

THE COST OF A BUNDLE OF WOOD: VIDEO GAMES AND IN-APP PURCHASES

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I. The Backstory: Introduction

Video games play a large part in modern society and culture: they are a dominant art form and have a notable presence in the economy.¹ *Pong*, developed in 1958, is considered the first video game.² This simple tennis simulation game triggered a wave of technological development, and by the 1980s there were over a dozen different in-home game systems on the market.³ The introduction of video games and home consoles marked a significant change for the entertainment industry. Color television was not yet widely adopted—even in American homes—and the remote control was still considered a luxury.⁴ Video game systems that allowed a person to *talk to* and *play with* the television were an entirely new, and very popular, concept.⁵ Today, video games have been described as “the new normal,” with television and movies becoming “things of the past.”⁶ In fact, the video game industry today can match, and even surpass, the film industry in global revenue.⁷ In only one day of sales, the game *Call of Duty: Black*

¹ S. GREGORY BOYD, BRIAN PYNE & SEAN F. KANE, VIDEO GAME LAW 1 (2019).

² Alan Chodos, *This Month in Physics History: October 1958: Physicist Invents First Video Game*, AMERICAN PHYSICAL SOCIETY APS NEWS (Oct. 2008), <https://www.aps.org/publications/apsnews/200810/physicshistory.cfm>.

³ BOYD, *supra* note 1, at 211.

⁴ BOYD, *supra* note 1, at 2.

⁵ BOYD, *supra* note 1, at 2.

⁶ Daniel Raphael, *The Impact of Video Games on This Generation*, HUFF POST (Nov. 7, 2013), https://www.huffpost.com/entry/the-impact-of-video-games_b_4227617.

⁷ In 2019, the global game market is predicted to reach \$152.1 billion. *Newzoo Global Games Market Report 2019: Light Version*, NEWZOO (June 19, 2019), <https://newzoo.com/insights/trend-reports/newzoo-global-games-market-report-2019-light-version/>. In comparison, 2018 box office revenue reached \$41 billion. *Global Box Office Revenue Hits Record \$41B in 2018, Fueled by Diverse U.S. Audiences*, <https://www.hollywoodreporter.com/news/global-box-office-revenue-hits-record-41b-2018-fueled-by-diverse-us-audiences-1196010>, and the film industry as a whole is predicted to reach \$103 billion in 2019. *Global Movie Production & Distribution Industry-Market Research Report*, IBIS WORLD (Sept. 2019),

Ops 2 exceeded *The Avengers* movie box office record by over \$300 million.⁸

The content of video games has matured drastically over the decades, as has their form.⁹ Whereas consoles were originally bought with games already installed, modern games can be freely downloaded from the internet, so consumers no longer need to physically enter a store to purchase a game.¹⁰ One of the most common gaming systems today is portable smartphones, which allow for most games to be downloaded instantly, and often for free.¹¹ To adapt to this new business model, the industry developed new monetization methods. In-app purchases, particularly common in mobile games, became a popular way to earn money off of otherwise free games.¹² For years, consumers accepted these in-app purchases silently, until the metaphorical bubble burst with the release of the console game, *Star Wars: Battlefront 2*, and its use of loot boxes.¹³

A loot box is an opportunity for a player to win potentially rare and valuable game items.¹⁴ Loot boxes exist in an array of game styles and platforms, and they can take many different forms: for example, it can be a chest or other container with mystery items, or it can be a game of chance such as a prize wheel, or a random reward for viewing an advertisement.¹⁵ Luck alone determines what item the player

<https://www.ibisworld.com/global/market-research-reports/global-movie-production-distribution-industry/>.

⁸ RON GARD & ELIZABETH TOWNSEND GARD, *VIDEO GAMES AND THE LAW* 3 (Routledge ed., 2017).

⁹ See e.g., BOYD, *supra* note 1, at 19 (noting the increasing number of different game devices and platforms); GARD, *supra* note 8, at 2 (regarding different devices games can be played on, and the increasing styles of gameplay).

¹⁰ Sean Kane, Partner, Frankfurt, Kurnit, Klien & Selz, *Inside the Game: Unlocking the Consumer Issues Surrounding Loot Boxes* 17 (August 7, 2019) (transcript available at

https://www.ftc.gov/system/files/documents/public_events/1511966/loot_boxes_workshop_transcript.pdf.) [hereinafter Symposium].

¹¹ *Id.* at 20.

¹² William Lim, *Blood in the Water: A History of Microtransactions in the Video Game Industry*, MEDIUM (Aug. 15, 2018), <https://medium.com/@williamlim3/blood-in-the-water-a-history-of-microtransactions-in-the-video-game-industry-e5bf9e3de4da>.

¹³ *Id.* In addition to its purchase price, the game included several integral characters and items that could only be accessed through hundreds of hours of tedious gameplay, or by paying an extra fee. *Id.*

¹⁴ FPS Justice Gaming Commission, *RESEARCH REPORT ON LOOT BOXES*, 5 (2018), https://www.gamingcommission.be/opencms/export/sites/default/jhksweb_nl/documents/onderzoeksrapport-loot-boxen-Engels-publicatie.pdf [hereinafter FPS Justice].

¹⁵ *Loot Boxes in Online Games and Their Effect on Consumers, in Particular Young Consumers*, at 13-14, 26 (July 2020),

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receives.¹⁶ A player can often earn loot boxes through game play, however, players can also purchase them through microtransactions, which are in-game purchases made with real money.¹⁷ Because they are entirely chance-based, regulators worry that loot boxes are a gateway that may expose children to gambling at an early age.¹⁸ But as lawmakers focus on loot boxes as an underage gambling concern, many fail to recognize the concerns posed by microtransactions as a whole. Loot boxes are one type of microtransaction, but microtransactions come in many forms and in games of many different types. Microtransactions are not inherently bad and are often used as a *bona fide* method to fund games while still increasing accessibility through a lower sticker price.¹⁹ Yet, there are many ways that microtransactions can be poorly integrated into gameplay and used in predatory ways. Predatory microtransactions work with the mechanics of the game itself to deceive players and induce purchases. This is also called commercialization of a game—the microtransactions become “so pervasive or manipulative that they might disrupt gameplay.”²⁰

The law has not adapted to the new technologies at the same rate as the video game industry—there is a legal disconnect between these new monetization methods and industry accountability. This Comment will analyze how microtransactions can become predatory and how players can be deceived as to the nature of those purchases. Part II of this Comment will briefly explain players’ use of in-app purchases, the revenue generated, and the different types of microtransactions. Part III will show the ways in which psychological methods can be used to induce purchases and how players can be misled as to the nature and value of these purchases. This Comment will highlight the addictive nature of video games and how developers can use this characteristic to integrate predatory microtransactions. It will also establish why loot boxes are of particular concern to regulators in light of these addictive tendencies. Finally, Part III will show that most gambling statutes are unable to effectively regulate loot boxes, despite their similarities, because most virtual items are not recognized by the law as having value. It will then proceed to show, however, that the use and effect of microtransactions creates an illusion for consumers that virtual items

[https://www.europarl.europa.eu/RegData/etudes/STUD/2020/652727/IPOL_STU\(2020\)652727_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2020/652727/IPOL_STU(2020)652727_EN.pdf)

¹⁶ Anthony J. Dreyer et al., *Is my Loot Box Legal?*, VIDEO GAMING/E-GAMING LAW UPDATE (SKADDEN, ARPS, SLATE, MEAGHER & FLOM LLP.), Sept. 26, 2019, at 1.

¹⁷ Symposium, *supra* note 10, at 28.

¹⁸ Symposium, *supra* note 10, at 3.

¹⁹ Symposium, *supra* note 10, at 25-26.

²⁰ Symposium, *supra* note 10, at 205.

do have value. Finally, Part IV will establish that industry standards and regulatory oversight are necessary to protect consumers. The law must adapt to recognize virtual items, not just in the form of loot boxes, but in all contexts. Part IV will briefly examine the approaches taken by other countries to address different types of microtransactions. It will conclude with recommendations for potential regulatory and industry standards that can be implemented in the United States to protect consumers and the video game industry.

II. The Journey: Background

A. GUILD MEMBERS: WHO USES MICROTRANSACTIONS

Estimates show money spent on in-game virtual items to be in the billions of dollars globally each year.²¹ As a starting point, it is important to recognize that not only children play video games or engage in microtransactions. Roughly three-quarters of children between ages five and fifteen play online video games.²² But, overall, one-half of Americans today play videogames—both children and adults.²³ Most of the gaming population is composed of adults and the average gamer is thirty-three years old.²⁴ Approximately less than a quarter of the gaming population is under the age of eighteen.²⁵

Concern amongst regulators centers upon children because they are particularly vulnerable to predatory monetization techniques.²⁶ They are more likely to make rash, illogical decisions in the heat of the moment—or in the middle of exciting gameplay.²⁷ Additionally, children do not always understand the value of money: they may have difficulty distinguishing between real and fake money and they may not understand the compounding nature of multiple \$0.99 transactions.²⁸ Adults also engage in microtransactions, however, and can also fall into

²¹ BOYD, *supra* note 1, at 165.

²² THE DIGITAL, CULTURE, MEDIA, AND SPORTS COMMITTEE, IMMERSIVE AND ADDICTIVE TECHNOLOGIES, 2019, HC 1846 (UK) [hereinafter IMMERSIVE AND ADDICTIVE TECHNOLOGIES].

²³ Symposium, *supra* note 10, at 41.

²⁴ Symposium, *supra* note 10, at 41-42.

²⁵ Symposium, *supra* note 10, at 42.

²⁶ Symposium, *supra* note 10, at 72-73.

²⁷ Some companies have started placing daily caps on the amount that a person can spend, but this still does not impact the overall maximum that a player can spend. IMMERSIVE AND ADDICTIVE TECHNOLOGIES, *supra* note 22, at 65. *See also* FPS Justice, *supra* note 14, at n.5 (“A 19-year-old spends \$13,500.25 on in-game purchases in 3 years (USA), a 14-year-old spends his mother’s monthly salary on FIFA 18 (Ireland), a student spends more than £2,000 on skin betting (UK).”).

²⁸ Symposium, *supra* note 10, at 198-99.

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the trap of spending more money than they intend or realize. In a survey of adult players, 90% reported that they had opened a loot box, more than half of which were paid for.²⁹ One adult reported going \$15,800 into debt, another reported spending \$300 CAD in 20 minutes.³⁰ One parent reported that their child spent over £200 in the game *Runescape*—in one day—and accumulated a total debt of £50,000 from playing the game.³¹

B. THE MARKETPLACE: MICROTRANSACTION REVENUE AND TYPES

The video game industry continues to grow exponentially: in the coming years industry revenue is expected to increase anywhere between 7% and 10% annually.³² Microtransactions make up a significant portion of this revenue.³³ Microtransactions became popular with the introduction of smartphones and the popularity of the iPhone App Store and Android Google Play Store. On mobile phones, small games can be downloaded quickly and directly.³⁴ These games are relatively inexpensive, often only \$0.99 to \$4.99 and others, called “freemium” or “free-to-play” games, have no purchase cost at all.³⁵ Mobile games are very popular, both amongst traditional gamers and those who never previously played video games.³⁶

These mobile games make up most of the game market today.³⁷ A 2017 report placed global revenue from mobile games alone that year

²⁹ Erik Rolfsen, *Loot Boxes Look a lot Like Gambling, UBC Study Finds*, UBC NEWS (May 1, 2019), <https://news.ubc.ca/2019/05/01/lure-of-the-loot-box-looks-a-lot-like-gambling/>.

³⁰ Kyle Langvardt, *Regulating Habit Forming-Technology*, 88 *FORDHAM L. REV.* 129, 146 (2019).

³¹ *IMMERSIVE AND ADDICTIVE TECHNOLOGIES*, *supra* note 22, at 62.

³² BOYD, *supra* note 1, at 137; Julia Beyers, *Are Microtransactions Safe in iGaming?*, *PENTEST MAG.* (June 25, 2019), <https://pentestmag.com/are-microtransactions-safe-in-igaming/>.

³³ *See IMMERSIVE AND ADDICTIVE TECHNOLOGIES*, *supra* note 22, at 130 (stating that in 2018, 43% of video game revenue in Europe came from microtransactions.); FPS Justice, *supra* note 14 at n.23 (reporting that 51% of developer Ubisoft’s revenues for a year came from microtransactions and in 2017 22 billion USD were spent on microtransactions on otherwise free games.).

³⁴ *See Symposium*, *supra* note 10, at 20.

³⁵ *Symposium*, *supra* note 10, at 20.

³⁶ *Symposium*, *supra* note 10, at 16.

³⁷ Mitchell Denton, *Mobile Gaming Makes Up Over 50% of the Global Games Market*, *GAMIFY*, <https://www.gamify.com/gamification-blog/mobile-gaming-now-makes-up-more-the-50-of-the-global-games-market-in-2018#:~:text=Mobile%20Gaming%20Makes%20Up%20over%2050%25%20of%20the%20Global%20Games%20Market,-by%20Mitchell%20Denton> (last visited May 30, 2021).

at \$34.8 billion.³⁸ Even games that are free to download can generate a significant amount of revenue and have become a profitable model for developers.³⁹ For example, within two weeks of the release of the free mobile game *Pokémon:Go*, Nintendo's value increased twenty-three billion dollars.⁴⁰

Some of these free games receive funding through advertisements which may provide, for example, game items or extra time as rewards.⁴¹ Other free games are condensed versions of the game to which players can gain additional levels, or even full access, for a fee.⁴² And many are only free to download and include microtransactions that, although optional, can range from having a minimal impact on gameplay to a significant effect on a player's success and overall game experience.⁴³

Microtransactions also exist in paid-for games and in console games, and they make up a large portion of revenue in these games as well.⁴⁴ In 2017, computer game sales were predicted to generate \$8 billion dollars.⁴⁵ Also in 2017, microtransactions in these computer games were estimated at \$22 billion.⁴⁶ Microtransactions are highly profitable and a "key monetization method" for any game.⁴⁷ They allow the industry to continue to provide free games and keep the price of paid games low.⁴⁸ Loot boxes are a particularly lucrative type of microtransaction; a 2019 prediction stated that, of the entire microtransactions market, the market for loot boxes alone was set to grow to \$50 billion by 2022.⁴⁹

³⁸ Andrew Moshirnia, *Article: Precious and Worthless: A Comparative Perspective on Loot Boxes and Gambling*, 20 MINN. J.L. SCI. & TECH. 77, 83 (2018); see also J. Clement, *Gaming Monetization—Statistics & Facts*, STATISTA (Feb. 19, 2021), <https://www.statista.com/topics/3436/gaming-monetization/#dossierSummary> (noting that in 2020 the mobile gaming market was valued at over \$77 billion).

³⁹ Moshirnia, *supra* note 38, at 83; see also Langvardt, *supra* note 30, at 138.

⁴⁰ GARD, *supra* note 8, at 1-2.

⁴¹ See Symposium, *supra* note 10, at 36.

⁴² Symposium, *supra* note 10, at 35, 38.

⁴³ See Symposium, *supra* note 10, at 35-36.

⁴⁴ See generally FPS Justice, *supra* note 14 (examining a variety of console, paid-for games that include microtransactions such as *Overwatch*, *Star Wars Battlefront II*, *FIFA18*, and *Counter-Strike: Global Offensive*).

⁴⁵ Samuel Horti, *Revenue from PC Free-to-Play Microtransactions has Doubled Since 2012*, PCGAMER (Nov. 26, 2017), <https://www.pcgamer.com/revenue-from-pc-free-to-play-microtransactions-has-doubled-since-2012/>.

⁴⁶ *Id.*

⁴⁷ Beyers, *supra* note 32.

⁴⁸ See Beyers, *supra* note 32.

⁴⁹ Steven Blickensderfer & Nicholas A. Brown, *U.S. Regulation of Loot Boxes Heats Up with Announcement of New Legislation*, NAT'L L. REV. (May 9, 2019),

The label “micro” in the term microtransaction is somewhat of a misnomer. Although many microtransactions, particularly in mobile games, are only a few dollars and can cost as low as \$0.99, some can reach as high as \$99.99.⁵⁰ Microtransactions take many forms and, although there is overlap, one can separate them into four general categories: loot boxes, explained above; time restrictions, virtual items, and game currency.⁵¹ A time restriction is when a player must wait a specified amount of time prior to proceeding with an aspect of the game—alternatively, the player can make a microtransaction to bypass the wait.⁵² Other time restrictions might limit how long a player can use a specific feature or virtual item.⁵³ Virtual items themselves range in their abilities: some give players a notable advantage, such as providing a stronger weapon for battle or accomplishing tiresome but necessary tasks for the player, as is the case with pets in the game, *MapleStory*.⁵⁴ Other items serve no purpose and are purely aesthetic, such as a special dance move for a character in the game *Fortnite*, or “skins” which change the appearance of weapons in *Counter-Strike Global-Offensive*.⁵⁵ Some loot box items, however, are inextricably linked to game progression.⁵⁶

<https://www.natlawreview.com/article/us-regulation-loot-boxes-heats-announcement-new-legislation/>.

⁵⁰ Symposium, *supra* note 10, at 36, 221.

⁵¹ Gabe Duverge, *Insert More Coins: The Psychology Behind Microtransactions*, TOURO U. WORLDWIDE PSYCHOL. (Feb. 25, 2016), <https://www.tuw.edu/psychology/psychology-behind-microtransactions/>; Kaylyn Hohn, *The Controversy with ‘Loot Boxes’: How Children Become Addicted to Microtransactions*, GAMERVW (Dec. 4, 2018), <https://gamervw.com/2018/12/04/the-controversy-with-loot-boxes-how-children-become-addicted-to-microtransactions/>.

⁵² *E.g.*, Symposium, *supra* note 10, at 90.

⁵³ *E.g.*, Symposium, *supra* note 10, at 89-90.

⁵⁴ The pets collect the loot of defeated enemies automatically, so that the player does not have to repeatedly click or swipe to do it manually, saving players a significant amount of time. Some have stated, however, that pets are essentially necessary in the higher levels of the game. Calum Marsh, *The End of Ownership*, PAC. STANDARD (Sept. 9, 2018), <https://psmag.com/magazine/the-end-of-ownership>.

⁵⁵ John T. Holden, *Article: Trifling and Gambling with Virtual Money*, 25 UCLA ENT. L. REV. 41, 89 (2018).

⁵⁶ *Id.* at 47, 89 n.332; FPS Justice, *supra* note 14; Symposium, *supra* note 10 at 31; Sandra E. Garcia, *A Non-Gamer’s Guide to Fortnite, The Game That Conquered All the Screens*, N.Y. TIMES, (July 25, 2018) <https://www.nytimes.com/2018/07/25/arts/what-is-fortnite-battle-royale-nyt.html>.

⁵⁶ David J. Castillo, *Unpacking the Loot Box: How Gaming’s Latest Monetization System Flirts with Traditional Gambling Methods*, 59 SANTA CLARA L. REV. 165, 170-73 (2019) (“Loot boxes are the central part of Overwatch’s progression system. . . . [In Star Wars: Battlefront II, loot boxes containing] Star Cards were also the only way for a player to level up their characters.”). *See also* Lim, *supra* note 12 (“[Star Wars: Battlefront II] locked several key characters behind a loot box system. . . . The game itself felt designed around the economy of buying loot boxes.”).

Most of these in-game purchases are made using a special game currency.⁵⁷ The player purchases the in-game currency with real money, then uses that game currency to buy the other virtual items, time boosters, and loot boxes.⁵⁸ The currency usually has no value outside the game and cannot be transferred back into real-world money.⁵⁹

Although some microtransactions are more important to gameplay than others, as a general rule most are not strictly necessary for a player to do well in the game.⁶⁰ Usually an item that is absolutely necessary to play the game can also be obtained for free through normal gameplay, although it may be very difficult.⁶¹ Similarly, time restrictions will pass, although the player who does not make a microtransaction may need to wait anywhere from a couple minutes to a couple days before continuing gameplay.⁶² In this way, while a player is not required to complete microtransactions in order to succeed, however microtransactions can significantly impact a player's experience in a game.⁶³

Players' opinions and feelings about microtransactions, especially loot boxes, are varied.⁶⁴ Some players enjoy purchasing new items to show off to friends, just as they would at school.⁶⁵ Some enjoy the excitement and surprise of opening loot boxes.⁶⁶ Other players however, including some serious long-term players, have become frustrated with the increasing prevalence of microtransactions in video games and how they are used.⁶⁷

⁵⁷ Symposium, *supra* note 10, at 28.

⁵⁸ Symposium, *supra* note 10, at 47.

⁵⁹ See BOYD, *supra* note 1, at 167.

⁶⁰ Patricia E. Vance, *What Parents Need to Know About Loot Boxes (and Other In-Game Purchases)*, ESRB, (July 24, 2019), <https://www.esrb.org/blog/what-parents-need-to-know-about-loot-boxes-and-other-in-game-purchases/>; see also Symposium, *supra* note 10, at 90.

⁶¹ Symposium, *supra* note 10, at 26.

⁶² *E.g.*, Symposium, *supra* note 10, at 63.

⁶³ *E.g.*, Symposium, *supra* note 10, at 26. Games can also employ price discrimination techniques. Lawmakers have been cautioned that game developers could “[use] knowledge of a person’s . . . in-game experience to encourage spending, without the player’s prior knowledge.” *E.g.* IMMERSIVE AND ADDICTIVE TECHNOLOGIES, *supra* note 22, at 105.

⁶⁴ See generally Symposium, *supra* note 10.

⁶⁵ See Symposium, *supra* note 10, at 22.

⁶⁶ See Symposium, *supra* note 10, at 102.

⁶⁷ *E.g.*, Kishan Mistry, *P(l)aying to Win: Loot Boxes Microtransaction Monetization, and a Proposal for Self-Regulation in the Video Game Industry*, 71 RUTGERS U.L. REV. 537, 542 (2018).

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III. The Quest Begins: Analysis

Strictly necessary or not, some microtransactions are incorporated into the game in ways that make them *appear* necessary and, when purchased with real money, as though they have real value. The law affords these items no legal value, however, and it provides no protection for consumers from deceptive microtransactions. Best practices and regulatory oversight are necessary if video game developers are to continue using microtransactions to fund games.

Video games contain many features that resemble addictive activities. Developers can use microtransactions in ways that take advantage of these similarities and other aspects of human psychology.⁶⁸ Microtransactions can be integrated into the gameplay and encouraged through the design of the game in ways that give players the impression that to do well in the game, they must make microtransactions.⁶⁹ Loot boxes and other microtransactions are often a key means of progression in free games, leading to “situations where individuals feel compelled to buy loot boxes in order to do better within the game.”⁷⁰ When virtual video game items become purchasable, particularly in virtual world games which mimic many real world features, players begin to assign real value to those items and believe that they are purchasing something with real transferable value. When a game begins to take advantage of addictive features, to deceive players as to the necessity and role of microtransactions, or to encourage players to assign real value to virtual items, the microtransactions risk becoming predatory. This predatory nature is why industry standards and regulations are necessary to give legal recognition to virtual items and monitor how microtransactions are used in video games within acceptable industry standards.

To demonstrate this need for standards and a re-evaluation of game items and currency, this comment will first walk through the addictive tendencies of video games in general. It will then examine the

⁶⁸ Duverge, *supra* note 51.

⁶⁹ The game can match new players against those who have more skills and purchases, or those who purchased a special item that the player is interested in. It can then also reward a player who makes a purchase with a more favorable match. Players are especially frustrated with “pay-to-win” games where it felt as if microtransactions were “needed for nearly every aspect of the game.” Moshirnia, *supra* note 38, at 90; see also IMMERSIVE AND ADDICTIVE TECHNOLOGIES, *supra* note 22, at 105 (“game[] companies use data to shape the in-game experience includ[ing] online multiplayer ‘matchmaking.’”).

⁷⁰ Michael J. MacPhee, *A New Form of Addiction: A Practical Regulatory Approach Towards Randomized Reward Systems in Video Games to Protect Consumers from Gambling-Like Practices*, 59 WASHBURN L.J. 137, 158 (2020).

many ways in which predatory monetization schemes can be integrated into video games. It will then focus on loot boxes specifically to show why the addictive features of games and predatory methods raises such concern with that particular microtransaction. Finally, this Comment will demonstrate the lack of uniformity, or complete method, as to how game items and game currency are treated by the law.

A. MAGIC SPELLS: VIDEO GAMES AND ADDICTION

Consumers today spend an abundance of hours on video games.⁷¹ In May of 2019, the World Health Organization listed for the first time “gaming disorder” as a behavioral addiction in its International Classification of Diseases.⁷² Characterizations of the disorder include an increase in the priority that a player gives to playing the game, an impaired control over gaming, and continuation or escalation of gameplay despite negative consequences.⁷³ These indicators and consequences all closely mirror those of traditional addictions.⁷⁴ Many lawmakers and others have voiced their concerns regarding these similarities.⁷⁵ Senator Josh Hawley of Missouri stated that “video games prey on user addiction . . . extracting profits from fostering compulsive habits.”⁷⁶ For example, the game *Fortnite*, which as of 2019 had over 250 million players,⁷⁷ was described as “created to addict” and was

⁷¹ IMMERSIVE AND ADDICTIVE TECHNOLOGIES, *supra* note 22, at 1 (“Among young people, 12-to-15-year-olds spend an estimated 13 hours 48 minutes per week playing video games”).

⁷² Castillo, *supra* note 56, at 194; Anya Kamenetz, *Is ‘Gaming Disorder’ an Illness? WHO Says Yes, Adding it to its List of Diseases*, NPR (May 28, 2019, 5:48 PM), <https://www.npr.org/2019/05/28/727585904/is-gaming-disorder-an-illness-the-who-says-yes-adding-it-to-its-list-of-diseases>; *see also*, Symposium, *supra* note 10, at 151 (noting that the United States has not made a similar classification, but it has listed internet gaming disorder as a condition for future study).

⁷³ IMMERSIVE AND ADDICTIVE TECHNOLOGIES, *supra* note 22, at 18.

⁷⁴ Edwin Hong, *Loot Boxes: Gambling for the Next Generation*, 46 W. ST. L. REV. 61, 64 (2019).

⁷⁵ *E.g.*, Hawaii State Legislator Chris Lee described them as being “explicitly designed to prey upon and exploit human psychology.” Chris Lee (ChrisLee808), REDDIT, https://www.reddit.com/r/gaming/comments/7elin7/the_state_of_hawaii_announces_action_to_address/dq62w5m/ (last visited May 30, 2021).

⁷⁶ Tony Romm & Craig Timberg, *Video Game ‘Loot Boxes’ Would be Outlawed in Many Games Under Forthcoming Federal Bill*, WASH. POST (May 8, 2019), <https://www.washingtonpost.com/technology/>.

⁷⁷ Anna Nicoulaoi, *Fame and ‘Fortnite’—Inside the Global Gaming Phenomenon*, FIN. TIMES (Aug. 2, 2019), <https://www.ft.com/content/> (noting that this would make it the fifth largest country in the world).

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compared to heroin and cocaine.⁷⁸ In June of 2019, a class action was filed in federal court in the Northern District of California by parents of underage players asserting that games like *Fortnite* “are highly addictive, designed deliberately so, and tend to compel children playing them to make purchases.”⁷⁹ Another class action lawsuit was filed in Canada in October 2019, stating that the game was created to be “the most addictive game possible.”⁸⁰

Although legal complaints may exaggerate, there remains many similarities between video games and casinos. Both environments are filled with constant noise and activity, with images and sounds to draw players in and excite them.⁸¹ Furthermore, the game, just like a casino, can give players constant encouragement to continue playing by providing new opportunities whenever it seems like the player may take a break.⁸² It is also very easy for both the gambler and the gamer to lose track of time: casinos are known for an environment that encourages people to lose track of time, and video games aim to keep the player constantly immersed and either never leaving or constantly returning to check on progress.⁸³ Furthermore, the use of virtual currency to make purchases within the game, particularly to purchase loot boxes, is similar to the use of casino chips for betting. Both the casino chips and the virtual currency remove the real cost of the bet, or of the microtransaction.

The video game industry denies that video game addiction is real or a health concern, referring to the American Psychiatric Association which has not found video games to be addicting.⁸⁴ Furthermore, industry leaders insist that addiction is a result of individual characteristics and that the industry cannot be held responsible for

⁷⁸ Edward C. Baig, *Epic Games Sued for Not Warning Parents 'Fortnite' is Allegedly as Addictive as Cocaine*, USA TODAY (Oct. 7, 2019), <https://www.usatoday.com/story/tech/talkingtech/>.

⁷⁹ *Id.*

⁸⁰ *Id.*

⁸¹ See Thandi Fletcher, *Casino Lights and Sounds Encourage Risky Decision-Making*, UBC NEWS SCIENCE HEALTH & TECHNOLOGY (Oct. 29, 2018), <https://news.ubc.ca/>; Keith Whyte, *Similarities & Solutions From the Gambling Addiction Prevention Field*, INT'L ASS'N OF GAMING REG. (Sep. 25, 2019), <https://www.iagr.org/industry-news/research-spotlight-loot-boxes-or-slot-machines>; Moshirnia, *supra* note 38, at 87-8.

⁸² See Langvardt, *supra* note 30, at 135, 139-141; see also Whyte *supra* note 81; Rolfsen, *supra* note 29.

⁸³ See Langvardt, *supra* note 30, at 135, 141; Rolfsen, *supra* note 29; Emily Chang, *Fortnite Addiction is Forcing Kids into Video-Game Rehab*, BLOOMBERG TECHNOLOGY (Nov. 30, 2018), <https://www.bloomberg.com/news/videos/2018-11-30/fortnite-addiction-is-forcing-kids-into-video-game-rehab-video>.

⁸⁴ Chang, *supra* note 83.

players who develop an overreliance on gaming.⁸⁵ One Electronic Arts representative, before the British House of Commons, noted that video game publishers owe no legal duty of care to consumers.⁸⁶ Whether or not there is a legal duty of care, however, the industry has strong incentives to encourage player devotion to games.⁸⁷ Although the majority of gamers never make a microtransaction—some data shows that less than 6% of those who play a free game ever make a purchase—game publishers are like any other product developer and want to attract as many customers or players as possible.⁸⁸ Those players who do use microtransactions, the heavy spenders, are called “whales.”⁸⁹ Even non-whales, however, may engage in some microtransactions, even if not to the same level as the whales.⁹⁰ It is therefore important to developers that they attract as many overall players as possible, even those players who do not initially seem to be whales.⁹¹ If a game can attract a player, and keep that player engaged with the game, then the player is more likely to become emotionally invested in the game.⁹² Players who are emotionally invested in a game are more likely to spend money in that game, and some research suggests that it is the heavy spenders who will actually take the longest to start spending.⁹³ “Hook, Habit, and Hobby” is the term in the gaming industry for generating long-term, devoted players who are more likely to spend money and become the whales.⁹⁴ The industry does have an incentive to generate devotion, even addiction, among video game players: the more overall players devoted to a game, the more potential whales the game can create.

Video games want to attract and keep as many players as possible. And there are many ways that the game can take advantage of its unique features to increase its addictiveness. Modern games are malleable: the

⁸⁵ Langvardt, *supra* note 30, at 146.

⁸⁶ Matthew Gault, *EA Says Loot Boxes are Just ‘Surprise Mechanics’*, VICE (June 20, 2019, 10:32 AM), <https://www.vice.com/en/article/xwnk7d/ea-says-loot-boxes-are-just-surprise-mechanics>.

⁸⁷ Langvardt, *supra* note 30, at 147.

⁸⁸ Duverge, *supra* note 51.

⁸⁹ Approximately 1.9% of gamers make up 90% of the revenue from microtransactions. Langvardt, *supra* note 30, at 140.

⁹⁰ Langvardt, *supra* note 30, at 140.

⁹¹ See Langvardt, *supra* note 30, at 141.

⁹² Torulf Jernström, *Let’s go Whaling: A Guide to Monetisation Through In-App Purchases*, POCKETGAMER.BIZ (Sept. 2, 2016, 10:00 AM), <https://www.pocketgamer.biz/comment-and-opinion/63871/monetisation-lets-go-whaling/>.

⁹³ *Id.*

⁹⁴ *Id.*

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game developer can constantly add to and update the game with new features or special events.⁹⁵ This encourages players to play the game more often and to stay with a particular game for longer because there is always new, interesting material.⁹⁶ Furthermore, mobile games in particular have constant access to their players and can send regular notifications and solicitations for the player to login and play. A player may receive an item or game currency as an incentive for logging in regularly.⁹⁷ This repeated call for players to login, and the reward when they do so, increases addictive behavior with respect to the game.⁹⁸

B. BEASTS: PREDATORY MONETIZATION

As microtransactions have become more commonplace in all types of games, their use and integration into gameplay has become increasingly exploitative and predatory. Games count on the devotion of their players, and more devoted players mean more microtransactions. Not all games and microtransactions are predatory, but they can become so when the game abuses player psychology and marketing techniques.⁹⁹ Indications of predatory monetization occur when the game begins to exploit player devotion, disguising the microtransactions or withholding overall cost “until players are already financially and psychologically committed.”¹⁰⁰ There are many ways in which this can occur such as, “limited disclosure of the product; intrusive and unavoidable solicitations; and systems that manipulate reward outcomes to reinforce purchasing behaviors over skillful or strategic play. . . . [including] exploit[ing] inequalities in information between purchaser and provider.”¹⁰¹ Through these predatory methods, the game can then deceive players into believing that the microtransactions are more necessary than they truly are.

Video games are a unique product because they are very closely integrated with technology and the internet and create a dynamic product that can be easily changed at the developer’s will.¹⁰² The manipulability of video games and the disparity of information between game creator and game player creates an environment ripe for

⁹⁵ Langvardt, *supra* note 30, at 144-45.

⁹⁶ Langvardt, *supra* note 30, at 144-45.

⁹⁷ Langvardt, *supra* note 30, at 144-45.

⁹⁸ Langvardt, *supra* note 30, at 144-45.

⁹⁹ Langvardt, *supra* note 30, at 145.

¹⁰⁰ Daniel L. King & Paul H. Delfabbro, *Predatory Monetization Schemes in Video Games (e.g. ‘Loot Boxes’) and Internet Gaming Disorder*, 113 *SOC’Y FOR THE STUDY OF ADDICTION* 1967, 1968 (2018).

¹⁰¹ *Id.*

¹⁰² Symposium, *supra* note 10, at 21-22.

predatory microtransactions. For example, some games provide players with an initial cache of the game currency and items, similar to a trial phase of a new product.¹⁰³ This “starter pack” allows the player to become accustomed to the game without need for an immediate payment.¹⁰⁴ Over time, new goals and challenges are introduced which require new items or game currency.¹⁰⁵ Microtransactions are then advertised as the best method to acquire these resources.¹⁰⁶ It may take hours or days of rigorous gameplay—players call this “grinding”—to earn necessary items otherwise.¹⁰⁷ Some critics believe that developers purposely design poor systems so that players will become frustrated with tedious and unenjoyable grinding and will simply pay to advance.¹⁰⁸ One player spent \$500 CAD to skip tedious content that would have taken hundreds of hours to play through otherwise.¹⁰⁹ Game publishers want to create an experience that wears players down enough to spend money, but not frustrate them so much that they give up on the game altogether.¹¹⁰ Instead of encouraging progress based upon the skill of the player, the game encourages progress through the microtransactions.

Another traditional marketing tool is the use of sales and special discounts on larger purchases. Games, however, can ensure that players only see the more expensive items first.¹¹¹ When the player is later shown the cheaper option, he or she is more likely to make a purchase because it appears to be a bargain in comparison.¹¹² The game can also track the funds a player has available and offer different prices for different players.¹¹³ Similarly, a game can see from a player’s habits when he or she is more likely to make a microtransaction, or which options the player is more likely to purchase.¹¹⁴ The game can then

¹⁰³ Langvardt, *supra* note 30, at 139.

¹⁰⁴ Langvardt, *supra* note 30, at 139.

¹⁰⁵ Langvardt, *supra* note 30, at 139.

¹⁰⁶ Langvardt, *supra* note 30, at 139.

¹⁰⁷ After the release of *Star Wars: Battlefront 2* the gaming community discovered that earning all necessary items through gameplay rather than purchasing them would require 4,528 hours of play, the equivalent of two-and-a-half years of a full-time job. Lim, *supra* note 12.

¹⁰⁸ Prateek Agarwal, *Economics of Microtransactions in Video Games*, INTELLIGENT ECONOMIST (Apr. 10, 2019), <https://www.intelligenteconomist.com/economics-of-microtransactions/>.

¹⁰⁹ IMMERSIVE AND ADDICTIVE TECHNOLOGIES, *supra* note 22, at 64.

¹¹⁰ Prateek, *supra* note 108; *see also* Langvardt *supra* note 30, at 140.

¹¹¹ Jernström, *supra* note 92.

¹¹² Jernström, *supra* note 92.

¹¹³ King, *supra* note 100, at 1967-68.

¹¹⁴ *Cf.* King, *supra* note 100, at 1967-68.

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present that type of microtransaction to that player more often than it presents others.¹¹⁵ Games accumulate a significant amount of data about their players, and there are many ways in which this data can be used to make microtransactions predatory.

A player may also be offered an item at specific, emotionally charged moments in the game, such as when a character is about to die or is on the last turn of a puzzle.¹¹⁶ This last-minute offer, when the item is most needed, increases the chances that the player will make a purchase in the moment when he or she is caught up in the game.¹¹⁷

The game can even pit less-skilled players, who have not purchased an item, against those who have—suggesting to the player that the item is necessary for success.¹¹⁸ A player who does buy the item may then be given an easier match, which reinforces that the purchase was worthwhile and even necessary.¹¹⁹ The game publisher Activision filed a patent for this type of player matching system in 2017.¹²⁰ It is unclear how actively the technology is being employed, and not all games necessarily use player data in these ways.¹²¹ The field, however, is ripe with opportunities for games to manipulate and use this information to create predatory microtransactions.

Games can also make use of players' own lack of knowledge to make microtransactions predatory. Influencers and other social media personalities serve as the video game version of celebrity product promoters. These promoters are popular gamers who play the game on platforms such as YouTube and Twitch, modeling gameplay and features for other gamers.¹²² Some influencers are asked by game producers to engage in microtransactions while modeling the game and they may be reimbursed if they do.¹²³ Publishers may also ask them to

¹¹⁵ Cf. King, *supra* note 100, at 1967-68.

¹¹⁶ Jernström, *supra* note 92.

¹¹⁷ Jernström, *supra* note 92.

¹¹⁸ See Moshirnia *supra* note 38, at 89-91.

¹¹⁹ Moshirnia, *supra* note 38, at 90.

¹²⁰ Heather Alexandra, *Activision Patents Matchmaking That Encourages Players to Buy Microtransactions*, KOTAKU (Oct. 17, 2017), <https://kotaku.com> (A spokesperson of Activision stated that the patent was only “exploratory” work done by an “R&D team working independently from [the] game studios,” and that the technology had not been used in any games). *But see*, IMMERSIVE AND ADDICTIVE TECHNOLOGIES, *supra*, note 22, at 104-05.

¹²¹ See Alexandra, *supra* note 120 (discussing how a spokesperson of Activision stated that the patent was only “exploratory” work done by an “R&D team working independently from [the] game studios,” and that the technology had not been used in any games). *But see* IMMERSIVE AND ADDICTIVE TECHNOLOGIES, *supra*, note 22, at 104-05.

¹²² See Symposium, *supra* note 10, at 76-7.

¹²³ Symposium, *supra* note 10, at 101.

open specific loot boxes and can give the influencer better odds than the average player.¹²⁴ Viewers who see the influencer receive valuable prizes from the loot box may believe that their own odds of winning similar prizes are higher than they truly are.

The social aspect of video games can also be exploited to introduce predatory microtransactions.¹²⁵ For example, the game may inform players when one of them gets a rare item so others will want it as well. If the item was won in a loot box, the other players may believe that they have a good chance of winning it themselves. Adolescents in particular want to show off and can be more easily encouraged to make purely aesthetic microtransactions when they see other players with new items.¹²⁶ Additionally, players who participate in guilds, groups of players working together, may feel compelled to buy items because they do not want to disappoint their friends and fellow members.¹²⁷

The use of virtual currencies as a medium for other microtransactions disguises from players how much they spend, which further increases a player's vulnerability to predatory microtransactions. Developers assert that in-game currencies make the game more realistic and authentic for the player.¹²⁸ Some games do use a currency that is historically or geographically relevant to the game, but many more use generic currencies such as gold or crystals, and others have arbitrary 'currencies' like "a boatload of doughnuts, [or] a can of stars."¹²⁹ Regardless of the form the currency takes, the effect is that the true cost of the purchase is removed from the microtransaction and players are more likely to forget that they are spending real money, especially in the heat of the moment.¹³⁰ The value of the fake currency is further confused by the fact that it is usually bought in odd amounts, and there is rarely a uniform correspondence between the amount of virtual currency received and real money used to purchase it.¹³¹ Players

¹²⁴ Symposium, *supra* note 10, at 101-02.

¹²⁵ See Symposium, *supra* note 10, at 82.

¹²⁶ See Jernström, *supra* note 92, at 9.

¹²⁷ Symposium, *supra* note 10, at 82.

¹²⁸ Symposium, *supra* note 10, at 48.

¹²⁹ See *FTC v. Amazon.com, Inc.*, No. C14-1038-JCC, 2016 U.S. Dist. LEXIS 55569, at *3 (W.D. Wash. Apr. 26, 2016); See also *Boyd*, *supra* note 1, at 175.

¹³⁰ Duverge, *supra* note 51; FPS Justice, *supra* note 14, at n.32, n.68; Symposium, *supra* note 10, at 198 ("Even if the information is listed providing real dollar amounts, digital transactions can make it difficult for people to understand that they're spending money.").

¹³¹ *R.A. v. Epic Games Inc.*, No. 2:19-cv-1488 2019 U.S. Dist. LEXIS 217426, at *2:19-cv-1488 (C.D. Cal. Feb. 28, 2019).

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often lose track of the total amount of money spent within the game.¹³² Game systems often store players' credit card information, further facilitating quick and thoughtless purchases and making it harder for players to keep track of the total amount of money spent.¹³³ Games do not always provide mechanisms to help even diligent players keep track of transactions—players may not know the total until they check their bank statement.¹³⁴

Games are designed to pull players in and captivate them so as to create a devoted customer base. These techniques, however, can border on addictive and some games take advantage of these addictive tendencies.¹³⁵ This is when games and microtransactions risk becoming predatory. The design of the game may emphasize progression through these microtransactions rather than through skill.¹³⁶ Using the information learned from players, the system can also target interactions that are most likely to generate microtransactions from a given player.¹³⁷ These are all examples of predatory monetization schemes, and they exist in both console and mobile games. In order to protect players from these deceptive microtransactions, some regulatory oversight is necessary.

C. BOSS LEVEL: LOOT BOXES

Loot boxes are particularly concerning because they contain many of the same features as gambling games. This increases the addictive parallels of video games and casinos and makes the loot boxes particularly exploitable. Players enjoy loot boxes because of the unknown reward, but it is this very randomness that encourages multiple attempts and purchases.¹³⁸ Researchers have repeatedly linked loot boxes to problem gambling and have shown a connection

¹³² See Duverge, *supra* note 51; FPS Justice, *supra* note 14, at n.32, n.68; see also Symposium, *supra* note 10 at 184 (“There have been a lot of press reports about gamers spending far more than they intend to on loot boxes, people spending thousands of dollars [There] are actually two separate stories of people who discovered they’d spent more than \$10,000 on microtransactions.”).

¹³³ MacPhee, *supra* note 70, at 140.

¹³⁴ Johnny Doe v. Epic Games Inc., 435 F. Supp. 3d 1024, 1032 (N.D. Cal. 2019); Compl. at 18-22, Johnny Doe v. Epic Games Inc., Case 4:19cv3629 (N.D. Cal. June 21, 2019).

¹³⁵ See generally Langvardt, *supra* note 30, at 135-152.

¹³⁶ Langvardt *supra* note 30, at 141 (noting games may have “design practices that draw the user into compulsive behavior”).

¹³⁷ King, *supra* note 100, at 1967-68.

¹³⁸ See Langvardt, *supra* note 30, at 144.

between those who purchase loot boxes and those who develop gambling problems.¹³⁹ This is true of both children and adults.¹⁴⁰

The process of opening a loot box is meant to be thrilling and exciting, with flashing lights and exploding animations, just like pulling the lever on a slot machine in a casino. These animations heighten the tension to make the experience more exciting, and research suggests that these ostentatious displays encourage the risky decision-making that is the hallmark of problem gambling.¹⁴¹ It also encourages repeated attempts, or repeated loot box purchases.¹⁴² The pomp and circumstance combined with the uncertainty of the reward triggers an increase in dopamine production, the same hormone response that occurs when gambling.¹⁴³ Gamers who play with loot boxes experience the same emotional ups and downs as gamblers: an initial rush when the bet is made, or the box is being opened, followed by feelings of regret, shame and depression when the reward falls short.¹⁴⁴ This prompts a desire to keep trying, time after time, because a good reward must be just around the corner.¹⁴⁵ Some loot boxes show “near-miss” animations with the image slowing down and almost stopping on a particularly valuable item—similar to a slot machine.¹⁴⁶ Showing how close they were to winning makes players believe they will get a reward with another attempt.¹⁴⁷

The video game industry does not want loot boxes classified as gambling because the games that follow the (voluntary) rating standards would have to put a mature label on these games.¹⁴⁸ This would drastically reduce the customer base for many games.¹⁴⁹ Video game developers and publishers defend loot boxes on the basis that they are not gambling mechanisms but rather “surprise mechanics” like random collectibles or baseball trading cards and that “people enjoy surprises . . . [i]t’s been a part of toys for years.”¹⁵⁰ There are notable differences between purchasing trading cards and loot boxes, however.

¹³⁹ Symposium, *supra* note 10, at 115.

¹⁴⁰ See Symposium, *supra* note 10, at 119-20.

¹⁴¹ Thandi Fletcher, *Casino Lights and Sounds Encourage Risky Decision-Making*, UBC NEWS SCIENCE HEALTH & TECHNOLOGY (Oct. 29, 2018), <https://news.ubc.ca/>.

¹⁴² Moshirnia, *supra* note 38, at 87.

¹⁴³ Prateek, *supra* note 108; Castillo, *supra* note 56, at 193.

¹⁴⁴ Moshirnia, *supra* note 38, at 88.

¹⁴⁵ Moshirnia, *supra* note 38, at 87.

¹⁴⁶ Moshirnia, *supra* note 38, at 87.

¹⁴⁷ Moshirnia, *supra* note 38, at 87.

¹⁴⁸ Castillo, *supra* note 56, at 198.

¹⁴⁹ Castillo, *supra* note 56, at 198.

¹⁵⁰ Gault, *supra* note 86.

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Although collectors may binge on trading card packs, the purchasing process is very different from placing a bet or buying a loot box.¹⁵¹ Trading cards take more time and thought because, traditionally, one must go and physically purchase trading card packs, in person.¹⁵² Instead of purchasing and opening one after another in short succession, consumers of collectibles often, go with the intention of only purchasing a set amount.¹⁵³ The process of buying trading card packs is significantly more drawn out and involved than with loot boxes, where, like with casino gambling, “[t]he entire setup. . . the entire visual of it, the entire sensory load of it, is rapid and is immediate.”¹⁵⁴ To purchase a loot box a player does not have to take the time go anywhere or search for what they want. There’s significantly less friction: it can all be done instantaneously from home and, if the player is disappointed, more can be instantly purchased.¹⁵⁵ Players are known to purchase and open multiple loot boxes in a short period of time—just like problem gamblers will pull a slot-machine lever time after time—all in the hope of receiving a specific reward.¹⁵⁶

Loot boxes are already concerning due to their similarities to gambling. But they can also be made increasingly dangerous through the same predatory techniques as other microtransactions. For example, unlike traditional gambling games, the odds of receiving certain prizes from loot boxes can be changed at any time by developers.¹⁵⁷ A player always knows the odds of a game of roulette, and the rules and mechanics of poker and blackjack never change. This is not true of loot boxes, however. Loot boxes introduce into video games, which are traditionally skill based, an element of chance that can change the entire dynamic of the game.

¹⁵¹ Players have also spoken up about the inaccuracy of this comparison, pointing out that purchasing loot boxes is not the same as going to the toy store because “people don’t spend thousands of dollars on [the collectible toy] Hatchimals. . . to assemble the ultimate Hatchimal Squad.” Inside Gaming, *EA Lies About Loot Boxes Again—Inside Gaming Daily*, YOUTUBE (Jun. 20, 2019), <https://www.youtube.com/watch?v=x0B8lw61840&t=289s>; see also Symposium, *supra* note 10, at 121-22.

¹⁵² Symposium, *supra* note 10, at 121.

¹⁵³ Symposium, *supra* note 10, at 159-60.

¹⁵⁴ Jason M. Bailey, *A Video Game ‘Loot Box’ Offers Coveted Rewards, but is it Gambling?*, N.Y. TIMES (Apr. 24, 2018), <https://www.nytimes.com/2018/04/24/business/loot-boxes-video-games.html> (quoting State Senator Kevin Ranker).

¹⁵⁵ Symposium, *supra* note 10, at 159-60.

¹⁵⁶ See Symposium, *supra* note 10, at 116, 159-60; Moshirnia, *supra* note 38, at 88.

¹⁵⁷ *E.g.*, Symposium, *supra* note 10, at 166.

D. PLAYER INVENTORY: THE VALUE OF VIRTUAL ITEMS

Gambling statutes vary from state to state but contain the same general elements: consideration from the player, a potential prize, and an outcome controlled by chance.¹⁵⁸ Initially, regulators' concerns regarding microtransactions were focused solely upon loot boxes and their similarities to gambling. In most cases with the loot boxes at issue, state gambling laws have been poorly equipped to handle the virtual nature of the games and items. Chance is interpreted differently in each state, with some states requiring that chance have more of a role than others.¹⁵⁹ Regardless of the amount of chance necessary for a given state's gambling regulations to apply it is clear that loot box outcomes are based upon chance; players do not have control over whether or what they will win in a loot box.¹⁶⁰ The prize and risk elements pose more difficult questions, however.¹⁶¹ Both require an element of value: the consideration must be something of value risked by the player, and the potential prize must also have value.¹⁶² It is unclear under most laws and case precedent whether the virtual coins bet, and the virtual items won, have value as defined by these statutes.

This question of value and virtual items, however, is not limited to the virtual items in loot boxes. It is an important question for all virtual items and microtransactions. The threshold question is whether virtual items and virtual currency can amount to things of value. One argument is that they do not, because they often cannot be exchanged for real-world money.¹⁶³ There are many other arguments for why virtual items may have value, however. Given the function of these items and the ways in which developers encourage microtransactions, many players believe that virtual items do have some real value.¹⁶⁴

Some have argued that traditional theories of property support real value within game items and currency. Gamers often devote a significant amount of time and energy to obtaining game wealth and to developing characters.¹⁶⁵ The time and effort spent by players to building up game assets matches a Lockean property theory; a person

¹⁵⁸ 38 Am. Jur. 2d Gambling §2.

¹⁵⁹ MacPhee, *supra* note 70, at 160.

¹⁶⁰ Castillo, *supra* note 56, at 187.

¹⁶¹ Castillo, *supra* note 56, at 189.

¹⁶² 38 Am. Jur. 2d Gambling §2.

¹⁶³ MacPhee, *supra* note 70, at 160.

¹⁶⁴ Marsh, *supra* note 54 (Noting that it "seems reasonable that you, the person who has exchanged money for the [virtual] sword, should have *some* legal claim to it.").

¹⁶⁵ Alfred Fritzsche V, *Trespass to (Virtual) Chattels: Assessing Online Gamers' Authority to Sell In-Game Assets Where Adhesive Contracts Prohibit Such Activity*, 8 U.C. DAVIS BUS. L.J. 235 at 16 (2007).

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who invests labor into something increases its value and thereby has a property interest in it.¹⁶⁶ A personhood theory may similarly suggest that game assets have value due to the strong identificatory relationships that players can form with the virtual items they create and with the avatars they develop to represent themselves.¹⁶⁷

Property theories and the value of virtual items were first tested in 2002, by a company named BlackSnow Interactive. The company hired workers to enter a virtual game world and earn game currency and items there.¹⁶⁸ These assets were then sold to other players in exchange for real money.¹⁶⁹ The game's Terms of Service prohibited these sales, and BlackSnow's accounts were terminated.¹⁷⁰ In response, BlackSnow sued, claiming a property interest in the accounts' assets, despite the Terms of Service.¹⁷¹ BlackSnow argued a Lockean theory,¹⁷² claiming that the sale of the virtual items was actually a sale of the time invested into those items, time that belonged to the players.¹⁷³ Essentially, BlackSnow said that the time investment was work that added to the value of those accounts and virtual items, thereby giving BlackSnow a property interest in them. Unfortunately, this legal question was never answered as the case was dropped when the Federal Trade Commission brought unrelated charges against BlackSnow.¹⁷⁴

A similar question was raised in 2016 when the federal government filed a sealed indictment against a player of the video game FIFA Soccer for allegedly conspiring to defraud the game developer by obtaining the game's virtual currency, FIFA Coins, "by means of materially false and fraudulent pretenses and representations."¹⁷⁵ A

¹⁶⁶ *Id.* at 17-19.

¹⁶⁷ *Id.* at 22.

¹⁶⁸ Julian Dibbell, *Black Snow Interactive and the World's First Virtual Sweat Shop*, JULIAN DIBBELL (DOT COM) (Jan. 2003), <http://www.juliandibbell.com/texts/blacksnow.html>.

¹⁶⁹ *Id.*

¹⁷⁰ *Id.*

¹⁷¹ *Id.*

¹⁷² They likely could not have argued a personhood theory because the players were simply minimum wage workers out of Tijuana and, therefore, presumably had little personal attachment to the accounts that they used or to the virtual assets of those accounts. *Id.*

¹⁷³ JACK BALKIN & BETH SIMONE NOVECK *THE STATE OF PLAY: LAW, GAMES, AND VIRTUAL WORLDS* 138 (NYU Press 2006) (quoting BlackSnow Interactive's representative: "What it comes down to is, does a ... player have rights to his time, or does Mythic own that player's time? It is unfair of Mythic to stop those who wish to sell their items, currency or even their own accounts, which were created with their own time").

¹⁷⁴ BlackSnow essentially skipped town when the FTC discovered that it had put non-existent computers up for auction on eBay. Fritzsche, *supra* note 165, at 245.

¹⁷⁵ Holden, *supra* note 55, at 71.

jury trial resulted in a conviction, but the defendant moved for a new trial, alleging in part that, based upon the game's own Terms of Service, the coins were *not* currency and had no monetary value.¹⁷⁶ Unfortunately, the matter was dismissed after the defendant unexpectedly passed away before the court could rule on his motion, leaving the issue of the value of in-game assets unresolved once again.¹⁷⁷

The question continues to haunt the courts, especially as loot boxes and other microtransactions become increasingly commonplace. Several cases have addressed the question of loot box value and virtual currency value in online gambling games.¹⁷⁸ Although these cases have been brought under statutes in a number of different states, the crux of the decisions have rested upon the question of value; specifically, whether the virtual items used as wagers and winnings have sufficient value to classify them as consideration and prizes as defined by the relevant gambling law.

*Kater v. Churchill Downs, Inc.*¹⁷⁹ was the first of such cases, and involved a virtual casino video game where players play online casino games with the chance to win virtual chips.¹⁸⁰ When players run out of chips, they can either wait for the chips to replenish over time or they can purchase more chips from within the app.¹⁸¹ After purchasing \$1,000 worth of virtual chips, and subsequently losing all \$1,000, a player sued the app developer under Washington gambling statutes.¹⁸² To answer whether the game met the statute's definition of gambling, the court had to determine if the virtual chips had value.¹⁸³ The district court initially found that the virtual chips were not "things of value" because the players could not redeem them for real money.¹⁸⁴ Plaintiff's

¹⁷⁶ See Holden, *supra* note 55, at 72.

¹⁷⁷ Holden, *supra* note 55, at 73.

¹⁷⁸ See *e.g.*, *Kater v. Churchill Downs, Inc.*, 886 F.3d 784 (9th Cir. 2018); *Wilson v. PTT, LLC*, 351 F. Supp. 3d 1325 (W.D. Wash. 2018); *Fife v. Sci. Games Corp.*, No. 18-cv-00565-RBL, 2018 U.S. Dist. LEXIS 212908 (W.D. Wash. Dec. 18, 2018); *Liston v. King.com, Ltd.*, 254 F. Supp. 3d 989 (N.D. Ill. 2017).

¹⁷⁹ *Kater v. Churchill Downs, Inc.*, 886 F.3d 784 (9th Cir. 2018) [hereinafter *Kater 9th Cir.*].

¹⁸⁰ See *id.* at 785-86.

¹⁸¹ *Kater v. Churchill Downs, Inc.*, No. C15-612-MJP, 2015 U.S. Dist. Lexis 175049, at *2 (W.D. Wash. Nov. 19, 2015), *rev'd*, 886 F.3d 784, 787 (9th Cir. 2018). [hereinafter *Kater D.Ct.*].

¹⁸² *Kater 9th Cir.*, 886 F.3d, at 786; *Kater D.Ct.*, 2015 U.S. Dist. Lexis 175049, at *1-2.

¹⁸³ Washington defines gambling as: "staking or risking something of value upon the outcome of a contest of chance or a future contingent event not under the person's control or influence, upon an agreement or understanding that the person or someone else will receive something of value in the event of a certain outcome." WASH. REV. CODE § 9.46.0237 (2020).

¹⁸⁴ *Kater D.Ct.*, 2015 U.S. Dist. Lexis 175049, at *8-9.

alternative claim, that the virtual chips had value because they extended gameplay, was similarly rejected.¹⁸⁵ The court held that because “there is never a possibility of receiving real cash or merchandise” from extended gameplay, the prize—increased game time given by the chips—has no real value.¹⁸⁶ But, the Ninth Circuit reversed, holding that the extension of game time *can* be a prize of value, even when there is no option to win money.¹⁸⁷

Kater focused on the prize element of the gambling statute.¹⁸⁸ Two subsequent cases that were also brought under Washington’s gambling statute addressed the consideration element and whether virtual gambling chips are valuable consideration.¹⁸⁹ The games were similar to the casino-style game at issue in *Kater*, but the court in *Kater* did not address the question of consideration.¹⁹⁰ On motions to dismiss, the defendant game developers in these later cases tried to distinguish their cases from the Ninth Circuit’s holding in *Kater* by establishing that the virtual chips had no value as consideration because players continued to receive free chips over time.¹⁹¹ In both cases the district court found that the virtual chips met the definition of valuable consideration because players would have to pay for additional chips with real money if they wanted to immediately continue playing after depleting their virtual chips.¹⁹² The existence of alternative free options and waiting to receive more chips did not make them any less a thing of value.¹⁹³ Under Washington law, online games using virtual currency constitute gambling because the currency has value as both a prize and as consideration.

Placing a value on virtual items is not limited to casino games or to Washington’s gambling statutes. Other states have also addressed the

¹⁸⁵ *Id.* at 10-11.

¹⁸⁶ *Id.* at *9-10.

¹⁸⁷ *Kater 9th Cir.*, 886 F.3d at 787.

¹⁸⁸ *See generally id.*

¹⁸⁹ *See Wilson v. PTT, LLC*, 351 F. Supp. 3d 1325, 1330 (W.D. Wash. 2018); *see also Fife v. Sci. Games Corp.*, No. 18-cv-00565-RBL, 2018 U.S. Dist. LEXIS 212908, at *1-2 (W.D. Wash. Dec. 18, 2018).

¹⁹⁰ *See Wilson*, 351 F. Supp. 3d, at 1337 (acknowledging that the Ninth Circuit declined to address the issue of consideration in *Kater*); *see also Fife*, 2018 U.S. Dist. LEXIS 212908, at *10 (noting that the Ninth Circuit “did not address whether additional free coin allotments” gave virtual tokens value).

¹⁹¹ *See Wilson*, 351 F. Supp. 3d, at 1337; *see also Fife*, 2018 U.S. Dist. LEXIS 212908, at *9-10.

¹⁹² *See Wilson*, 351 F. Supp. 3d, at 1338; *see also Fife*, 2018 U.S. Dist. LEXIS 212908, at *11-12.

¹⁹³ *See Wilson*, 351 F. Supp. 3d, at 1338; *see also Fife*, 2018 U.S. Dist. LEXIS 212908, at *11-12.

value of virtual items and currency with varying outcomes. For example, in the popular game Candy Crush Saga, players have a limited number of lives that, once used up, will replenish themselves over time¹⁹⁴ Players who do not want to wait for the lives to regenerate on their own can purchase more or, alternatively, can use “donated lives” which are received in exchange for marketing the game to Facebook friends.¹⁹⁵ A class action lawsuit arose under Illinois law after several players’ donated lives were deleted.¹⁹⁶ In denying the defendant’s motion to dismiss, the court held that lives were items of value.¹⁹⁷ Even though the plaintiff received the lives for free, they were alternatively purchasable through microtransactions, and therefore, have a calculable value.¹⁹⁸ Furthermore, the court found that receiving donated lives instead of purchasing lives is inconsequential in determining whether the lives had value.¹⁹⁹ Although this determination was only made on a motion to dismiss, the case was brought in federal court where the plaintiff had to establish the potentiality of value under the higher plausibility standard.²⁰⁰ This outcome suggests that game developers give virtual items legal value by making the items available through microtransactions in the game.²⁰¹

This possibility is also present in a case that involved loot boxes and the gambling statutes of California, Michigan, and Illinois. In the mobile game Castle Clash, players use real money to purchase virtual gems, which in turn are used to purchase loot boxes containing “Heroes” and “Talents” of varying rarity.²⁰² The court found that the prize

¹⁹⁴ Liston v. King.com, Ltd., 254 F. Supp. 3d 989, 993 (N.D. Ill. 2017).

¹⁹⁵ *Id.*

¹⁹⁶ *Id.* at 994.

¹⁹⁷ *Id.* at 997.

¹⁹⁸ *See id.* The court further noted that the defendant valued the marketing activities that players were engaged in and compensated players by giving them extra lives in consideration for the players marketing activities.

¹⁹⁹ *See id.* (“Candy Crush lives have actual economic value; they are available for purchase at a particular price. . . . King’s argument that an asset that is able to sell for 20 cents has no inherent value is untenable; that the game provides a mechanism by which players may also receive such assets for free in exchange for [marketing] activities that King values does not change that basic fact.”).

²⁰⁰ Liston v. King.com, Ltd., 254 F. Supp. 3d 989, 1002 (N.D. Ill. 2017).

²⁰¹ *See id.* at 997.

²⁰² Soto v. Sky Union, LLC, 159 F. Supp. 3d 871, 875 (N.D. Ill. 2016) (“According to the complaint, players stockpile more gems only by paying real money for them. Sky Union sells gems in bulk, ranging from 230 gems for \$1.99 to 16,800 gems for \$99.99. These gems may be used to purchase in-game enhancements or to speed up [a player’s] progress in the game.”).

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element was not met because the Heroes and Talents could not be exchanged or redeemed for real money.²⁰³

The rewards could not be monetized and could not provide players with additional game time; therefore, they are valueless and not proper prizes.²⁰⁴ The court noted, however, that there was a possibility that the consideration element was met.²⁰⁵ This is because the virtual gems used to purchase the loot boxes were themselves bought with real money.²⁰⁶ Therefore, those virtual items, purchased through microtransactions, retained the value of that purchase.²⁰⁷

Courts have not uniformly answered the question of whether a prize has value. But case law on value and virtual items suggests that virtual items still have *some* intrinsic value, even if they do not meet a given state's definition of a prize. After all, they are purchased with real currency at some point, even when the game's currency is used as the medium. In summary, game items are given value when they are made purchasable through microtransactions. Anything that flows from that microtransaction also has value: loot boxes and other virtual items are no less valuable because they are obtained in exchange for game currency rather than purchased directly through microtransactions.²⁰⁸ Finally, even if there is a way to obtain a game item for free, if purchasing it is also an option, then there may be value.²⁰⁹ Under some statutes, however, even if loot boxes have value through an earlier purchase with real money, the items received from them may not be viewed as a prize unless they provide more game time or can be transferred into something such as game time or game currency. The lack of uniformity and case law between states makes it difficult to predict how a virtual item might be viewed in the future. It is, however, clear that many traditional gambling statutes are not equipped to address loot boxes and virtual items: items won in a loot box do not always constitute a prize, even when they have value and the other legal elements of gambling exist.

²⁰³ *Id.* at 880.

²⁰⁴ *Id.* at 882 (noting that the California statute, like Washington, includes in its definition of value extended game time. It is unclear if the other state statutes did as well).

²⁰⁵ *Id.* at 881.

²⁰⁶ *Id.*

²⁰⁷ *Id.* at 81.

²⁰⁸ *Soto*, 159 F. Supp. 3d at 882 ("...simply adding a step whereby players must purchase digital currency and use that currency to participate does not nullify the pecuniary loss...").

²⁰⁹ *E.g. Wilson v. PTT, LLC*, 351 F. Supp. 3d 1325, 1338 (W.D. Wash. 2018); *Liston v. King.com, Ltd.*, 254 F. Supp. 3d 989, 997 (N.D. Ill. 2017).

There is a growing recognition that virtual items may have value both legally and socially, even if that value does not meet the requirements for gambling regulation.²¹⁰ Items are given value when the game makes them purchasable with real money. On the other hand, most games include Terms of Service (“ToS”) and End User License Agreements (“EULA”) that explicitly disclaim any real-world value for virtual items and currency.²¹¹ Games also retain the right to delete any game items or currency at any time.²¹² Some advocates argue that ToS agreements are contracts of adhesion and, therefore, courts may find them void if the terms are unconscionable, or if “high pressure tactics” are used.²¹³ There is potential that a disclaimer of value is unconscionable when a game actively suggests that its items have value and uses predatory monetization methods to further encourage microtransactions.²¹⁴ But even if that is true it is unlikely that courts would find these ToS void.²¹⁵ Players have the choice to go to games with more favorable terms—in fact, consumers are not required to play video games at all. It is purely a leisure activity. An argument that ToS are contracts of adhesion with unconscionable terms is unlikely to see much success.

Courts have even bolstered the validity of ToS agreements that limit the value of virtual items. *Dupee v. Playtika Santa Monica*²¹⁶ involved an online casino game and an allegation by the plaintiff that the game constituted unlawful gambling under Ohio law.²¹⁷ The game used virtual coins that could be purchased with real money but never redeemed for real money.²¹⁸ The case was dismissed on procedural grounds; however, the court recognized that the ToS might have the

²¹⁰ London & Country Mortgages performed an analysis of the cost of virtual properties in a number of video games, even calculating how much the properties would cost if converted into various real-world currencies. *An In-Depth Analysis of the Video Game Housing Market*, LONDON & COUNTRY, <https://www.landc.co.uk/video-game-property/> (last visited May 30, 2021).

²¹¹ BOYD, *supra* note 1, at 107. *But see* Fritzsche, *supra* note 165, at 15 (examples of games that do grant players property interest in virtual assets); Byron M. Huang, *Walking the Thirteenth Floor: The Taxation of Economies*, 17 YALE J.L. & TECH 224 (2015) (showing examples of games wherein federal income tax upon virtual assets may be appropriate).

²¹² BOYD, *supra* note 1, at 106.

²¹³ Kevin W. Saunders, *Virtual Worlds: Real Courts* 52 VILL. L. REV. 187, 209 (2007).

²¹⁴ *Id.*

²¹⁵ *Id.* at 210.

²¹⁶ *Dupee v. Playtika Santa Monica*, No. 1:15CV1021, 2016 U.S. Dist. LEXIS 25026 (N.D. Ohio Mar. 1, 2016).

²¹⁷ *Dupee v. Playtika Santa Monica*, No. 1:15CV1021, 2016 U.S. Dist. LEXIS 25026, at *3 (N.D. Ohio Mar. 1, 2016).

²¹⁸ *Id.*

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power to limit the value of the items within the game.²¹⁹ In *Phillips v. Double Down Interactive LLC*,²²⁰ the court again recognized the power of ToS to limit the real-world value of virtual items. This case was also dismissed on other grounds, but the court noted that the terms of the game prohibited selling game accounts, and thereby the chips within them, for real money.²²¹

Despite ToS and EULA restrictions upon value, developers implicitly encourage players to assign value to these virtual items through the predatory use of microtransactions. This is done by first introducing the microtransactions into the game model, and further reinforced through encouraging their purchase with predatory techniques, especially those that suggest the microtransactions are integral to game success. There are many other ways that developers can continue to reinforce the misconception amongst players that the items purchased have value. For example, leading up to the release of Bethesda's *Fallout 76*, players could pre-order several physical items reminiscent of the game.²²² One item, a duffel bag, was delayed in production and underbudgeted—the bag received did not, according to players, match the advertised description.²²³ In an attempt to appease the community, the game publisher gave players in-game currency instead of a return and refund option.²²⁴ The game essentially equated a refund using real currency with a refund using game currency. This is indicative of how the industry wants players to view game currency as something with a value that is interchangeable with real-world value. If

²¹⁹ Holden, *supra* note 55, at 86 (“...the case contributed to the discussion by an additional district court observing that the terms of service appear to have the power to limit the value of virtual coins.”).

²²⁰ See *Phillips v. Double Down Interactive LLC*, 173 F. Supp. 3d 731 (N.D. Ill. 2016).

²²¹ *Id.* at 735.

²²² Mike Minotti, *Fallout 76 Special Edition Doesn't Delivery Promised Collectible Bag, Bethesda Offering \$5 in Apology*, VENTUREBEAT (Nov. 29, 2018), <https://venturebeat.com/2018/11/29/fallout-76-special-edition-lied-about-a-collectible-bag-bethesda-offering-5-in-game-as-an-apology/>; see also Internet Historian, *The Fall of 76*, YOUTUBE (May 4, 2019), <https://www.youtube.com/watch?v=kjyeCdd-dl8&fbclid=IwAR1i8WcB7tp7ge76e3cb8SA6GCd5DHyniXGcFdIjsV1nCfiuVtONPdmly90>.

²²³ Matt Brown, *Fallout 76 Power Armor Edition Criticized, Free Canvas Bags Now Planned (Update)*, WINDOWS CENTRAL (Dec. 4, 2018), <https://www.windowscentral.com/fallout-76-draws-criticism-power-armor-edition-contents>; Erik Kain, *Bethesda Gave 'Influencers' Nice 'Fallout 76' Canvas Bags Instead of Fans Who Spent \$200*, FORBES (Dec. 3, 2018), <https://www.forbes.com/sites/erikkain/2018/12/03/bethesda-gave-influencers-nice-fallout-76-canvas-bags-just-not-customers-who-paid-200/?sh=aa64df83ac11>.

²²⁴ Minotti, *supra* note 222.

players view the items that they purchase within the game as having value then they are more likely to engage in microtransactions.

There have also been several claims that the existence of secondary markets should lend credence to the fact that game accounts and assets have value, despite ToS and EULAs.²²⁵ These black markets seem to give virtual items marketable value despite the game terms because they allow players to sell and trade the items and currency for money.²²⁶ It was the existence of these secondary markets on which BlackSnow built its business model, and at one time eBay had a section devoted to these sales.²²⁷ Players have made up to hundreds of thousands of dollars this way.²²⁸

Some games provide these secondary markets themselves, while others prohibit the activity and state in their ToS that accounts can be terminated if game moderators discover that a player sold an account or its assets.²²⁹ Even when companies restrict the activity, however, secondary “black markets” remain commonplace.²³⁰ Some gamers believe that moderators do not uniformly enforce ToS and EULA restrictions on “real-world” sales and allege that moderators knowingly allow certain players to use these black markets without consequence.²³¹ Others suggest that a game’s design and use of microtransactions implicitly encourages players to engage in secondary market sales, notwithstanding ToS and EULA restrictions.²³² Regardless, developers are aware that these markets exist and do not always act to shut them down, or punish players who make use of them.²³³ This another way in which predatory monetization in video games can take advantage of players and their misconceptions as to the value of their virtual assets. A game can passively allow such a market

²²⁵ Fritzsche, *supra* note 165, at 12.

²²⁶ MacPhee, *supra* note 70, at 161; *see also* IMMERSIVE AND ADDICTIVE TECHNOLOGIES, *supra* note 22, at 90 (“It is also widely acknowledged that the virtual contents of loot boxes can be ‘cashed out’ for real-world monetary value.”).

²²⁷ Saunders, *supra* note 213, at 229.

²²⁸ F. Gregory Lastowka & Dan Hunter, *The Laws of the Virtual Worlds*, 92 CALIF. L. REV. 1, 39 (2004).

²²⁹ BOYD, *supra* note 1, at 167.

²³⁰ Fritzsche, *supra* note 165, at 3.

²³¹ Andrew E. Jankowich, *Property and Democracy in Virtual Worlds*, 11 B.U. J. SCI & TECH. L. 173, 182 (2005); *see also* IMMERSIVE AND ADDICTIVE TECHNOLOGIES, *supra* note 22, at 32 (“We are concerned that there are large video game companies who are failing to proactively enforce their own platform’s terms of use to prevent in-game items being readily exchanged for cash.”) (referencing a report from the Gambling Commission of the UK).

²³² Jankowich, *supra* note 231, at 182-83.

²³³ Jankowich, *supra* note 231, at 184.

to exist by allowing, and implicitly encouraging, players to assign real value to virtual items and currency. The developer itself, however, remains protected through the disclaimer in its ToS and EULA.

Sanctioned or not, the existence of secondary markets also makes it difficult for inexperienced gamers to differentiate between games that allow resale and those that do not. The microtransactions look the same in both types of games—the difference does not emerge until down the line when one player can resell items and another cannot. Most players do not recognize the different restrictions that a game's terms may impose. When developers introduce and emphasize microtransactions, they only add to this confusion.²³⁴ Microtransactions suggest to players that their game currency and items do, in fact, have real world value. Players give value to these items and there is a significant market for them.²³⁵ A market that allows consumers to buy items creates the presumption amongst consumers that there will be a market to sell those items as well. Games capitalize on this misconception—microtransactions encourage players to believe there is value in their items. The game can then integrate predatory monetization techniques to heighten the likelihood that players will engage in more microtransactions of all types, not just loot boxes.

The class action lawsuits brought by parents of *Fortnite* players demonstrate this dichotomy and the frustrations of players. Allegations in the complaints include claims of psychological manipulation and unfair trade practices under California consumer protection law.²³⁶ One complaint alleges that developers “perfected a predatory scheme” and that this scheme “entices players to start playing [the] game, with the goal of luring those players to make in-game microtransactions,” including loot box purchases.²³⁷ Another complaint includes similar allegations of psychological manipulation and states that the game “is known for its addictive tendencies.”²³⁸ These accusations echo throughout the gaming community and have resonated with public figures.²³⁹ The complaints themselves further highlight the nature of

²³⁴ See Jankowich, *supra* note 231, at 181.

²³⁵ Fritzsche, *supra* note 165, at 20; John S. Chao, *Recognizing Virtual Property Rights, It's About Time*, 45 L. SCH. STUDENT SCHOLARSHIP 1, 16 (2010).

²³⁶ *E.g.*, Compl. at 1-2, R.A. v. Epic Games Inc., No. 2:19-cv-1488 (C.D. Cal. Feb. 28, 2019).

²³⁷ *Id.*

²³⁸ Compl. at 11, Johnny Doe v. Epic Games Inc., No. 4:19cv3629 (N.D. Cal. June 21, 2019).

²³⁹ *E.g.* Lee, *supra* note 75; see also Anna Nicolaou, *Fame and 'Fortnite'—Inside the Global Gaming Phenomenon*, FIN. TIMES (Aug. 2, 2019),

game currency and loot boxes, and that players who make microtransactions have no way to see how much they have spent in total, nor opportunity to reverse the purchase.²⁴⁰

Loot boxes alone are not the problem. Rather, it is this addictive nature of video games in general which allows developers to use predatory monetization schemes in the integration of all microtransactions. Players that fall prey to such schemes believe that they are purchasing items with value that may be redeemable or transferable later, but they are ultimately worthless. The lack of legal recognition and value for virtual items has “created a drastic disconnect between what people are actually receiving in exchange for their money and time online, and what they think they’re getting.”²⁴¹ Many developers design games to encourage players to spend inordinate amounts of money on valueless virtual items.

IV. The Hero Returns: Conclusion and Regulatory Proposals

Even prior to the microtransaction boom, economists studied the implications of games built around virtual worlds.²⁴² The vast markets and economies of those games act similarly to real-world markets, with the same fluctuations depending on the estimated worth and availability of in game goods and currency.²⁴³ Legal theorists postulated, as games increasingly commodified their worlds with these real-world market mechanisms, that real-world law would become increasingly relevant to game activity.²⁴⁴ Microtransactions are a slightly different form of commodification, however, the theory that in-game markets could have real-world implications still seems to apply. As Professor Balkin noted, “[o]nce virtual worlds contain items of value easily convertible into real-world property, states will become increasingly interested in regulating what goes on in them.”²⁴⁵

<https://www.ft.com/content/f2103e72-b38f-11e9-bec9-fdcab53d6959> (noting that Prince Harry described the video game *Fortnite* as “created to addict.”).

²⁴⁰ See generally Compl. at 11, *Johnny Doe v. Epic Games Inc.*, No. 4:19cv3629 (N.D. Cal. June 21, 2019).

²⁴¹ Marsh, *supra* note 54.

²⁴² Saunders, *supra* note 213, at 192.

²⁴³ See Saunders, *supra* note 213, at 192.

²⁴⁴ Jankowich, *supra* note 231, at 179 (developers may “have invited suits and regulation and other manifestations of real-world law by emphasizing commerce within virtual worlds”).

²⁴⁵ See generally Jack M. Balkin, *Virtual Liberty: Freedom to Design and Freedom to Play in Virtual Worlds*, 90 VA. L. REV. 2043, 2060 (2004).

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Gambling legislation exists to protect customers: it forces the gambling industry to take precautions and to actively watch for signs of problem gambling amongst consumers. Leaders in the industry also head movements to encourage responsible gambling.²⁴⁶ But most gambling legislation cannot be applied to loot boxes. Loot boxes, in fact all microtransactions, pose the same dangers as gambling. Players can become addicted to games, especially to loot boxes, and engage in uncontrolled spending. Despite the similar dangers, many video game industry leaders are reluctant to accept that they may have a responsibility to players whose spending falls outside of normal habits.²⁴⁷ In order to protect the integrity of the industry and its consumers, a regulatory body responsible for monitoring deceptive and unsafe microtransaction integration into video games should develop and implement gold standards.

Some changes are being made. Platforms such as Apple's App-store, Android's Google Play store, and Amazon now require "in-game purchases" labels for games that include microtransactions.²⁴⁸ The industry has also promised to begin publishing the statistical likelihood of loot box outcomes.²⁴⁹ These are two important steps—but they are not sufficient. Parents of players, and adult players themselves, do not always understand the different types of microtransactions or their dangers. Furthermore, the industry still has the ability to change the odds of receiving different items in a loot box. As discussed in previous sections, games can also use technology to target or match players in ways that encourage microtransactions. Given the predatory ways in which developers can use microtransactions, the industry cannot be left to self-regulate any longer.

Some countries across the world have already enacted new regulations that apply to video games, although for the most part they have only addressed loot boxes. For example, some countries have declared loot boxes to violate gambling laws. These countries have even banned them from all games marketed to children under the age of

²⁴⁶ See, e.g., Press Release, GVC Holdings, GVC Goldings Launches First US Foundation for Responsible Gambling, Corporate Compliance and Integrity (Oct. 8, 2019) (<https://www.prnewswire.com/news-releases/gvc-holdings-launches-first-us-foundation-for-responsible-gambling-corporate-compliance-and-integrity-300934069.html>).

²⁴⁷ IMMERSIVE AND ADDICTIVE TECHNOLOGIES, *supra* note 22, at 13.

²⁴⁸ Symposium, *supra* note 10.

²⁴⁹ Symposium, *supra* note 10.

eighteen.²⁵⁰ Others simply require disclosure of loot box probabilities.²⁵¹

China has also considered limiting the number of loot boxes that can be opened by a player each day.²⁵² Australia, on the other hand, merely recommends that games with loot boxes have warning labels.²⁵³

The most interesting development comes from the United Kingdom which initially found that loot boxes did not qualify as gambling.²⁵⁴ In September 2019, however, a new parliamentary report was released concerning potential harms that can result from technologies like videogames.²⁵⁵ This report is particularly notable because it is not limited to loot boxes and gambling, but rather considers gaming disorders as a whole, as well as other related concerns.²⁵⁶ It is possible now that the UK will re-evaluate its stance towards loot boxes and to other microtransactions altogether.

The United States should follow the UK and take a leading position by addressing microtransactions as a whole, rather than loot boxes alone. Microtransactions are not all bad. When implemented properly they allow for game prices to stay low or non-existent, which increases accessibility to games across demographics.²⁵⁷ But microtransactions can also be implemented in dangerous ways. Self-regulation alone by the industry will not suffice, however industry leaders cannot be ignored either. Video game developers should work with government regulators to establish a system of gold standards and oversight that allows microtransactions to remain in games in safe ways.

²⁵⁰ Tom Gercken, *Video Game Loot Boxes Declared Illegal Under Belgium Gambling Laws*, BBC NEWS (Apr. 26, 2018), <https://www.bbc.com/news/technology-43906306>; Andy Chalk, *Netherlands Gaming Authority Cracks Down on Loot Boxes in Some Games*, PCGAMER (Apr. 19, 2018), <https://www.pcgamer.com/netherlands-gaming-authority-cracks-down-on-loot-boxes-in-some-games/>.

²⁵¹ T.J. Hafer, *The Legal Status of Loot Boxes Around the World, and What's Next in the Debate*, PCGAMER (Oct. 26, 2018), <https://www.pcgamer.com/the-legal-status-of-loot-boxes-around-the-world-and-whats-next/>.

²⁵² Inside Gaming Daily, *EA Slammed for "Lack of Honesty and Transparency,"* YOUTUBE (Sept. 13, 2019), <https://www.youtube.com/watch?v=kUIVWB0Laf0&fbclid=IwAR1tFMT-Iw7SM8dX6T0g96dhniLZL7Joact4olaXWDKYRXRGlmf5olCA2gA>; Sean Farlow, *China is Looking to Limit Loot Boxes and Have Exact Drop Rates*, GAZETTE REVIEW (Aug. 16, 2019), <https://gazettereview.com/2019/08/china-looking-limit-loot-boxes-exact-drop-rates/>.

²⁵³ Hafer, *supra* note 251.

²⁵⁴ Zoe Kleinman, *Fifa Packs and Loot Boxes 'Not Gambling' in UK*, BBC NEWS (July 22, 2019), <https://www.bbc.com/news/technology-49074003>.

²⁵⁵ See generally Immersive and Addictive Technologies, *supra* note 22.

²⁵⁶ See generally Immersive and Addictive Technologies, *supra* note 22.

²⁵⁷ Symposium, *supra* note 10, at 25-26.

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On the governmental level, several state legislatures have had bills proposed, but none have yet passed.²⁵⁸ Some of these proposals were limited to loot boxes, while others addressed microtransactions as a whole.²⁵⁹ There have also been federal proposals. In May 2019, Republican Senator Josh Hawley introduced a bi-partisan bill that would not only prohibit loot boxes from games played by minors, it would also bar games geared towards adolescents from offering any type of microtransaction that provide in-game advantages.²⁶⁰ The bill is not expected to succeed, but federal oversight is the best way to proceed. Video games are a fluid industry much of which takes place online, with players in different states interacting. Federal regulation will help to ensure uniformity. This will benefit the industry as well, providing clear guidelines that apply throughout the country.

Any bill that is passed should create a standard for how virtual items' value will be addressed legally. It should also provide a clear grant of authority to the Federal Trade Commission (FTC), whose role it is to monitor businesses and bring action against unfair and deceitful practices. The FTC can keep track and address predatory monetization techniques. The FTC already monitors the Child Online Privacy Protection Act (COPPA) and can set similar guidelines for acceptable microtransaction practices. These guidelines should include COPPA-like regulations that require controls and standards for games and microtransactions that are marketed to underage players. COPPA requires that a website collecting personal data bar access to any visitor under the age of thirteen until parental permission is granted.²⁶¹ A similar standard can be set for microtransactions; any player under a certain age must provide parental consent during game set up. Without consent, no microtransactions can be marketed to the player. Oversight should also include monitoring how games are collecting user data and

²⁵⁸ Anthony Dreyer, et. al., VIDEO GAMING/E-GAMING LAW UPDATE - AUGUST/SEPTEMBER, SKADDEN, ARPS, SLATE, MEAGHER & FLOM LLP (AUG. 6, 2019), <https://www.jdsupra.com/legalnews/video-gaming-e-gaming-law-update-august-59045/>; Jason M. Bailey, *A Video Game 'Loot Box' Offers Coveted Rewards, but Is It Gambling?*, N.Y. TIMES, <https://www.nytimes.com/2018/04/24/business/loot-boxes-video-games.html>.

²⁵⁹ Moshirnia, *supra* note 38; Michael Brestovansky, *'Loot Box Bill Fails to Advance'*, HAW. TRIB. HERALD (Mar. 24, 2018), <https://www.hawaiitribune-herald.com/2018/03/24/hawaii-news/loot-box-bills-fail-to-advance/>; 2017 Legis. Bill Hist. CA A.B. 2194; 2019 Legis. Bill Hist. NY S.B. 1416.

²⁶⁰ Tony Romm & Craig Timberg, *Video Game 'Loot Boxes' Would be Outlawed in Many Games Under Forthcoming Federal Bill*, WASH. POST (May 8, 2019), <https://www.washingtonpost.com/technology/2019/05/08/video-game-loot-boxes-would-be-outlawed-many-games-under-forthcoming-federal-bill/>.

²⁶¹ 15 U.S.C.S. § 6502(b)(1)(A)(ii).

ensuring that the data is not being used to engage in targeted or predatory microtransactions. Finally, regulators should consider a ban on loot boxes in games that are marketed to underage players, with a mature label for these games.

There are also further steps that the industry can take. Parental controls should be uniform across all platforms and games. These controls should allow parents who do permit microtransactions to set a limit on spending. Developers should also consider implementing check-ins requiring further parental consent on a regular basis, such as monthly, to continue microtransactions. With the internet and credit cards it is much easier for children to spend more money and to do so more quickly than it was previously. Therefore, it is important to provide tools for parents to keep track of a child's purchases in the same way that they could restrict a cash allowance or prohibit a visit to a store.

Another option that developers can consider is releasing alternate versions of the same game. One game version can have microtransactions, while the other—marketed at a higher price—does not require microtransactions. Alternatively, one game could be subscription-based. Full disclosure as to the differences between the games and their costs will allow a player to make an informed decision as to which version is best suited for them and their gaming habits.

Finally, if games are to continue collecting user data, they should do so responsibly. This includes using the data to watch out for unusual spending habits that suggest addictive behavior by a player, similarly to the way that gambling sites use this data to monitor for behavior indicative of gambling addictions. When a player seems to be engaging in concerning microtransactions – such as spending a large amount of money on loot boxes in a short period of time – the game can provide a check in with the player, or even a time-out. Games can also consider limits on how many loot boxes or other virtual items can be purchased at a given time, or phase of the game.

Industry gold standards, in conjunction with regulatory oversight, will increase consumer protection and consumer trust in video games and their integrity. Consumers will not be deceived, through predatory microtransactions, into purchasing unnecessary items that are in reality valueless. With regulators and industry leaders working together to determine appropriate models a fair solution can be reached that does not cripple the video game industry. It will allow the industry to continue to innovate with new technological advancements, as it has done for over sixty years, while consumers will remain protected.