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**Pseudo-Gambling and Whaling: How Loot Boxes Prey on  
Vulnerable Populations and How to Curtail Future Predatory  
Behavior**

Alexander Mann

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PSEUDO-GAMBLING AND WHALING:  
HOW LOOT BOXES PREY ON VULNERABLE POPULATIONS  
AND HOW TO CURTAIL FUTURE PREDATORY BEHAVIOR

*Alexander Mann\**

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ABSTRACT

*The video game industry has blossomed from a niche hobby into a mainstream cultural industry, outpacing global box office sales in annual revenue. Yet the price of a video game has barely increased since the industry's inception, and the current standard price point of sixty dollars has survived for over a decade. Competitive market forces drive companies to invest ever more time and money into creating increasingly complex software in order to remain on the cutting edge of graphics and design, while simultaneously increasing revenue. Thus, video game developers and publishers have developed a multitude of alternative money-making services to provide revenue beyond the initial sale of a game. Of these, the one technique that has garnered the most attention, and the most legislative scrutiny, is the "loot box." Through this system, players are allowed to pay a sum of real-world currency in exchange for receiving one or more random in-game items. This technique simulates gambling practices yet escapes current gambling oversight, leaving games containing this technique available to anyone. This includes vulnerable populations that do not have the capacity for rational spending, such as minors and*

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*those suffering from gambling addiction. Though loot boxes stubbornly persist in existing titles and popular franchises, market forces are slowly phasing out the practice. While current regulatory forces discuss loot boxes, other monetization methods are rising to replace them and no law currently stands in the way of their return. Efforts should be focused toward creating a video game distributor regulatory board, fostering parental education regarding electronic parental controls, and enacting long-term legislation at state and federal levels to prevent similar issues from occurring in future.*

#### TABLE OF CONTENTS

Introduction.....	202
I. Market Theory, Practice, and Consequences.....	205
A. Free Market, Free Market Forces .....	205
B. Digital Marketplaces and Microtransactions .....	208
C. Birth of the Loot Box .....	210
D. The Loot Box, as Seen Today.....	211
E. Hook, Habit, Hobby: The Art of Whaling .....	213
F. At-Risk Populations, Predictable Results.....	217
II. Gambling or Not – The Tricky Legality .....	223
A. Elements of Gambling .....	223
B. Considering Consideration.....	224
C. Value or Worthless?.....	225
D. The Mechanic and the Monetization: The Core Problem.....	227
III. Regulation and Legislation .....	231
A. Historical Self-Regulation .....	231
B. International Scrutiny.....	233
C. Domestic Legislation .....	235
IV. Solutions: Actual and Speculative, Short-Term and Long-Term.....	237
A. Consumers Forcing Short-Term Markets .....	237
B. A New Self-Regulation: Distributor-Side.....	239
C. Alternative Industry Regulations .....	242
D. Long-Term Education and Understanding for Legislation .....	244
Conclusion .....	246

## INTRODUCTION

Imagine a slot machine that acted just as any ordinary slot machine would, but once every three hours, the slot machine allowed you to play one spin on it for free. Now, assume that a child, or a recovering gambling addict, wanted to walk through a room filled with these machines, carrying *your* personal credit card, unsupervised, and it is completely legal (and encouraged) for them to use these machines. Most would immediately decline to risk their finances in such a manner, for the same reason we would hesitate to do so in the lobby of a hotel in Las Vegas: minors and problem gamblers are likely to be uncontrollably drawn to these machines and spend irresponsible amounts of money.<sup>1</sup> Yet, with the advent of loot boxes and other randomized microtransactions, this situation is analogous to our current reality.

The loot box exists as a randomized reward system implemented in video games and brought into mainstream gaming culture by the release of games such as *Overwatch*.<sup>2</sup> While playing the game, players are fed small trickles of free loot boxes filled with randomized in-game digital items, ranging from rare and amazing to common and dull; however, should a player wish to open another box immediately, one is always available to them for a fee.<sup>3</sup>

This digital reward system thus touches upon the core aspects of gambling (consideration, chance, and value) yet escapes modern legislative or regulatory scrutiny.<sup>4</sup> As a result, minors and problem gamblers are exposed to the same psychological triggers as traditional gambling, but from a more available access point: their

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<sup>1</sup> NATASHA DOW SCHULL, ADDICTION BY DESIGN: MACHINE GAMBLING IN LAS VEGAS 254-70 (4th ed. 2014); Amy Bestman et al., *Children's Attitudes towards Electronic Gambling Machines: an Exploratory Qualitative Study of Children who Attend Community Clubs*, 14 HARM REDUC. J. 20 (2017).

<sup>2</sup> David J. Castillo, *Unpacking the Loot Box: How Gaming's Latest Monetization Model System Flirts with Traditional Gambling Methods*, 59 SANTA CLARA L. REV. 165, 169-72 (2019).

<sup>3</sup> *Id.*

<sup>4</sup> *Id.* at 183-93.

phones and video game consoles.<sup>5</sup> The results have been predictable: families suffering from financial devastation,<sup>6</sup> an overabundance of irrational spending on chances for worthless virtual property,<sup>7</sup> an increase in problem gambling behavior in the developing minds of minors,<sup>8</sup> and a panicked yet uninformed response from legislative and regulatory authorities.<sup>9</sup>

The world is slowly catching on, and four years after the rise of the loot box to prominence, both the private market and public regulatory bodies are beginning to restrict the practice from development.<sup>10</sup> Yet while the world deliberates over the use of loot boxes, the practice persists in its most famous and profitable examples.<sup>11</sup> To complicate matters, as the loot box is phased out,

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<sup>5</sup> See David Zendle & Paul Cairns, *Loot Boxes are Again Linked to Problem Gambling: Results of a Replication Study*, PLOS ONE (Mar. 7, 2019), <https://doi.org/10.1371/journal.pone.0213194>; see also David Zendle & Paul Cairns, *Paying for Loot Boxes is Linked to Problem Gambling, Regardless of Specific Features like Cash-Out and Pay-to-Win*, 102 COMP. IN HUM. BEHAV. 181 (2020), <https://www.sciencedirect.com/science/article/pii/S0747563219302468>.

<sup>6</sup> Zoe Kleinman, *'The Kids Emptied our Bank Account Playing FIFA'*, BBC NEWS (July 9, 2019), <https://www.bbc.com/news/technology-48908766>.

<sup>7</sup> Alex Walker, *Someone Spent Over \$150,000 In Microtransactions OA Transformers Game*, KOTAKU (Oct. 14, 2019), <https://kotaku.com/someone-spent-over-150-000-in-microtransactions-on-a-t-1839040151>.

<sup>8</sup> *Country's Top Mental Health Nurse Warns Video Games Pushing Young People into 'Under the Radar' Gambling*, NHS England (Jan. 18, 2020), <https://www.england.nhs.uk/2020/01/countrys-top-mental-health-nurse-warns-video-games-pushing-young-people-into-under-the-radar-gambling/>.

<sup>9</sup> Castillo, *supra* note 2.

<sup>10</sup> Elise Favis, *Borderlands 3 Won't Have Loot Boxes*, GAME INFORMER (May 1, 2019), <https://www.gameinformer.com/2019/05/01/borderlands-3-wont-have-loot-boxes>; Wesley Yin-Poole, *The Netherlands Declares Some Loot Boxes are Gambling*, EUROGAMER (Apr. 19, 2018), <https://www.eurogamer.net/articles/2018-04-19-the-netherlands-declares-some-loot-boxes-are-gambling>; Paul Tassi, *EA Surrenders in Belgian FIFA Ultimate Team Loot Box Fight, Raising Potential Red Flags*, FORBES (Jan. 29, 2019), <https://www.forbes.com/sites/insertcoin/2019/01/29/ea-surrenders-in-belgian-fifa-ultimate-team-loot-box-fight-raising-potential-red-flags/>.

<sup>11</sup> See The Overwatch Loot Box store page, BLIZZARD, <https://us.shop.battle.net/en-us/product/overwatch-loot-box> (last visited Jan. 20, 2020) (showing Blizzard's store page where consumers can purchase loot boxes for the game Overwatch).

other innovative monetization schemes are slowly being introduced to replace the lost revenue.<sup>12</sup>

Ideally, new systems would be put in place to augment the existing remedies in ensuring above-the-board revenue streams for video game developers. Video games in the United States have enjoyed few, if any, regulations from government bodies regarding their sale, relying chiefly on their self-regulatory body, the Entertainment Software Rating Board (ESRB).<sup>13</sup> Yet the ESRB has declined to implement meaningful regulation regarding loot boxes and has a financial incentive to continue ignoring the issue at hand.<sup>14</sup>

Outside of the United States, countries have begun to respond to the business practice with a myriad of regulatory schemes. In western countries, such as the United Kingdom, the loot box has arisen as a new problem that the population and legislature have found themselves unprepared to deal with.<sup>15</sup> Some East Asian countries, such as Korea and Japan, have dealt with the issue for some time and have taken some first, if ineffective, steps to ensure adequate protections.<sup>16</sup> China has gone the furthest, enforcing a recent law that curtails the amount of time and money minors are allowed to spend on games.<sup>17</sup> By examining these regulatory responses and the results, the United States is in a position to set standards that not only address the issue fairly between developers and consumers, but also to prevent similar predatory practices from being utilized in gaming's future.

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<sup>12</sup> Stephen Totilo, *Ubisoft Explains Assassin's Creed Odyssey's Microtransactions and Some of the Math Behind Them*, KOTAKU (Oct. 9, 2018), <https://kotaku.com/ubisoft-explains-assassin-s-creed-odyssey-s-microtransa-1829635195>.

<sup>13</sup> Castillo, *supra* note 2, at 197-98.

<sup>14</sup> Jason Schreier, *ESRB Says it Doesn't See Loot Boxes as Gambling*, KOTAKU (Oct. 11, 2017), <https://kotaku.com/esrb-says-it-doesnt-see-loot-boxes-as-gambling-1819363091>.

<sup>15</sup> NHS England, *supra* note 8.

<sup>16</sup> Kevin Liu, *A Global Analysis into Loot Boxes: Is it "Virtually" Gambling?*, 28 WASH INT'L L.J. 763, 780-84 (2019).

<sup>17</sup> Javier C. Hernandez & Albee Zhang, *90 Minutes a Day, until 10 P.M.: China Sets Rules for Young Gamers*, N.Y. TIMES, (Nov. 8, 2019), <https://www.nytimes.com/2019/11/06/business/china-video-game-ban-young.html>.

Ultimately, new systems, both public and private, must be implemented to ensure the financial safety of those that are vulnerable to uncontrollable psychological gambling triggers.

This Article aims to examine how the loot box has evolved in the current digital marketplace, its effects on the market and society, the current regulatory state of the loot box, and potential solutions for both loot boxes and for other, future schemes.

The first Part will discuss how the loot box originated as the video game industry shifted from flat-rate physical goods to modern day digital marketplaces, and how the technique of “whaling” enables developers to thrive entirely off of microtransaction income alone. It will also discuss the results of this practice, and how populations vulnerable to psychological gambling triggers are affected.

The second Part will discuss the U.S. legislation and case law regarding traditional gambling and digital gambling, demonstrating how loot boxes and digital gambling are currently legally distinguishable from traditional gambling.

The third Part will discuss the global reaction to these practices, and how individual countries have identified the issues at play and reacted to them.

The fourth and final Part will discuss potential solutions for both the United States and private gaming industry to protect the inventive and entrepreneurial spirit of game development while tempering that innovative spirit with anti-predatory regulation.

## I. MARKET THEORY, PRACTICE, AND CONSEQUENCES

### A. *Free Market, Free Market Forces*

Video games have enjoyed a strange state of price stability for the past twenty years.<sup>18</sup> In the early days of the industry, when standards were few and far between, prices could vary between forty

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<sup>18</sup> Colin Moriarty, *The Real Cost of Gaming: Inflation, Time, and Purchasing Power*, IGN ENTERTAINMENT, INC. (Oct. 15, 2013), <https://www.ign.com/articles/2013/10/15/the-real-cost-of-gaming-inflation-time-and-purchasing-power>.

and eighty dollars for a single title.<sup>19</sup> In such an emerging industry, new entrants to the market attempted to set new standards in game production with varied leaps of innovation.<sup>20</sup> Games could be shipped either in a cartridge or on CD, be played on a home computer or on a home console, or have any number of unique control methods.<sup>21</sup> Home game consoles themselves could have add-ons on top of add-ons, enhancing the complexity of both hardware and software.<sup>22</sup>

By the mid-1990s, video game production practice began to solidify. As Nintendo and others claimed market dominance, the home console became the de-facto noun one used to describe a video game.<sup>23</sup> Thanks to a combination of development and production costs, as well as some tacit collusion in the market, prices began to normalize around fifty dollars.<sup>24</sup> Several years later, as Microsoft entered the market, prices increased to sixty dollars per game for Microsoft's Xbox 360 and Sony's PlayStation 3.<sup>25</sup>

For nearly fifteen years, the base price of a standard game for a home video game console has rarely, if ever, risen above sixty

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<sup>19</sup> Michelle Yan & Ben Gilbert, *Here's the Reason Most New Console Video Games Cost \$60*, BUSINESS INSIDER (Oct. 29, 2018), <https://www.businessinsider.com/why-video-games-always-cost-60-dollars-2018-10>.

<sup>20</sup> Scott Gallagher and Seung Ho Park, *Innovation and Competition in Standard-Based Industries: A Historical Analysis of the U.S. Home Video Game Market*, 49 IEEE TRANSACTIONS ON ENGINEERING MGMT. 80 (2002).

<sup>21</sup> Michael Poh, *Evolution of Home Video Game Consoles: 1967 – 2011*, HONGKIAT, <https://www.hongkiat.com/blog/evolution-of-home-video-game-consoles-1967-2011/> (last updated May 8, 2018).

<sup>22</sup> See Rollin Bishop, *Misguided Console Add-Ons You Might Have Tried to Forget*, THE MARY SUE (Sep. 9, 2011), <https://www.themarysue.com/misguided-console-add-ons/>.

<sup>23</sup> JEFF RYAN, SUPER MARIO: HOW NINTENDO CONQUERED AMERICA 117-29 (2012).

<sup>24</sup> Kyle Orland & Jonathan Gitlin, *Why Retail Console Games Have Never Been Cheaper, Historically*, ARS TECHNICA (June 30, 2013), <https://arstechnica.com/gaming/2013/06/why-retail-console-games-have-never-been-cheaper-historically/>; see also Kate Cox, *The Competition Is As Fake As The Blood: Why New Video Games Are Always The Same Price*, THE CONSUMERIST (Mar. 15, 2014), <https://consumerist.com/2014/03/15/the-competition-is-as-fake-as-the-blood-why-new-video-games-are-always-the-same-price/>.

<sup>25</sup> Yan, *supra* note 19.



dollars.<sup>26</sup> This is a problem for developers and publishers due to several compounding factors.

First, the ever-present market force of inflation has driven the real value of a sixty dollar purchase down twenty-five percent in the past fifteen years.<sup>27</sup> A sixty dollar purchase in 2005 is equivalent to an eighty dollar purchase in 2019, yet the price of a game has remained constant over those years.<sup>28</sup> Investors typically prefer that their investments generate enough revenue to counter the effects of inflation.<sup>29</sup> Even better, investors hope that their individual investments “beat the market,” or a typical market index fund (otherwise, investors would simply invest in the index fund).<sup>30</sup>

This would ordinarily not be a problem if, over time, the goods became cheaper to produce, and this is reflected somewhat in the industry’s move from physical CD/DVD production to purely digital market distribution.<sup>31</sup> However, as games struggle to remain competitive, more and more money must be invested in development costs to retain a technologically competitive edge, outpacing the benefits of digital distribution.<sup>32</sup>

Again, this would not be a problem if the industry was able to grow its market to accommodate more mainstream audiences. However, the video game industry has struggled in increasing its new users by a sustainable amount: reports show that, over the most popular services, new users have increased by a paltry three to four percent per year.<sup>33</sup>

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<sup>26</sup> *Id.*

<sup>27</sup> This can be verified by using standard inflation calculations, achievable by utilizing an inflation calculator such as <https://westegg.com/inflation/>.

<sup>28</sup> *Id.*; Yan, *supra* note 19.

<sup>29</sup> Solnik, B.H., *Inflation and Optimal Portfolio Choices*, 13 J. OF FIN. AND QUANTITATIVE ANALYSIS, 903, 904-05 (1978).

<sup>30</sup> Joe Nocera, *How to Beat the Market*, N.Y. TIMES (Nov. 13, 2009), <https://www.nytimes.com/2019/11/13/books/review/the-man-who-solved-the-market-gregory-zuckerman.html>.

<sup>31</sup> Orland, *supra* note 24.

<sup>32</sup> Jason Schreier, *Why Video Games Cost so Much to Make*, KOTAKU (Sept. 18, 2017), <https://kotaku.com/why-video-games-cost-so-much-to-make-1818508211>.

<sup>33</sup> See *2019 Video Game Industry Statistics, Trends, and Data*, WEPC, <https://www.wepc.com/news/video-game-statistics/> (last updated Nov. 2019). Specifically, listing a decreased retention rate and a new user acquisition rate of

If the industry continued its sixty-dollar one-time-purchase trend, it would quickly find itself unprofitable and unattractive to investors.<sup>34</sup>

### *B. Digital Marketplaces and Microtransactions*

Initially, games made all of their money with the same business model as VHS tapes: by selling individual physical copies of games to individual end-users.<sup>35</sup> This was the entirety of the transaction: one game, one user, and one-time revenue.<sup>36</sup>

However, in the 2000s, the internet transitioned from being an office email-based curiosity to a ubiquitous household service.<sup>37</sup> With the commonality of the internet, several advantageous developments occurred in the video game industry. First, games now had the capability to host competitive “multiplayer” games between users over an internet connection.<sup>38</sup> Second, purely digital marketplaces could spring up, selling copies of games to individuals entirely over the internet (a great advantage to developers, who no longer had to manufacture and distribute CD/DVDs).<sup>39</sup> Third, games

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3.9% on Steam, the most prominent video game store on personal computers. Accurate industry data is generally difficult to acquire, so the precise number of new users is a best estimate from available data.

<sup>34</sup> Prateek Agarwal, *Economics of Microtransactions in Video Games*, INTELLIGENT ECONOMIST (Apr. 10, 2019), <https://www.intelligenteconomist.com/economics-of-microtransactions/>; Lewis Packwood, *Microtransactions and Loot Boxes in Video Games – Are They Pure Greed or a Modern Necessity?*, GAMESRADAR (Dec. 20, 2017), <https://www.gamesradar.com/microtransactions-and-loot-boxes-in-video-games-are-they-pure-greed-or-a-modern-necessity/>.

<sup>35</sup> JLuo, *Rethinking the Video Game Business Model*, HBS DIGITAL INITIATIVE (Apr. 24, 2018), <https://digital.hbs.edu/platform-digit/submission/rethinking-the-video-game-business-model/>.

<sup>36</sup> *Id.*

<sup>37</sup> Andrew Perrin & Maeve Duggan, *Americans’ Internet Access: 2000-2015*, PEW RES. CTR. (June 26, 2015), <https://www.pewresearch.org/internet/2015/06/26/americans-internet-access-2000-2015/>.

<sup>38</sup> Riad Chikani, *The History of Gaming: An Evolving Community*, TECHCRUNCH (Oct. 31, 2015), <https://techcrunch.com/2015/10/31/the-history-of-gaming-an-evolving-community/>.

<sup>39</sup> *Id.*

could now be updated, or “patched,” to fix software issues and add content online.<sup>40</sup>

In this environment, combined with the economic pressures detailed earlier, game developers had the brilliant idea of selling additional digital content for their games over the digital marketplace.<sup>41</sup> This practice, known as “downloadable content,” “DLC,” or “microtransactions,” was seen as an additive property that enhanced a player’s experience of a game.<sup>42</sup> Game developers also benefited, as they now had an extra revenue stream for their titles.<sup>43</sup> However, developers soon began to take advantage of this system, selling games that were half-finished at full price with additional content carved into pieces on the marketplace, or had content on the physical disc blocked to players unless players paid a fee digitally.<sup>44</sup>

Games even began to organize their entire revenue stream around microtransactions, most prominently with the rise of the smartphone app marketplace.<sup>45</sup> In this brave new market that was able to reach far more consumers than any traditional gaming platform could have ever dreamed, the emphasis was on which games would be easy for players to spend a moment or two while they were sitting, bored, on their phone.<sup>46</sup> A multitude of cheap-to-

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<sup>40</sup> Jimmy Tran, *How Digital Distribution is Changing the Scope of Gaming*, VENTUREBEAT (May 6, 2014), <https://venturebeat.com/community/2014/05/06/how-digital-distribution-is-changing-the-scope-of-gaming/>.

<sup>41</sup> Kishan Mistry, *P(l)aying to Win: Loot Boxes, Microtransactions Monetization, and a Proposal for Self-Regulation in the Video Game Industry*, 71 RUTGERS U. L. REV. 537, 539 (2018).

<sup>42</sup> Castillo, *supra* note 2, at 167-69.

<sup>43</sup> *Id.*

<sup>44</sup> See S.G. Brown, *Incomplete Games: The History of a Shady Practice*, VIDEO CHUMS (Jan. 26, 2017), <https://videochums.com/article/incomplete-games-the-history-of-a-shady-practice>; Jim Sterling, *Roadmap to Nowhere (The Jimquisition)*, YOUTUBE (Apr. 1, 2019), <https://www.youtube.com/watch?v=B8VKNyrphXA>; Jason Schreier, *Capcom Says On-Disc DLC is for ‘Easy Compatibility,’ File Size*, KOTAKU (Mar. 5, 2012), <https://kotaku.com/capcom-says-on-disc-dlc-is-for-easy-compatibility-file-5890630>.

<sup>45</sup> Castillo, *supra* note 2, at 167-69.

<sup>46</sup> *Id.*

produce games were developed around the “free-to-play” model, wherein a user could indefinitely play a game at no cost; however, the game would be filled with “gatekeeping” that would put psychological pressure on players to spend money in order to fulfill goals.<sup>47</sup> The revenue streams from mobile gaming quickly caught up to that achieved by traditional gaming platforms, where even today the market share for mobile games remains roughly even with traditional gaming platforms.<sup>48</sup>

### C. Birth of the Loot Box

By 2015, it was clear that the concept of the microtransaction was here to stay. Despite consumer grumbling, there was never a time wherein any consumer, government, or market force would persuade game developers to move away from the model.<sup>49</sup> In this environment, the “loot box” was born.

Though the concept had existed in other games, the release of *Overwatch* by Blizzard Entertainment enshrined the term and the concept in the gaming zeitgeist.<sup>50</sup> The concept was simple: every so often, the game would reward players with a box (called a “Loot Box” in-game) which, when opened, contained a random selection of digital cosmetic goods which players could use to change the appearance of their in-game characters.<sup>51</sup> These goods would be tiered by rarity – the most common goods may offer a simple change of color palette of a character, but the rarest would grant a character a completely redesigned costume.<sup>52</sup>

The business model was simple as well. Players would receive a loot box frequently as they began the game but would soon have to invest ever-greater hours to earn additional boxes.<sup>53</sup> However,

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<sup>47</sup> *Id.*

<sup>48</sup> *Id.*; Omer Kaplan, *Mobile Gaming is a \$68.5 Billion Global Business, and Investors Are Buying In*, TECHCRUNCH (Aug. 22, 2019), <https://techcrunch.com/2019/08/22/mobile-gaming-mints-money/>.

<sup>49</sup> See Agarwal, *supra* note 34.

<sup>50</sup> Castillo, *supra* note 2, at 170-71.

<sup>51</sup> *Id.*

<sup>52</sup> *Id.*

<sup>53</sup> Paul Tassi, *The Math Behind Why Overwatch’s Loot Boxes Are Exhausting to Unlock*, FORBES (Jun. 10, 2016),

borrowing from other microtransaction models, players could pay real money in order to purchase additional boxes, each of which had the chance of containing the items players wanted.<sup>54</sup> With additional outfits becoming available in the prize table over time, especially over seasonal events (such as costumes around Halloween), *Overwatch* could guarantee not only a constant revenue stream but also constant player engagement with the game.<sup>55</sup>

The loot box practice soon branched out from *Overwatch* and began to take root in many games throughout 2017 and 2018.<sup>56</sup> However, as more people became aware of this mechanic, some began to wonder: is a mechanic where a player pays real money to obtain a randomized result just another form of gambling? And if so, how does it affect players and those around them?

#### D. The Loot Box, as Seen Today

Today, the loot box still thrives in several high-profile games as a valuable source of revenue generation.<sup>57</sup>

*Overwatch* and similarly styled games continue to use the loot box practice to this day.<sup>58</sup> Blizzard Entertainment, *Overwatch*'s developer, stated that out of the \$7.18 billion it earned in fiscal year 2017, \$4 billion came from in-game purchases of its loot boxes.<sup>59</sup> With statistics like these, most game developers implemented and maintained loot box systems as a matter of common sense.<sup>60</sup>

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<https://www.forbes.com/sites/insertcoin/2016/06/10/the-math-behind-why-overwatches-loot-boxes-are-exhausting-to-unlock/>.

<sup>54</sup> Castillo, *supra* note 2, at 170-71.

<sup>55</sup> *Id.*

<sup>56</sup> Edwin Hong, *Loot Boxes: Gambling for the Next Generation*, 46 W. ST. L. REV. 61, 65 (2019).

<sup>57</sup> *Id.*

<sup>58</sup> *Id.*

<sup>59</sup> Rob Thubron, *Over Half of Activision-Blizzard's \$7.16 Billion Yearly Revenue Came from Microtransactions*, TECHSPOT (Feb. 12, 2018), <https://www.techspot.com/news/73230-over-half-activision-blizzard-716-billion-yearly-revenue.html>.

<sup>60</sup> See Paul Tassi, *In Pursuit Of 'Hearthstone' Whales, Blizzard Will Drain The Ocean*, FORBES (Nov. 10, 2017), <https://www.forbes.com/sites/insertcoin/2017/11/10/in-pursuit-of-hearthstone-whales-blizzard-will-drain-the-ocean/>; Samuel Horti, *How the Loot Box*

Activision Blizzard, the owner of Blizzard Entertainment, has even filed patents for methods designed to increase the number of players who purchase loot boxes, which demonstrates (through the time and expenditure required for the patenting process) just how valuable the company considers loot boxes to be.<sup>61</sup>

Sports games, in particular, are a valuable resource for loot box practice. The *FIFA* series, the best-selling sports video game franchise in the world, frequently uses the loot box structure to offer players the ability to obtain footballers, some with bigger names and better performance, in order to create fantasy soccer teams.<sup>62</sup> Most egregiously, *NBA 2K20*, the latest installment of the *NBA 2K* franchise, utilizes virtual slot machines, prize wheels, and pachinko machines, all of which can be played with real currency. They are also all considered to be using loot box-style mechanics instead of their apparent nature: gambling machines.<sup>63</sup>

Mobile games (that is, games which can be played on a mobile phone) are the largest implementers of loot boxes.<sup>64</sup> With a multitude of free-to-play titles directly in the hands of anyone with a smartphone, mobile games reach a larger market than any traditional gaming media.<sup>65</sup> To generate revenue, many of these titles utilize loot box practices, both to give players power-ups while

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*Controversy Shaped Gaming in 2017*, PC GAMER (Dec. 21, 2017), <https://www.pcgamer.com/how-the-loot-box-controversy-shaped-gaming-in-2017/>; Wes Fenlon, *The Case for and against Loot Boxes, According to Developers*, PC GAMER (Nov. 22, 2017), <https://www.pcgamer.com/the-case-for-and-against-loot-boxes-according-to-developers/>.

<sup>61</sup> U.S. Patent No. 9,789,406 (issued Oct. 17, 2017).

<sup>62</sup> Castillo, *supra* note 2, at 172.

<sup>63</sup> Ethan Gach, *I Feel Gross Just Watching NBA 2K20's Loot Box Trailer*, KOTAKU (Aug. 8, 2019), <https://kotaku.com/i-feel-gross-just-watching-nba-2k20-s-loot-box-trailer-1837674621>.

<sup>64</sup> Martha Busby, *Loot Boxes Increasingly Common in Video Games Despite Addiction Concerns*, THE GUARDIAN (Nov. 22, 2019), <https://www.theguardian.com/games/2019/nov/22/loot-boxes-increasingly-common-in-video-games-despite-addiction-concerns>.

<sup>65</sup> Anna Tobin, *Is Mobile Phone Gaming Taking Over from Console Gaming?*, FORBES (Oct. 11, 2016), <https://www.forbes.com/sites/annatobin/2018/10/11/is-mobile-phone-gaming-taking-over-from-console-gaming/>.

playing the game and to give the player cosmetic items to enhance their gameplay experience.<sup>66</sup>

*E. Hook, Habit, Hobby: The Art of Whaling*

The economic incentive for a developer is clear on its surface: implementing loot box systems in games creates an additional revenue stream. However, after developers implemented the system, they still faced the looming need to generate even more revenue in their next fiscal year. Developers therefore had to figure out the most profitable way to utilize loot box practices.<sup>67</sup>

A popular analysis of free-to-play games with microtransaction revenue structures is the “Hook, Habit, Hobby” model, most famously articulated by Torulf Jernstrom, the CEO of Finnish game developer Tribeflame.<sup>68</sup> The model lays out the general principle behind why these games are both popular and profitable.

The Hook is something that can get players interested in playing the game.<sup>69</sup> This traditionally was done with inventive and engrossing gameplay with high production value, which to an extent is still implemented today.<sup>70</sup> However, with newer games on mobile phones, this can be done by offering immediate, free rewards that would otherwise only be available after playing for a long time or through paying real currency.<sup>71</sup>

In the Hook phase, when the player is interested in the game and is investing their time in it, successful developers will implement an “icebreaker” offer.<sup>72</sup> An icebreaker is a massive discount or deal on purchasable rewards that would otherwise take a long time to earn for free.<sup>73</sup> Icebreakers can also be delivered on a short timer, a “buy

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<sup>66</sup> Agarwal, *supra* note 34.

<sup>67</sup> *Id.*

<sup>68</sup> Torulf Jernstrom, *Let's Go Whaling: A Guide to Monetization through In-App Purchases*, POCKETGAMER (Sept. 2, 2016), <https://www.pocketgamer.biz/comment-and-opinion/63871/monetisation-lets-go-whaling/>.

<sup>69</sup> *Id.*

<sup>70</sup> *Id.*

<sup>71</sup> *Id.*

<sup>72</sup> *Id.*

<sup>73</sup> *Id.*

now or lose the deal forever” sort of flash sale, or offered just when the player would want or need the icebreaker, in order to get players to act quickly without thinking too hard about their purchase.<sup>74</sup> Once a player has spent real currency in a game their internal psychological barriers break down, which makes a player far more likely to spend real currency on the game in the future.<sup>75</sup>

Getting players invested in the Hook phase also more easily helps them transition into the Habit phase.<sup>76</sup> The Ikea Effect states that people will overvalue something that they have spent a lot of time and investment in, even if the base product is basically worthless.<sup>77</sup> When players spend their time and money in the game, they feel they should keep coming back because they have created something valuable and worthwhile.<sup>78</sup>

In the Habit phase, the flow of premium content slows while players are investing their time in the game.<sup>79</sup> In this phase, the game is designed to slow player progression and, in turn, shift sales to rewards focused on increasing player progression.<sup>80</sup> Content is offered in this phase that pays off over a longer period of time; this keeps players coming back to the game in order to extract the full value of their item.<sup>81</sup> The Habit phase is a transition phase, hoping to convert a habitual player into a long-term, devoted player.<sup>82</sup>

Loot boxes (or gachas, or Skinner Boxes) are most effective in this model, due to the psychological principles of operant conditioning.<sup>83</sup> Players are rewarded for completing tasks and will

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<sup>74</sup> *Id.*

<sup>75</sup> *Id.*

<sup>76</sup> *Id.*

<sup>77</sup> *Id.*

<sup>78</sup> *Id.*

<sup>79</sup> *Id.*

<sup>80</sup> *Id.*

<sup>81</sup> *Id.*

<sup>82</sup> *Id.*

<sup>83</sup> *Id.*; see also Liu, *supra* note 16 at 773. A “gacha” is the East Asian precursor and counterpart to the loot box, referring to a game that uses the elements of a practical gacha machine (essentially a gumball machine, but instead of gumballs the machine dispenses a random toy in a capsule) in a digital game by awarding different characters or heroes to players. A “Skinner Box” is an operant conditioning chamber in which animals will learn behaviors in response to certain stimuli and will continue those behaviors even when the stimuli is



appreciate the thrill of getting a random reward for their efforts.<sup>84</sup> Randomized rewards also prevent players from progressing too quickly throughout the game; after all, developers do not want players to feel they have extracted the full value of the game too quickly, otherwise developers have just lost a customer.<sup>85</sup> In chasing the high of progression and random chance, players will be most tempted to purchase loot boxes in this phase.<sup>86</sup>

When a player has invested enough time and energy into the game, they transition into the Hobby phase. This is characterized by “superfans” who have invested so much time in the game that they are near the limit of how far they can progress in the game.<sup>87</sup> In this phase, the rewarding content is geared toward making a player feel important, like they have surmounted some challenge, and offering them advantages in their future play.<sup>88</sup> The reasoning for this is twofold.

First, Hobby players are more likely to be large spenders in these games, as they feel the game is worth their time and investment (much like any other traditional hobby).<sup>89</sup> By offering them perks that make them feel special, while also providing them with challenges that they are able to complete through their continued time and investment, developers can keep these long-term players without any cap to the players’ spending.<sup>90</sup> Most importantly, the perks offered to Hobby players should make them highly visible to all other players, especially newcomers.<sup>91</sup>

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dispensed at random intervals or is removed entirely.

<sup>84</sup> Jernstrom, *supra* note 68.

<sup>85</sup> *Id.*

<sup>86</sup> *Id.*

<sup>87</sup> *Id.*

<sup>88</sup> *Id.*

<sup>89</sup> *Id.*

<sup>90</sup> *Id.*

<sup>91</sup> Heather Alexandra, *Activision Patents Matchmaking that Encourages Players to Buy Microtransactions*, KOTAKU (Oct. 17, 2017), <https://kotaku.com/activision-patents-matchmaking-that-encourages-players-1819630937>; Juho Hamari et al., *Why do Players Buy In-Game Content? An Empirical Study on Concrete Purchase Motivations*, 68 COMP. IN HUM. BEHAV. 543 (2017).

Second, as Hobby players are now highly visible, newcomers to the Hook phase will be able to see Hobby players and become inspired to reach the Hobby players' level of success.<sup>92</sup> This will encourage Hook players to purchase an icebreaker and get them started on the path to becoming a Hobby player.<sup>93</sup>

Only a small percentage of newcomers will end up in the Hobby phase.<sup>94</sup> However, this is sufficient for most companies to sustain their business model.<sup>95</sup> *Clash of Clans* and *Clash Royale*, two high-profile mobile games, utilize the Hook, Habit, Hobby technique to great effect: *Clash of Clans* has grossed \$6.4 billion in revenue since its release in 2012, and *Clash Royale* has grossed \$2.5 billion since its release in 2016.<sup>96</sup>

This small percentage of players that end up in the Hobby phase are colloquially known in the industry as “whales,” a small group of people who spend a large amount of money.<sup>97</sup> A developer's goal in utilizing a microtransaction model is to foster a sufficient quantity of whales so that their business can generate as much revenue as possible at minimal cost for a long period of time.<sup>98</sup> While the ideal whale for developers is someone with a lot of extra money, not enough time, and a willingness to spend that money on their game, developers end up attracting people far more vulnerable to these tactics than the ideal customer.<sup>99</sup>

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<sup>92</sup> *Id.*

<sup>93</sup> Jernstrom, *supra* note 68.

<sup>94</sup> *Id.*

<sup>95</sup> *Id.*

<sup>96</sup> Nicole Carpenter, ‘*Clash Royale*’ Surpassed \$2.5 Billion in Revenue in Its Three Years Since Launch, FORBES (Mar. 5, 2019), <https://www.forbes.com/sites/nicolecarpenter/2019/03/05/clash-royale-surpassed-2-5-billion-in-revenue-in-its-three-years-since-launch/>.

<sup>97</sup> Liu, *supra* note 16, at 775.

<sup>98</sup> Jernstrom, *supra* note 68.

<sup>99</sup> Mike Rose, *Chasing the Whale: Examining the Ethics of Free-To-Play Games*, GAMASUTRA (July 9, 2013), [https://www.gamasutra.com/view/feature/195806/chasing\\_the\\_whale\\_examining\\_the\\_.php](https://www.gamasutra.com/view/feature/195806/chasing_the_whale_examining_the_.php).

*F. At-Risk Populations, Predictable Results*

As loot boxes have remained and ingrained themselves into fundamental game design, two populations have emerged as casualties of the standard whaling strategy: minors<sup>100</sup> and problem gamblers.<sup>101</sup>

Minors are vulnerable to whaling techniques for precisely the same reasons that minors are not allowed to gamble in any state in the United States: minors are generally atrocious at making responsible decisions and choices with gambling behavior.<sup>102</sup> Minors are still in the process of exploring the intricacies of the world and may not understand the value of money, nor fully appreciate odds of betting and common logical fallacies related to betting.<sup>103</sup> Developing brains in minors are also susceptible to incoming behavior signals, which may affect their long-term cognitive development and lead to gambling-related disorders later in life.<sup>104</sup>

Yet the vast majority of games are developed with the intention of selling those games to persons under 18.<sup>105</sup> Developing a game exclusively for persons 18 and older earns a game the dreaded Adults Only (AO) rating, which would exclude a sizeable market from purchasing the game, as discussed below in Section III.A.<sup>106</sup>

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<sup>100</sup> Elpido K. Cruz, *The Psychological and Virtual Siege of Loot Boxes*, 23 J. TECH. L. & POL'Y 215, 217 (2019).

<sup>101</sup> Hong, *supra* note 56, at 62-63.

<sup>102</sup> See Nat'l Ctr. for Responsible Gaming, *Talking with Children about Gambling*, INT'L CTR. FOR RESPONSIBLE GAMING (2008), <https://www.icrg.org/sites/default/files/uploads/docs/ncrgtalktochildren2015hi.pdf> (last visited Apr. 23, 2020).

<sup>103</sup> Zoe Kleinman, 'My Son Spent £3,160 in One Game', BBC NEWS (July 15, 2019), <https://www.bbc.com/news/technology-48925623>.

<sup>104</sup> Hannah Pitt et al., *Factors that Influence Children's Gambling Attitudes and Consumption Intentions: Lessons for Gambling Harm Prevention Research, Policies and Advocacy Strategies*, 14 HARM REDUC. J. 11 (2017).

<sup>105</sup> Liu, *supra* note 16, at 773-74.

<sup>106</sup> See Schreier, *supra* note 14 (referring to game publishers' unwillingness to have an AO (18+) rating attached to games); see also *ESRB Ratings Guide*, ENTERTAINMENT SOFTWARE RATING BOARD, <https://www.esrb.org/ratings-guide/> (last visited Jan. 20, 2020) (defining possible ratings for games, including M (17+) and AO(18+)).

Colorful advertising and cartoonish designs easily attract minors to games.<sup>107</sup> With an ever-greater number of minors possessing smartphones with access to games, it is simple to create a multitude of free-to-play games for minors while not necessarily disclosing the microtransaction structure of the free-to-play game.<sup>108</sup> Even in traditional gaming, microtransactions run the risk of making the money spent “magical,” because overall, the brains of minors “can’t process these virtual transactions because it’s not tangible to them.”<sup>109</sup>

Leaving minors in control of their gaming decisions has had devastating consequences for some families. Stories abound of children spending thousands of dollars of their family’s money on loot boxes because they do not realize that the money being spent is real.<sup>110</sup> Kanye West famously railed against in-app purchases, as his toddler North was making a purchase on their iPad “every five minutes,” even though the game was designed for “a 2-year-old.”<sup>111</sup> But some families do not have the capital necessary to survive these spending sprees. One famous story reported by the BBC told the tale of a family’s four children emptying their parents’ bank account in three weeks by purchasing loot boxes from *FIFA*.<sup>112</sup> Other stories reported by the BBC detail minors spending £100, £700, £1,000, or even £2,000 on loot boxes in both traditional games and smartphone games.<sup>113</sup> The problem is not simply localized to the United Kingdom. Minors in Canada have spent over \$8,000 of their parents’ money on *FIFA* as well.<sup>114</sup> From these case studies, one may see

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<sup>107</sup> Liu, *supra* note 16, at 773-74.

<sup>108</sup> *Id.*

<sup>109</sup> Julie Jargon, *You Spent \$1,500 on Virtual Bazookas? Kids are Splurging on Digital Goods*, THE WALL ST. J. (July 16, 2019), <https://www.wsj.com/articles/you-spent-1-500-on-virtual-bazookas-kids-are-splurging-on-digital-goods-11563291006>.

<sup>110</sup> *Id.*

<sup>111</sup> Dante D’Orazio, *Kanye West is Fed Up with In-App Purchases*, THE VERGE (Oct. 10, 2015), <https://www.theverge.com/2015/10/10/9493905/kanye-west-is-fed-up-about-in-app-purchases>.

<sup>112</sup> Kleinman, *supra* note 6.

<sup>113</sup> Kleinman, *supra* note 103.

<sup>114</sup> Debra Kelly, *Kids who Wasted Thousands of Dollars on Gaming*, GRUNGE, <https://www.grunge.com/29299/kids-wasted-thousands-dollars-parents-money-games/> (last visited Jan. 20, 2020).

how minors, when given control of spending, are not able to control their behavior and may throw that money into activities that trigger primal reward instincts.

Unfortunately, there has never been a systematic study of how much and how often minors actually spend on loot boxes. However, leading psychologists are concerned that the mere exposure to gambling-adjacent mechanics of loot boxes has the potential to create greater problems later in cognitive development.<sup>115</sup> Exposing minors to these addictive behaviors normalizes these behaviors later on in life, keeping adults addicted to the sensation of gambling.<sup>116</sup> At present, minors are indeed exposed: one article conservatively estimated a total of fifty-seven million game players under the age of eighteen in the United States alone.<sup>117</sup> Given that the loot box has enjoyed a center-stage presence in the video game market, it is likely that any minor exposed to video games has been exposed to at least one title that featured a loot box.

In addition, the U.K. Gambling Commission has determined that, in 2018, at least twenty-five thousand minors in the United Kingdom are problem gamblers, with thirty-six thousand others classified as at-risk, via traditional gambling methods.<sup>118</sup> In 2019, the numbers rose, with fifty-five thousand minors in the United Kingdom classified as having a gambling problem.<sup>119</sup> By exposing these at-risk minors to gambling-adjacent mechanics in video games, these minors may manifest gambling-related disorders later on in their cognitive development, where it will be far harder to treat.<sup>120</sup>

Parental controls, as they currently exist, cannot curb this practice by minors. While minors may attempt to work around these controls, the true danger lies in parents not even knowing what the

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<sup>115</sup> Pitt, *supra* note 104.

<sup>116</sup> *Id.*

<sup>117</sup> Liu, *supra* note 16, at 766.

<sup>118</sup> Mattha Busby, 'Easy Trap to Fall Into': *Why Video-Game Loot Boxes Need Regulation*, THE GUARDIAN (May 29, 2018, 1:50 PM), <https://www.theguardian.com/games/2018/may/29/gamers-politicians-regulation-video-game-loot-boxes>.

<sup>119</sup> NHS England, *supra* note 8.

<sup>120</sup> Alan Drummond & James D. Sauer, *Video Game Loot Boxes are Psychologically Akin to Gambling*, 2 NATURE HUM. BEHAV. 530 (2018).

controls are, how to use them, or that they even exist.<sup>121</sup> Studies have shown that not even half of parents have set up parental controls for their children's internet browsing activity, and the same is true for their children's online gaming activity.<sup>122</sup> Surveys have found that most parents do not even raise the issue of cybersecurity and online restrictions with their children.<sup>123</sup> The reasons have been myriad, but the one commonality is that parents were unaware of these controls in the first place.<sup>124</sup>

This raises the question: How are parents to learn of these limiting tools? While educational materials have been posted on the internet, these materials are only found by parents who are actively seeking to be informed.<sup>125</sup> Parents who do not know that they do not know about parental controls will find themselves powerless to control their child's spending until it is too late.<sup>126</sup> Barring a nationwide movement to spread awareness akin to MADD or DARE, it is unlikely that contemporary parents will be able to fully understand the tools available to restrict access to potentially harmful activities, like gambling-adjacent loot boxes.

The lesson is clear: minors are unable to control their spending on loot boxes, and existing parental controls are inadequately utilized to curb this spending. Yet developers are not incentivized to change their development strategies, because these young whales are far too profitable for them.

Equally distressing is the pressure that loot box mechanics place on people, minors and adults, who have a gambling disorder or some

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<sup>121</sup> Monica Anderson, *Parents, Teens and Digital Monitoring*, PEW RES. CTR. (Jan. 7, 2016), <https://www.pewresearch.org/internet/2016/01/07/parents-teens-and-digital-monitoring/>.

<sup>122</sup> *Id.*; see also Shahneila Saeed, *Online Safety: A Pupil's Perspective*, DIGITAL SCHOOLHOUSE (Sept. 7, 2016), <https://www.digitalschoolhouse.org.uk/system/files/cms/docs/online-safety-pupils-perspective-report-a4-WEB-0918.pdf>; Holly Bentley et al., *How Safe Are Our Children? 2019*, NAT'L SOC'Y FOR THE PREVENTION OF CRUELTY TO CHILD. (2019), <https://learning.nspcc.org.uk/media/1747/how-safe-are-our-children-2019.pdf>.

<sup>123</sup> Saeed, *supra* note 122.

<sup>124</sup> Anderson, *supra* note 121.

<sup>125</sup> Bentley, *supra* note 122.

<sup>126</sup> *Id.*

other gambling problem (which may have been induced or exacerbated by prior loot box exposure).<sup>127</sup> Those that have gambling disorders can take all possible steps to avoid temptation and relapse; however, the same fundamental forces of randomized chance in loot boxes can either force these people out of the video game market entirely or cause them to relapse back into compulsive, uncontrollable spending on randomized chance.<sup>128</sup>

With disposable income, this breed of whale spends far more money on loot boxes, and does so more often than any other whale.<sup>129</sup> Multiple case studies have been reported of people whose marriages have been destroyed, or who have been forced into bankruptcy because the ever-present nature of the loot box compelled them into a spending behavior that they had no control over.<sup>130</sup> The current individual record-holder for money spent on loot boxes is an anonymous individual who has spent \$150,000 on loot boxes in a mobile *Transformers* game.<sup>131</sup>

Multiple surveys have been conducted that definitively correlate problem gambling disorders with increased loot box purchases, with problem gamblers spending on average four times as much money on loot boxes as non-problem gamblers.<sup>132</sup> The work of David Zendle and Paul Cairns has focused squarely on the psychological effects of loot boxes on the psyches of players.<sup>133</sup> Their studies have demonstrated a significant correlation between the usage of loot boxes and either the development or exacerbation of problem gambling behaviors.<sup>134</sup> Regardless of features that would otherwise be used to define traditional gambling, such as a cash market value for loot box prizes or whether the prizes offered an advantage in the

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<sup>127</sup> Hong, *supra* note 56, at 62.

<sup>128</sup> Jim Sterling, *The Addictive Cost of Predatory Videogame Monetization (The Jimquisition)*, YOUTUBE (July 1, 2019), <https://www.youtube.com/watch?v=7S-DGTBZU14>.

<sup>129</sup> Liu, *supra* note 16, at 775-76.

<sup>130</sup> Sterling, *supra* note 128.

<sup>131</sup> Walker, *supra* note 7.

<sup>132</sup> Zendle, *supra* note 5.

<sup>133</sup> *Id.*

<sup>134</sup> *Id.*

game, the same positive correlation between loot boxes and problem gambling was found.<sup>135</sup>

Their work has also shown that only problem gamblers change their spending habits when loot boxes are added or removed from a game.<sup>136</sup> A study of the game *Heroes of the Storm* demonstrated that, when loot boxes were first included and then removed from the game, only problem gamblers decreased their in-game spending; all other categories spent the same amount of money as they had prior to the loot boxes' removal.<sup>137</sup> This serves as evidence that loot boxes, as opposed to other forms of microtransactions, disproportionately affect the spending of problem gamblers.<sup>138</sup>

This research demonstrates that anyone with a gambling problem, diagnosed or not, will be tempted to irresponsibly spend more of their money than the average customer due to the compulsion of their mental illness. For adults, no amount or awareness of parental controls will help to limit their exposure to these dangerous scenarios, as they will be fully in control of their games and consoles; however, due to their mental illness, they will not be in control of their spending.<sup>139</sup>

With such a large amount of capital spent, and against populations that should have no business putting money into randomized chance mechanics, public concern has begun to grow around the practice. The chief concern is how similar the loot box is to traditional gambling.<sup>140</sup> After all, if a player can put in money and get a random prize as a result, was that money not a wager? Did that player not gamble for a random prize? These questions are especially concerning given that minors, one of the most profitable “whale” types, are given access to these “gambling” mechanics while all other forms of gambling are legally restricted to adults

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<sup>135</sup> *Id.*

<sup>136</sup> David Zendle, *Problem Gamblers Spend Less Money when Loot Boxes are Removed from a Game: A Before and After Study of Heroes of the Storm*, 7 PEERJ e7700 (Oct. 29, 2019), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6824327/>.

<sup>137</sup> *Id.*

<sup>138</sup> *Id.*

<sup>139</sup> *Id.*

<sup>140</sup> Mark D. Griffiths, *Is the Buying of Loot Boxes in Video Games a Form of Gambling or Gaming?*, 10 GAMING L. REV. 52 (2018).



only. Is the loot box practice just a form of gambling that is skirting around the law? Or even worse, openly violating it?

## II. GAMBLING OR NOT – THE TRICKY LEGALITY

### A. *Elements of Gambling*

Gambling has a wide range of permutations, and as such there are few, if any, definitions that can easily apply to all gambling. United States federal law, for example, has left the intricacies of gambling legality to the states, leaving several permutations to be interpreted.<sup>141</sup> However, federal law does provide the definition of a bet or wager: “[A bet or wager] means the staking or risking by any person of something of value upon the outcome of . . . a game subject to *chance*, upon an agreement or understanding that the person or another person will receive something of *value* in the event of a certain outcome.”<sup>142</sup> This is emblematic of the statutory definition of gambling in several states, including California (where many video games are developed) and Nevada (the most famous state for legalized gambling).<sup>143</sup> In the context of this definition, does spending real money on a loot box constitute a bet or wager?

The only easy part of the statutory definition is the second part: loot box outcomes are most certainly governed purely by chance.<sup>144</sup> However, the first part regarding consideration, and the last part regarding something of value, have in their nebulous definitions allowed developers to avoid regulation.

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<sup>141</sup> Castillo, *supra* note 2, at 183-84.

<sup>142</sup> 31 U.S.C. § 5362(1)(A) (2006) (emphasis added). While consideration is not explicitly stated as a term in the federal statute, other discussions of the loot box have used the term as analogous to the staking of something of value. Castillo, *supra* note 2, 185-87; Hong, *supra* note 56, 67-8; Liu, *supra* note 16, 771-72. Consideration is therefore used as the term here, remaining consistent with the relevant loot box legal discourse.

<sup>143</sup> Castillo, *supra* note 2, at 183-84.

<sup>144</sup> *Id.* at 187-89.

### B. Considering Consideration

The challenge to consideration does not come from debating whether real currency spent on a loot box is valuable consideration.<sup>145</sup> Rather, the definition is blurred because loot boxes can be earned through several different methods, of which real currency is only one method.<sup>146</sup>

As detailed above, players in *Overwatch* can spend money directly on a set of loot boxes.<sup>147</sup> These loot boxes are also earned via simply playing the game, although earning one box may take one or several hours.<sup>148</sup> Other games allow purchase of loot boxes via the game's own internal virtual currency, which may be earned in-game or purchased with real currency.<sup>149</sup> This would normally run against the view adopted by a majority of U.S. jurisdictions: that wagering something of value is *required* in order to meet the definition of consideration.<sup>150</sup>

However, in this majority, the opportunity for “free plays” does not negate the element of consideration.<sup>151</sup> This makes sense when one applies the principle to the slot machine described in the introduction. If there existed a slot machine that gave a person a free spin once every three hours, and as many spins as they wanted if they spent enough money, few jurisdictions would find this slot machine negates the consideration element. “That the prize may go to some one [sic] who has paid nothing does not negative the fact that many have paid for their chance. Because some have not been drawn into the gambling phase does not render it any the less a lottery, with whatever of evil it engenders, as to the large public who

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<sup>145</sup> See *Soto v. Sky Union LLC*, 159 F.Supp.3d 871, 878-79 (N.D. Ill. 2016) (deciding that even virtual currency purchased with real currency is valuable consideration under California law).

<sup>146</sup> Castillo, *supra* note 2, at 185-86.

<sup>147</sup> *Id.* at 169.

<sup>148</sup> Daniel Friedman, *Want Overwatch to Get Rid of Loot Boxes? It Might Get More Expensive*, POLYGON (Sept. 5, 2018), <https://www.polygon.com/2018/9/5/17822966/overwatch-loot-boxes-skins-events>.

<sup>149</sup> Castillo, *supra* note 2, at 169.

<sup>150</sup> *Id.* at 185.

<sup>151</sup> See 38 Am. Jur. 2d *Gambling* § 2.

have paid.”<sup>152</sup> The same principle applies to a loot box. Every so often, a player is given a loot box for free, or as many as they want if they pay enough in real currency. Loot boxes therefore likely satisfy the definition of consideration.

### C. Value or Worthless?

The main lynchpin on which the gambling discussion turns is whether the player is given something of *value* in the event of a certain outcome. In order for something to have value, courts have determined that whatever is won after a game of chance must have some form of market value.<sup>153</sup> Whether in the form of goods, tokens, or pure cash, as long as the prize has some value on the market, the prize satisfies the definition of value for the statutory definition.<sup>154</sup>

In general, the prizes for loot boxes do not carry any market value.<sup>155</sup> They cannot be sold or traded, either between players or other entities.<sup>156</sup> Once a player receives content from the box, that content is that player’s and that player’s alone.<sup>157</sup> The content may have some subjective value to the player, and the player may have spent plenty of real currency to obtain the content, but once the content reaches the player the content is legally worthless.<sup>158</sup>

Most games also include, as part of their software license agreement, that players will not sell either the content bound to a player’s game account or the player’s game account itself to another player.<sup>159</sup> When such value has been generated in violation of a

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<sup>152</sup> *Grimes v. State*, 235 Ala. 192, 194 (Ala. 1937); *see also Soto*, 159 F.Supp.3d 883.

<sup>153</sup> *Soto v. Sky Union LLC*, 159 F.Supp.3d 871, 879 (N.D. Ill. 2016).

<sup>154</sup> *Id.*; *see also Mason v. Machine Zone, Inc.*, 851 F.3d 315, 320 (4th Cir. 2017); *Phillips v. Double Down Interactive, Inc.*, 173 F.Supp.3d 731, 740-41 (N.D. Ill. 2016).

<sup>155</sup> *See Soto*, 159 F.Supp.3d at 879; *see also Mason*, 851 F.3d at 320; *Phillips*, 173 F.Supp.3d at 740-41.

<sup>156</sup> *See Soto*, 159 F.Supp.3d at 879; *see also Mason*, 851 F.3d at 320; *Phillips*, 173 F.Supp.3d at 740-41.

<sup>157</sup> *See Soto*, 159 F.Supp.3d at 879; *see also Mason*, 851 F.3d at 320; *Phillips*, 173 F.Supp.3d at 740-41.

<sup>158</sup> *See Soto*, 159 F.Supp.3d at 879; *see also Mason*, 851 F.3d at 320; *Phillips*, 173 F.Supp.3d at 740-41.

<sup>159</sup> *Castillo*, *supra* note 2, at 191.

software's terms of service, that value will likely be declared invalid for the purposes of satisfying the elements of gambling, and the developers granted immunity from suit.<sup>160</sup> Thus, any value to be extracted from loot boxes is effectively nullified.

However, as most of the case law in the United States regarding value has utilized recovery under state law claims, the actual definition of value can vary state-by-state.<sup>161</sup> In *Kater v. Churchill Downs Incorporated*, the case revolved around an online casino in which the only prizes were chips that users could use to continue to play the casino games.<sup>162</sup> The chips could not be cashed out, and it was against the terms of service to sell the chips to any other user (though the chips could be transferred between users freely).<sup>163</sup> The court found that, under Washington State's broad gambling definitions, the chips had the effect of extending the playtime of the casino games and therefore constituted a thing of value for the purposes of state gambling regulations.<sup>164</sup> While this case is still currently being litigated, it is possible that such a case may become persuasive authority in a future case or regulation in another state.

Looking solely at the majority of current case law and statutory definitions described above, it is likely that loot boxes currently do not reward anything of value as a prize after a game of chance, and therefore likely do not meet the "value" element of gambling. Yet, very little case law exists to illuminate the issue. It is plausible that a judge may find, in light of the social pressures detailed earlier, that loot box prizes do indeed have value as a matter of law.

After all, one aspect of the "value" argument seems to make no sense: If items in loot boxes have no value, then what exactly are consumers paying for in a loot box? Have they given their money away for something completely worthless? In the new digital frontier, it seems unacceptable that paid-for digital goods can be considered valueless.

To use an analogy, would a raffle in which the prize was a stage show or a roller coaster ride be gambling? There would be no

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<sup>160</sup> *Kater v. Churchill Downs*, 886 F.3d 784, 788 n.2 (9th Cir. 2018).

<sup>161</sup> *Id.* at 788.

<sup>162</sup> *Id.* at 785-86.

<sup>163</sup> *Id.*

<sup>164</sup> *Id.* at 787-88.

“value” in the prizes, as they contain experiences that could not be sold or traded on the market. Yet, prizes in loot boxes would have more value than a stage show or a ride on a roller coaster, as they take the form of digital “goods.” As Rebecca McDonough contends, “[i]t must be acknowledged that game items have value beyond the video game and in the real world.”<sup>165</sup>

Regardless, current case law and statutory definitions are inadequate to classify loot boxes as gambling outright.

#### *D. The Mechanic and the Monetization: The Core Problem*

The loot box is not inherently a terrible mechanic on its own. On the contrary, a system which rewards players with semi-randomized cosmetic gear throughout play creates an engaging and dynamic progression that can spawn an infinite myriad of styles that might never be experimented with if players could choose their cosmetics outright. This assertion may not be shared by the majority of game players; unfortunately, and curiously, there is currently no publicly available study or survey that can accurately reflect player sentiment on their preference for loot boxes. However, again, the loot boxes themselves are not the problem.

The central issue is that developers have created pathways for people to spend real currency on these games of chance.<sup>166</sup> By offering players the ability to pay real currency in a game of chance for a random prize, this creates a situation so similar to actual gambling as to be indistinguishable.<sup>167</sup>

Developers claim that loot boxes create an additional revenue stream for the company, so that they can continue to deliver content without having to raise the price on video games from sixty dollars to seventy dollars or beyond.<sup>168</sup> This claim is faulty for several

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<sup>165</sup> Rebecca E. McDonough, *Loot Boxes: “It’s a Trap!”*, 46 N. KY. L. REV. 62, 86 (2019).

<sup>166</sup> Drummond, *supra* note 120.

<sup>167</sup> *Id.*

<sup>168</sup> James Batchelor, *Loot Boxes: Future of AAA or a Monetization Misfire?*, GAMESINDUSTRY.BIZ (Oct. 18, 2017), <https://www.gamesindustry.biz/articles/2017-10-18-loot-boxes-combat-rising-development-and-marketing-costs>.

reasons. First, if loot boxes are creating a revenue stream that is supporting developers the same way that a price increase will, then there has functionally been a price increase in video games; the only difference is that the cost burden is shouldered by vulnerable populations instead of by customers with rational purchasing power.<sup>169</sup> After all, the available evidence demonstrates that, when loot boxes are removed from a game, the only population that spends less money on the game is comprised of problem gamblers.<sup>170</sup> Therefore, even if the assertion is true that loot boxes ensure the sixty dollar price point, it is only true because vulnerable populations are being exploited for excess funds. Capitalizing on those with gambling disorders is not the solution, it is precisely the *problem*.

Second, developers have created, adjacent to loot boxes, a confuse-opoly of editions for their major titles.<sup>171</sup> These editions all offer more content than the game at base price and offer a multitude of items for each edition that can be so confusing that some companies are forced to create charts to better educate their customers.<sup>172</sup> This confuse-opoly creates a “fear of missing out” (FOMO) on content in other editions, which drives consumers to purchase the highest-price editions possible.<sup>173</sup> In essence, then, developers release a “starter price” of sixty dollars, when the product is expected to be actually sold at seventy to a hundred dollars.<sup>174</sup> The dreaded price increase has therefore already functionally occurred; by exploiting players’ FOMO, the expected

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<sup>169</sup> Zendle, *supra* note 5.

<sup>170</sup> Zendle, *supra* note 136. It is important to note that the game used in the study did not cost \$60. Rather, it has fluctuated between \$10 and being free-to-play. However, Zendle and Cairns’s work remains the only definitive study on the spending habits of problem gambling players in games with regard to loot boxes, so their findings have been extrapolated to other games in this paper.

<sup>171</sup> Jim Sterling, *How Publishers Exploit Your Confusion and Your FOMO (The Jimquisition)*, YOUTUBE (Feb. 4, 2019), <https://www.youtube.com/watch?v=ZM4Dx33p57M>.

<sup>172</sup> See Emily Heller, *Which Edition of Assassin’s Creed Odyssey Should You Buy?*, POLYGON (Oct. 10, 2018), <https://www.polygon.com/deals/2018/10/10/17959446/assassins-creed-odyssey-editions-compared-standard-deluxe-gold-ultimate>.

<sup>173</sup> Sterling, *supra* note 171.

<sup>174</sup> *Id.*

sale price of the game has effectively increased beyond the sixty dollar starter price.<sup>175</sup>

Next, developers argue that allowing for in-game loot box purchases gives players who do not have much free time the ability to simply pay for loot boxes instead of spending the time earning them in-game.<sup>176</sup> This reasoning is disingenuous. Developers deliberately create scenarios in which players will be tantalized enough to continue playing the game, but will also make loot boxes just difficult enough to attain that players may be tempted to purchase these loot boxes.<sup>177</sup> This can be evidenced most clearly by the removal of paid-for loot boxes in *Star Wars Battlefront II* (2017).

Before release, *Star Wars Battlefront II* (2017) players who paid for early access to the game were able to play the game a few days before the general public.<sup>178</sup> However, players reported back that the game's entire progression system was controlled by paid-for loot boxes, and iconic Star Wars characters (such as Luke Skywalker and Darth Vader) were locked until players paid enough "credits" (the in-game currency).<sup>179</sup> Credits, of course, could be earned through loot boxes.<sup>180</sup> Players quickly calculated that earning just one of these heroes without spending any real currency would take approximately forty hours of playtime.<sup>181</sup> Developers responded to this criticism on Reddit by stating that the intent was to give players a "sense of pride and accomplishment"; this response has since earned the Guinness World Record of the Most Downvoted (disliked) Comment of All Time on Reddit.<sup>182</sup>

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<sup>175</sup> *Id.*

<sup>176</sup> Jernstrom, *supra* note 68.

<sup>177</sup> *Id.*; see also Cruz, *supra* note 100, at 218.

<sup>178</sup> Gita Jackson, *A Guide to the Endless, Confusing Star Wars Battlefront II Controversy*, KOTAKU (Nov. 21, 2017), <https://kotaku.com/a-guide-to-the-endless-confusing-star-wars-battlefront-1820623069>.

<sup>179</sup> Ethan Gach, *Unlocking Heroes in Star Wars Battlefront II Could Take a Long Time [Update]*, KOTAKU (Nov. 12, 2017), <https://kotaku.com/players-are-trying-to-calculate-how-long-it-takes-to-un-1820373111>.

<sup>180</sup> *Id.*

<sup>181</sup> *Id.*

<sup>182</sup> Paige Leskin, *EA's Comment on a Reddit Thread About 'Star Wars: Battlefront 2' Set a Guinness World Record for the Most Downvoted Comment of All Time*, BUS. INSIDER (Sept. 9, 2019), <https://www.businessinsider.com/reddit-world-record-downvotes-ea-star-wars-battlefront-2-2019-9>.

Upon the game's release, the loot boxes remained, but there was no way to pay for them with real currency.<sup>183</sup> To account for this, developers made loot box drops and rewards far more frequent to keep players engaged in the game.<sup>184</sup> Thus, prior to the last-minute changes, developers had created a false choice by providing players with the "option" to skip over tedious playtime by spending actual money, a problem that the developers caused and were selling solutions for.<sup>185</sup> When paid-for loot boxes got the boot, and there was no choice to be had, the problem magically disappeared along with the solution.

Few other titles have shed the paid-for loot box model in favor of a non-paid-for loot box, but for those that have, the frequency and value of the rewards to players *increased*. This implies that the "option" given to players without much free time was not as much an option as it was an exploitation of the market to sell solutions created by developers.<sup>186</sup>

Finally, developers claim that the increased profits for games ensure that employees in game companies can be supported in their jobs.<sup>187</sup> However, this has factually never been the case since the loot box rose to prominence. At the end of the past two fiscal years, game developing giants Activision Blizzard and Electronic Arts (the largest gaming conglomerates in the United States and the most prominent utilizers of loot boxes globally) reported record profits, and at the same time fired record numbers of employees.<sup>188</sup> Even the record profits offered by loot boxes could not offer all their employees adequate job security.<sup>189</sup>

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<sup>183</sup> Jackson, *supra* note 178.

<sup>184</sup> Heather Alexandra, *EA Boosts Star Wars Battlefront II's Multiplayer Rewards*, KOTAKU (Dec. 4, 2017), <https://kotaku.com/1821350257>.

<sup>185</sup> *Id.*

<sup>186</sup> Jason Schreier, *Shadow of War Is Now Microtransaction Free*, KOTAKU (July 17, 2018), <https://kotaku.com/shadow-of-war-is-now-microtransaction-free-1827666902>.

<sup>187</sup> Agarwal, *supra* note 34.

<sup>188</sup> See Jason Schreier, *EA Lays Off 350 People in Marketing, Publishing, and More*, KOTAKU (Mar. 26, 2019), <https://kotaku.com/ea-lays-off-350-people-in-marketing-publishing-analyt-1833575289>; see also Allegra Frank, *Activision Blizzard Cuts Hundreds of Jobs Despite 'Record Revenue' Year*, POLYGON (Feb. 12, 2019), <https://www.polygon.com/2019/2/12/18222096/blizzard-layoffs-february-2019>.

<sup>189</sup> See Frank, *supra* note 188.



There is no reason why the loot box cannot have a place in game design. The issue is that these boxes are available for purchase with real currency, and games are designed to push this purchase onto people least equipped to resist it. Any justification as to why this mechanic needs to be monetized falls flat on its face the moment it is subjected to any scrutiny. Instead, the only commentary that holds any water is that these practices, when monetized, are akin to gambling and require regulation.

### III. REGULATION AND LEGISLATION

#### A. Historical Self-Regulation

The video-game industry, due to its high throughput of innovation and its ever-evolving nature, has enjoyed a relative lack of legislative or regulatory limitation.<sup>190</sup> Rarely have games faced the actual threat of regulation regarding their innovations.<sup>191</sup> The only time that the video game industry has come close to governmental intervention was in the early nineties, when the overly-violent graphics of *Mortal Kombat* forced the industry to come together and form what would become the Entertainment Software Association (ESA), to demonstrate to the federal government that the industry could self-regulate without outside interference.<sup>192</sup>

Most gaming regulation today is decided by the ESA, which has established itself as the premier trade association of the video game industry.<sup>193</sup> The ESA acts as a lobbying group to legislative groups, as well as an advocate for the industry in court cases, including those that have reached the Supreme Court.<sup>194</sup>

The ESA also oversees the ESRB.<sup>195</sup> The ESRB gives ratings for games in much the same way as the Motion Picture Association of

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<sup>190</sup> Cruz, *supra* note 100, at 224.

<sup>191</sup> *Id.*

<sup>192</sup> Jeremy Jayne & Danny O'Dwyer, *How Does the ESRB Rate Video Games?*, YOUTUBE (Nov. 11, 2019), <https://www.youtube.com/watch?v=TaB-Tp4G6WI>.

<sup>193</sup> *Id.*

<sup>194</sup> *Id.*

<sup>195</sup> *Id.*

America (MPAA) gives ratings for movies.<sup>196</sup> Based on content, game ratings can range from an E (for “everyone”) to an M (for “mature”) to an AO (for “adults only”).<sup>197</sup> These are the notable ratings. An E means that anyone can purchase the game, regardless of age.<sup>198</sup> An M means only people 17 and over may purchase the game (a regulation enforced against brick-and-mortar stores by the ESA and ESRB).<sup>199</sup> An AO means only people 18 and over may purchase the game.<sup>200</sup>

While the distinction between M and AO seems trivial, it is in fact crucial. An AO rating is typically given only to games that include heavily mature themes, such as depicting virtual sex in a manner similar to pornography or including massive violence on a scale likely to induce domestic terrorism.<sup>201</sup> For this reason, most big box retailers (Target, Best Buy, Wal-Mart, etc.) will refuse to stock an AO game on their shelves.<sup>202</sup> Earning an AO rating on any game would be devastating to a game developer, as a significant portion of a game’s normal sales would be completely unavailable.<sup>203</sup> Although it has never done so, the ESRB has stated that any game that features “real gambling” would certainly earn itself an AO rating.<sup>204</sup>

Given the death sentence that an AO rating brings upon a game, the ESA and ESRB are unlikely to ever define loot boxes as actual gambling, and therefore unlikely to self-regulate industry practice to remove the mechanics from their games.<sup>205</sup> In fact, in 2017, the ESRB stated that it did not consider loot boxes to be gambling.<sup>206</sup>

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<sup>196</sup> *ESRB Ratings Guide*, ENTERTAINMENT SOFTWARE RATING BOARD, <https://www.esrb.org/ratings-guide/> (last visited Jan. 20, 2020).

<sup>197</sup> *Id.*

<sup>198</sup> *Id.*

<sup>199</sup> *Id.*

<sup>200</sup> *Id.*

<sup>201</sup> Mark Sammut, *19 Crazy AO Video Games the Ratings Board Banned*, THE GAMER (Oct. 8, 2018), <https://www.thegamer.com/video-game-ratings-grown/>.

<sup>202</sup> Schreier, *supra* note 14.

<sup>203</sup> Castillo, *supra* note 2, at 198.

<sup>204</sup> Schreier, *supra* note 14.

<sup>205</sup> Castillo, *supra* note 2, at 198.

<sup>206</sup> Schreier, *supra* note 14.

The key difference, it stated, was that a prize was always guaranteed from the loot box, analogizing the practice to selling packs of trading cards.<sup>207</sup> The ESRB reasons that though the box or pack may not have what a player wants, a player is still always receiving some sort of prize.<sup>208</sup> In the present year of 2020, the ESRB still seems reluctant to change its mind regarding the issue.<sup>209</sup>

The industry, therefore, lacked and continues to lack any sense of motivation to self-regulate loot boxes, and in fact explicitly allows for their usage. Predictably, when public concern grew over an industry unwilling to change, the market eventually awakened the sleeping bear: the threat of government regulation.<sup>210</sup>

### B. International Scrutiny

This Article has mentioned the *FIFA* series several times in discussing the loot box issue. This is not only because the famed soccer franchise is, as stated, the best-selling sports game franchise in the world.<sup>211</sup> It is also because overspending on loot boxes by minors and people with gambling problems in *FIFA* specifically has sparked scrutiny by international regulators in areas where soccer is the most popular sport, most notably in the European Union.

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<sup>207</sup> *Id.*

<sup>208</sup> *Id.*

<sup>209</sup> See Jayne, *supra* note 192; see also Luke Plunkett, *A Look at How the ESRB Rates Games*, KOTAKU (Nov. 11, 2019), <https://kotaku.com/a-look-at-how-the-esrb-rates-video-games-1839785495>.

<sup>210</sup> The ESRB's trading card reasoning, notably, is off the mark from the gambling definition discussed in Section II. Nowhere in the statutory definition does there have to be a *lack* of a prize in order to define a bet or wager. This then raises the question: do trading card games constitute gambling, especially in minor-oriented card games such as Magic: The Gathering, Yu-Gi-Oh!, The Pokémon Trading Card Game, or even baseball cards? Based on federal statutory definitions, I would argue yes, as cards happen to have market value, the only element loot boxes do not meet in the statutory definition of gambling. However, that is a topic for another paper.

<sup>211</sup> Arjun Reddy, *FIFA's Video Game is Leaving its Competition in the Dust Because of 2 Key Advantages (EA)*, BUS. INSIDER (Mar. 7, 2019), <https://markets.businessinsider.com/news/stocks/fifa-video-game-leaving-competition-in-the-dust-2019-3-1028013682>.

The first countries to recognize loot boxes as gambling were the Netherlands and Belgium in 2018.<sup>212</sup> After investigating several games that contained loot box mechanics, both countries declared loot boxes to be gambling and thus regulated under their own respective gambling regulations.<sup>213</sup> Although several gaming companies disagreed with the ruling and fought to keep the practice in place, in the end the companies surrendered and removed the ability to purchase loot boxes for real currency for all users in those countries.<sup>214</sup>

In 2019, after the BBC aired the stories of parents and people with gambling disorders struggling with loot boxes, the U.K. Parliament began an investigation into the nature of loot boxes and whether they could be considered gambling under U.K. law.<sup>215</sup> Although, in 2017, the U.K. Gambling Commission declined to define loot boxes as gambling (using similar reasoning to the discussion of a loot box's lack of "value" detailed above),<sup>216</sup> in 2019 the U.K. Parliamentary Digital, Culture, Media, and Sport Committee issued a report which classified loot boxes as gambling and recommended that they be regulated under U.K. gambling laws.<sup>217</sup> Most recently, in January of 2020, the director of mental health for the United Kingdom's National Health Service (NHS) recommended a flat ban on loot boxes in games, citing mounting evidence of gambling addiction arising in the developing minds of minors who are exposed to such mechanics.<sup>218</sup> No legislation has yet passed the U.K. Parliament declaring this to be the actual law in the United Kingdom, but the Conservative Party in the United Kingdom has issued a manifesto making an examination of the issues surrounding loot boxes a priority.<sup>219</sup>

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<sup>212</sup> Yin-Poole, *supra* note 10; Tassi, *supra* note 10.

<sup>213</sup> Yin-Poole, *supra* note 10; Tassi, *supra* note 10.

<sup>214</sup> Yin-Poole, *supra* note 10; Tassi, *supra* note 10.

<sup>215</sup> Kleinman, *supra* note 103.

<sup>216</sup> Castillo, *supra* note 2, at 177.

<sup>217</sup> Rich Stanton, *The DCMS Committee Says Loot Boxes are "Games of Chance"*, KOTAKU UK (Sept. 12, 2019), <https://www.kotaku.co.uk/2019/09/12/the-dcms-committee-says-loot-boxes-are-games-of-chance>.

<sup>218</sup> NHS England, *supra* note 8.

<sup>219</sup> Alastair Jones, *The Conservatives' Plan to "Tackle Issues Around Loot*

Loot boxes are not only a hot topic in the European Union. In 2017, China demanded that any seller of loot boxes disclose the odds of winning a particular prize in any one loot box.<sup>220</sup> Unwilling to lose the Chinese market, *Overwatch* and others disclosed the odds of loot box prizes to the world.<sup>221</sup> South Korea and Japan soon required similar disclosures, and companies obliged.<sup>222</sup> However, the disclosure of the odds did little to curb spending, and in 2019 China instated a new law that not only restricted the amount of time that minors could actually play games, but also restricted how much money per month they would be allowed to spend on in-game transactions.<sup>223</sup>

### C. Domestic Legislation

The United States has a complicated relationship with gambling as well as a lack of federal gambling statutes. Consequently, there has been little action taken on the part of the United States to determine whether loot boxes constitute gambling, and if so, how to deal with them.

In 2018, the Federal Trade Commission agreed to hold workshops and investigate loot boxes after reading troubling statistics in the U.K. Gambling Commission's reports.<sup>224</sup> Workshops began in April of 2019 and are still ongoing, though the FTC's consumer education specialists wrote about the subject in 2019 following initial workshop reports.<sup>225</sup>

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*Boxes*", KOTAKU UK (Nov. 27, 2019), <https://www.kotaku.co.uk/2019/11/27/the-conservatives-plan-to-tackle-issues-around-loot-boxes>.

<sup>220</sup> Allegra Frank, *Overwatch Loot Box Probabilities Are Revealed – At Least for China*, POLYGON (May 5, 2017), <https://www.polygon.com/2017/5/5/15558448/overwatch-loot-box-chances-china>.

<sup>221</sup> *Id.*

<sup>222</sup> Hong, *supra* note 56, at 69-70.

<sup>223</sup> Hernandez, *supra* note 17.

<sup>224</sup> Ethan Gach, *The FTC Says it Will Investigate Loot Boxes*, KOTAKU (Nov. 28, 2018), <https://kotaku.com/the-ftc-says-it-will-investigate-loot-boxes-1830714932>.

<sup>225</sup> Amy Hebert, *Video Games, Loot Boxes, and Your Money*, FED. TRADE COMM'N (Sept. 26, 2019), <https://www.consumer.ftc.gov/blog/2019/09/video-games-loot-boxes-and-your-money>.

In early 2019, a bill was introduced in the U.S. Senate to impose a flat ban on all loot boxes and “pay-to-win” microtransactions, defined as in-game purchases that gave players a distinct advantage over non-purchasers.<sup>226</sup> Dubbed colloquially as the “Loot Box Bill,” it has received bipartisan sponsorship in the Senate.<sup>227</sup> However, as of writing, no other action has been taken on the bill since its introduction in May 2019.<sup>228</sup>

The Loot Box Bill is a nuclear bomb on microtransactions in games. Instead of leaving any sort of wiggle room for games to non-predatorily introduce these mechanics, such as by not utilizing the psychologically manipulative techniques described above, the bill instead stops most microtransactions dead in their tracks.<sup>229</sup> Any game that utilizes the free-to-play model would thus be severely restricted as to what types of mechanics they can place in their game to generate additional revenue, no matter how those mechanics are introduced or utilized. The bill would remove paid-for loot boxes entirely, while simultaneously removing all other nebulously defined pay-to-win mechanics (such as a boost to construction speed in a village management game). While many consumers may cheer for such a future, doing so stifles innovation and creativity among small developers. Smaller video game developers can currently make a low-cost game for a phone and utilize microtransactions in that game to make up the cost of development, while investing any future profits into a higher-cost project.<sup>230</sup> The Loot Box Bill, by stopping all loot boxes and other related microtransactions, would shut many small independent developers out of the market entirely.

While the Loot Box Bill would certainly put a stop to the current iteration of revenue generation, understanding the history of how loot boxes became implemented in video games demonstrates that the loot box is not the disease. The loot box is a symptom of a far greater problem that incentivizes game developers to profit off of

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<sup>226</sup> Jason Schreier, *U.S. Senator Introduces Bill to Ban Loot Boxes And Pay-To-Win Microtransactions*, KOTAKU (May 8, 2019), <https://kotaku.com/u-s-senator-introduces-bill-to-ban-loot-boxes-and-pay-1834612226>.

<sup>227</sup> A Bill to Regulate Certain Pay-to-Win Microtransactions and Sales of Loot Boxes in Interactive Digital Entertainment Products, and for Other Purposes, S. 1629, 116th Cong. (2019).

<sup>228</sup> *Id.*

<sup>229</sup> *Id.*

<sup>230</sup> Agarwal, *supra* note 34.

those who cannot be responsible with their spending via psychological traps. Instead of approving overly broad legislation to treat a symptom and stifle innovation, alternative solutions must be implemented for the long term.

#### IV. SOLUTIONS: ACTUAL AND SPECULATIVE, SHORT-TERM AND LONG-TERM

##### A. Consumers Forcing Short-Term Markets

As more and more public pressure mounts on developers who utilize loot boxes, fewer and fewer developers are willing to utilize them as a source of revenue. Games that once had loot boxes as a revenue stream, such as *Middle Earth: Shadow of War*, have updated their games to remove them entirely.<sup>231</sup> Newly developed games use a lack of loot boxes in their game as a virtue signal, detailing a lack of loot boxes in all of their marketing and promotional materials.<sup>232</sup> As each new game announces its box-less intentions, consumer sentiment for that company or game rises, and companies are thus reinforced in continuing this cycle.<sup>233</sup>

Additionally, improved consumer sentiment toward game publishers means that legislators and regulators are less inclined to go after video game companies for pseudo-gambling practices.<sup>234</sup> This raises market certainty with regards to the company's value and thus improves their shareholder value and stock price.<sup>235</sup>

David Castillo believes that the simplest and best solution to the loot box problem is the overwhelming force of applied public pressure.<sup>236</sup> The example he uses is the effectiveness of public

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<sup>231</sup> Schreier, *supra* note 186.

<sup>232</sup> Favis, *supra* note 10.

<sup>233</sup> Michael Walters, *How DICE Saved Star Wars Battlefront II from the Pay-to-Play Disaster it Once Was*, THE GAMER (Sept. 21, 2019), <https://www.thegamer.com/how-dice-saved-star-wars-battlefront-ii-loot-box/>.

<sup>234</sup> Castillo, *supra* note 2, at 198-202.

<sup>235</sup> See Andy Chalk, *Electronic Arts Stock Sheds \$3 Billion in Value After Battlefront 2*, PC GAMER (Nov. 28, 2017), <https://www.pcgamer.com/electronic-arts-stock-sheds-3-billion-in-value-after-battlefront-2/> (as an example of the effects of consumer sentiment on stock prices when sentiment is low).

<sup>236</sup> Castillo, *supra* note 2, at 198-202.

protest in *Star Wars Battlefront II* (2017), which temporarily removed loot boxes from the game entirely.<sup>237</sup> I agree that public protest is certainly an integral part of enacting change within the game industry, and it is certainly responsible for the initial moves made within the industry. However, despite overwhelming public protest against the practice for the past three years, public pressure has yet to solve the loot box issue by itself alone.

Loot boxes are not yet completely phased out in the short-term. *FIFA* and *Overwatch*, among others, continue to use loot boxes and do not appear likely to part ways with the practice any time soon.<sup>238</sup> *Fortnite*, one of the hottest pop-culture games of the past several years,<sup>239</sup> continues to utilize loot boxes in its “Save the World” mode, which is itself a topic of ongoing litigation concerning the boxes’ predatory effect on minors.<sup>240</sup> Mobile games, as well, continue to utilize the practice and hunt any whale with a smartphone, and do not have to suffer much (if any) concentrated public pressure to cease this practice.<sup>241</sup>

In the long-term, while loot boxes will be phased out, other methods are developing to supplement the income loot boxes once provided. While governments continue to chase the tail of loot boxes as they disappear, battle passes, long-term subscriptions, time-savers, and seasonal content are currently being offered to capitalize on players’ fear of missing out and to spur them into making impulsive purchases for currently worthless digital goods.<sup>242</sup> While this may not be strictly gambling, these techniques still apply undue psychological pressure on vulnerable whales to spend ever increasing amounts of money in Hook, Habit, Hobby models.<sup>243</sup> Should this trend continue unabated, stories of minors and those

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<sup>237</sup> *Id.*

<sup>238</sup> See BLIZZARD, *supra* note 11.

<sup>239</sup> Kevin Webb, *Fortnite was the Most Important Game of this Decade, and It Will Be for the Next One, Too*, BUS. INSIDER (Dec. 29, 2019), <https://www.businessinsider.com/fortnite-most-influential-video-game-decade-2019-12>.

<sup>240</sup> Brian Flood, *Epic Games Fails to Stop Fortnite Loot Box Class Action*, BLOOMBERG LAW (Aug. 1, 2019), <https://news.bloomberglaw.com/class-action/epic-games-fails-to-stop-fortnite-loot-box-class-action>.

<sup>241</sup> Busby, *supra* note 64.

<sup>242</sup> Totilo, *supra* note 12.

<sup>243</sup> Jernstrom, *supra* note 68.



with addictions who spend thousands upon thousands of dollars on games will not cease, further running the risk that governments around the world may implement sweeping, authoritarian rules similar to China's.

To preserve developers' freedom to innovate, as well as preserve players' freedoms to both enjoy games and to rationally and responsibly spend money how they choose, a more far-reaching and long-term solution must be achieved.

### *B. A New Self-Regulation: Distributor-Side*

Several pieces of scholarly literature regarding loot boxes have arrived at the same conclusion: the industry is in a position to and should immediately self-regulate, creating an environment beneficial for the consumer, the developer, and for the legislative body overseeing the products.<sup>244</sup> As evidence, the literature points to the industry's previous success in forming the ESRB in the first place. By creating a content ratings board to inform parents of the content in specific games, consumers were happy to know what they were purchasing, developers were happy to produce what they wanted under an informative label, and legislators were happy that video game violence was no longer their problem.<sup>245</sup>

While an effective solution to video game violence, copy-pasting the ESRB model onto the loot box practice would not be effective, primarily due to the ESA's financial incentive to continue utilizing loot boxes in games, described above in Section III.A. With the ESRB, the video game industry was able to curtail sales of certain games to minors without a parent's permission.<sup>246</sup> The necessary solution, however, would create an environment that would remove the sale of loot boxes to persons of all ages, in order to curtail the problem not just for minors but for adults with gambling disorders as well. Without significant domestic legislative pressure, or until loot boxes are phased out in favor of yet another financial innovation, it is unlikely that the ESA, and therefore the ESRB, will ever self-regulate in opposition of their own financial

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<sup>244</sup> See Castillo, *supra* note 2, at 197-98; Liu, *supra* note 16, at 797-98.

<sup>245</sup> Castillo, *supra* note 2, at 197-98.

<sup>246</sup> *Id.*

interests, especially when such regulation would mean a certain decrease in revenue from existing titles.

However, the video game industry does not have *complete* control over their market. Over the course of the loot box's development, there has been one party that has continuously demonstrated an understanding of consumer demand, and who has understood that what improved player sentiment was good for its business model: video game retailers and distributors.

As mentioned earlier, big box retailers such as Target, Best Buy, and Wal-Mart would refuse to stock any game that had received an AO rating from the ESRB.<sup>247</sup> Sony, Microsoft, and Nintendo, the principal makers of home video game consoles, have required developers to disclose their loot box odds if developers want to sell games on a console's digital store.<sup>248</sup> Even Apple and Google, when confronted with the multitude of loot box-implementing games on their own digital stores, required said games to disclose their odds to consumers.<sup>249</sup>

Therefore, it would be in the consumer's and the distributor's best interest for a distributor-based trade association to form, similar to the ESA, that would decide what games would be sold in their stores. This would allow distributors to control the general content that they would sell, and more importantly, collectively decide on which content they would *not* be willing to sell. The distributors' familiarity with the product would assist in making reasonable regulations that could more effectively police the market, while still preserving developers' ability to innovate and create more than overly broad and difficult-to-adapt legislation ever could.

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<sup>247</sup> Castillo, *supra* note 2, at 198.

<sup>248</sup> Dave Thier, *Under Threat of Legislation, Sony, Microsoft and Nintendo Agree to Force Loot Box Odds Disclosure*, FORBES (Aug. 7, 2019), <https://www.forbes.com/sites/davidthier/2019/08/07/under-threat-of-legislation-sony-microsoft-and-nintendo-agree-to-force-loot-box-odds-disclosure/>.

<sup>249</sup> See Lisa Marie Segarra, *Google Requires Loot Box-Laden Kids' Games Disclose the Odds of Winning Digital Goods*, FORTUNE (May 31, 2019), <https://fortune.com/2019/05/31/google-play-store-loot-boxes/>; see also Ben Kuchera, *Apple Adds New Rules for Loot Boxes, Requires Disclosure of Probabilities*, POLYGON (Dec. 21, 2017), <https://www.polygon.com/2017/12/21/16805392/loot-box-odds-rules-apple-app-store>.

The distributor association also would not be influenced by the increased revenue generated by loot boxes or similar mechanics. After all, those purchases flow directly from the player to the developer over a digital connection, and a brick-and-mortar distributor sees no increase in profit from those purchases.<sup>250</sup> The ESA, by contrast, is an association made up of purely game developers, who all have a vested interest in a game's increased profits past the initial point of sale.<sup>251</sup> The distributor association will therefore be influenced only by consumer sentiment regarding certain games, especially when legislative and regulatory eyes would be upon the games (and therefore, the retailers).

The concept of a distributor association is not new in the United States. After all, the MPAA is itself a distributor association, rating movies based purely on content and not on how much money the movie is expected to make.<sup>252</sup> Granted, it is unlikely that any movies to date encourage viewers to engage in pseudo-gambling in the middle of the film, and it is unknown how the MPAA would react if such films were ever invented. Until that day, the point stands that distribution associations can effectively inform consumers and prevent harmful content from reaching vulnerable populations without monetary influence.

By creating a distribution association, video game distributors will more effectively be able to control manipulative and pseudo-legal content from ever reaching their storefronts, digital or otherwise, which will put enormous pressure on developers to conform to the association's standards. Even as new monetization techniques develop, such an association could prevent the virulent

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<sup>250</sup> While digital distribution is increasing year-over-year, physical distribution through brick-and-mortar stores remains a significant and vital channel for video game sales. By way of example, the most recent data regarding the digital download ratio of games for Sony's PlayStation 4 was 66%, meaning that 34% of its titles were still purchased as physical copies. See *Supplemental Information for the Consolidated Financial Results for the Fourth Quarter Ended March 31, 2020*, SONY CORPORATION (May 13, 2020), [https://www.sony.net/SonyInfo/IR/library/presen/er/pdf/19q4\\_supplement.pdf](https://www.sony.net/SonyInfo/IR/library/presen/er/pdf/19q4_supplement.pdf).

<sup>251</sup> *We Are ESA*, ENT. SOFTWARE ASS'N, <https://www.theesa.com/about-esa> (last visited Jan. 20, 2020).

<sup>252</sup> *Film Ratings*, MOTION PICTURE ASS'N OF AM., <https://www.motionpictures.org/film-ratings/> (last visited Jan. 20, 2020).

spread of these techniques into vulnerable populations, and thus curtail predatory practices far more effectively than legislatures and regulatory agencies.

### C. *Alternative Industry Regulations*

The video game industry has attempted to curb any legislative efforts against it via disclosure: disclosure of odds, disclosure of potential prizes, etc. So far, this practice has seen mixed results from various countries. In Korea and Japan, it has been an effective goalpost; in China minors are now legislatively banned from spending too much money on games.<sup>253</sup> However, further disclosure has a possibility of mollifying even the most totalitarian of governments.

In the current market, as McDonough describes, “[t]he user is buying content beyond the initial purchase price without first being afforded the knowledge that doing so is essentially a requirement to play the game.”<sup>254</sup> Currently, the ESRB requires developers to place, on a game’s ratings label, an “In-Game Purchases” descriptor if the game contains any DLC, loot boxes, or other microtransactions.<sup>255</sup> However, game developers have developed ways around having even this content label applied to their titles, such as by adding in loot boxes and microtransactions months after the game’s release.<sup>256</sup>

To address this, a regulation requiring games placed on store shelves to carry a prominent warning sticker regarding the average amount of in-game user spending for a type of game (or all games, generally) may be partially effective at curbing minors’ access to predatory games, as parents would see the increased theoretical price tag and be hesitant to enter into such an expensive, long-term

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<sup>253</sup> Liu, *supra* note 16, at 780-84.

<sup>254</sup> McDonough, *supra* note 165.

<sup>255</sup> ENT. SOFTWARE RATING BOARD, *supra* note 196.

<sup>256</sup> See Wesley Yin-Poole, *Four Months After Launch: Call of Duty: Black Ops 4 Gets Loot Boxes – and They’re Awful*, EUROGAMER (Feb. 20, 2019), <https://www.eurogamer.net/articles/2019-02-20-four-months-after-launch-call-of-duty-black-ops-4-gets-loot-boxes-and-theyre-awful>; see also Imran Khan, *Crash Team Racing Adds Real Money Microtransactions with Next Update*, GAMEINFORMER (July 30, 2019), <https://www.gameinformer.com/2019/07/30/crash-team-racing-adds-real-money-microtransactions-with-next-update>.

commitment in financing their child's gaming hobby. By having games display such tags using data collected from previous, similar titles, parents can have a greater appreciation of just how much a game actually costs, and whether it is worthwhile to understand the parental controls available to them.

Such a disclosure, while useful, would be a logistical nightmare. Data would have to be consistently and continuously collected, sorted, updated, printed, and attached to every physical copy that was shipped to a brick and mortar store. The developers or the stores themselves may carry the burden of attaching updated stickers, but the act of attaching them to the thousands of copies of various games sold each day remains a daunting task. Games would also attempt to skirt around this issue by claiming that they are of a different kind than they actually are, with no clear regulatory body to answer to for a mismatched type, in order to achieve the lowest warning sticker price possible.

A workable adaptation of this may be a warning label akin to the required surgeon general's warning on cigarette packs. The warning label would contain information regarding the presence of loot box mechanics, the average per-capita increased spending due to loot boxes across all major game titles, and a warning regarding the effect of pseudo-gambling on adolescent or mentally ill psyches. This would also come with simple instructions on how to access and utilize parental controls to keep children from overspending, which would overcome the educational barrier to parental controls mentioned earlier.

However, such a solution would work only for physical copies of games sold through brick-and-mortar stores with a parent's supervision. If a game is sold digitally, it can be incredibly easy for a minor to use a saved credit card profile to purchase as many games and loot boxes as the child wants.<sup>257</sup> Parents will find it difficult to monitor their child's activity as the child is playing the game, as much is done to obscure the prices of these loot boxes from the passing parent's eye by use of virtual currencies, tricky store pages,

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<sup>257</sup> Evan V. Symon, *How Young Gamers Can Quietly Ruin Their Parents' Finances*, CRACKED (June 17, 2018), <https://www.cracked.com/personal-experiences-2570-how-young-gamers-can-quietly-ruin-their-parents-finances.html>.

and pop-up purchases.<sup>258</sup> If these disclosures are made online (similar to the FTC's loot box warning discussed above),<sup>259</sup> then the same problem regarding guiding parents to educational materials on parental controls occurs once more.

These disclosures also would do little to curb spending and purchasing of loot boxes by adults with gambling disorders, the other population of whales threatened by pseudo-gambling practices. There would be no guardian to stop their spending until their finances were drained. Additionally, these disclosures would do little to combat time-savers, battle passes, and other feats of digital ingenuity that promise a recurring revenue stream through manipulative marketing techniques.

Ultimately, though, I believe that requiring physical copies of games to be sold with a visible warning label explaining parents' ability to control their child's usage and spending in the product would have the ultimate effect of disseminating that information to enough people such that the practice would become common knowledge. If parental controls become commonplace, at least minors and their guardians can be protected from the effects of gambling-adjacent gaming in future. This increased awareness might also evolve into increased support and solutions for adults with gambling disorders, as well.

#### *D. Long-Term Education and Understanding for Legislation*

Whether or not a distributor association forms or is successful, legislators and regulators must take a holistic view of the video game industry and its practices in order to form comprehensive and narrowly tailored legislation to protect both consumer interests and corporate innovation. For far too long the standard for regulatory agencies has been a general ignorance of emerging technologies and their effect on society. The ESA and ESRB can even help regulatory bodies in reaching acceptable trade practices, so long as regulatory bodies take an active role in the proceedings and realize that the ESA and ESRB, while informed, are not neutral.

To combat loot boxes specifically in the United States, one or several states could recognize the loot box mechanic as falling under

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<sup>258</sup> *Id.*

<sup>259</sup> Hebert, *supra* note 225.

established state gambling regulations. As previously mentioned, most gambling regulations are governed by the states, not the federal government. However, the actions of a single, powerful state, such as California, can influence markets for the entirety of the country. If California, where most video game developers are housed, were to define loot boxes as gambling, developers would be forced to remove them from games. Even if developers were willing to comply with such a statute in California, they would have to perform a cost-benefit analysis on whether it would make business sense to produce two separate games: one which complies with California gambling regulations for California consumers, and one which still utilizes paid loot boxes in the rest of the country. Based on historical precedent from California's automobile emissions reduction program,<sup>260</sup> I would predict that most developers would conform to California's standard, should California adopt such legislation.

Edwin Hong also believes that California is in prime position to dictate how loot boxes are implemented and utilized nationwide, if not globally.<sup>261</sup> After all, a number of the largest game developers in the industry are based in the state.<sup>262</sup> His argument, however, is that California should implement a flat ban on the loot box practice, based on the success that Belgium and the Netherlands had in removing loot boxes from within their borders.<sup>263</sup> While a flat ban would be effective at removing loot boxes, Belgium and the Netherlands did not actually implement a sweeping ban on loot boxes; they merely adopted loot boxes as gambling practices under their respective gambling commissions.<sup>264</sup> As stated above, adopting loot boxes as gambling under state law is precisely what I propose a state such as California should do to positively adjust the market for the nation as a whole. A flat ban on loot boxes would undeniably be effective at removing them from the practice, but without other careful consideration, could have disastrous ripple effects

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<sup>260</sup> Mike Collins, *Auto Makers Agree to Stricter California Tailpipe-Emissions Standards*, THE WALL ST. J. (July 25, 2019), <https://www.wsj.com/articles/auto-makers-agree-to-stricter-california-tailpipe-emissions-standards-11564074757>.

<sup>261</sup> Hong, *supra* note 56, at 78-79.

<sup>262</sup> *Id.* at 81.

<sup>263</sup> *Id.* at 81-82.

<sup>264</sup> Yin-Poole, *supra* note 10; Tassi, *supra* note 10.

throughout the industry, as described above in Sections II.D. and III.C.

Despite my zeal for adopting loot boxes under existing gambling statutes, *how* this goal is accomplished must be approached with a great deal of care. If regulatory bodies intend to serve the overall public good, a significant amount of time and effort must be spent in fully identifying the issues at play, lest their regulations spark unintended consequences far worse than the prior status quo.

#### CONCLUSION

Loot boxes have developed as a lucrative business model to supplement video game developer incomes amid stagnant prices in a competitive market. However, the unregulated nature of the video game industry has led to predatory practices in foisting loot boxes onto unsuspecting consumers. In addition, the whale-hunting nature of these practices has led to the exploitation of vulnerable populations, such as minors and gambling addicts. The nature of loot box usage nearly meets the United States' definition of gambling, and in international jurisdictions loot boxes are either defined as gambling or strictly regulated. Despite this, the United States has either taken inadequate or overly broad measures to protect consumers. In the short-term, loot boxes will be phased out due to market forces driving them out of software development. In the long-term, a trade association of video game distributors will be able to quickly and effectively control predatory content in games, while regulatory bodies should educate themselves about the industry and its economics before proposing further regulation or legislation.