



# Federal Trade Commission

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## **A Different Perspective on DRM**

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The timing for this conference is impeccable. The debate over Digital Rights Management – DRM – has reignited in the last six weeks thanks to Steve Jobs, the settlement of the Sony “root kit” case, and the release of Microsoft Vista. I think this public debate is a good thing.

The focus of the debate over DRM – and rightfully so – has been on the scope of copyright. I think I bring a slightly different perspective to DRM as someone who is focused on consumer protection and competition issues. As I look at the digital marketplace, I am not sure the bedrock consumer protection and competition principles that are deeply embedded in the Commission’s case law need to be reworked. Yes, there are new problems – the recent Sony case is one example. However, I am not yet convinced that there is a need for new solutions in

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<sup>1</sup> The views stated here are my own and do not necessarily reflect the views of the Commission or other Commissioners. I would like to express my gratitude to Kyle Andeer, Elizabeth Delaney, Serena Viswanathan, and Holly Vedova, my attorney advisors, for their invaluable contributions to this paper.

the form of new rules.

My goal today is to explore some of the consumer protection and competition issues with DRM and explain how those issues can be analyzed under existing Commission case law. Many of the issues have arisen in the context of digital music but I think the issues raised by DRM extend to a number of different markets – whether it be digital media and entertainment or the application of DRM in enterprises to secure sensitive or confidential information.

## **I. CONSUMER PROTECTION**

DRM raises three distinct issues in my mind when it comes to the Commission's consumer protection mission. First, there are the disclosure obligations when selling DRM-encrypted materials. Second, there are the obligations to protect privacy, including confidential information about one's employees and customers. Third, there is a growing concern about unwanted software and the potentially harmful effects on consumers' computers. I believe that the Commission's traditional consumer protection principles, which have served us well in many different areas, apply with equal force to what I will call "consumer media" DRM. Technology has changed the playing field, but not the rules by which individual firms must play.

The Commission's recent settlement with Sony BMG is a good example.<sup>2</sup> In 2005, Sony began shipping compact discs with DRM software. That software did several things. First, it allowed the user to make only a limited number of digital copies and it also prevented consumers from "ripping" the music to common digital formats. Second, the digital music files were compatible with only Sony BMG and Microsoft portable devices – thus for example, the consumer could not import that music into iTunes and play it on iPod devices. Third, the DRM

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<sup>2</sup> *In re Sony BMG Music Entertainment*, FTC File No. 062 3019 (posted for public comment Jan. 30, 2007) (consent decree) (available at <http://www.ftc.gov/os/caselist/0623019/index.htm>).

software was loaded automatically onto a user's computer when the user played or burned a copy of an encrypted CD on that computer. However, the software included cloaking technology – frequently referred to as a “root kit” – that made it hard to remove from the system. At the same time, that technology left the user's computer vulnerable to external attack – in essence, it opened a backdoor for hackers. Finally, consumers had to use Sony's media player to play the music. That player would “phone home” to Sony's servers when a CD was played and it allowed Sony to monitor usage and serve ads.

The settlement focused on Sony's failure to adequately disclose the existence and effects of its DRM software and the unfair nature of Sony's installation practices. I think the case provides an excellent road map for the many consumer protection issues raised by DRM.

First, there is the failure to disclose the material limitations on consumers' use of the CD imposed by Sony's DRM technology. The Commission has long insisted that consumers be given adequate notice of the terms on which goods or services are being made available to them, including any material limitations.<sup>3</sup> Unless otherwise advised, I think consumers have the right to expect that their CDs come without copying limitations, and to expect that the music on those CDs will play on any device. This position is not without precedent. Several years ago, when personal digital assistants were being touted as wireless communications devices, the Commission brought actions against the manufacturers of several handheld computers. We alleged the companies failed adequately to disclose that the devices could not actually access the

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<sup>3</sup> See *Thompson Medical Co.*, 104 F.T.C. 648, 842-43 (1984), *aff'd*, 791 F.2d 189 (D.C. Cir.1986) (requiring simultaneous audio and visual disclosure of certain information); see also “Facts for Business: Dot Com Disclosures,” available at <http://www.ftc.gov/bcp/online/pubs/buspubs/dotcom/index.html> (“If qualifying information is necessary to prevent an advertisement from being misleading, advertisers must present the information clearly and conspicuously.”).

internet wirelessly, unless the consumer also purchased additional equipment and services.<sup>4</sup> Likewise, with DRM, any material limitations of use rights (including, but not limited to, technological limitations such as an inability to use the media on another platform) must be clearly and conspicuously disclosed before a sale of those media is made.

Similarly, Sony did not inform consumers that its mandatory, proprietary media player would collect information from users' computers and use it to serve advertisements. I think consumers have the right to expect to be able to play their CDs on their computers, without being monitored and targeted with marketing. The Commission has challenged this type of conduct by adware purveyors,<sup>5</sup> and the same principles apply here. While this issue is not specific to DRM, it illustrates the potential risks for companies that may be tempted to piggyback marketing or other functions onto their DRM schemes. If piggybacking is material to consumers, and particularly if it is not expected in the context of the device or media, it must be disclosed. As a footnote, online behavioral targeting itself raises the specter of data collection and privacy violations. This is a hot topic that the Commission is closely following.

The third aspect of the *Sony* case that harkens back to established Commission cases is the undisclosed and irreversible downloading of software onto consumers' computers. We are entering a world where DRM may be implemented by way of software, hardware, or both.

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<sup>4</sup> *In re Microsoft Corp.*, Docket No. C-4010 (issued May 17, 2001) (consent order) (available at <http://www.ftc.gov/os/caselist/c4010.htm>); *In re Hewlett-Packard Co.*, Docket No. C-4009 (issued May 17, 2001) (consent order) (available at <http://www.ftc.gov/os/caselist/c4009.htm>); *In re Palm, Inc.*, Docket No. C-4044 (issued Apr. 17, 2002) (consent order) (available at <http://www.ftc.gov/os/caselist/0023332/index.htm>).

<sup>5</sup> *In re Zango, Inc. et al.*, File No. 052 3130 (issued Nov. 2, 2006) (consent order) (available at <http://www.ftc.gov/os/caselist/0523130/index.htm>); *In re Direct Revenue, LLC et al.*, File No. 052 3131 (issued Feb. 20, 2007) (consent order) (available at <http://www.ftc.gov/os/caselist/0523131/index.htm>).

Regardless of how it is delivered, consumers must know what they are getting before they buy.

The Commission has brought actions against numerous distributors of spyware and adware; a common theme in these cases is that the companies surreptitiously loaded their software and made it difficult or impossible to uninstall.<sup>6</sup> Sony's use of a root kit to hide its DRM software was a particularly egregious twist on that practice, made even more troublesome by the security vulnerabilities the software created. In all of these cases, the Commission has made clear that this conduct is unfair and illegal. Companies that employ DRM walk a fine line; obviously they need to ensure the viability of their mechanism in order to effectively protect their copyright. However, imposing it on consumers unilaterally without appropriate notice and consent, especially where it may have unintended effects, is problematic.

The story – at least from a consumer protection standpoint – is slightly different when one looks at the application of DRM technology in what I will call the “enterprise” sector. Here, I’m referring specifically to the use of DRM to authenticate users’ rights to documents or information, particularly personal information. We have all heard the stories of the theft or inadvertent disclosure of sensitive information. By controlling access, “enterprise” DRM may be one tool that can be used in this battle to protect personal information and data. But, as we know, no DRM regime is completely hack-proof. It is likely, if not inevitable, that data breaches will occur, even with DRM-protected information.

The Commission has long insisted that when explicit or implicit representations are made to consumers and customers that their privacy will be protected – and those representations are

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<sup>6</sup> *FTC v. Seismic Entertainment Prods. Inc.*, Civ. No. 1:04-CV-00377-JD (D.N.H. Oct. 6, 2004) (complaint) (available at <http://www.ftc.gov/os/caselist/0423142/0423142.htm>); *FTC v. Odysseus Marketing, Inc.*, Civ. No. 1:05-cv-00330-SM (D.N.H. Sept. 21, 2005) (complaint) (available at <http://www.ftc.gov/os/caselist/0423205/0423205.htm>); see also *Zango, Inc.*, and *Direct Revenue, LLC*, *supra* n.5.

readily found when consumers and customers entrust their confidential personal information to others – failing to make good on these representations amounts to deception under the FTC Act.<sup>7</sup> However, when it comes to protecting confidential personal information, the Commission's jurisprudence does not stop at disclosure requirements. Section 5 of the FTC Act prohibits “unfair,” as well as “deceptive” acts and practices. The Commission has held that systemic or systematic shortfalls by custodians in protecting confidential personal information in their possession can be considered an unfair practice.

For example, the Commission obtained a \$15 million settlement from the data broker Choice Point based in part on its unfair practices in failing to secure consumers’ personal information, and has brought numerous similar cases.<sup>8</sup> It seems to me that this principle should apply to DRM when, because of a lack of reasonable procedures, a company fails to protect consumers or customers from theft or other misuse of their confidential personal information. In short, as to this use of DRM, I also think longstanding Commission principles and requirements governing liability are applicable.

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<sup>7</sup> *FTC v. Toysmart.com, LLC*, Civ. No. 00-11341-RGS (D. Mass. filed Jul. 10, 2000) (complaint) (available at <http://www.ftc.gov/opa/2000/07/toysmart.htm>); *In re Eli Lilly and Co.*, Docket No. C-4047 (issued May 8, 2002) (consent order) (available at <http://www.ftc.gov/os/caselist/0123214/0123214.htm>); *In re Gateway Learning Corp.*, Docket No. C-4120 (issued Sept. 17, 2004) (consent order) (available at <http://www.ftc.gov/os/caselist/0423047/0423047.htm>).

<sup>8</sup> *See United States v. ChoicePoint, Inc.*, Civ. No. 106-CV-0198 (N.D. Ga. Feb. 15, 2006) (settlement) (available at <http://www.ftc.gov/os/caselist/choicepoint/choicepoint.htm>); *see also In re CardSystems Solutions, Inc.*, Docket No. C-4168 (Sept. 5, 2006) (consent decree) (available at <http://www.ftc.gov/os/caselist/0523148/0523148.htm>); *In re DSW, Inc.*, Docket No. C-4157 (Mar. 7, 2006) (consent decree) (available at <http://www.ftc.gov/os/caselist/0523096/0523096.htm>); *In re BJ's Wholesale Club, Inc.*, Docket No. C-4148 (Sept. 20, 2005) (consent decree) (available at <http://www.ftc.gov/os/caselist/0423160/0423160.htm>); settlement in *Gateway Learning*, *supra* n. 7.

I believe the Commission has the tools to handle many of the emerging consumer protection issues raised by DRM under its existing statutory authority to prohibit deceptive or unfair practices. The Federal Trade Commission Act has proven very adaptable to changing times. Therefore, at this point, I do not think that we need specific DRM legislation from a consumer protection standpoint. This is not to say, however, that I think the Commission has all the remedial tools it needs to deal with breaches of privacy or other harms attributable to defective DRM. I don't think those tools are adequate. More specifically, for most unfair or deceptive acts or practices, the Commission can and does seek equitable remedies, including consumer redress or disgorgement. In the *Sony* case, for example, consumers were offered refunds and reimbursement to repair any damage to their computers. In reality, however, much of the harm in the *Sony* case and similar cases – restricted use of lawfully-purchased music, breaches of privacy, and unwanted intrusion into users' computers – is difficult to quantify monetarily. And, the companies responsible for the harms do not always have ill-gotten gains to disgorge. Consequently, either through Congressional action or through rulemaking action at the Commission, I would like to see the Commission armed with the authority to seek civil penalties in these types of cases.

## **II. COMPETITION**

I would like to turn to some of the antitrust issues implicated by DRM.

As is so often the case with software, interoperability is front and center in terms of the antitrust issues. Apple, Microsoft, Sony, and others have developed different DRM technologies to encrypt digital content. This has given some comfort to the copyright holders concerned with piracy. However these competing DRM standards limit interoperability – Microsoft's Zune is incompatible with Apple's iTunes. Undeniably, consumers would benefit from increased

interoperability in the digital music marketplace – at least in the short term. The lack of interoperability – and Apple’s market share – has led some to argue that antitrust should be brought to bear. However, I for one am not sure that antitrust – at least at this point in time – should be used to force these companies to make their products interoperable with their competitors.

Apple has sparked the most controversy largely because of the success of iTunes and iPod. Apple has sold over 90 million iPods since 2001 and over 2 billion songs on its iTunes Music Store – no one else comes close in either market. This success has led some to argue that Apple’s tactics violate the antitrust laws.<sup>9</sup> Apple’s refusal to license its DRM solution – FairPlay – to third parties and its refusal to use anything but FairPlay has meant that there is limited interoperability between Apple’s products and competitors’ products. This has made it difficult, if not impossible, for the average consumer – such as myself – to transfer music from iTunes to third party devices. It also means that it is difficult to play music encrypted with third party DRM on an iPod. However, iPod owners are not necessarily locked into iTunes for music – there are a number of other sources, including CDs and sites like eMusic, that do not encrypt their music files.

I do not know enough about the facts to make an assessment one way or the other about these investigations. I would note that there are some interesting parallels with the government’s case against Microsoft. Microsoft’s monopoly in operating systems was protected, at least in

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<sup>9</sup> For example, a class action complaint brought here in the Northern District of California alleges that Apple’s strategy of “tying” the iPod and iTunes violates federal and California antitrust laws. Authorities in Europe are also looking into whether this practice violates their laws. The Norwegian Consumer Ombudsman ruled in January 2007 that Apple’s closed system is illegal because the songs sold on iTunes, encoded with Apple’s FairPlay DRM, cannot be played on any music device other than an iPod.

part, by a so-called “applications barrier to entry.”<sup>10</sup> Under one theory of that case, Java and Netscape were a threat to Microsoft because those applications could erode that barrier to entry by making it easier to “port” applications between operating systems. The promise was that the development of these technologies – so called middleware – would allow developers to be agnostic when it came to operating systems. That would allow competing operating systems to flourish – Apple, Linux, and others would no longer be hampered by the “applications barrier to entry.”

One could argue that iTunes’ lack of interoperability creates a barrier to entry in the digital device market.<sup>11</sup> The iPod has been enormously successful with over 90 million units sold since its introduction several years ago. One theory is that consumers who have invested money in iTunes music for their iPods will be locked into Apple when it is time to replace their devices. They will not go with a competitive device because of the investment in iTunes music. An interesting theory, but one with some flaws – at least today.

For one, the market for these devices is still in its infancy – the market is continuing to

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<sup>10</sup> *United States v. Microsoft*, 253 F.3d 34, 55 (D.C. Cir. 2001). The “applications barrier to entry” was premised on the argument that it was costly and time consuming for independent software developers to write applications for more than one operating system. Given the ubiquity of Microsoft’s operating system, developers focused their energies on writing applications that would work with Microsoft’s operating system.

<sup>11</sup> The Berkman Center for Internet & Society at Harvard Law School has released a paper which describes the potential antitrust problem with Apple’s strategy. It argues that Apple’s strategy of making iTunes exclusively compatible with iPod allows for the generation of entry barriers in the market of portable players and some barriers in the market of music downloading services. In so doing, this strategy ultimately reinforces Apple’s price discrimination scheme, as Apple is able to fine tune prices more precisely to a consumer base that is more tightly linked to both products, and conveys information about intensity of usage or downloads more efficiently. The Berkman Center for Internet & Society at Harvard Law School, “iTunes: How Copyright, Contract, and Technology Shape the Business of Digital Media – A Case Study,” at 47-48 (June 17, 2004) available at <http://cyber.law.harvard.edu/media/itunes>.

grow and it is expected to for some time. In other words, there are still a number of consumers who have not purchased a device. Today there are a number of devices on the market – Toshiba, Microsoft, Sony, SanDisk, and iRiver to name a few. Apple may have the largest installed base today but it is unclear whether that will remain the case in the future. At the time of the government's Microsoft challenge the market was far more developed. Microsoft had an enduring decade-long monopoly in the operating system and there were few alternatives in the marketplace. I think it is too soon to say whether the lion's share of device customers will ultimately be locked into Apple's product. Second, studies suggest that the vast majority of music on iPods today is not purchased from iTunes. Rather, it comes from non-encrypted sources – largely compact discs – that can easily be ported to other devices.

Some have argued that the various stakeholders should coalesce around a marketplace standard for DRM. The Coral Consortium, Sun's DreaM project, and the Digital Media Project are three examples of ongoing standard-setting efforts in the DRM marketplace. Yet none of these efforts have made much headway on the problem. Standard setting can be enormously beneficial to consumers. At the same time, some stakeholders are wary of participating in these efforts because they can be manipulated. We have seen that some seek to manipulate the standard-setting process in ways that implicate the antitrust laws and that ultimately may result in supra-competitive prices and/or sub-competitive quality that ultimately hurt consumers. The Commission's recent *Rambus* case is a case in point.<sup>12</sup>

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<sup>12</sup> *In re Rambus Inc.*, Docket No. 9302 (issued Aug. 2, 2006) (opinion of the Commission and final order), available at <http://www.ftc.gov/opa/2006/08/rambus.html>. There the respondent engaged in deceptive practices respecting its patents and patent applications during a standard-setting process. The result was incorporation of the respondent's intellectual property into two SDRAM standards and the respondent's illegal acquisition of monopoly power in violation of Section 2 of the Sherman Act. The Commission imposed a ceiling on the royalties the respondent could exact in those circumstances.

Others have argued that the solution to the DRM question, at least in the music business, is to abandon DRM. The larger debate over DRM is one that is largely driven by the desire of the content providers to control their output (whether it is the entertainment and media companies concerned about piracy or enterprises concerned about the inadvertent disclosure of proprietary or confidential information). The Internet has benefits for business and consumers alike but it has also created great uncertainty. Perhaps no market has seen more upheaval than the media markets. While the music labels have seen the greatest change to date, movie studios, television networks, book publishers, and video game publishers are not far behind. Today there are a number of different stakeholders all jockeying for position in the new landscape. The traditional players are trying to hold on to their power in this new medium. Those efforts raise some interesting antitrust questions.

In an open letter posted on Apple's website last month, Steve Jobs stated that his company would enthusiastically support a move away from DRM – at least in the market for digital music.<sup>13</sup> His letter, and the response to it, raise some interesting issues. He pointed the finger at the “Big 4” music labels – Warner Music Group, SonyBMG, EMI and Universal – as the reason Apple encrypts music. When it comes to digital music, the Big 4 have adopted similar strategies. According to Jobs and others, the music labels will not license their content to online music stores unless those “stores” promise to encrypt their “product” with DRM.

In fall 2005, as the music labels prepared to renegotiate their licenses with Apple, the labels talked publicly about a new “variable” pricing model for digital music. The heads of the labels complained publicly about Apple's standard 99 cent retailing model – a model followed

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<sup>13</sup> Steve Jobs, “Thoughts on Music,” (Feb. 7, 2007) available at <http://www.apple.com/hotnews/thoughtsonmusic>.

by many other online stores. They wanted Apple to adopt a variable licensing strategy where “superstars” would be higher priced and at the same time music from new and emerging artists would be priced for less than 99 cents.<sup>14</sup> Soon after these public statements, the press reported that the Department of Justice and the New York Attorney General’s office had launched independent investigations of the music companies.

I should emphasize that I have no inside knowledge as to the substance or status of these investigations. Press reports at the time suggested that these investigations were focused on possible violations of Section 1 of the Sherman Act by the music companies in the market for digital music downloads. For example, there was speculation that the authorities were looking at possible agreements relating to the prices charged to digital music distributors such as Apple, Microsoft, and Wal-Mart, the use of “most favored nation” clauses in music service contracts, and efforts by the music labels to influence retail prices.<sup>15</sup> If the music labels agreed on the prices they would charge companies like Apple that would be an obvious violation of Section 1.

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<sup>14</sup> Edgar Bronfman Jr., speaking at an investor conference in New York, publicly aired the frustrations of music executives with the pricing structure of Apple's iTunes, the world's most successful digital-music store. iTunes charges 99 cents a song and \$9.99 for an album. Locking the prices at those levels isn't fair, Bronfman said, suggesting that variable pricing would be more equitable. “There’s no content in the world that has doesn't have some price flexibility,” Bronfman pointed out. “Not all songs are created equal. Not all albums are created equal.” Arik Hesseldahl “Why Apple Won't Up-Charge Downloads,” *Business Week Online* (Sept. 29, 2005); *see also* Dan Sabbagh “Media Editor EMI in push to call the tune with Apple over pricing of downloads,” *The Times* (London) (Nov. 17, 2005) (“Arguments over Apple's pricing have raged in recent months as two other top record companies, Warner Music Group and SonyBMG, have indicated that they want Apple to be more flexible. Only the largest company, Universal Music, part of Vivendi Universal, agrees with Apple that a simple pricing structure will help to develop the market.”).

<sup>15</sup> *See* Jennifer LeCalire, “Big Four Music Studios Subpoenaed in Digital-Music Pricing Probe,” *TechNewsWorld* (Dec. 27, 2005); Ed Oswald, “DOJ Investigating Digital Music Prices,” *BetaNews* (Mar. 3, 2006); “Feds Probe Online Music Companies: Justice Department Looking For Price Fixing In Burgeoning Industry” *CBS News* (Mar. 3, 2006) available at [http://www.cbsnews.com/stories/2006/03/03/tech/main1366727.shtml?source=search\\_story](http://www.cbsnews.com/stories/2006/03/03/tech/main1366727.shtml?source=search_story).

However, an agreement by the labels on a business model – for example, the adoption of a variable pricing scheme – could also violate Section 1. If there were hard core agreements, they might be viewed as horizontal price fixing or market division agreements that are illegal per se under the Sherman Act. By the same token, if and to the extent that uniformity is just the result of rivals monitoring and imitating each other, and there are no “plus” factors, that would probably not be considered illegal under the antitrust case law.

In sum, DRM technology may be relatively new. However, the “pure” consumer protection issues, as well as the antitrust issues, that are implicated are not new. Those who counsel firms involved in developing and/or using that technology will be well advised to be on top of the authorities defining the circumstances in which conduct may be unfair or deceptive or may violate Sections 1 or 2 of the Sherman Act.