

## Copyright Industry Perspectives: The Pivotal Role of TPMs in the Evolution of the Video Game Industry

Christian Genetski\* & Christian Troncoso\*\*

The story of the video game industry, like that of many other creative art forms, is in part a testament to the power of copyright law. Compared with many other industries that rely on copyright protection, however, the video game industry is relatively young. Although there is considerable debate about the industry's precise birthdate, most point to the early- to mid-1970s as the point at which video games entered into the mainstream consciousness. Coming of age around the same time that the 1976 Copyright Act was being debated and later implemented, an initial challenge for the industry was simply ensuring that authors of video games received the same scope of copyright protection as authors of more traditional forms of media. Given that the defining characteristic of video game software was its interactivity, with the audiovisual output controlled in part by user interaction, there was initially some uncertainty about the extent to which early video games could be protected by copyright. Indeed, the Register of Copyrights once famously declined to register a copyright claim in the audiovisual components of a video game in part because the content was not an original work of authorship due to its interactive nature.<sup>1</sup> In denying the claim for copyright, the Register noted that the audiovisual components of the game could not be registered because "they are created randomly by the player and not by the author of the video game."<sup>2</sup> Of course, the Register was subsequently persuaded to register the work,<sup>3</sup> and questions about the copyrightability of video games have faded. Unsurprisingly, however, other copyright challenges have emerged.

Like most desirable digital content, video games are subject to extraordinarily high levels of online piracy and other forms of copyright infringement. Although the pernicious effects of piracy are well known, the steps the video game industry has taken to combat piracy—and defeat it in the marketplace—warrant closer

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\* Christian Genetski is the Chief Legal Officer for FanDuel, Inc., the market leader in daily fantasy sports. Prior to joining FanDuel, he served as the General Counsel for the Entertainment Software Association, the U.S. trade group representing the interests of the video game industry. In that capacity, he represented the video game industry before Congress and regulatory agencies on a range of intellectual property and technology issues, including the Digital Millennium Copyright Act (DMCA).

\*\* Christian Troncoso is Senior Manager, Policy for BSA | The Software Alliance. Prior to joining BSA, he served as Senior Counsel for the Entertainment Software Association, where he advocated on behalf of video game publishers on a range of legislative and regulatory issues in the United States and before foreign governments.

1. *See Atari Games v. Oman*, 888 F.2d 878, 880 (D.C. Cir. 1989).
2. *See id.*
3. *See Atari Games v. Oman*, 979 F.2d 242, 247 (D.C. Cir. 1992).

examination, particularly in the midst of the ongoing review of the efficacy of the Copyright Act.<sup>4</sup> The explosive growth of the video game industry over the past fifteen years is a data point that should inform such review, particularly when discussions involve potential reforms to § 1201 of the Digital Millennium Copyright Act (DMCA). This Article proceeds in two parts, first providing a brief overview of the history and intent underlying the passage of the DMCA, and then highlighting how the anti-circumvention provisions in § 1201 have succeeded in fostering an explosion of innovation in the video game industry.

## I. DMCA BACKDROP

In passing § 1201 of the DMCA, Congress sought to encourage copyright owners' use of technological protection measures (TPMs) in service of two distinct, but related goals: (1) to "prevent piracy and other economically harmful unauthorized uses of copyrighted materials" and (2) to "support new ways of disseminating copyrighted materials to users[,] . . . safeguard the availability of legitimate uses of those materials by individuals [and] . . . make more works widely available, and the process of obtaining permissions easier."<sup>5</sup> To promote these twin goals, the DMCA prohibits trafficking in tools and technologies primarily designed, used or marketed for either of two distinct purposes—circumventing an owner's exclusive rights under the Copyright Act or gaining access to the protected work—each of which threaten the value of the underlying copyrighted works that the TPMs seek to protect.<sup>6</sup> These purposes correspond to the two goals the DMCA is intended to promote. First, the prohibition against trafficking in tools and technologies that circumvent TPMs that protect a copyright owner's exclusive rights reinforces those rights by granting authors an additional cause of action against those who traffic in tools or technologies that facilitate infringement.<sup>7</sup> Stated simply, one of the distinct purposes of the DMCA is to deter circumvention that facilitates piracy.

By contrast, the prohibition against trafficking in tools or technologies designed to circumvent TPMs that control *access* to a protected work has the distinct, and equally important, purpose of making circumvention unlawful in certain instances,

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4. See Press Release, U.S. Judiciary Comm., Chairman Goodlatte Announces Comprehensive Review of Copyright Law (Apr. 24, 2013), <http://perma.cc/5QBL-GUNB>; see also *Copyright Review Process Will Continue into 2015; Education and Circumvention Will Be Next Issues Examined*, BLOOMBERG BNA (Aug. 20, 2014), <http://perma.cc/78PQ-4R8R>.

5. Committee on the Judiciary, House of Representatives, 105th Cong., Section-by-Section Analysis of H.R. 2281 as Passed by the United States House of Representatives on August 4, 1998, at 6 (Comm. Print 1998); see also H.R. REP. NO. 105-551, pt. 1, at 11 (1998) ("When copyrighted material is adequately protected in the digital environment, a plethora of works will be distributed and performed over the Internet.").

6. See 17 U.S.C. § 1201 (2012).

7. Chapter 12 of Title 17: *Hearing Before the Subcomm. on Courts, Intellectual Prop., & the Internet of the H. Comm. on the Judiciary*, 113th Cong. 34 (2014), available at <http://perma.cc/7K62-ESR4> (statement of Christian Genetski, Senior Vice President & General Counsel, Entertainment Software Association).

without requiring a link to infringement.<sup>8</sup> Congress has recognized, and the courts have affirmed, that in the online environment, allowing unauthorized access would undermine the value of copyrighted works and the incentive for the copyright owner to make them more widely available.<sup>9</sup> For example, circumvention of TPMs restricting access to content on an online streaming service would violate the *access* prohibition, irrespective of whether that circumvention enabled the unauthorized copying of that content, or merely the viewing of it.<sup>10</sup> Together, these prohibitions on circumvention seek to incentivize copyright owners' use of TPMs both to prevent infringement and to expand the universe of legitimate access to their works.

## II. EVOLUTION OF THE VIDEO GAME INDUSTRY: A DMCA SUCCESS STORY

The video game industry's success is very much a story about content creators leveraging the protections afforded by § 1201 to develop new business models that have enhanced the value and expanded the availability of their copyrighted works. The evolution of the video game industry over the last fifteen years therefore reflects a DMCA success story for game platforms, game publishers and, most importantly, the hundreds of millions of U.S. consumers who are entertained by video games each year.

Since the DMCA was enacted in 1998, game publishers have continually deployed TPMs in pursuit of both of the DMCA's mutually reinforcing objectives. Although piracy of video game content and attacks on the integrity of online games remain a significant concern for the industry, there is no question that TPMs have played a pivotal role in reducing piracy, particularly on home console platforms. The more dramatic impact, however, has undoubtedly been the industry's evolution from offering only packaged goods to embracing digital technologies to meet consumer demand. Because eliminating piracy is impossible, video game publishers have also focused on "competing with free" by ensuring that lawfully obtained games offer a compelling user experience that cannot be replicated by pirated copies. The video game industry was among the earliest of the content industries to respond to the emergence and widespread consumer adoption of broadband Internet (and corresponding explosion of online piracy) by developing business models that meet consumer demand by delivering video game content across multiple platforms, with increased flexibility, and at a greater range of price points.

Indeed, the manner in which the entertainment software industry has delivered engaging experiences to consumers has evolved dramatically. Just fifteen years

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8. See 17 U.S.C. § 1201(b) (2012).

9. See S. REP. NO. 105-90, at 8 (1998); see also *MDY Indus., LLC v. Blizzard Entm't, Inc.*, 629 F.3d 928, 944 (9th Cir. 2011).

10. See, e.g., *RealNetworks, Inc. v. Streambox, Inc.*, No. 2:99CV02070, 2000 WL 127311, at \*6 (W.D. Wash. Jan. 18, 2000).

ago, industry products consisted primarily of console and PC games that were sold on discs and played at home with limited opportunities for multiplayer interaction. Today, however, online game delivery and game play are the norm, providing consumers with additional channels for acquiring game content, and expanded options for playing against and engaging with other gamers around the world. For instance, the video game industry has developed both hardware platforms, including home consoles and handheld devices, and software platforms, including web portals and cloud services, that are dedicated to delivering game content and enabling game play. Each of the three major home consoles—Playstation, Xbox and Wii—works in tandem with integrated, console-specific online networks that have transformed the consoles into robust online gaming networks that bring together millions of players worldwide each day and provide players with access to cloud-based content that enhances the gameplay experience. In addition to physical game consoles and their associated networks, consumers also may access, obtain and play video games through online game platforms, such as EA’s Origin, Microsoft’s Games for Windows Live and Valve Corporation’s Steam, or game streaming services such as OnLive. Separately, game publishers also develop video game software for other multipurpose platforms, such as the Windows Store and Apple’s App Store, which serve as digital hubs for games playable on mobile phones, tablets and PCs. Finally, game publishers offer games directly to consumers that are played exclusively online over the PC platform, in some cases through a game client that connects to the publishers’ servers and often through a mere web browser interface. In each of these distribution models, much of the functionality and entertainment experience is directed by or occurs on the publisher’s server, access to which is safeguarded by TPMs.

In addition to expanding the universe of platforms and distribution models, the use of TPMs has also provided game developers with flexibility to experiment with alternative means of monetization. For example, under the “free-to-play” (F2P) model frequently employed with online web and mobile games, publishers provide consumers with free access to games and seek to generate revenue through in-game advertising and/or the sale of in-game items. Offering access to content in exchange for a monthly subscription fee is another method for monetizing games that was initially popularized by publishers of “massively multiplayer online” games (MMOs). More recently, Sony announced the launch of a Netflix-like streaming model under which consumers can pay a monthly fee to gain unlimited access to a curated selection of games.<sup>11</sup>

The video game industry’s position on the leading edge of consumer-focused innovation should not be surprising. Gamers are sophisticated consumers with high expectations, and gaming itself is an interactive experience between publisher and gamer. To compete effectively, platforms and publishers must anticipate, appreciate and exceed gamer expectations. The expansion into new digital

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11. Jonathon Dornbush, *Sony’s Playstation Now to Offer Netflix-Style Subscriptions for Streaming Games*, ENT. WKLY. (Jan. 5, 2015), <http://perma.cc/FU9S-FUFK>.

distribution models has been a critical tool to deliver gamers content in a manner that meets their demands. Indeed, these innovations give consumers greater access to more content, through a greater number of distribution channels, and on more flexible terms than ever before. As a consequence, the introduction of these new business models has resonated with consumers, generating incredible growth for the online segment of the game industry. In fact, in 2012, a survey conducted by PricewaterhouseCoopers (PwC) revealed that for heavy gamers, defined as a player who plays video games more than ten hours per week, 67% of gaming occurred online.<sup>12</sup> Further, 100% of teens in the study played games on their smartphones.<sup>13</sup>

The ability to bring these innovative product and service offerings to market is in many ways a function of the Copyright Act's strong anti-circumvention provisions. There is no question that employing TPMS in service of consumer friendly functionality is a sound business practice irrespective of the scope of copyright protection. However, the DMCA plays an important role nevertheless, because having the rule of law backstopping these technologies sets the expectation for normative behavior and disincentivizes the development of (and consumer demand for) devices and technologies aimed at circumventing TPMS. The video game industry is therefore wary of efforts to reform § 1201 that might undermine the scope of existing protections. For example, some have proposed weakening the DMCA by allowing TPMS to be hacked unless it can be proved that the hacker's primary purpose or intent is to engage in or facilitate copyright infringement.<sup>14</sup> Although well intentioned, such proposals ignore the fact that the circumvention of TPMS to obtain unauthorized access to cloud-based content does not necessarily result in a cognizable instance of infringement. Given that each of the business models discussed above is predicated on the ability of publishers to gatekeep access to cloud-based game content, an all-purpose carve-out for "non-infringing" access would effectively leave game publishers without a remedy against unscrupulous actors who might try to traffic in devices designed to provide unauthorized access to such content.

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12. PRICEWATERHOUSECOOPERS, THE EVOLUTION OF VIDEO GAMING AND CONTENT CONSUMPTION 14 (2012), available at <http://perma.cc/537E-SLMC>.

13. *Id.* at 21.

14. See, e.g., *Chapter 12 of Title 17: Hearing Before the Subcomm. on Courts, Intellectual Prop., & the Internet of the H. Comm. on the Judiciary*, 113th Cong. 60, at 85-86 (2014), available at <http://perma.cc/7K62-ESR4> (statement of Corynne McSherry, Intellectual Property Director, Electronic Frontier Foundation).