

DIGITAL RIGHTS MANAGEMENT:

A BALANCED SCORECARD OF STAKEHOLDER VIEWS



New Millennium Research Council

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September 2003

Bibliographic Information:

New Millennium Research Council (2003). Washington, D.C.

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Preface

Digital rights management (DRM) is software developed to enable secure distribution and to prevent illegal distribution of paid content on the Internet. DRM is thereby a tool for copyright holders, or content owners, to ensure that their work isn't stolen or obtained without payment. The open nature of the Internet, file sharing programs, and online piracy have created a need for such technology.

With this review, the NMRC develops a scorecard of stakeholders and their views regarding public policy solutions to DRM controversies. The report highlights the potential for building bridges between DRM factions.

In the DRM debate, disparate groups have emerged advocating for seemingly opposed solutions to the practice of online copyright violation. The purpose of this paper is to provide a critical examination of issues, factions, and their positions. The report articulates a strategic vision that addresses wider key stakeholder DRM issues and builds upon existing and proposed common ground principles.

The NMRC publishes this report at a critical point in the DRM debate, as legal ramifications for piracy become more prominent in the media and Congress considers significant changes to intellectual property rights and copyright law.

This report emerges in light of challenges made to current copyright protection law, provoked by controversy over intellectual property rights and privacy issues. In order to ensure that copyright policy is balanced so that all of those interested benefit, the NMRC hopes to better open lines of communication between interested parties based on the common ground identified in this report.

The NMRC was established in 1999 to foster policy research focused on developing workable, real-world solutions to the issues facing policymakers, primarily in the fields of telecommunications and technology. Please visit our Web site, www.newmillenniumresearch.org to learn more about the Council and recent events.

The NMRC wishes to thank research intern Belinda Southard, who was instrumental in the research and drafting of this report.

September 2003

Executive Summary

Introduction

This NMRC E-Zine presents a brief examination of stakeholder groups, and their positions, involved in the debate surrounding Digital Rights Management (DRM). The major ‘factions’ in the DRM debate include the content industry (e.g., RIAA, MPAA, music labels, etc.), technology industry (e.g., Sony, Philips, Nokia, Intel, etc.), software industry (e.g., Microsoft, Sun, Apple, etc.), and ISPs (e.g., Verizon, Earthlink, AOL, etc.). Other factions’ positions examined include consumers, public interest groups (e.g., EFF, EPIC, ACLU, etc.), and artists (e.g., Metallica, Madonna, etc.).

Three matrices are included in this paper, each presenting relevant stakeholder group (or faction) positions on key DRM topics. The tables provide the reader with basic information regarding factions’ “solutions” to seemingly intractable disputes, and showcase areas of common ground. Simply said, this E-Zine is designed to highlight both areas of controversy and agreement. It explores the complex relationships that exist between parties and notes the gray areas of agreement in the hopes of spurring further communication between factions.

Key Findings

- The most collaboration taking place on developing DRM solutions is in the private sector – between the software, technology, ISP, and content factions.
- The software, technology, ISP, honest user, school, and content factions agree on the installation of some level of DRM in all technology devices.
- The software, technology, ISP, honest user, and content factions agree on the development of pay-per-use models as an alternative to illegal file-sharing sites.
- The content faction, schools, software, and tech factions agree on the installation of bandwidth management technology as a way to limit on-campus piracy.
- Drafting a bill less strict than the Hollings bill that recognizes the DRM developed by the software and technology factions may align them with the content industry.
- The content faction’s efforts to work with the school, technology, software, and ISP factions on DRM solutions are more efficient and amiable than its legal campaign, although major label artists and software coalitions support the legal campaign.

Matrix A: DRM Stakeholders and Central Issues

This first matrix presents fundamental background information on key stakeholder positions and contentions in the DRM debate. This matrix briefs the reader on a macro level.

The content industry is the leading opponent to piracy and wants ISPs to enforce copyright violation. The technology, school, and ISP factions are caught between the pressure to punish violators and the desire to protect their customers’ right to privacy. The technology, software, and ISP factions are creating and implementing DRM technologies, while the content industry is pushing Congress to obligate the technology and to require ISP factions to adopt a certain level of DRM in all digital devices.

Findings include:

- Legal and federal action threatens to slow private DRM solutions.
- Schools and public interest groups want fair use – free access for research.
- Content industry believes fair use is an excuse for piracy.
- Content industry wants to limit freedom for copyright protection.
- Tech, software, users, and ISPs: fair use allows creativity and invention.
- Key shared values: DRM should be developed and piracy is illegal.

Matrix B: DRM Proposed Solutions and Benefits

This problem-solution format lines up each faction's preferred solution on a much more micro level and includes specific stakeholder names, titles, and actions. An addendum is included which summarizes key court cases and judicial action pertaining to DRM.

Solutions

The content industry is aggressively pursuing legal and private sector solutions to address issues of copyright violation. It is working with the software, technology, and ISP factions to implement marketable forms of DRM, such as pay-per-use alternatives to file-sharing sites.

Numerous schools are fighting RIAA's subpoenas, while others are implementing bandwidth management technology with assistance from the content and artist factions. Software and technology stakeholders are also collaborating to implement technology that limits the amount of on-campus file sharing. The content industry is currently in negotiations with schools to offer discounted or free music to students.

The majority of honest usersⁱ have not yet gravitated toward a particular DRM solution. Selected public interest groups believe that many forms of DRM violate First Amendment rights. Fringe, indie, or very popular artists like Pearl Jam, value the free exposure gained by online file sharing. However, those artists represented by large record companies, such as Metallica and Madonna, side with the content industry's more stringent legal and federal efforts.

Outcomes

The content industry would like a federal mandate on DRM. Meanwhile, the software, technology, and ISP factions are actively implementing DRM measures privately. The content, tech, software, and ISP factions share the desire to protect honest users and allow them to maintain the practice of easily accessing content online.

Matrix C: Key Proposed Solutions and Their Implications

Four key solutions in the DRM debate are: (1) pay-per-use models, (2) bandwidth management technology, (3) "light" DRM in all technological devices, and (4) federal enforcement/judiciary action.

Pay-Per-Use Models

Pay-Per-Use (PPU) models require collaboration between the content, software, technology, and ISP factions. In addition to Apple's iTunes, Napster is being reintroduced as a PPU, along with

the new BuyMusic.com and Kazaa's Streamwaves. Support from the software faction for this model is exhibited through BuyMusic.com's use of Microsoft's Windows Media software.

Content, software, technology, and ISP factions agree that music should be offered online, customers should be given options, and that illegal file sharing cannot be fully eliminated, just marginalized. Analysts involved in the DRM debate speculate that honest users may gravitate toward PPU models as it provides a legitimate alternative to illegal file sharing, although they have been criticized for their lack of selection.

Bandwidth Management Technology

Bandwidth management technology (BMT) is a slightly lower-profile solution to piracy, and exemplifies how educational institutions are working with the technology and content factions. BMT allows schools to limit the amount of bandwidth used for file sharing. For example, Oregon State University and Northwestern University have already implemented BMT; the University of Southern California and Yale have opted for the technology.ⁱⁱ

The content industry finds BMT a satisfactory solution to on-campus piracy – the RIAA maintains a “hands-off” policy towards schools so long as they have a file-sharing policy.ⁱⁱⁱ BMT enables schools to centralize oversight of DRM and empowers the technology and software factions to freely create new DRM solutions.

Light DRM

The majority of content, technology, software factions, ISPs, and users agree that a modest level of DRM is necessary. At the federal level, the Hollings bill requires DRM, but the precise level to be mandated remains uncertain. In the private sector, the technology and software factions are implementing watermarks and passcodes.

A federal mandate could increase the cost of producing technology affecting software companies already actively engaged in creating DRM solutions. While the level of federal government involvement remains unclear, a number of ISPs are developing anti-DRM technology. The implementation of a ‘light level’ of DRM in all technological devices seems quite likely, whether determined by market forces or the government.

Federal Enforcement

This proposed solution refers to the pending Berman and Hollings bills and the current RIAA legal campaign against thousands of individual users.

The technology, consumer, and public interest group factions are opposed to stringent legal enforcement. Various factions have engaged in consensus building—the software, technology, and ISP factions in discussions surrounding the Hollings bill. The bill would make it illegal to produce any technological device without DRM. It also allows for fair use, which appeals to the needs of schools.

Implications

- Private sector efforts being made by the content industry are much more well-received by the software, technology, ISP, and consumer factions than efforts being made in the court or in Congress. These efforts also prioritize customers' needs for simplicity while providing a range of options.
- Market-driven solutions are being developed faster than judicial or legal actions toward implementing DRM technologies. The private sector is fueling the DRM market on its own.
- A report on how consumers view the DRM issue and the range of options being considered by various stakeholder factions and the government would add to the debate. The success of burgeoning PPU models will further inform whether or not honest users will be swayed away from illegal file sharing.

ⁱ Honest users refer to users who only use file sharing Web sites because they have no legal alternative.

ⁱⁱ The RIAA's suit against these schools should not be confused with their current subpoenas against individual students suspected of piracy. The suit pertaining to BMT targeted schools as an entity, not individual users on their networks.

ⁱⁱⁱ Mariano, Gwendolyn. "Schools Declare File-Swapping Truce." *CNET News.com* 14 March 2002.

MATRIX A

DRM Stakeholders and Central Issues

| | Content Industry | Tech Industry | ISPs | Consumers/Users | Federal Government/Courts |
|-------------------------------------|---|--|--|--|--|
| Privacy/ Free Speech | Respect First Amendment rights, but feel consumers jeopardize those rights when they break copyright laws | Do not want to jeopardize customers' First Amendment rights to any degree | Wish to uphold First Amendment rights to protect consumers | Opinion has not yet been solicited; Economist says some are willing to give up rights for content ^{iv} | Currently protect privacy under DMCA of 1998; Two bills currently on floor to weaken protection |
| Fair Use | Anti-Fair-Use; believes it gives hackers an excuse to circumvent DRM ^v | Have tech necessary for fair users, such as passcodes | Believe in providing fair use options to customers | Libraries, schools, researchers strongly advocate for fair use | DMCA currently protects fair use; Brownback bill advocates fair use |
| Piracy | Anti-Piracy; waging legislative and advertising campaigns against pirates | Neither condones or encourages piracy; hurts their revenue | Similarly anti-piracy; hurts revenue | <u>Honest Users</u> : Now opting to pay for content, rather than file-share <u>Pirates</u> : Believe anonymity should be protected and all information should be free | Anti-piracy, Berman and Hollings bills would make it easier to enforce copyright violation; rulings in favor of subpoenaing hundreds of file-sharers |
| Regulation/ Mandates | Advocating for stricter regulation, per Hollings and Berman bills | Already implementing DRM tech and hoping regulation isn't necessary; so long as it doesn't place onus on them to enforce | Would prefer no mandates and continue developing market-driven solutions | Opinion has not yet been sought; some say too much will thwart them, some say users will do anything for content ^{vi} | Being urged to pass stricter regulation than DMCA offers |
| Artistic Freedom | Do not want to be discouraged by prospect of copyright violators undermining profits | Want to encourage among users, but do not want to do so at the cost of the content providers, as it will ultimately hurt their revenue | Also want to encourage among users, but not at expense of content industry, as it will ultimately hurt their revenue | Do not wish to have access to content as inspiration thwarted | Wish to encourage among content faction and users, but not at expense of copyright owners |

MATRIX A

DRM Stakeholders and Central Issues

| | Content Industry | Tech Industry | ISPs | Consumers/Users | Federal Government/Courts |
|------------------------------|--|---|---|--|--|
| Technological Freedom | Seem like they want to be team players, but have content innovation as first priority | Huge priority—currently implementing and developing new versions of DRM | Huge priority—currently implementing and developing options for users | Huge priority for pirates to develop anti-DRM; Honest users don't care, so long as they have technological options | Wish to keep up a healthy tech market, but legislation may force industry to implement specific kinds of DRM |
| Enforcement | They want federal gov't to mandate that tech or ISPs implement DRM in all devices and to allow them to access pirates' files | Want no responsibility for enforcing copyright violations; think content faction should enforce | Want no responsibility in violating customers' privacy | Whether honest users or pirates, want little responsibility | Can't not take part in enforcing copyright violations |
| Current Legislation | Pushing hard for Hollings and Berman bills | Fine w/leg as is (DMCA), but doesn't want to be made responsible for enforcing law | Fine w/DMCA as-is; anti Berman and Hollings bills, advocate for Boucher and Brownback bills | <u>Fair Use Advocates</u> : want DMCA to remain, oppose Hollings and Berman; <u>Pirates</u> : Oppose Berman and Hollings legislation | Investigating the issue in Congressional Caucus on Intellectual Property Promotion and Piracy Prevention |

^{iv} Lyon, Gordon. "The Internet Marketplace and Digital Rights Management," *National Institute of Standards and Technology*.

^v Motion Picture Association of America, Inc. "Digital Rights Management: Promoting Consumer Choices and Content Security," *One Pager Issue Briefs* for Advisory Committee to the Congressional Internet Caucus.

^{vi} Association for Competitive Technology, *One Page Issue Briefs* for Advisory Committee to the Congressional Internet Caucus and Lyon, Gordon⁽ⁱ⁾.

MATRIX B

DRM Proposed Solutions and Benefits

| | Key Players/ Who's Who | Key Positions and Contentions | Proposed Solutions | Proposed Benefits/Outcomes |
|------------------------|---|---|---|---|
| Content Industry | <ul style="list-style-type: none"> Recording Industry Association of America (RIAA, Cary Sherman) Motion Picture Association of America (MPAA, Jack Valenti) Book publishers Content owners (Disney, Viacom) Music labels (EMI, Vivendi, Warner) | <ul style="list-style-type: none"> For extreme copyright protection/DRM per federal mandate(s) and private ventures Believe peer-to-peer (P2P) networks, such as Kazaa, hurt revenue Believe fair use is an excuse for hackers | <ul style="list-style-type: none"> Support Berman and Hollings legislation that requires DRM in every form of digital content and allows copyright owners to track suspected perpetrators Track down perpetrators and sue Sony and Universal sold Pressplay to Roxio, who will sell songs under Napster name—pay-per-use | <ul style="list-style-type: none"> Encourage content owners to release material on digital formats, thus encouraging economy Will further protect honest users Centralizes control of copyrighted material Allows fair use w/in homes Makes examples of violators Napster familiarity, but more legal |
| Software Manufacturers | <ul style="list-style-type: none"> Microsoft Sun Microsystems Intel Linux Apple Dell | <ul style="list-style-type: none"> Federal mandate for DRM implementation may increase cost-base More for market-driven solutions, not federal mandates; although many signed on to amicus brief in support of RIAA against Verizon Will incorporate DRM at own pace | <ul style="list-style-type: none"> Microsoft: Next - Generation Secure Computing Base (NGSCB) allows creators to decide who gets to print, copy and forward MS also working w/ Macrovision on DRM; dual-session copying Apple released iTunes, pay-per-use model w/music catalogs licensed on liberal terms Developing software for schools to limit bandwidth for file-sharing | <ul style="list-style-type: none"> Empowers the user to be proactive in protection Avoids federal mandates Ensures confidentiality of legal and medical records Files can “sunset” after a certain date Dual session: allows users to play on CD player and Windows Media Player Allows same activities previously afforded to honest users Use of Windows Media doesn't confuse users |

MATRIX B

DRM Proposed Solutions and Benefits

| | Key Players/ Who's Who | Key Positions and Contentions | Proposed Solutions | Proposed Benefits/Outcomes |
|------------------------------|---|---|--|---|
| Tech Manufacturers | <ul style="list-style-type: none"> • Sony • Philips • Nokia • Thompson Multimedia • Intel • IBM • Hewlett-Packard • Fujitsu • Panasonic • Sharp | <ul style="list-style-type: none"> • Do not want to enforce copyright laws | <ul style="list-style-type: none"> • Sony and Nokia put DRM into hi-fi and hand-held devices • Sony and Philip acquired Intertrust (DRM company) • Thompson Multimedia-digital fingerprinting • Digital Home Working Group (DHWG) made up of Intel, Sony, MS, Nokia, Fujitsu, etc., created interoperability to openly share content • Packeteer/ WiseWan—bandwidth management technology for schools | <ul style="list-style-type: none"> • Protecting copyrighted material from being transferred from gadget to gadget • DHWG puts software and electronics manufacturers on same page • Simplifies, doesn't confuse consumers • Avoids federal involvement • DHWG uses public domain content, can incorporate DRM on own terms • Helping schools protect themselves from students' piracy |
| | | <ul style="list-style-type: none"> • Open to incorporating DRM at their own, cautious pace | | |
| | | <ul style="list-style-type: none"> • Intel, IBM, HP lobbying against federal mandates | | |
| ISPs and Digital "Middlemen" | <ul style="list-style-type: none"> • Verizon • Earthlink • AOL Instant Messaging • Yahoo Messenger • Kazaa, Morpheus, Gnutella, Limewire • RealNetworks, Inc. • Apple iTunes | <ul style="list-style-type: none"> • Deny responsibility for enforcing copyright laws | <ul style="list-style-type: none"> • RealNetworks, Inc. and Apple iTunes introduced pay-per-use websites • RealNetworks selling songs cheaper: 79¢ ea. • Kazaa introduced pay-per-use website, Streamwaves | <ul style="list-style-type: none"> • Convenient b/c doesn't thwart consumers with too much DRM • Music is streamed, not downloaded and less likely to be copied • Offers free 30-second samples • Gets honest-paying subscribers • Eventually crowds out unprotected files |
| | | <ul style="list-style-type: none"> • Want to protect privacy of their customers | | |
| | | <ul style="list-style-type: none"> • Want to preserve freedom of information online | | |
| | | <ul style="list-style-type: none"> • For market-driven solutions, not federal mandates | | |

MATRIX B

DRM Proposed Solutions and Benefits

| | Key Players/ Who's Who | Key Positions and Contentions | Proposed Solutions | Proposed Benefits/Outcomes |
|---|--|---|---|---|
| Consumers/ Users | <ul style="list-style-type: none"> Content purchasers Businesses Schools/Libraries Pirates | <ul style="list-style-type: none"> Content purchasers and businesses: Willing to pay for copyright and want privacy to be protected, although are generally apathetic towards DRM^{vii} Schools/Libraries: Want fair use protected; do not want to be forced to turn over identity of students via subpoenas Pirates: Do not want to pay for copyright and want total privacy; argue that P2P enhances sales | <ul style="list-style-type: none"> "Vote with our dollars,"^{viii} and let consumers try out which forms of DRM increase revenue Solicit consumer input as to why content sales have plummeted, instead of basing evidence on sales figures Schools: fight RIAA's subpoenas^{ix} Leave DRM at status quo | <ul style="list-style-type: none"> Retain free information flow of Internet Keep control of music decentralized Keeps power w/public, not elite few Avoid causal link between P2P networking and decreased revenue Ensure fair use! Build consumer confidence |
| Public Interest Groups^x | <ul style="list-style-type: none"> NetCoalition Electronic Frontier Foundation (EFF) Electronic Privacy Information Center (EPIC) American Civil Liberties Union (ACLU) American Library Association (ALA) Friends of Fair Use | <ul style="list-style-type: none"> NetCoalition, EFF, EPIC, ACLU want to preserve privacy of online users; strongly against federal mandates and subpoenas ALA, and Friends is for fair use for research purposes Believe content industry wants DRM to increase revenue, not protect consumers or artists | <ul style="list-style-type: none"> NetCoalition has asked for information and initiated dialogue w/RIAA over subpoenas; RIAA complied Want "Hollywood" to accept that there is no perfect business model for copyright protection Create legislation that allows for "wobble room" creative and tech industries are based upon EFF organizing student rallies and putting ads in Rolling Stone to push alternative DRM leg. | <ul style="list-style-type: none"> NetCoalition's letter shows constructive attitude; RIAA's willingness to meet is first step^{xi} Retain rights to "time-shift" viewing, "space-shift," backup copies, use medium of choice, translate content into comparable formats Retain fair use rights Retain free information flow of Internet EFF honing in on target file-sharing population |

MATRIX B

DRM Proposed Solutions and Benefits

| | Key Players/ Who's Who | Key Positions and Contentions | Proposed Solutions | Proposed Benefits/Outcomes |
|---------|--|---|---|--|
| Artists | <ul style="list-style-type: none"> Singers/Songwriters (Metallica, Madonna) Actors, screenwriters Screen Actors Guild (SAG) American Society of Composers, Authors, and Publishers (ASCAP) | <ul style="list-style-type: none"> SAG and ASCAP filed amicus briefs to Universal City Studios v. Reimerdes case urging court to uphold anti-piracy ruling | <ul style="list-style-type: none"> Propose DRM in all digital content per Hollings bill | <ul style="list-style-type: none"> Keep revenue flowing to copyright owners Encourages creativity and innovation |
| | | <ul style="list-style-type: none"> Other artists feel content industry are fighting for money, not artist's rights, and encourage free proliferation of content (Pearl Jam, Dave Matthews) | <ul style="list-style-type: none"> Copyleft licensing; permission from artist to redistribute content (ex: EFF's Open Audio License) | <ul style="list-style-type: none"> Copyleft: decriminalizes file-sharing and gives license rights to artist |
| | | | <ul style="list-style-type: none"> Produce music that takes up more space | <ul style="list-style-type: none"> Makes sharing very difficult Can retain prices |

MATRIX B

DRM Proposed Solutions and Benefits

| | | | | |
|---------------------------|---|--|--|--|
| Federal Government | <ul style="list-style-type: none"> Congress Digital Management Copyright Act (DMCA) Senator Brownback (R-Kan) Senator Wyden (D-Or) Rep. Berman (D-Ca) Senator Hollings (D-S.C.) Rep. Mary Bono (R-Ca) US Senate Committee on the Judiciary, "Protecting Creative Works in the Digital Age"; Chairman Orrin Hatch and ranking Democrat Member Patrick Leahy FCC Undersecretary of Commerce for Technology | <p>Positions taken in favor of consumer:</p> <ul style="list-style-type: none"> DMCA currently protects fair use and circumvention for legitimate research purposes Brownback for fair use Wyden for informing consumer of DRM | <p>Congressional action in favor of consumer:</p> <ul style="list-style-type: none"> <u>Consumer, Schools and Libraries Digital Rights Management Awareness Act</u>. Sen. Sam Brownback to protect fair use in 2003 to protect fair use Rep. Rick Boucher's bill for fair use rights. Wyden's <u>Digital Consumer Right to Know Act</u> | <p>Brownback and Wyden's bills:</p> <ul style="list-style-type: none"> Balances needs of owners, protects research uses Inform consumers of their power to affect DRM market Disallows digital watermarks or fingerprinting w/o consumer's knowledge, to prevent incompatibility |
| | | <p>Positions taken in favor of extreme DRM and anti-fair use:</p> <ul style="list-style-type: none"> Berman and Hollings are for strict DRM, anti-fair use FCC introduced idea of broadcast flag; idea died in Dec., 2002 Rep. Bono will soon announce Congressional Caucus on piracy and intellectual property^{xii} | <p>Congressional action in favor of content industry:</p> <ul style="list-style-type: none"> Berman P2P Hacking Bill would allow content industry to access computer files of suspected pirates and not make methods known to public. Not yet introduced in 2003. Hollings' bill, <u>Security Systems Standards and Certification Act</u>. (SSSCA) wants built-in DRM in all consumer digital devices. To be reintroduced in 2003. | <p>Berman's bill:</p> <ul style="list-style-type: none"> Copyright owner can protect property, otherwise afforded to satellite and software companies Will not impair P2P networks Creates level playing field for P2P and anti-P2P innovative freedom Creates safe harbor No viruses or destruction used in process <p>Hollings's bill:</p> <ul style="list-style-type: none"> Promotes broadband and digital TV economy Allows fair use at home Keeps rights of copyright owners as priority |

^{vii} In-Stat/MDR report, "DRM in 2003: Are We Making Any Progress?"

MATRIX B

DRM Proposed Solutions and Benefits

^{viii} Levy, Steven. “Info with a Ball and Chain.” *Newsweek* 23 June 2003.

^{ix} A judge upheld a challenge by Massachusetts Institute of Technology and Boston College that subpoenas were filed incorrectly.

^x List of Public Interest Groups is not exhaustive; EFF, EPIC, and ACLU are most representative of extreme, anti-DRM, pro-consumer groups. Others include: Digitalconsumers.org, People for the American Way (PFAW), Center for Democracy and Technology (CDT), Competitive Enterprise Institute, New Yorkers for Fair Use, New York Linux Scene (NYLXS), [Alliance for Digital Progress](#).

^{xi} Borland, Jon. “ISP Group Challenges RIAA Subpoenas.” *CNET News.com* 11 August 2003.

^{xii} “Mary Bono’s Raring to Run RIAA,” *Associated Press* 16 June 2003.

MATRIX B: Addendum

Key Cases and Judicial Action

| | Key Players/ Who's Who | Key Contentions and Positions | Proposed Solutions | Proposed Benefits/Outcomes |
|--|---|---|---|--|
| Key Court Cases and Judicial Action | <ul style="list-style-type: none"> Universal City Studios, Inc. v. Reimerdes (2001) RIAA v. Verizon/Earthlink (2003) Eldred v. Ashcroft (2003) Dastar Corp. v. Twentieth Cent. Fox Films (2003) | <p>Cases ruled in favor of content industry:</p> <ul style="list-style-type: none"> Reimerdes case (funded by EFF) ruled in favor of Studios; first amendment does not protect posting codes that crack DVD DRM on personal websites RIAA case upheld RIAA's request for names of suspected pirates Eldred case upholds Congress's extension of copyright life to 95 years | <p>Cases ruled in favor of fair use:</p> <ul style="list-style-type: none"> Court overturned ruling that Dastar had used Fox film without paying copyright fees because Fox had not renewed copyright license; in favor of public domain content | <p>Implications of said rulings:</p> <p>Reimerdes case</p> <ul style="list-style-type: none"> Shows that DMCA is limited in First Amendment protection (e.g., won't protect cracking of DRM codes, nor posting them) <p>RIAA case</p> <ul style="list-style-type: none"> Shows that P2P file sharers are not anonymous and personal information is subject to exposure <p>Eldred case</p> <ul style="list-style-type: none"> Shows public domain content (not copyrighted) is diminishing <p>Dastar case</p> <ul style="list-style-type: none"> Whatever is public domain is fair game |

MATRIX C

Key Proposed Solutions and Their Implications

Key:

- + Faction advocates for proposed solution
- Faction advocates against proposed solution
- ∅ Faction takes neutral stance or has no reaction to proposed solution

| Factions | Pay-Per-Use (PPU) Models | Bandwidth Management Technology (BMT) | Light DRM in all Technological Devices | Federal Enforcement / Judicial Action | IMPLICATIONS |
|---|--|--|---|---|---|
| CONTENT FACTION (RIAA, MPAA, book publishers, etc.) | + Vivendi Universal and Sony sold Pressplay subscription service to Roxio, who purchased rights to Napster name; Shawn Fanning, founder, is pursuing service under Napster name Universal is also offering music at BuyMusic.com. | + Support use; will not sue schools so long as they have an anti-P2P policy Currently educating schools on copyright infringement and taking “hands-off” approach, allowing schools to develop policies ^{xiii} | + Strongly support Hollings bill that creates federal mandate for DRM Strong advocates for PPU models, i.e., RIAA support Scott Blum’s BuyMusic.com ^{xiv} | + Want DRM in all tech. devices per Hollings bill Filed at least 871 subpoenas to individual users under DMCA in July 2003, but agreed to talks with NetCoalition (ISPs) Already subpoenaed four individual distributors and settled with one company for at-work piracy For Berman bill that allows content ind. to access suspected pirates’ files and destroy | <ul style="list-style-type: none"> ▪ Blames piracy for slumping revenues ▪ Waging relentless campaign against suspected pirates (individuals, companies, schools) ▪ Currently holds ISPs responsible for helping identify pirates ▪ Anticipated meeting with NetCoalition is first step in negotiations ▪ Deal with Napster shows openness to market-driven solutions ▪ BMT: Policy with schools show a more lenient, cooperative stance and tolerance of technology that at least limits piracy to a degree ▪ Want to allow fair use in homes ▪ Will likely retreat from legal campaign if effective DRM becomes more prevalent by market strategies and piracy is greatly reduced |

MATRIX C

Key Proposed Solutions and Their Implications

| Factions | Pay-Per-Use (PPU) Models | Bandwidth Management Technology (BMT) | Light DRM in all Technological Devices | Federal Enforcement / Judicial Action | IMPLICATIONS |
|---|---|--|---|---|---|
| SOFTWARE FACTION (Microsoft, Apple, Dell, Business Software Alliance, Interactive Digital Software Association) | + Apple's iTunes used liberally-licensed songs from content industry ^{xv} BuyMusic.com uses Windows Media software from Microsoft | + NetReality's WiseWan and Packeteer allocate small amount of bandwidth for file-sharing, block file-sharing entirely, or limit activity to certain hours ^{xvi} | + Currently developing light DRM such as NGSCB, dual-session copying, iTunes, Microsoft's Windows Media Player uses Macrovision DRM | + Multiple software groups signed on to amicus brief in support of RIAA's case against Verizon ^{xvii} Ø Regarding federal enforcement of DRM, actions taken suggest that they believe market forces and current DRM developments made in the private sector will help marginalize piracy faster than federal law. | <ul style="list-style-type: none"> ▪ Definitely wants to curb piracy and support RIAA litigation campaign ▪ Currently collaborates with content and tech industries on market-driven solutions ▪ Accepts notion that P2P trading is imminent and cannot be fully eliminated, but marginalized ▪ Retains value of customers by trying not to confuse them and provide simple solutions ▪ Affords same rights previously so to honest users ▪ iTunes' success shows interest in PPU exists ▪ Accepts that information isn't free |

MATRIX C

Key Proposed Solutions and Their Implications

| Factions | Pay-Per-Use (PPU) Models | | Bandwidth Management Technology (BMT) | | Light DRM in all Technological Devices | | Federal Enforcement / Judicial Action | IMPLICATIONS |
|---|--------------------------|---|---------------------------------------|---|--|---|--|--|
| TECHNOLOGY FACTION (Sony, Nokia, Thompson Multimedia, Intel, IBM) | + | So long as responsibility to enforce is on copyright owners | + | Developing and installing Packeteer and WiseWan at schools and soon in businesses—already installed at Oregon State University and Northwestern University. | + | Sony/Nokia have installed in handhelds, Thompson is using digital fingerprinting, Sony/Philip acquired DRM company, Intertrust, Microsoft installed Macrovision DRM into Windows Media Player | - <div>Intel, IBM, HP formed Alliance for Digital Progress to lobby against MPAA- do not want federal mandates.</div> <div>They believe current DRM developments will help curb piracy faster than federal mandates.</div> <div>Do not want cost-base to increase.</div> | <ul style="list-style-type: none"> ▪ Retains value of customers by trying not to confuse them and providing interoperable technology ▪ Places responsibility of enforcement on copyright owners ▪ Collaborates with schools to help marginalize piracy ▪ Relies on market forces to resolve the issue more than federal law ▪ Accepts that information isn't free |

MATRIX C

Key Proposed Solutions and Their Implications

| Factions | Pay-Per-Use (PPU) Models | Bandwidth Management Technology (BMT) | Light DRM in all Technological Devices | Federal Enforcement / Judicial Action | IMPLICATIONS |
|--|--|--|---|---|---|
| ISPS AND DIGITAL MIDDLEMEN (Verizon, Earthlink, Kazaa, Morpheus) | <div> <div>+</div> <div> <p>Many models introduced such as RealNetworks, iTunes, Streamwaves work w/ popular file-sharing sites, such as Kazaa, to introduce PPU models</p> <p>Morpheus Chief Executive on record for saying he's "open to any business opportunity"^{xviii}</p> </div> </div> <div> <div>Ø</div> <div> <p>Grokster President, Wayne Ross advocates for a flat-fee service^{xix}</p> </div> </div> | <div> <div>Ø</div> <div> <p>No reaction on record, however, BMT gives option to limit or "manage" file-sharing, not eliminate it</p> </div> </div> | <div> <div>+</div> <div> <p>So long as freedom of information is preserved and file-sharing is still valued</p> </div> </div> <div> <div>-</div> <div> <p>Backlash is emerging with development of Kazaa Lite and Earthstation 5, which mask ID information</p> </div> </div> | <div> <div>-</div> <div> <p>Against Berman and Hollings legislation</p> <p>Strongly support Brownback bill, counters other two bills</p> <p>Believe pay-per-use models will be sufficient for enforcing piracy</p> <p>Currently working w/ software and tech industries to curb piracy through market</p> <p>Verizon appealed RIAA's subpoenas</p> <p>RIAA accepted request for talks by NetCoalition</p> </div> </div> | <ul style="list-style-type: none"> ▪ Very much wish to rely on market forces to marginalize pirates ▪ Place responsibility of enforcement on copyright owners ▪ Consumer retention valued shown through use of PPU sites ▪ Willing to work w/content, tech, and software industries to develop market solutions ▪ Honest users use illegal file-trading because it's the only option; if given a PPU option, honest users will leave illegal sites ▪ iTunes is only "success story" providing evidence that PPU models will be successful, thus confidence in PPU models is somewhat fragile ▪ Unsure if users will migrate to other free sites ▪ Accepts that information isn't free |

MATRIX C

Key Proposed Solutions and Their Implications

| Factions | Pay-Per-Use (PPU) Models | Bandwidth Management Technology (BMT) | Light DRM in all Technological Devices | Federal Enforcement / Judicial Action | IMPLICATIONS |
|-----------------------|---|---|---|---|--|
| CONSUMERS: | | | | | |
| Honest Users | + Honest Users: Will pay small fee for security ^{xxi} | + Still allows for honest file-sharing | + Light DRM will not change their file-sharing activities | ∅ P2P use declined by 15% after subpoenas were issued by RIAA ^{xxiii} | <ul style="list-style-type: none"> Want to retain the positive and honest values of file-sharing and P2P networks Want to retain honest use activities |
| Schools/Libraries | ∅ Schools: So long as they retain fair use exception under DMCA; working with content industry to get discounted PPU models on campus | + Minimizes amount of space for file-sharing for other programs to run; Indiana, USC, and Yale have installed in lieu of being sued | + Screens those who are eligible for fair use access, but do not want DRM to thwart fair use access | - Want DMCA fair use exception to remain; support Brownback bill to protect fair use Boston College and MIT were granted request not to comply with RIAA subpoenas based on FERPA violation. ^{xxiv} | <ul style="list-style-type: none"> Use DRM as a tool to screen abusers of fair use policy Tech and software factions fear that extreme or restrictive federal DRM mandates will thwart consumers, particularly when the market is beginning to offer honest-user options Schools do not want to be in position to turn in identity of students; open to BMT and discounted PPU models |
| Pirates ^{xx} | - Pirates: Do not want to pay for any content and argue that PPU models do not offer the esoteric selection available on P2P networks | ∅ Still allows for file-sharing, just slows down pirates | - Do not want to be screened from content Constantly developing technology that counters DRM, such as “swarming” tech. ^{xxii} | - Do not want any DRM mandates or privacy infringed upon | <ul style="list-style-type: none"> Consumer/User opinion has not been formally solicited or researched as to why they use P2P file-sharing sites (free cost, selection, preview ability, freedom to sample) in order to predict whether or not PPU will succeed |

MATRIX C

Key Proposed Solutions and Their Implications

| Factions | Pay-Per-Use (PPU) Models | Bandwidth Management Technology (BMT) | Light DRM in all Technological Devices | Federal Enforcement / Judicial Action | IMPLICATIONS |
|--|--|--|--|--|--|
| PUBLIC INTEREST GROUPS (EFF, EPIC, ACLU, boycott-RIAA.com, digitalconsumer.org) | ∅ Many groups believe PPU's compromises the freedom of information available on Internet, although PPU's give consumers an option instead of an obligation | ∅ No reaction on record, however, BMT only limits amount of space to file-share, it does not stop it | - Do not want to compromise freedom of anonymity or disclose personal info in exchange for content | - For Brownback fair use bill and Wyden's Right to Know Act Believe Hollings and Berman bills violate First Amendment rights | <ul style="list-style-type: none"> ▪ Oppose content faction's forcing ISPs to expose suspected pirates ▪ Priority is on customer's First Amendment rights ▪ Advocate for legislation that allows "wiggle room" in file-sharing—do not restrict market^{xxv} ▪ Do not believe DRM will stop piracy^{xxvi} and wish to rely on market forces to resolve piracy |
| ARTISTS/ ARTIST GROUPS (Metallica, Dr. Dre, Michael Jackson, Screen Actor's Guild (SAG), American Society of Composers, Authors, and Publishers (ASCAP)) | + Artists do not want to be cheated out of royalties - ===== Indie/fringe artists value exposure granted by P2P networks; Pearl Jam only distributes music online ^{xxvii} | + Dr. Dre and Metallica endorse; they dropped formal complaint against schools after they adopted the technology ^{xxviii} | + Wish to marginalize piracy as much as possible and to receive just revenue | + SAG and 20+ artist groups signed onto amicus brief in support of RIAA's case against Verizon ^{xxix} - ===== Michael Jackson opposed to legal action taken against "downloaders." ^{xxx} | <ul style="list-style-type: none"> ▪ Except for fringe artists, most artists side with content faction in strict, anti-piracy stance ▪ Artist's priority is revenue and seems to rely on federal mandates or courts to enforce ▪ Openness to BMT suggests that artists are willing to compromise so long as impact of piracy is minimized. |

MATRIX C

Key Proposed Solutions and Their Implications

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- ^{xiii} Mariano, Gwendolyn. "Schools Declare File-Swapping Truce." *CNET News.com* 14 March 2002.
- ^{xiv} Agence France-Presse. "Record Labels Support Site: BuyMusic.com Selling Songs Legally." *Globeandmail* 24 July 2003.
- ^{xv} Newton, Jon. "...Offering Carrots and Wielding Sticks..." *MP3 Newswire.net* 8 June 2003.
- ^{xvi} Mariano, loc cit.
- ^{xvii} Software groups include Business Software Alliance, Interactive Digital Software Association, and Software & Information Industry Association.
- ^{xviii} Menn, Joseph and Jon Healey. "Napster Creator May be Set for Comeback." *Latimes Online* 7 July 2003.
- ^{xix} Ibid.
- ^{xx} In Gordon Lyon's "The Internet Marketplace and Digital Rights Management," he characterizes web customers as "Honest Passive," "Dishonest Passive," "Honest Active," and "Dishonest Active." "Pirates," as I have used the term indicates those who Lyon would refer to as both Dishonest Active (DA) and Dishonest Passive (DP) customers. DA customers are described as "political agents, criminals and unethical enthusiasts" who need "constant vigilance." DP customers are described as taking "unauthorized, free versions of materials...opportunistically as encountered." "Honest Users," as I have used the term indicates those who Lyon would refer to as both Honest Active (HA) and Honest Passive (HP) customers. HA customers are described as perhaps a corporate entity who "acts fundamentally in good faith." HP customers are described as the "easiest customer class" who "obeys agreed-upon rules, makes no effort to find or distribute illegal copies and rejects any stolen materials that may be received." (p.3)
- ^{xxi} In Stat/MDR Report, "DRM in 2003: Are We Making Any Progress?" June 2003.
- ^{xxii} "Swarming" technology, according to Brian Krebs in his June 26, 2003 article, "Online Piracy Spurs High-Tech Arms Race," "allows users to chop up big files into manageable chunks that are stored on numerous systems throughout the P2P provider's network...downloading it to the computer much more quicker." Other counter-DRM technological advances include Peer Guardian, which blocks Internet addresses the music industry use to spy on P2P network users.
- ^{xxiii} Nielsen/Net Ratings. "File-Sharing Application Usage Dips After Warning from the Recording Industry, According to the Nielsen/NetRatings." 14 July 2003.
- ^{xxiv} Associated Press. "Schools Fight Music Piracy Subpoenas." *CNN.com* 23 July 2003. Harmon, Amy. "Internet Providers Question Subpoenas to Stop File Swapping." *Nytimes.com* 11 August 2003.
- ^{xxv} Weinberger, David. "Copy Protection is a Crime Against Humanity." *Wired* 11 June 2003.
- ^{xxvi} Bowman, Lisa. "Labels Aim Big Guns at Small file Swappers." *CNET News.com* 25 June 2003.
- ^{xxvii} MacMillan, Robert. "Internet Sparks a Copyright Fire." *Washingtonpost.com* 24 June 2003.
- ^{xxviii} Mariano, loc cit.
- ^{xxix} Other groups include AFMA (formerly American Film Marketing Assn.), Directors Guild of America, Producers Guild of America, Writers Guild of America, Graphic Artists Guild, American Federation of Television and Radio Artists, American Federation of Musicians of the United States and Canada, Broadcast Music, Inc., Association for Independent Music, Recording Artists Coalition, Association of American Publishers, American Society of Media Publishers, and Professional Photographers of America.
- ^{xxx} Associated Press. "Michael Jackson: Don't Jail Downloaders." *CNN.com* 22 July 2003.

APPENDIX A

Glossary of Stakeholders

Note: What follows are examples and names of those who represent key stakeholders in the DRM issue. This glossary is not exhaustive, but includes the names of key players within each faction discussed in this report.

Artists: Singers/Songwriters, Actors, Screenwriters, Screen Actors Guild (SAG), American Society of Composers, Authors, and Publishers (ASCAP)

Consumers/Users :

Honest Users: Consumers willing to pay for content if given a legal alternative.

Pirates: Consumers of copyrighted material who actively seek out venues to obtain the material without payment.

Schools: Universities, colleges, secondary and primary education institutions.

Businesses: Any organization with employees who may file-share.

Content Industry: Recording Industry of America (RIAA), Sony Music, Universal Vivendi, Motion Picture Association of America (MPAA), Disney, Viacom, etc.

Federal Government: Senators Brownback, Hollings, and Wyden. Representatives Bono, Berman, and Boucher. Congressional Caucus on Piracy and Intellectual Property, the FCC, Senate Committee on the Judiciary, “Protecting Creative Works in the Digital Age,” Chairman Orrin Hatch and ranking Democrat Member Patrick Leahy.

ISPs and Digital Middlemen: Verizon, Earthlink, America OnLine (AOL), Yahoo, Kazaa, Morpheus, Gnutella, Limewire, RealNetworks, Apple’s iTunes.

Public Interest Groups : NetCoalition, Electronic Frontier Foundation (EFF), American Civil Liberties Union (ACLU), Electronic Privacy Information Center (EPIC), American Library Association (ALA), Friends of Fair Use.

Software Industry: Microsoft, Sun Microsystems, Intel, Linux, Apple, Dell.

Technology Industry: Sony, Philips, Nokia, Thompson Multimedia, Intel, IBM, Hewlett-Packard, Fujitsu, Panasonic, Sharp.

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