusions of cash from startups. To meet their quarterly targets, the labels "sat in meetings with digital startups" and tried "to take as much money" as they could. 309 They "kn[e]w their business model was not going to work," that this was not "recurrent revenue," and that "next year" they would need "to get a different business" because the startup "is going to be out of business." 310 But they still relied on the funding because of the "big, up-front fees" of "ten, twenty million bucks," which helped the labels "make their quarter." 311

In short, the record labels confronted many natural hurdles when faced with the challenges and opportunities presented by Napster and the distribution of digital music. As described in this Part, many of these hurdles were inherent in the industry itself (with its history of physical distribution and maze of rights), with others flowing from the Innovator's Dilemma, which explains the behavior of large, established companies in all industries. The next Part offers other reasons for the missed opportunity that are not as readily explained by these factors.

V. LABELS: MISSED OPPORTUNITIES

As Part IV showed, the labels faced constraints that made it difficult to be open to new business models such as those presented by Napster. But even given these hurdles, there was widespread agreement that the labels could have done more to meet the opportunities of digital

^{306.} Id

^{307.} Interview with Participant "I," supra note 81.

^{308.} Id.

^{309.} Interview with Participant "J," supra note 111.

^{310.} Id.

^{311.} Id.

distribution. This Part highlights several of these explanations, focusing on the role of lawyers in the companies, the labels' fear of change, the companies' largely-ignored technology VPs, a curious conception of the identity of customers, a reliance on "bulletproof" models, and additional mistakes. Although several of the factors highlighted in this Part build on those in Part IV, they were less inevitable than factors like the maze of rights and Innovator's Dilemma.

A. Lawyers

One reason for the unwillingness to embrace new business models can be traced to the involved officials. In particular, lawyers played a central role in the operation of the labels, which partially explains the sluggish reaction to the digital music revolution. One respondent highlighted the connection between the lawyers and companies' lack of entrepreneurial drive: "Lawyers at the labels historically drove the digital agenda. There was no one there with a truly entrepreneurial spirit. Zero, zilch, zingo, nada. No one there whose entire initiative was not to hang on to the past." 312

Another innovator concurred that "most labels are run by lawyers," which led to a focus on worst-case scenarios instead of business decisions exploiting opportunities.³¹³

Similarly, a record label official admitted that the "digital strategy" was "just a plain defense" that focused on antipiracy, copy protection, and "doing everything in their power to keep it locked up."³¹⁴ Because the labels were "very protectionist," they "didn't believe there was this huge market opportunity they were missing out on."³¹⁵

B. Running Scared

Partly owing to the role of lawyers, one reaction of the labels was to assume they would outlast any changes. Another reaction was fear. One respondent explained that "people in general fear the unknown" and that "it's intrinsic for humans to think negatively." Illustrating the point, he offered that if "you walk inside a dark cave," you "don't

^{312.} Interview with Participant "R," supra note 179.

^{313.} Interview with Participant "F," supra note 106.

^{314.} Interview with Participant "D," supra note 100.

^{315.} Id

^{316.} Interview with Participant "K," supra note 97.

think there could be a box of gold in there," but instead "probably think there is a bear in there" that "is going to eat me."³¹⁷

The labels realized they were "the middlemen" and that "on the Internet, the middlemen get squeezed out." The labels were hemorrhaging revenues, and they "react[ed] negatively, almost like a cornered animal." ³¹⁹

One representative of a company offering a platform for digital music lamented the "very long and frustrating road" by which many record label officials "would do nothing" because of a "fear of changes to the status quo," "fear of breaking the business model of selling CDs," and "fear of disintermediation and price controls." 320

In short, the labels needed to "vote for the future," but their pessimistic, short-term approach, fueled by lawyers and building on the Innovator's Dilemma, meant that "they couldn't."

C. Ignored VPs

Adding to their difficulties was the labels' refusal to listen to their executives who actually understood the possibilities of digital distribution. Respondents talked about a "faction" at the labels that was "more progressive" and recognized the possibilities of the Internet. 322 But several respondents explained that these officials were "really never at the top of the management pyramid" and "largely were powerless." 323

Even more dramatically, each of the companies "had a VP level person called the 'digital person'" who was "the person who had a decent office and no operational responsibility whatsoever." These officials, at least according to several of the respondents, would go to conferences, promise "we're right on top of it," and then "go back to their offices and be ignored by everyone else in the company." 325

Even though these technology VPs recognized that the Internet would "change everything," that was not obvious to the "people living

^{317.} *Id.*

^{318.} Interview with Participant "F," supra note 106.

^{319.} *Id*.

^{320.} Interview with Participant "CC," supra note 124.

^{321.} Interview with Participant "E," supra note 237.

^{322.} Interview with Participant "K," *supra* note 97; *see also* Interview with Participant "V," *supra* note 119 (discussing the people "who were like deer in the headlights" and also those "who really did understand" the move to digital distribution and were "on top of it" and "making efforts to try to go there fast").

^{323.} Interview with Participant "K," supra note 97.

^{324.} Interview with Participant "B," supra note 172.

^{325.} Id

in the day-to-day world."³²⁶ This category, consisting of the "record guys," who do the artist and repertoire (A&R) (scouting) and marketing functions for the labels—signing acts, getting promotion, making and distributing videos—"wanted to go back to doing it" the way "they were trained" since "that's what they were good at."³²⁷

Building on the other factors, the neglect of the technology VPs was tied to the role of lawyers and hurdles presented by the Innovator's Dilemma. The labels could not avoid the fact that there were "much better margins" in "the physical goods business" than "in the Internet business." 328

D. Customers

Another ill-fated decision was for the labels to treat record stores, rather than end-users, as their customers. According to one industry official, "historically, the primary focus" was "the record stores, which were ninety percent of the sales channel" with the "remainder being record clubs."³²⁹ The labels knew how to recoup their investment, working with retailers and putting their music "near the register with advertising."³³⁰ In contrast, there was "not much direct consumer attention" and the companies "spent precious little money doing any consumer research."³³¹

The labels viewed the record companies as their customers. "Everything was about getting records played, end caps, 332 i.e., radio and retail." They "never had a clue who the buyer was." The industry was "slow to embrace Internet sales" because they would be "disenfranchising retailers who were the lifeblood." For example, Amazon "was a threat" to the relationship with MusicLand, which had 1,000 stores in malls, and Tower Records. Yet because of this focus on the record stores, the "real customers" became "pissed off and

- 326. Interview with Participant "I," supra note 81.
- 327. Id.
- 328. Interview with Participant "B," supra note 172.
- 329. Interview with Participant "L," supra note 88.
- 330. Interview with Participant "H," supra note 103.
- 331. Interview with Participant "L," supra note 88.
- 332. "End caps" are the displays at the end of the aisle in record stores. Chris Standring, *Can You Afford Distribution?*, MUSICBIZACADEMY.COM (Apr. 2010), http://www.musicbizacademy.com/articles/cs distribution.html.
 - 333. Interview with Participant "L," *supra* note 88.
 - 334. *Id.*
 - 335. Id.
 - 336. *Id.*

angry at the pricing of albums and/or the weakness of most of the songs" and turned to file-sharing.³³⁷

E. "Bulletproof" Models

The record labels had an existing business model that was profitable and that they knew how to exploit. As a result, they "thought they were bulletproof." They "saw the Internet as a fad or problem that need[ed] to be eradicated." The labels were "flush with rising CD sales, riding on a wave of big-selling pop artists like Britney Spears and Backstreet Boys" and they "couldn't see how digital would replace revenues off CDs," especially because "growth from the '80s to late '90s was phenomenal and they wouldn't give it up." ³⁴¹

The labels "were pretending to be interested in Internet distribution of music" but "in fact they weren't" and instead "were just trying" to "protect their ridiculously unfair advantage on the pricing side." In fact, the industry was "incredibly skeptical of the ability of digital distribution." 343

In addition, many in the industry jealously guarded their control over distribution. An industry leader stated they would "never give another company their music for distribution" since "distribution is our business." Relatedly, for years they would tell innovators: "We don't want you creating business on the back of our music." There was "leftover anger from MTV doing just that in the previous decade." And partners that advocated the benefits of digital distribution were met by "deafening silence on the best days." 347

Using another concept, the labels "coveted" control, which was "very seductive." They also had a "Cro-Magnon" instinct to "control [their] property." The "loss of control," however, is "palpable" as

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337. Id.
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^{338.} *Id.*

^{339.} *Id.*

^{340.} *Id.*

^{341.} Interview with Participant "D," supra note 100.

^{342.} Interview with Participant "C," supra note 92.

^{343.} Interview with Participant "EE," supra note 121.

^{344.} Interview with Participant "L," supra note 88.

^{345.} *Id.*

^{346.} *Id.*

^{347.} Interview with Participant "CC," supra note 124.

^{348.} Interview with Participant "G," supra note 84.

^{349.} Id.

the labels "don't have all the means of manufacturing and distribution anymore." 350

The respondents offered two analogies to describe the record labels' strategies. One innovator relayed how a top record label official offered the analogy that "we are arms merchants, we give the same arms to everybody and let people fight with each other and in exchange for those arms, we want a boatload of money." The innovator thought this was "a very, very shortsighted attitude" and was "not surprised that the music industry is in the situation that it is right now."

As a final analogy, the labels followed a strategy of "a bunch of tall guys walking a bunch of short guys across a deep stream and waiting until they get to the other side." In other words, they could "suffer a lot if everybody suffers" and then could "consolidate hoping that when you get to the other side of the stream, control will be back." 354

F. Mistakes

These analogies and fixation with control played a role in the self-admitted mistakes of the industry. Even allowing that hindsight is 20/20, many top officials in the recording industry believed that the labels "blew it" because they were "unwilling to adapt to new markets." According to one respondent, the labels had "no clue" on business development and corporate strategy. 356

The labels "just weren't going to change it if they didn't have to."³⁵⁷ They "couldn't see the forest for the trees" and were "so sure this was some sort of passing fancy" that "if they just buried their head in the sand long enough," the innovators "would all go away."³⁵⁸ The "inevitability" of technological change "never occurred to them."³⁵⁹

Two high-ranking record label officials conceded there were "a million things" they could have done differently and there were

- 350. Interview with Participant "I," supra note 81.
- 351. Interview with Participant "F," supra note 106.
- 352. *Id.*
- 353. Interview with Participant "G," supra note 84.
- 354. *Id*
- 355. Interview with Participant "M" (Dec. 6, 2011) (on file with author).
- 356. *Id*.
- 357. Interview with Participant "C," *supra* note 92.
- 358. *Id.*
- 359. *Id.*
- 360. Interview with Participant "T," supra note 126.

"zillions of things that we could have done that we didn't do." The labels "didn't move as fast as they should have." They didn't "experiment enough." And they could have been "more aggressive" in "try[ing] new business models."

If they had adopted new models earlier, rather than "fiddling," "the curve might have flattened out earlier and they might be on the uptick." The labels "dithered around" without "get[ting] serious about creating an alternative." Instead, they "had to wait to hit rock bottom to realize they had to change their strategy."

In short, many reasons explain why the record labels did not pivot quickly to embrace the revolutionary possibilities of Napster and digital distribution. In addition to the endemic factors discussed in Part IV, the labels' problems were exacerbated by the role of lawyers, a curious conception of customers, and other mistakes.

VI. COPYRIGHT LITIGATION

Stepping back from the *Napster* case and hurdles confronting the labels, Part VI looks more broadly at copyright litigation in general. Lawsuits have had a significant effect on the music industry. This Part begins with a description of the labels' use of litigation as a business model. It then traces the harms from statutory damages and gives numerous examples of the effects of personal liability. It next explains the dangers of vagueness as well as industry threats. It concludes by highlighting the realities of copyright litigation in critiquing copyright-reform proposals offered by scholars.

A. Lawsuits

The labels have achieved "an enormous number of business goals" from the "tremendously effective hammer" of filing suit. 368 Copyright litigation "distracts" the companies on the receiving end of the suit and is "overly consuming," especially for small companies. 369 The

^{361.} Interview with Participant "S," *supra* note 277.

^{362.} Interview with Participant "T," supra note 126.

^{363.} Interview with Participant "S," supra note 277.

^{364.} Interview with Participant "T," supra note 126.

^{365.} Interview with Participant "F," supra note 106.

^{366.} Interview with Participant "S," supra note 277.

^{367.} Interview with Participant "F," supra note 106.

^{368.} Interview with Participant "K," supra note 97.

^{369.} Id.

important role played by lawyers helps explain the prevalence of litigation in the industry.

Especially as employed against startups, lawsuits have an "absolute chilling effect," with their "ultimate success... completely irrelevant." Litigation is expensive, costing—according to two respondents—\$150,000 to \$200,000 a month in legal fees. It is "demoralizing" to employees, who have little interest in working for a company that "gets branded as an infringer" or as "lawless rebels."

Litigation discourages the targeted company from "making changes to the product design" since such changes could be viewed as indicators it was "doing something wrong." And in many of the cases, the labels "do a pretty darned good job of slandering you from top to bottom."

Nor do the two sides typically have similar resources. One respondent explained that it was not "a fair fight" since the labels "have billions of dollars and hundreds of lawyers" and "can fight for years" and "spend you into submission." In contrast, the "technology innovators" are "small startups who don't have much money and don't have lawyers." Compounding the asymmetry, the labels often combine forces. As one innovator explained: "Once you get dogpiled, you're dead." Once you get

Some companies obtain insurance against the risk of copyright infringement litigation. But a disadvantage of such insurance is that "you lose some measure of control over your own destiny." In particular, "if you're insured and the plaintiffs want to settle within the policy limits, it's awfully hard to say no." 380

An innovator explained that his company was sued "because we were getting powerful in the music industry." The labels "don't want anyone to get too powerful." They "don't want another distributor or

^{370.} Interview with Participant "EE," supra note 121.

^{371.} Interview with Participant "J," *supra* note 111; Interview with Participant "M." *supra* note 355.

^{372.} Interview with Participant "M," supra note 355.

^{373.} Interview with Participant "DD," (May 9, 2012) (on file with author).

^{374.} Interview with Participant "K," supra note 97.

^{375.} Interview with Participant "N," supra note 85.

^{376.} *Id*

^{377.} CARRIER, *supra* note 133, at 115-17 (illustrating cases in which labels combined forces).

^{378.} Interview with Participant "Q," supra note 130.

^{379.} Interview with Participant "DD," *supra* note 373.

^{380.} Id

^{381.} Interview with Participant "K," supra note 97.

^{382.} *Id*.

another company to be able to dictate terms to them."³⁸³ Copyright lawsuits "aren't necessarily about right or wrong," or "good and evil," or "operating within the spirit or the letter of the law."³⁸⁴ Instead, litigation was "simply a business strategy."³⁸⁵ As one label executive told a respondent nonchalantly at a closing dinner: "we sued you" because "we thought you were getting too powerful."³⁸⁶

Supporting this point, another respondent learned from an official at one of the leading labels that "[w]e watch all [the new music services] that are not in compliance with licensing requirements, and when they get to five million uniques [unique visitors per month], then we send them letters and camp out and shut them down." 387

One record label official agreed that "even the threat of a lawsuit . . . really does slow down investment in the space." This respondent was "sure" there were "quite a few" innovative services that "never came to life" because of "the threat of potential lawsuits from content owners." 389

Even the most promising services have found themselves on the receiving end of lawsuits. One "went from being a company that was profiled in the *Wall Street Journal* attracting interest from VCs and seemed surely headed to a successful [initial public offering] to bankruptcy."³⁹⁰ The result of the lawsuit was "awful" and "devastating."³⁹¹ The company, which was "up to about seventy employees," had to "fire everybody."³⁹² There were "people in the press saying very nasty things about us when all we wanted to do was make cool software and web-based tools."³⁹³ "We kept saying, '[n]o, we're not trying to steal your stuff,' and explained that '[i]f you give us the means to charge, we'll charge."³⁹⁴

Nonetheless, the service decided not to fight, recognizing that "you guys have big guns, high-profile people and Jack Valenti on TV saying we're murderers and stranglers." ³⁹⁵ Nor did the service have the

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383. Id.
384.
       Id.
385.
       Id.
386.
      Id.
387.
      Interview with Participant "W," supra note 93.
388.
      Interview with Participant "D," supra note 100.
389.
390.
       Interview with Participant "BB," supra note 140.
391.
      Id.
392.
      Id.
393.
      Id.
394.
      Id.
395.
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"many, many millions of dollars" it would have taken to fight.³⁹⁶ Within a period of a few weeks, the company had spent "over half a million dollars," which paled in comparison to the "millions" the labels had spent "to kill us."³⁹⁷ In addition to the "incalculable" amount of money the labels were spending, the lesson from the individual lawsuits against the "Hummer Winblad guys" was a "cautionary tale" to "anyone with a checkbook in the capitalist system."³⁹⁸

Further revealing that VCs "don't want to fund anyone going to trial," one respondent pointed to the example of Veoh, which won a case involving the Digital Millennium Copyright Act safe harbors³⁹⁹ but, because of the costs involved in litigating against the recording industry, was "dead."

Fast-forwarding to the present, recent events only confirm the analysis. One example is provided by the shutdown of the website dajaz1.com, a hip-hop music blog popular with DJs and used by labels to promote music. 401 The RIAA "monitored the site" for "a year and a half," "identifying instances where its operators had uploaded music to unauthorized file-sharing services where the recordings could be freely downloaded." 402

In December 2010, United States Immigration and Customs Enforcement (ICE), a unit of the Department of Homeland Security, alleged that dajaz1, along with other sites, was "used to commit or facilitate criminal copyright infringement." But many of the examples used in the affidavit of infringing content were sent by the record labels themselves. Having a legitimate argument on the lack of

^{396.} *Id.*

^{397.} Id.

^{398.} *Id.*; see infra note 426 and accompanying text.

^{399.} *UMG Recordings, Inc. v. Shelter Capital Partners LLC*, 667 F.3d 1022, 1026, 1050 (9th Cir. 2011). The DMCA safe harbors are designed to protect Internet service providers from liability for users' actions. *See* 17 U.S.C. § 512(a) (2006).

^{400.} Interview with Participant "Q," supra note 130.

^{401.} Mike Masnick, *More & Bigger Mistakes Discovered in Homeland Security's Domain Seizures*, TECHDIRT (Dec. 22, 2010, 9:56 AM), http://www.techdirt.com/articles/20101222/02112912376/more-bigger-mistakes-discovered-homeland-securitys-domain-seizures.shtml.

^{402.} Declan McCullagh, *DHS Abruptly Abandons Copyright Seizure of Hip-Hop Blog*, CNET (Dec. 8, 2011, 11:14 AM), http://news.cnet.com/8301-31921_357339569-281/dhs-abruptly-abandons-copyright-seizure-of-hip-hop-blog/#ixzz1mbcWIN9S.

^{403.} Application and Affidavit for Seizure Warrant at 3, *In re Rapgodfathers.com*, No. 10-2822M (C.D. Cal. Nov. 17, 2010), *available at* http://documents.nytimes.com/request-to-seize-web-sites-for-piracy.

^{404.} Mike Masnick, Homeland Security's 'Evidence' for Domain Seizures Also Included Songs Sent by Labels, TECHDIRT (Dec. 20, 2010, 10:36 AM),

infringement—which the ICE effectively conceded by ultimately returning the domain name—did not stop the site from being shut down for more than a year. 405

B. Statutory Damages

Underscoring the threat of litigation is the massive potential liability that technology companies face as a result of statutory damages. At any time before a court enters a final judgment, a copyright owner can choose between receiving statutory damages, on the one hand, and actual damages and profits, on the other. 406

The current version of the statute provides that copyright owners can obtain "an award of statutory damages for all infringements . . . with respect to any one work . . . in a sum of not less than \$750 or more than \$30,000 "407 The court may increase the award to \$150,000 when a copyright owner demonstrates willful infringement. "was not aware and had no reason to believe" that its activity constituted infringement. With widespread use and a loose definition of willfulness, statutory damages could quickly reach into the billions of dollars.

Two examples are instructive. One involves Viacom, which sued YouTube and Google for copyright infringement based on 160,000 unauthorized clips available on YouTube. 410 "Multiplied by a potential \$150,000 per clip, YouTube could be liable for \$24 *billion*, nearly fifteen times the \$1.65 billion Google spent to buy the entire company."411

http://www.techdirt.com/articles/20101220/03324012341/homeland-securitys-evidence-domain-seizures-also-included-songs-sent-labels.shtml.

^{405.} Mike Masnick, *Breaking News: Feds Falsely Censor Popular Blog for Over a Year, Deny All Due Process, Hide All Details...*, TECHDIRT (Dec. 8, 2011, 8:29 AM), http://www.techdirt.com/articles/20111208/08225217010/breaking-news-feds-falsely-censor-popular-blog-over-year-deny-all-due-process-hide-all-details.shtml.

^{406. 17} U.S.C. § 412 (2006); *see* CARRIER, *supra* note 133, at 149 n.7 ("A copyright owner can receive statutory damages only for (1) unpublished works it registers with the Copyright Office before infringement and (2) published works it registers within three months of publication.").

^{407. § 504(}c)(1).

^{408. § 504(}c)(2).

^{409.} *Id.*

^{410.} Press Release, Viacom, Viacom Files Federal Copyright Infringement Complaint against YouTube and Google (Mar. 13, 2007), available at http://www.viacom.com/news/News Docs/Viacom%20Press%20Release.pdf.

^{411.} CARRIER, *supra* note 133, at 147.

The second example involves MP3.com, which allowed users, after buying a CD, to listen to it from any location. The defendant settled by paying \$53 million to avoid a potential statutory-damages award of \$250 million. 413

One interview respondent conceived of statutory damages as being "effectively infinite." The "point is" that when you are charged with statutory damages, "you're dead." The prospect of statutory damages also could discourage companies from fully developing their service because of the fear of increased damages. One respondent explained that the company was "reluctant to expand its service" because it worried about "potentially extra damages if it lost." ⁴¹⁶

C. Personal Liability: Law

Compounding the severe concerns presented by statutory damages is the imposition of personal liability. In music copyright cases, some courts have imposed personal liability on a company's officers. A fundamental principle of corporate law is that shareholders are not responsible for a company's liabilities and that their loss cannot exceed the amount they invest in the corporation. Nearly all states have enacted laws limiting shareholder liability on the grounds that such limits encourage beneficial, but risky, activity that shareholders would avoid if they bore personal responsibility. 19

Limited liability encourages efficient investment in two ways. First, it reduces information costs, allowing individuals "with money, but neither the skill nor the information needed for business management" to invest in others' enterprises without losing their entire

^{412.} *UMG Recordings, Inc. v. MP3.com, Inc.*, 92 F. Supp. 2d 349, 350 (S.D.N.Y. 2000).

^{413.} *UMG Recordings, Inc. v. MP3.com, Inc.*, No. 00 CIV.472, 2000 WL 1262568, at *4, *6 (S.D.N.Y. Sept. 6, 2000); Jim Hu & Evan Hansen, *Ruling against MP3.com Could Cost \$118 Million*, CNET (Sept. 6, 2000, 3:30 PM), http://news.cnet.com/Ruling-against-MP3.com-could-cost-118-million/2100-1023_3-245377.html.

^{414.} Interview with Participant "Q," supra note 130.

^{415.} Id

^{416.} Interview with Participant "DD," supra note 373.

^{417.} See, e.g., UMG Recordings, Inc. v. Bertelsmann AG, 222 F.R.D. 408, 411, 413–14 (N.D. Cal. 2004); Capitol Records, Inc. v. Wings Digital Corp., 218 F. Supp. 2d 280, 285 (E.D.N.Y. 2002); see also infra notes 426–427 and accompanying text.

^{418.} E.g., Nina A. Mendelson, A Control-Based Approach to Shareholder Liability for Corporate Torts, 102 COLUM. L. REV. 1203, 1204 (2002).

^{419.} Id. at 1211.

portfolio. 420 The investor is spared the task of "acquir[ing] detailed information on corporate operations, potential corporate liability, and . . . potential individual exposure," which might otherwise persuade them to forego the investment. 421 Second, limited liability corrects excessive risk aversion, which follows from an investor's unreasonable fear of "the risk of losing all her assets." 422 As a result of these benefits, limited liability allows more efficient diversification and optimal investment decisions. 423

At times, however, courts have "pierc[ed] the corporate veil" to impose personal liability on shareholders. ⁴²⁴ Such cases have involved close corporations (such as family-owned businesses), parent-subsidiary relations, and instances of fraud or misrepresentation. ⁴²⁵

Such veil piercing has been common in copyright cases. One court, for example, rejected a motion to dismiss filed by Hummer Winblad, a VC firm charged with contributory and vicarious copyright infringement for investing in, and controlling the operations of, Napster. Another court held a president and sole shareholder of a company that replicated CDs liable for contributory and vicarious infringement. 427

Compounding the law of personal liability is the role played by VC indemnification agreements. As discussed further below, VCs have plenty of reasons to shy away from funding digital music innovation. 428 But one reason that has not received sufficient attention involves these agreements.

Limited partnership agreements between investors and VCs have powerful indemnification provisions that are "very, very VC friendly,"

^{420.} *Id.* at 1217; see also Frank H. Easterbrook & Daniel R. Fischel, *Limited Liability and the Corporation*, 52 U. CHI. L. REV. 89, 94 (1985).

^{421.} Mendelson, *supra* note 418, at 1218; *see also* Paul Halpern et al., *An Economic Analysis of Limited Liability in Corporation Law*, 30 U. TORONTO L.J. 117, 136 (1980).

^{422.} Mendelson, supra note 418, at 1218.

^{423.} Easterbrook & Fischel, *supra* note 420, at 96–97; Joshua M. Siegel, Comment, *Reconciling Shareholder Limited Liability with Vicarious Copyright Liability: Holding Parent Corporations Liable for the Copyright Infringement of Subsidiaries*, 41 U. RICH. L. REV. 535, 538 (2007).

^{424.} Easterbrook & Fischel, supra note 420, at 109.

^{425.} *Id.* at 109–12.

^{426.} *UMG Recordings, Inc. v. Bertelsmann AG*, 222 F.R.D. 408, 409–10, 415 (N.D. Cal. 2004). The court later dismissed the suit because of the running of the statute of limitations. *In re Napster, Inc.*, No. C MDL-00-1369-MHP, C 04-3004 MHP, 2005 WL 289977, at *3–4 (N.D. Cal. Feb. 3, 2005).

^{427.} Capitol Records, Inc. v. Wings Digital Corp., 218 F. Supp. 2d 280, 285 (E.D.N.Y. 2002).

^{428.} See infra notes 523–541 and accompanying text.

allowing indemnification from investors even if the investors themselves sue. 429 But the agreements contain carve-outs for fraud, criminal conduct, and actions committed "knowingly." 430 Of relevance here, this very conduct is typically at issue in copyright infringement suits. As a result, VCs are not able to take advantage of the indemnification provisions that apply in many other settings, further decreasing their appetite for investing in digital music startups.

D. Personal Liability: Experience

The concerns about the effects of personal liability are not theoretical. Several of the innovators I interviewed relayed the harrowing experience of being personally sued. The first described a "process server that broke into the office" and "knocked on the door like it was the police." He continued: "everything about it was meant to psychologically intimidate," "it made a huge impact on me," and "I am going to do what I can the rest of my career to avoid being in that situation again."

Another innovator explained that the labels said "we're not going to sue the company, we are going to sue you personally" since "we can make all kinds of allegations and it's your job to prove you're not infringing" and "the lawsuit is going to cost you between 15 and 20 million bucks." The innovator decided that he could "find better uses" for his money "than to give it to lawyers." ⁴³⁴

A third respondent noted how "stressful" it was when he was sued personally. 435 It was "definitely very scary" when they came with the "multiple inch lawsuit for a couple billion bucks. 436 The innovator was afraid of the "unknown" and worried that he could have a judgment "the rest of [his] life. 437

A fourth participant relayed a comment from a high-ranking official in the recording industry who said "it's too bad you have" children "who are going to want to go to college and you're not going to be able to pay for it." The innovator recognized a "real"

^{429.} Interview with Participant "U," supra note 114.

^{430.} Id

^{431.} Interview with Participant "Q," supra note 130.

^{432.} *Id*

^{433.} Interview with Participant "F," supra note 106.

^{434.} Id

^{435.} Interview with Participant "J," *supra* note 111.

^{436.} *Id.*

^{437.} Id

^{438.} Interview with Participant "B," supra note 172.

undisguised intimidation factor" and commented on the "thug-like nature" of the "behavior of the record companies." 439

A fifth innovator knew that the personal lawsuit was "part of the game," but still thought it was a "slimy, scummy thing to do." He was disappointed since he was not a "free anarchist' kind of guy" but was "quite the opposite," trying to "do things that [we]re positive for the industry." The labels, however, "just make up stuff to slander you and disparage people." This made partners "very hesitant," since few would work with a company that was sued and could go out of business.

The personal attacks were potent, and "most people do not have the intestinal fortitude to weather [them]." One respondent "could list a dozen people who have been sued and say 'I want to fight,'" but then "just go away" and "close up shop, even if they're doing something that is reasonable."

A sixth respondent explained that "by far the most significant factor worrying the [company's] founders" and "frankly the thing that pushed them over the edge to stop the business rather than fight on appeal" was "the prospect that they could be personally liable."

There was "no reason" to sue the company founder individually, and the plaintiffs made "fairly ludicrous allegations."

But the "mere fact" that the allegations were "out there" meant "the CEO had to watch his step" and could "risk losing his house and his family's life savings."

There was "no question" that the personal lawsuit "had the deterrent effect it was intended to have on innovation."

E. Vagueness as a Weapon

Contributing to the attacks against companies and their founders is the lack of clarity in copyright law. The law of secondary liability, with its multiple (often vague) strands of contributory infringement,

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439. Id.
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^{440.} Interview with Participant "K," supra note 97.

^{441.} Id.

^{442.} Id.

^{443.} *Id.*

^{444.} Id.

^{445.} *Id.*

^{446.} Interview with Participant "DD," *supra* note 373.

^{447.} *Id.*

^{448.} *Id.*

^{449.} *Id.*

vicarious liability, and inducement, introduces numerous levels of ambiguity. The industry has employed this uncertainty as a weapon.

One record label official who considers himself a "content person" admitted that "if there is lack of clarity in an area, I am going to defend it to the most aggressive interpretation based on my rights." In the end, "it's always going to ultimately end up in favor of the content owners" since they "are going to have more resources and capability to hold the line in a way that's most favorable to them." In fact, the "lack of clarity" in the law "is holding back innovation right now."

From the other side, an innovator agreed that, even though "there is so much opportunity in this space," the "problem" is that it is "so uncertain," and "the uncertainty is what stops you from trying to approach that space again." 453

Adding to the uncertainty is the rigid requirement for filtering copyrighted works imposed by the district court in *Napster*. The court required perfect compliance, stating that only 100% effectiveness was sufficient. Under this standard, even reasonable or industry-standard efforts to filter infringing works would not be enough to prevent services from being shut down. 456

F. Threats

Related to the threats flowing from personal liability are other threats levied against entrepreneurs who offered new business models. Ironically enough, some of the most direct threats were levied against the companies that were some of the most diligent in attempting to comply with copyright law.

As stated succinctly by one official to an innovator offering a service that the labels could use to protect their music online, "You don't understand. Our job is to keep you down." 457

One respondent, who did not want the comment attributed to him given the sensitive nature of the information, relayed stories "from the

^{450.} Interview with Participant "D," supra note 100.

^{451.} Id.

^{452.} *Id.*

^{453.} Interview with Participant "F," supra note 106.

^{454.} See supra notes 74–80 and accompanying text.

^{455.} A&M Records, Inc. v. Napster, Inc., 284 F.3d 1091, 1098 (9th Cir. 2002).

^{456.} *MGM Studios, Inc. v. Grokster, Ltd.*, 454 F. Supp. 2d 966, 990 (C.D. Cal. 2006) (granting summary judgment against StreamCast based on inference of intent to encourage infringement "[e]ven if filtering technology does not work perfectly and contains negative side effects on usability").

^{457.} Interview with Participant "C," *supra* note 92.

rap business" about "people being physically intimidated" or "being hung out of windows."

Another respondent explained that "when you get high enough up in the food chain (and bizarrely we few kids were caught in this thing), you know it's a rough game" and "you don't belong there if you can't play." The respondent analogized the situation to the "poor gardener" from *The Sopranos* show, who is "working on lawns on disputed turf." "One week, one gang shows up and beats the snot out of him and says, 'You don't work here.'" The "next week, another team shows up and beats the snot out of him." "That's what it felt like" at the company.

One innovator explained that he was "out of the business now" but had been "threatened personally." ⁴⁵⁸ In particular, "when you're just a guy making a hundred thousand dollars a year and have some stock" and "you have a bunch of huge corporations that are part of multi-national conglomerates that are threatening to destroy you, you are going to get destroyed." ⁴⁵⁹ Another respondent received reprimands from "high-ranking officials" assigning blame for layoffs in the industry. ⁴⁶⁰

Yet another explained that "[w]e were Spotify five years ago and we were just getting hammered." In particular, "[e]very time I would do a press release, the next day the RIAA would call me." They would ask: 'How do you think you can do this? How do you think it's legal?'" 463

The innovator, however, "based everything on the law" and worked with lawyers carefully to "analyze the law." They would "read the law" and "come up with [their] own interpretation," ask their lawyer "if it holds up," and then "commit it to code." But "every time we brought out a new feature, we would have to go explain to the RIAA."

In particular, "when we started doing time-shifting or overseas broadcasts they just got so angry." The respondent relied on

^{458.} Interview with Participant "BB," supra note 140.

^{459.} *Id*.

^{460.} Interview with Participant "Q," supra note 130.

^{461.} Interview with Participant "F," supra note 106.

^{462.} *Id.* Relatedly, another participant explained that, as a result of a lawsuit filed by the labels, it was "very difficult to operate" inside the company, in particular because "there was lots of gamesmanship" and "the labels leaked information to the press." Interview with Participant "Q," *supra* note 130.

^{463.} Interview with Participant "F," supra note 106.

^{464.} *Id*

^{465.} *Id.*

^{466.} Id.

^{467.} Id.

Canadian and European law, which "allow you to time-shift songs," as well as World Intellectual Property Organization (WIPO) law, which focused on the "origin, not the destination," of the music. 468 But "once the RIAA saw that," they realized "[o]h my God, they've threaded the needle. 469 That's when "they went absolutely ape-shit and that's when the personal lawsuit and all that stuff came.

The threats were potent because of the uncertainty of copyright law. As discussed above, copyright law is plagued with ambiguity, potentially punishing a vast array of conduct.⁴⁷¹ This uncertainty is used to powerful effect by the industry.

One innovator likened the uncertainty to "a protection racket" or "the way that I imagine politics work in corrupt countries" where "everything is okay until it's not okay." In those settings, "you do what you want until one day you can't and they come and your tail light's broken." That situation, in which "there isn't a strong rule of law," is similar to "the current copyright system" in which it is "actually impossible to run a fully legal music service."

Contributing to these difficulties are the terms imposed on companies that seek to partner with the labels in offering new services. The labels, even according to one of their leading officers, "cripple the companies by demanding such advances and guarantees that they go belly up."⁴⁷⁵ As a result, the labels "killed virtually every company."⁴⁷⁶

G. Response to Scholars

Because of the difficulty of demonstrating the effect of copyright law and enforcement on innovation, a path was open for scholars to propose new, more expansive tests for liability.

1. "UPDATING" COPYRIGHT LAW

This opportunity has been seized, with several respected scholars pointing to technological change in calling for a more aggressive approach to the law of secondary liability. They have claimed that the

^{468.} *Id.*

^{469.} Id.

^{470.} Id

^{471.} See supra notes 450-453 and accompanying text.

^{472.} Interview with Participant "Q," supra note 130.

^{473.} *Id.*

^{474.} *Id.*

^{475.} Interview with Participant "L," supra note 88.

^{476.} *Id*.

Supreme Court's decision in *Sony Corporation of America v. Universal City Studios*, *Inc.*,⁴⁷⁷ which had found that the manufacturer of the videocassette recorder (VCR) was not secondarily liable because the device was "capable of substantial noninfringing uses," was the product of an earlier era.⁴⁷⁸ Because p2p developers have greater control over their products, these scholars have advocated heightened monitoring obligations.⁴⁷⁹

In contrast to these arguments, this Article has shown the importance and frequent use of litigation by the record labels as a business strategy. This realization is of crucial significance in evaluating proposals that scholars have offered to "update" the law of secondary liability.

For example, Professor Randal Picker proposes a higher burden on technologies that are able to monitor infringement. If a producer "ensures that the product can phone home so that updates can be promulgated throughout the system for the networked product, the producer should face a substantial noninfringing use test, coupled with the duty to evolve the product to eliminate infringing uses." ⁴⁸⁰ Picker recognizes the "quite strong" obligation that would accompany the elimination of infringing uses, so he asserts that a provider would satisfy elimination where it is "cost-effective to do so" or where the majority of infringing uses are removed. ⁴⁸¹

Similarly, Professors Doug Lichtman and William Landes seek to increase the obligation facing technology developers by applying tort law's negligence standards. Such standards "hold a party liable in cases where that party's failure to take economically reasonable precautions results in a harm." The authors recognize that the uncertainty of "what courts will require" could lead producers to be "excessively cautious." But they recommend "an efficient approach to indirect liability" by "applying a negligence rule to any activity that can lead to copyright infringement."

^{477. 464} U.S. 417 (1984).

^{478.} *Id.* at 442.

^{479.} See infra notes 480–490 and accompanying text.

^{480.} Randal C. Picker, *Rewinding* Sony: *The Evolving Product, Phoning Home and the Duty of Ongoing Design* 19 (John M. Olin Law & Economics, University of Chicago Law School, Working Paper No. 241, 2005), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract id=692746.

^{481.} *Id.*

^{482.} Douglas Lichtman & William Landes, *Indirect Liability for Copyright Infringement: An Economic Perspective*, 16 HARV. J.L. & TECH. 395, 405–06 (2003).

^{483.} *Id.* at 405.

^{484.} Id. at 406.

^{485.} *Id.* at 405.

Professors Lital Helman and Gideon Parchomovsky propose a variation on this argument with their "technological safe harbor" for p2p services that "employ the best available technology for filtering." The authors assert that such a safe harbor would "clear the uncertainty that currently shrouds the status of filtering in the context of peer-to-peer services."

Finally, an amicus brief filed in the *MGM v. Grokster* case on behalf of economists that included Nobel Prize winners Kenneth Arrow and Gary Becker, asked if "the indirectly liable party at low cost could have discouraged the infringing uses." The economists lament that "[i]f firms that produce [p2p] technology know that they are completely immune from liability as long as their technology makes possible some qualifying amount of non-infringing use, they will have no incentive to attempt to discourage infringing uses even if the costs of doing so are very low." The brief concludes that "[b]y offering blanket immunity the moment a firm can demonstrate sufficient legitimate use, the rule completely destroys any incentive for the firm to do better."

Each of these proposals, offered by respected scholars, sounds plausible in theory. Who could be against a technology taking reasonable measures to limit infringement, especially if they are not overly burdensome? But the recent history of copyright litigation offers a compelling reason not to adopt these approaches.

In particular, such tests would be enforced by the record labels. As a result, requirements for "reasonable" actions would quickly devolve into additional hurdles that the labels would exploit in moving to deny summary judgment and to prolong litigation. That is exactly the lesson provided by respondents who explained that copyright owners adopt the "most aggressive interpretation" of vague laws and ultimately emerge victorious because of their superior resources. ⁴⁹¹

2. COPYRIGHT LAW AND INNOVATION

This project also responds to Professor Peter Menell's arguments about copyright law and innovation. Menell contends that innovation

^{486.} Lital Helman & Gideon Parchomovsky, *The Best Available Technology Standard*, 111 COLUM. L. REV. 1194, 1238 (2011).

^{487.} Id. at 1239.

^{488.} Brief for Kenneth J. Arrow et al. as Amici Curiae Supporting Petitioners at 8, *MGM Studios, Inc. v. Grokster, Ltd.*, 545 U.S. 913 (2005) (No. 04-480), 2005 WL 176441, at *8.

^{489.} *Id.* at 9.

^{490.} Id.

^{491.} See supra notes 450–452 and accompanying text.

has not been chilled by copyright law because "researchers in academic, government, or think tank settings are largely insulated from exposure to copyright liability," as are open source programmers and hackers. ⁴⁹² The innovation "potentially threatened by indirect copyright liability does not require substantial capital investment, especially during the formative stages." ⁴⁹³ And "[s]tart-up innovators are unlikely to be aware of, or deeply concerned with, the contours of indirect copyright liability."

This project has shown, in contrast, that startup entrepreneurs are intimately aware of the hazards of copyright law and enforcement. These actors have raised the ire of the record labels even when they offered good-faith arguments that their innovations not only complied with the law but also created new business models that could be utilized by the record labels. Frequent litigation, personal liability, and statutory damages ensure that this is not an academic argument. Nor, finally, are VCs likely to provide essential funding given all the hurdles discussed in this Article.

VII. WHAT WE LOST

The challenge that has always confronted those who have attempted to link copyright enforcement with lost innovation involves the difficulty of tracing exactly what we have lost. One cannot pinpoint with certainty technologies that would have developed if history had followed a different course. This project, though, has uncovered many ideas regarding what society lost from the campaign against Napster and other similar defendants. This Part emphasizes five losses from the *Napster* decision and related litigation: lost innovation, lost venture capital, lost markets, lost licensing, and lost magic.

A. Lost Innovation

1. TIP OF THE ICEBERG

The first casualty involved lost innovation. Several participants thought there would have been more innovation in the digital music arena if not for the *Napster* decision and similar copyright litigation. One innovator lamented that "the minute the *Napster* decision came

^{492.} Menell, *supra* note 4, at 387.

^{493.} Id. at 389.

^{494.} Id.

out," it "put such a chilling effect on everything." Another participant concluded that "from 2000 to 2010, even to this day, there really hasn't been new innovation in digital music other than iTunes."

One innovator noted that "lots and lots of ideas" would have come about "that we can't imagine now." Some of these would have been "innovations on old ideas" while others would have "created entirely new services that don't exist today." Another respondent explained that it is "inherently hard to quantify" the "new disruptive technologies we're losing" because "the ones you lose . . . get shut down" and "for every one of those, there are ten new ideas that never get developed" or "never get beyond the napkin stage because people don't see it as an area where they ought to be investing their time and money."

One innovator concluded that recent developments such as the streaming of music through the Spotify service and sharing of music through Facebook were just the tip of the iceberg. While we "see pieces of these things now," we "would have seen much more advanced implementations of them if the innovation was free to go further." The "legal issues" and "lack of venture capital" have "made these innovations . . . very, very small and very limited." 502

2. LOST OPPORTUNITY

One respondent believed that the "business potential" and "shape the business ultimately took on" was "retarded and perverted" by the labels' behavior. 503 In particular, the labels "had an opportunity to achieve their dream of owning everything from content creation to distribution to sale" but "chose not to" in order to "eke out a few more years of CD sales." 504 This innovator thought that "the entertainment industry was probably unique" in this regard in that it "did not want a product." 505

Another respondent thought the record labels could have achieved greater success if they had been more proactive in embracing new

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495. Interview with Participant "F," supra note 106.
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^{496.} Interview with Participant "N," supra note 85.

^{497.} Id.

^{498.} Id.

^{499.} Interview with Participant "DD," supra note 373.

^{500.} Interview with Participant "N," supra note 85.

^{501.} Id.

^{502.} *Id.*

^{503.} Interview with Participant "BB," supra note 140.

^{504.} Id.

^{505.} Id.

business models.⁵⁰⁶ But as a result of "hiding behind copyright laws" to "maintain[] the status quo" or "maintain[] control," the labels were not able to attain "excellence."⁵⁰⁷

One innovator lamented the "incredible opportunities for innovation" that were lost because "you'd be talking to a group of lawyers who were concerned about risk mitigation much more than the people who actually focused on how you create a great experience." The respondent noted that the industry was "operating in the most narrow form of what it could have been rather than in the broadest form," which led to it becoming a "much smaller industry." And he concluded that "there was a lot of innovation that got stymied" in the industry and "to the detriment of some of the companies like ours that were trying to innovate in the space in a wholly legal and legitimate way." ⁵¹⁰

One record label executive believed there was a "missed opportunity" since "the entertainment industry" did not "do[] enough to leverage all the physical distribution of product to create stronger connections with fans." It made "no sense" that "fifteen years into digital exploration . . . when I buy a song, I still only get the song." The labels could have offered additional extras, like exclusive interviews and backstage access. 513

Another explained that "there are any number of things you can do with technology to alter the product." The respondent offered the example of e-books, for which services such as a "relationship with the author" or "social reading environment" could be "part of a bundle of things that are part of an e-book." 515

Finally, one respondent pointed to analogous effects on innovation in the video industry. This VC invested in a company that was sued by the labels because of its music videos. Even though the respondent was "100% certain" that "what we were doing was fair use," the company "settled the lawsuit for millions of dollars" (which could have

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506. Interview with Participant "F," supra note 106.
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^{507.} Id

^{508.} Interview with Participant "Y," supra note 127.

^{509.} *Id.*

^{510.} Id.

^{511.} Interview with Participant "V," supra note 119.

^{512.} *Id*

^{513.} *Id.*

^{514.} Interview with Participant "AA," supra note 89.

^{515.} Id

otherwise "helped the company innovate") and "closed down" the service. 516

3. DELAYED TECHNOLOGIES

One specific technology that could have enjoyed "a lot more eyes and attention" and "a lot of innovation" is filtering, which detects and blocks certain content. Napster "was in an early stage of trying to do that," and one respondent stated that "we were" as well. As discussed above, while YouTube has made progress in its use of filtering to block copyrighted files, more widespread attention to the issue could have offered additional promise, years earlier. Stopping

In addition, consumers could have obtained "easier access" to "different delivery mechanisms." One innovator thought there could have been a "\$50 billion market" in which "every television broadcast, every piece of music ever created, [and] every image ever taken" could be "available unfettered to all of the devices we have," including PC, mobile phone, and tablet. 521

In addition, interoperability barriers "could've been mitigated and lifted much earlier by the industry in a way that would have created a much bigger and more vibrant legal market much sooner and would have prevented the industry from being in as bad shape as it's in right now." 522

B. Lost Venture Capital

Related to lost innovation was the drying up of venture capital funding for digital music technologies. There is "no question" that the lawsuits "chased away innovators." One VC turned down "dozens" of companies because of concerns about the labels and licensing. 524

Another respondent explained that "if you want to get a list of innovations that didn't happen," there are "at least fifty" companies that "died on the vine." By "radically hurt[ing] the level of capital

- 516. Interview with Participant "EE," supra note 121.
- 517. Interview with Participant "J," *supra* note 111.
- 518. Id.
- 519. *Id.*; see supra note 110 and accompanying text.
- 520. Interview with Participant "U," supra note 114.
- 521. Interview with Participant "F," supra note 106.
- 522. Interview with Participant "Y," supra note 127.
- 523. Interview with Participant "K," supra note 97.
- 524. Interview with Participant "W," supra note 93.
- 525. Interview with Participant "CC," supra note 124.

that goes into the sector," there was "a negative impact on innovation." 526

Lawsuits against technology companies "ma[d]e it harder to raise capital" since VCs were less likely to provide funding "if you're just going to have to pay attorneys, or even worse, lose." As a result, "[i]t's harder to find experienced entrepreneurs as opposed to young and naïve people who are willing to start a company in this space," which led to the loss of "new disruptive technologies that deliver content to people." 528

Several respondents explained that many VCs still refuse to invest in digital music. "Even today, most VCs do not want anything to do with content plays, but would rather focus on technologies that don't require content licensing." One VC pointed to the "monumental challenges" and "monstrous problem" of investing in music that could be traced to the "single point of failure" in businesses that "ride on someone else's owned content."

Another respondent similarly concluded that "today, if you go to a VC and tell them you have a business you want to build around digital music, very, very few would listen." The "risks aren't worth it" because "the music labels have a monopoly, the copyright laws are so strict, [and] the penalties are gigantic and out of proportion to any revenues they could possibly get." 532

Another difficulty is that the labels can "change their minds at any time."⁵³³ One reason that "smart investors" do not invest in music is the constant "worry about what the record companies are going to try to pull next" such as changes to licenses or pricing.⁵³⁴

One innovator described the situation he confronted between the labels and the VCs. This respondent found himself in an "impossible . . . catch-22 situation" in that the labels wanted the company to be profitable (so they could take money from it) while the VCs wanted to "give as little as possible." The labels "don't want

^{526.} Interview with Participant "W," supra note 93.

^{527.} Interview with Participant "K," *supra* note 97.

^{528.} Interview with Participant "DD," supra note 373.

^{529.} Interview with Participant "R," supra note 179.

^{530.} Interview with Participant "EE," supra note 121.

^{531.} Interview with Participant "N," supra note 85.

^{532.} *Id*.

^{533.} Interview with Participant "F," supra note 106.

^{534.} Interview with Participant "U," supra note 114.

^{535.} Interview with Participant "Q," supra note 130.

you to become unfundable" but treat you "like a good parasite" by "bleed[ing] you slowly." 536

Even in the setting of Internet radio royalties, in which licensing rates have been negotiated, high rates are the "biggest liability" and "biggest question mark or red flag" for investors. ⁵³⁷ One innovator remarked that "hundreds" of VCs were not interested in his service because of the high rates. ⁵³⁸ The innovator concluded that the uncertainty "led to a real dearth of funding" among "music-centric startups." ⁵³⁹

Finally, in terms of litigation, one respondent concluded that "nothing has changed" and that the "terror campaign" the labels "have wrought over the last decade continues on unabated." The reason is that, even though "the CEOs and the management of several labels have changed several times, the attorneys have not." ⁵⁴¹

C. Lost Markets

A third loss from *Napster* and related litigation was the loss to the profitability of the record labels themselves. Although the labels focused on the infringement made possible on p2p networks, the vast user base on these networks presented golden opportunities. As discussed above, the centralized Napster service offered a robust prospect for the labels to monetize users' activity.⁵⁴² This possibility became more remote once the services became more decentralized.

This was not the only lost opportunity. One record label official thought that the suit against p2p service LimeWire (for inducing infringement) was "a huge mistake." The service had "a devoted following," was "convertible," and "would make a fortune for everyone." This was "the last chance" to take such a large group before it "split again for a long time," which is "what has happened." This was "the last chance" to take such a large group before it "split again for a long time," which is "what has happened."

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536. Id.
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^{537.} Interview with Participant "Z" (Apr. 24, 2012) (on file with author).

^{538.} Id.

^{539.} *Id.*

^{540.} Interview with Participant "K," supra note 97.

^{541.} *Id*.

^{542.} See supra notes 133–139 and accompanying text.

^{543.} Interview with Participant "I," supra note 81.

^{544.} *Id.*

^{545.} Id.

D. Lost Innovators

Related to the lost innovation discussed in Part VII.A above are the lost innovators. One respondent explained the several layers of innovation effects: (1) the "direct order effect" of "innovative companies shut down by the lawsuit"; (2) the "second-order but still direct deterrence effect" on the innovators who were shut down and who will "stay far away from digital media" in their next projects; and (3) the "broader in terrorem effect" imposed by copyright holders by "suing aggressively in favorable jurisdictions" and "naming individuals personally even if the claim against them is weak." ⁵⁴⁶

The licensing terms that the labels imposed on innovators often made it unprofitable to remain in the market. One respondent indicated that the problem was the "monopoly positions of the labels," which allowed them to refuse to "agree to reasonable license terms." Another explained that, "flat out," if "you're a small company, you cannot negotiate deals with the labels." 548

One VC explained that "labels have a history of basically screwing you at every turn." They "want to do short-term (one or two year) deals, and then renegotiate." As soon as the companies are profitable, they suck companies dry until they don't have a model that will work." The respondent explained that he "did one music deal [where] the company ended up shutting down because the labels just kept taking more and more and more." He continued: "Every time it got close to profitability, the labels would take more the next negotiation," finding that "it was just completely unsustainable." 553

Another respondent declared that "nobody has ever made money partnering with the record labels." And one more lamented that his company was "basically set up" to meet "insanely aggressive revenue targets." If the companies did not meet these targets, they "would be hopelessly screwed." This respondent wondered if music startups

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546. Interview with Participant "DD," supra note 373.
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^{547.} Interview with Participant "N," supra note 85.

^{548.} Interview with Participant "J," *supra* note 111.

^{549.} Interview with Participant "W," supra note 93.

^{550.} Id.

^{551.} *Id.*

^{552.} *Id.*

^{553.} *Id.*

^{554.} Interview with Participant "K," supra note 97.

^{555.} Interview with Participant "Q," supra note 130.

^{556.} Id.

were "a long-term money transfer scheme from venture capitalists to Hollywood." ⁵⁵⁷

One respondent explained that any innovator interested in launching a reasonably robust service must obtain "200 to 300 individual agreements with record labels," with "each one having the ability to say no and to change the terms." In addition, licensing deals "are not typically very long term," which "injects a huge amount of uncertainty into any business model."

One innovator explained that "any business that tried to be 100% on the legitimate side found itself highly compromised by the combination of the economics of what the industry was willing to do and their restrictions." One such restriction required service providers to "pay the greater of a percentage of revenue, a fixed amount per play, or a fixed amount per subscriber per month." In a nutshell, "heads I win, tails you lose, if it lands on the side, we flip again." S62

In particular, while the service provider would have been able to estimate its breakage point if it could "pay a penny a play," it was "blocked from doing full-scale distribution" since it was required to pay "a per subscriber minimum of \$3 a month" or a "revenue split that was calculated based on a percentage of revenue at retail." ⁵⁶³

In addition, "at every turn, one or more of the major labels would say 'I don't like that deal.'"⁵⁶⁴ They "literally, through economic rigidity and being control freaks about how they were treating their so-called partners, prevented a scale-up of the business."⁵⁶⁵

One respondent traced the "tremendous amount of capital" the labels imposed in advances to "some guy running a business unit that gets credit in his P&L for the full advance and would rather have it up front than paid when the music is consumed."⁵⁶⁶

Finally, one innovator confirmed that "the economics don't add up" as the "costs demanded per stream or per download or as a percent of revenue" are "just not realistic." The labels sought to "make as

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557. Id.
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^{558.} Interview with Participant "Z," supra note 537.

^{559.} *Id*

^{560.} Interview with Participant "Y," supra note 127.

^{561.} *Id.*

^{562.} *Id*

^{563.} *Id.* "Breakage" is a term for the percentage of people entitled to a service that do not use it. *Id.*

^{564.} *Id.*

^{565.} *Id.*

^{566.} Interview with Participant "W," supra note 93.

^{567.} Interview with Participant "Z," supra note 537.

much money as they could off their content" by reaching outcomes in negotiations that "keep all the upside with them" and "inevitably stifle innovation and growth because there's no incentive." Relatedly, the labels have "a veto that they can [use] whenever they feel like." S69

E. Lost Magic

Finally, and most wistfully, the labels' emphasis on litigation and neglect of their customers threatened the "magic around music." One innovator explained how "we could have continued that magic" if the labels had treated their customers differently and considered the benefits (rather than only the harms) of digital distribution. As a result of the labels' actions, however, the "goodwill toward the music industry" from "fantastic" artists and music was lost.

Far from preserving the magic of music, the scorched-earth litigation strategy did the opposite. Several participants criticized it, with one likening it to the industry's "war on drugs," in which they "just attack everything." The industry not only "attacked" the "lawless" but also conducted a "war on all new technology." ⁵⁷⁴

In short, the war against Napster and other p2p services led to several substantial losses. Some, such as lost innovation and VC, were felt by society at large. Others were felt by the labels themselves, which lost markets and licensing. And others were suffered by fans, who lost the magic of music.

CONCLUSION

Today's front-page stories and front-line battles on copyright have focused on issues of piracy and theft. Given the figures of lost profits and jobs bandied about by the entertainment industry, that is not surprising. But any discussion of these harms must consider the countervailing argument.

Overaggressive copyright law and enforcement has substantially and adversely affected innovation. This story has not been told. For it is a difficult story to tell. It relies on a prediction of what would have happened if history had taken a different course. We cannot pinpoint

^{568.} *Id.*

^{569.} Id.

^{570.} Interview with Participant "F," supra note 106.

^{571.} *Id*

^{572.} Id.

^{573.} Interview with Participant "K," supra note 97.

^{574.} Id

these losses with certainty. And this gap is no match for piracy harms, which have been proclaimed with the loudest of megaphones.

This Article addresses this age-old problem. It treats the *Napster* decision as a case study to ascertain the effects of the decision on innovation and investment. By interviewing 31 CEOs, company founders, and VPs who operated in the digital music scene at the time of Napster and afterwards, it paints the fullest picture to date of the effect of copyright law on innovation.

The Article concludes that the *Napster* decision stifled innovation, discouraged negotiation, pushed p2p underground, and led to a venture capital "wasteland." It also recounts the industry's mistakes and adherence to the Innovator's Dilemma in preserving an existing business model and ignoring or quashing disruptive threats to the model. And it shows how the labels used litigation as a business model, buttressed by vague copyright laws, statutory damages, and personal liability.

Innovation is crucial to economic growth. But the difficulty of accounting for it leads courts and policymakers to ignore it in today's debates. Any discussion of the appropriate role of copyright law must consider the effects on innovation. This Article begins this process.

APPENDIX

Subjects of Interviews (Current* and Former Positions)

Hank Barry CEO, Napster; Partner, Hummer Winblad;

Partner, Sidley Austin*

Dalton Caldwell Founder & CEO, imeem; Founder & CEO, Mixed

Media Labs*

Ted Cohen Co-Founder, Cypress Records; Senior VP (SVP)

of Digital Development & Distribution, EMI;

Managing Partner, TAG Strategic*

Kevin Conroy Chief Marketing Officer & President of New

Technology, BMG; Executive VP (EVP) of Global Products & Marketing, AOL; President,

Univision Interactive Media*

Don Dodge Director, Business Development, Microsoft

Emerging Business Team; VP of Product Development, Napster; Developer Advocate,

Google*

Kamran Elahian Co-Founder, CAE Systems, Cirrus Logic,

Momenta, NeoMagic, PlanetWeb, Centillium Communications, Actelis Networks, Informative, Entopia, Greenfield Networks; Chairman & Co-Founder, Global Catalyst Partners*

Jim Feuille Global Head, Technology Investment Banking,

UBS; Chief Operating Officer, Volpe Brown Whelan & Co.; Head, Technology Investment Banking, Robertson Stephens; General Partner,

Crosslink Capital*

Kasian Franks Founder & CEO, SeeqPod; Founder & CEO,

Mimvi*

Albhy Galuten SVP, Universal Music Group; VP, Digital Media

Technology Strategy, Sony*; Strategy Adviser &

Visiting Distinguished Scientist, Intertrust

Technologies*

Rob Glaser Chairman, CEO, & Founder, Real Networks;

Partner, Accel Partners*

Jim Griffin CEO, Cherry Lane Digital; Creator, Technology

> Department, Geffen Records; Founder, Choruss (Warner Music Group); Managing Director,

OneHouse LLC*

Craig Grossman VP & General Counsel, Scour; CEO, Apartment

> 433 Technologies, Inc. (successor debtor in possession to Scour); Lawyer & Entrepreneur*

David Hornik General Partner, August Capital*; Board

> affiliations*: Blippy, Gravity, Nomis, Rocket Lawyer, SAY Media, Splunk, StumbleUpon

David Hyman CEO, Gracenote; SVP of Marketing, MTV

Interactive; Co-Founder, Addicted to Noise; CEO

& Founder, MOG*

Gerry Kearby CEO & President, Liquid Audio; CEO,

Neurotone*

Larry Kenswil EVP of Business Strategy, Universal Music Group

(UMG); Attorney, Lawrence Kenswil Attorney at

Law*

Mark Lemley Attorney for Zediva; William H. Neukom

> Professor of Law, Stanford Law School*; Founding Partner, Durie Tangri LLP*

Rob Lord Creator, Internet Underground Music Archive;

General Manager, Winamp; Founder, Songbird;

Founder & CEO, Scene.nr*

Jason Mendelson Managing Director & General Counsel, Mobius

Venture Capital; Co-Founder & Managing

Director, Foundry Group*

Michael Merhej President, FolderShare; Founder & CEO,

AudioGalaxy*

Milton Olin Chief Operating Officer, Napster; SVP of

Business & Legal Affairs, A&M Records; Partner,

Altschul & Olin, LLP*

Will Poole Corporate VP, Windows Digital Media Division,

Microsoft; SVP, Windows Client, Microsoft;

Chairman, NComputing*

Michael Robertson Founder, CEO, & Chairman, MP3.com;

Founder & CEO, mp3tunes.com*

Hilary Rosen President, Chairman, & CEO, Recording Industry

Association of America (RIAA); Managing

Director, SKDKnickerbocker*

Jay Samit Global President of Digital Distribution, EMI;

EVP, Sony-BMG Music; VP of New Media Group, Universal Studios; CEO, Social Vibe*

Srivats Sampath Founder, President, & CEO, McAfee; VP of

Product Marketing, Netscape; Co-Founder,

President, & CEO, Mercora;

Executive-in-Residence, U.S. Venture Partners*

Paul Vidich Special Advisor, AOL; EVP, Strategic Planning &

Development, Warner Music Group; Board

Director and Angel Investor*

Tim Westergren Co-Founder & Chief Strategy Officer, Pandora*

Dick Wingate SVP of Content Development, Liquid Audio;

SVP, Marketing, Arista Records (BMG); President, Nellymoser, Inc.; General Manager,

Business Development, TAG Strategic*

Phil Wiser Chief Technology Officer (CTO), Sony; Creator,

Sony Digital Business Group; Co-Founder, Liquid Audio; Co-Founder, Chairman, & President,

Sezmi; CTO, Hearst Corporation*

Strauss Zelnick President & CEO, Bertelsmann Music Group

(BMG); President & CEO, Crystal Dynamics; President & COO, 20th Century Fox; CEO, Take

Two*