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“There are some aspects of this business model that make it so—you’re not making games to be fun anymore. . . . [H]ere’s the stuff that addicts players, that makes people come back. You’re implementing these strategies to hook people, but they’re not necessarily having fun with your game anymore. They’re compelled to play because they need to increase their level or feel like they’re making some other kind of progression.”

INTRODUCTION

“How do you sustain a business model in which users don’t pay for your service?” asked Senator Orrin G. Hatch to Mark Zuckerberg, CEO of Facebook, at a hearing before the Committees on the Judiciary and Commerce, Science and Transportation.2 “Senator, we run ads,” Zuckerberg replied, failing to suppress a smirk at the question.3 Zuckerberg’s April 10th congressional hearing is remembered as one of the key moments in 2018’s “techlash,” a term that denotes “[t]he growing public animosity towards large Silicon Valley platform technology companies and their Chinese equivalents.”4 This portmanteau of “technology” and “backlash” was first coined in 2013 by political editor Adrian Wooldridge, and was initially hyphenated as “tech-lash.”5 Wooldridge warned that the hyper-wealthy tech elites’ apparent exemption from public “backlash against the plutocracy” would soon be coming to an end.6 A mere four years

4. See Rana Foroohar, Year in a Word: Techlash, FIN. TIMES (Dec. 16, 2018), https://www.ft.com/content/76578fba-fca1-11e8-ac00-57a2a826423e.
later, *The Economist* predicted that in 2018, “politicians will turn on the technology giants—Facebook, Google and Amazon in particular—saddling them with fines, regulation and . . . broader pressure for transparency” in response to scandals emerging from the revelations of Silicon Valley’s private data misuse.8 *Financial Times* columnist Rana Foroohar declared “techlash” to be the word that best encapsulated 2018, commenting that “[t]echlash is the predictable result of an industry that can’t govern itself.”9

Video game companies—despite comprising a $150 billion industry and eclipsing both the global box office and digital music industries combined10—are typically absent from public discourse about Silicon Valley, tech giants, and the responsible, transparent use of consumer data. Nevertheless, the video game industry experienced its own techlash11 after several controversies erupted over the inherently exploitative qualities of “loot boxes,” the video game monetization practice in which players pay real money in exchange for the chance to win randomized virtual in-game items.12 For example, in the latest entries of the popular soccer video game series FIFA,13 players form their own

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9. Foroohar, supra note 5.


13. Electronic Arts, the publisher of the FIFA series, typically releases a new FIFA game every year. See generally Simon Parkin, Fifa: The Video Game That
team by collecting “player packs,” which contain randomly generated in-game cards bearing the likeness and attributes of real-world soccer players. These packs may be purchased in a two-step process of first buying “FIFA points” with real money and then using those points to purchase card packs within the game.14

Though the video game industry currently remains self-regulated,15 politicians have begun to consider whether governmental intervention is necessary in order to ensure that the video game industry does not employ abusive business strategies.16 Unfortunately, nearly all parties involved—including industry

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15. The video game industry is currently regulated by the Entertainment Software Association, a trade association established and membered by most of the top video game publishers in the world. Appropriately enough, “We are the Video Game Industry” is the tagline on the front page of the Entertainment Software Association’s website. See generally ENT. SOFTWARE ASS’N, https://www.theesa.com/ (last visited May 12, 2020) [https://perma.cc/G9FM-SJD6].

spokespeople,\textsuperscript{17} politicians,\textsuperscript{18} and journalists\textsuperscript{19}—have complicated this conversation by needlessly focusing on the dichotomy between gambling and loot boxes. While loot boxes may seem or feel like gambling within a video game, they are specifically

\textsuperscript{17} See Steve Watts, ESRB Does Not Consider Loot Boxes to Be Gambling, IGN (Oct. 12, 2017, 1:09 PM), https://www.ign.com/articles/2017/10/12/esrb-does-not-consider-loot-boxes-to-be-gambling [https://perma.cc/F53C-PW7A] (“ESRB does not consider loot boxes to be gambling,” a spokesperson for the organization told IGN. The rest of the company’s statement reads: ‘While there’s an element of chance in these mechanics, the player is always guaranteed to receive in-game content (even if the player unfortunately receives something they don’t want). We think of it as a similar principle to collectible card games: Sometimes you’ll open a pack and get a brand new holographic card you’ve had your eye on for a while. But other times you’ll end up with a pack of cards you already have. Should there be any gambling or gambling related mechanics in a game, ESRB assigns one of two content descriptors as part of the rating: ‘Simulated Gambling’ (player can simulate gambling without betting or wagering real cash or currency) and “Real Gambling” (player can actually gamble, including betting or wagering real cash or currency). If there is any real gambling in a game or app it will always receive an Adults Only rating.’).


designed\textsuperscript{20} to elude the legal definition of gambling under anti-gambling statutes.\textsuperscript{21}

Although there are slight differences in definitions\textsuperscript{22} between various state gambling statutes, “[i]n most states, for an activity to be defined as an illegal game of chance, three elements must be present: consideration, chance, and a prize.”\textsuperscript{23} Black’s Law Dictionary defines a prize as “[s]omething of value awarded in recognition of a person’s achievement.”\textsuperscript{24} While American courts have not yet directly addressed loot boxes,\textsuperscript{25} they have been asked on several occasions to determine whether illegal gambling mechanics exist within video games wherein players can pay real money for the chance to win in-game

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{20} See generally James G. Gatto & Mark A. Patrick, Are Loot Boxes an Illegal Gambling Mechanic?, NATL LAW REV. (Oct. 25, 2017), https://www.natlawreview.com/article/are-loot-boxes-illegal-gambling-mechanic [https://perma.cc/R96E-MPLH] (“ESRB does not consider this mechanic to be gambling because the player uses real money to pay for and obtain in-game content. The player is always guaranteed to receive something—even if the player doesn’t want what is received. Think of it like opening a pack of collectible cards: sometimes you’ll get a brand new, rare card, but other times you’ll get a pack full of cards you already have. That said, ESRB does disclose gambling content should it be present in a game via one of two content descriptors: Simulated Gambling (player can gamble without betting or wagering real cash or currency) and Real Gambling (player can gamble, including betting or wagering real cash or currency). Neither of these apply to loot boxes and similar mechanics.”).
\item \textsuperscript{21} See S. GREGORY BOYD ET AL., VIDEO GAME LAW: EVERYTHING YOU NEED TO KNOW ABOUT LEGAL AND BUSINESS ISSUES IN THE GAME INDUSTRY 201 (2019) ("[A] foundational knowledge of what gambling is and how it is treated under the law can mean the difference between laughing all the way to the bank and standing up when the judge calls your name.").
\item \textsuperscript{22} See James G. Gatto & Mark A. Patrick, How the Evolution of Games Has Led to a Rise in Gambling Concerns: All Bets are On! Gambling and Video Games, NATL LAW REV. (Sep. 16, 2018), https://www.natlawreview.com/article/how-evolution-games-has-led-to-rise-gambling-concerns-all-bets-are-gambling-and [https://perma.cc/ZR2M-CKDS] ("While these three [gambling] elements seem to be fairly simple terms, their interpretation is not. Their meaning varies from state to state.").
\item \textsuperscript{23} BOYD ET AL., supra note 21, at 202.
\item \textsuperscript{24} Prize, BLACK’S LAW DICTIONARY (11th ed. 2019).
\item \textsuperscript{25} There was a class action lawsuit brought before the California district court against Epic Games for their use of loot boxes in their highly popular game *Fortnite* (called “Loot Llamas” within the game). However, the California court granted Epic Games’s motion to transfer the case to the Eastern District of North Carolina, where the case was dismissed for failure to state a claim. Neither court answered whether loot boxes are “gambling” within a legal definition. See R.A. ex rel. Altes v. Epic Games, Inc., No. 5:19-cv-325-BO, 2020 WL 865420 (E.D.N.C. Feb. 20, 2020); see also Brian Flood, Epic Games Fails to Stop Fortnite Loot Box Class Action, BLOOMBERG L. (Aug. 1, 2019, 7:36 AM), https://news.bloomberglaw.com/class-action/epic-games-fails-to-stop-fortnite-loot-box-class-action [https://perma.cc/MM64-4XK7].
\end{itemize}
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items,26 These courts typically found that any in-game prizes within video games are not “things of value” unless they can be converted back into real currency in a manner similar to how players at a casino cash in their chips.27 Loot boxes usually do not grant players the ability to convert their in-game winnings into real money so they almost certainly do not fit within the legal definition of gambling.28

Rather than trying to clumsily cram loot boxes into a legal definition of gambling, parties would be far better off discussing loot boxes in the context of “dark patterns.” A dark pattern is a term for user interface designs that are “carefully crafted to trick users into doing things they might not otherwise do, such as buying insurance with their purchase or signing up for recurring bills.”30 While recent scholarship has analyzed the legal questions presented by loot box regulation and gambling law,31 the connection between loot boxes and dark patterns has seemingly gone unnoticed.


27. See Mason v. Mach. Zone, Inc., 140 F. Supp. 3d 457 (D. Md. 2015), aff’d, 851 F.3d 315 (4th Cir. 2017); see also Soto, 159 F. Supp. 3d 871; but see Kater, 886 F.3d at 787–88 (finding that the virtual chips within the game Big Fish Casino were “things of value” under Washington gambling law, regardless of whether they can be directly redeemed into real world currency).


29. See David J. Castillo, Unpacking the Loot Box: How Gaming’s Latest Monetization System Flirts with Traditional Gambling Methods, 59 SANTA CLARA L. REV. 165, 201 (2019) (“The ethics [of utilizing loot boxes] can be debated, but the difficulty of proving an actual risk, the outdated case law, and the lack of precedent concerning virtual prizes makes it difficult to classify loot boxes as gambling.”).


Although loot boxes have arguably received more public and governmental scrutiny than any other video game monetization practice, loot boxes are just one aspect of predatory dark pattern user interface design. As such, to focus solely on loot boxes and ignore dark patterns when analyzing exploitative video game designs is to miss the forest for the trees.

This Comment examines dark patterns within the video game industry and advocates for the creation of a regulatory model to prohibit the carte blanche use of these manipulative designs within video games so as to protect consumers from predatory monetization practices. An effective model for regulating predatory video game monetization practices should directly acknowledge the term “dark pattern”; create professional standards bodies and independent review boards; require informed consent for any behavioral or psychological studies involving user data; ban user interfaces designed to foster compulsive usage in children; and direct the Federal Trade Commission (FTC) to create industry rules based on industry-guided recommendations. Such a regulatory scheme would address both loot boxes and other forms of predatory dark patterns in video game design.

Part I of this Comment briefly overviews dark patterns and demonstrates how parties have needlessly focused on loot boxes’ similarity to gambling rather than addressing dark patterns, the actual source of the video game industry’s consumer exploitation. Part II summarizes the video game industry’s techlash, showcasing ways that the industry has abused its consumers and how consumers have responded, as well as arguing why governmental intervention is necessary to stop the industry from exploiting end users. Part III first analyzes the Protecting Children from Abusive Games Act (“PCAGA”), a bill introduced in 2019 to regulate loot boxes, and explains why this bill would be an ineffective solution for preventing manipulative game design. Additionally, Part III evaluates the Deceptive Experiences To Online Users Act—also known as the DETOUR Act—another bill introduced in 2019 that specifically targets dark patterns. Part III concludes by explaining how a regulatory model based upon the DETOUR Act would be the most effective solution for combatting predatory practices within the video game industry

and supporting consumer welfare. Finally, Part IV proposes elements to be included within an effective legislative model for regulating dark patterns in the video game industry.

I. DEFINING DARK PATTERNS AND OTHER INVASIVE ASPECTS OF THE VIDEO GAME INDUSTRY

In order to address a problem, one must first correctly identify the problem.33 Thus, it is necessary to explain the concept of dark patterns before one can engage in discussions about how the video game industry is utilizing dark patterns to abuse its consumers. As such, this Section first introduces the concept of dark patterns and outlines their usage in both traditional and video game contexts. Then, this Section explains the form of dark pattern that loot boxes encompass. Last, this section showcases the psychological aspects of video game design, including the abusive psychology that dark patterns utilize.

A. Dark Patterns

Although misleading or otherwise deceptive user interface designs are “pretty much as old as the web,”34 they were not recognized and labeled as “dark patterns” until user experience designer Harry Brignull coined the term in 2010.35 According to Brignull,36 dark patterns are defined as “tricks used in websites and apps that make you do things that you didn’t mean to, like buying or signing up for something.”37 Brignull identifies twelve different forms of dark patterns,38 explaining how each is

33. See SUN TZU, THE ART OF WAR 55 (Lionel Giles trans., Mil. Serv. Pub. Co. 1944) (2002) (“If you know the enemy and know yourself, you need not fear the result of a hundred battles. If you know yourself but not the enemy, for every victory gained you will also suffer a defeat. If you know neither the enemy nor yourself, you will succumb in every battle.”).
36. Harry Brignull created and runs the website Darkpatterns.org, where he catalogues examples of dark patterns so as to raise awareness of their existence and shame the companies that employ them. See id.
37. Id.
designed and providing examples of these dark patterns in use. For example, the Disguised Ads dark pattern occurs when a website runs advertisements that are designed to look like something a user might click on without realizing it is an advertisement, such as an ad that looks like a button labelled “Download Now.” The Confirmshaming dark pattern occurs when a company tries to “shame the user into compliance” and guilt them into making a purchase, such as when Amazon forces users to click a button reading “No thanks, I don’t want Unlimited One-Day Delivery” to decline signing up for Amazon Prime. Regardless of their varying executions, all dark patterns are intentionally manipulative, “carefully crafted with a solid understanding of human psychology, and they do not have the user’s interest in mind.”

Although the term “dark pattern” is still a relatively obscure label for manipulative user interface designs, the designs themselves are exceedingly common on the internet. Users have found examples of dark patterns on the official websites for Skype, Facebook, Amazon, Uber, and Office Depot. LinkedIn was even subject to a class action lawsuit for their egregious use of the Friend Spam dark pattern, in which their website

Comparison Prevention, Misdirection, Hidden Costs, Bait and Switch, Confirmshaming, Disguised Ads, Forced Continuity, and Friend Spam dark patterns).  

39. Although this Comment will refer to certain individual dark patterns on Brignull’s list, fully explicating each dark pattern Brignull has identified is beyond this Comment’s scope.


42. Jaiswal, supra note 32.

43. See Katharine Schwab, Over 1,000 Shopping Sites, from J.Crew to Walmart, Are Deceiving Users, Study Shows (June 28, 2019), https://www.fastcompany.com/90370454/over-1000-shopping-sites-from-j-crew-to-walmart-are-deceiving-users-study-shows [https://perma.cc/WZ25-2CYA] (noting that even in just an initial study of shopping websites, dark patterns were found in 1,267 websites).


sent automatic emails to users’ contacts while making it appear as if they were coming from the users themselves. LinkedIn eventually paid out a $13 million settlement for its deceptive practices.48

Dark patterns such as Confirmshaming and Disguised Ads49 are frequently utilized by web designers online and have even been adapted for use in freemium50 games marketed to children. The Disguised Ads dark pattern is particularly common within children’s games. The University of Michigan Medical School analyzed 135 children’s games, “many of which are the most popular ones at the Google Play store,” and found that 95 percent of the games had at least one ad, many of which were “specifically designed to look like part of the app.”51 Doctor Kids—a freemium game “intended for kids as young as 6” and “marketed as ‘educational’ because it teaches kids about different types of medical treatments”52—overtly uses the Confirmshaming dark pattern.53 The gameplay is sometimes interrupted by a bubble popping up with an offer to purchase a new mini game, and if the player refuses this offer, “the character on the screen shakes its head, looks sad, and even begins to cry.”54

CAUA | (“The product asks for your email or social media permissions under the pretence [sic] it will be used for a desirable outcome (e.g. finding friends), but then spams all your contacts in a message that claims to be from you. The most famous example of this dark pattern was used by Linkedin [sic], which resulted in them being fined $13 million dollars as part of a class action lawsuit in 2015.”).


49. See generally Mark Warner (@MarkWarner), TWITTER (Apr. 9, 2019, 10:00 AM), https://twitter.com/MarkWarner/status/1115660834351583233 [https://perma.cc/JUE9-YB5J].

50. Justin Ho, What Are Freemium Games?, KA LEO (Jan. 19, 2017), http://www.manoanow.org/kaleo/features/what-are-freemium-games/article_6f98eb0c-dea7-11e6-aa41-47566408a03c.html [https://perma.cc/VU5Y-8T4B] (“The term ‘freemium’ is used to describe games that are free to play but require money to unlock certain features. These features can include anything from customization options to large amounts of in-game currency.”).


52. Id.

53. See Brignull, supra note 35.

54. Lieber, supra note 51.
Since *Doctor Kids* is supposed to be teaching its players while they play the part of a doctor in a hospital, the child playing the game who encounters this dark pattern will be “shamed into thinking they’ve done something wrong” by not buying anything.\(^5\) Similarly, the character Strawberry Shortcake personally encourages players to purchase “a more expensive kitchen tool or to upgrade recipes” in *Strawberry Shortcake Bake Shop*.\(^6\) Because children “develop trusting emotional parasocial relationships with media characters,” a child may “feel an emotionally charged need to make purchases” when they hear Strawberry Shortcake tell them that they would “have ‘lots of fun activities to do together!‘”\(^7\) Likewise, Disney’s *Olaf’s Adventures* and Outfit7’s *My Talking Tom* both utilize the Disguised Ads dark pattern,\(^8\) hiding ads for microtransactions within in-game items like presents and cakes.\(^9\)

1. Video Game Dark Patterns Identified by Lewis, Björk, and Zagal

Dark patterns have also been identified specifically within the context of video game design, although under different classifications than the user interface dark patterns coined by Brignull. Several dark patterns commonly found in video games were “discovered collaboratively”\(^6\) by Professors Chris Lewis, Staffan Björk, and José P. Zagal.\(^6\) Within the context of video game design, a dark pattern is a motivational design pattern “used intentionally by a game creator to cause negative experiences for players which are against their best interests and likely to happen without their consent.”\(^6\) These dark patterns violate “user expectations by encouraging them to give up or jeopardize some resource to an extent that they were not expecting (time, money,

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5. *Id.*
6. *Id.*
7. *Id.*
8. See Brignull, supra note 38.
9. See Lieber, supra note 51.

60. **CHRIS LEWIS, IRRESISTIBLE APPS: MOTIVATIONAL DESIGN PATTERNS FOR APPS, GAMES, AND WEB-BASED COMMUNITIES** 99 (2014). Note that although most video game dark patterns were discovered collaboratively by Lewis, Björk, and Zagal, the Hellbroadcast and Currency Confusion dark patterns were discovered by Lewis alone. See *id.*


62. *Id.* at 42.
social capital)." Such dark patterns are categorized based on the type of resource that they directly demand from the player: temporal dark patterns, monetary dark patterns, or social capital dark patterns.

For example, the Grind dark pattern, a type of temporal dark pattern, is a game design that induces “a series of similar tasks a player performs in order to achieve a reward, and that reward does not require skill to achieve.” Video game designers use this dark pattern as a way to “pad[] out content in video games in order to make the game appear longer or provide more content.” The game Halo 4, for instance, contains a Grind dark pattern that requires players to earn “Spartan Points” through accumulated gameplay time in order to level-up and unlock equipment and powers for use in the online multiplayer mode.

This means that “[d]uring early levels, where players have not unlocked everything, some players may be at an advantage over others” who have not accumulated enough gameplay time to level-up and unlock powerful enough weapons to stay competitive online. This is considered a temporal dark pattern because “players must invest more time than they originally envisaged” in order to be able to enjoy the game in its online multiplayer mode without being unfairly dominated by other players.

The Monetized Rivalries dark pattern, a type of monetary dark pattern, occurs when a company tries to “exploit user competitiveness, encouraging them to spend money they would not otherwise spend, in order to achieve status.” The game Robot Unicorn Attack: Evolution heavily utilized the Monetized Rivalries dark pattern, which contained an online leaderboard wherein players competed to have their names placed based on their scores. The game allowed players to purchase single-use enhancement power-ups with real money to make the game

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63. Lewis, supra note 60, at 99.
64. Id. at 6 (including the specific dark patterns of Grind, Hellbroadcast, and Interaction by Demand).
65. Id. at 7 (including the specific dark patterns of Currency Confusion, Monetized Rivalries, and Pay to Skip).
66. Id. (including the specific dark patterns of Impersonation and Social Pyramid Schemes).
67. Id. at 104.
68. Id. at 103.
69. Id. at 105.
70. Id.
71. Id. at 106.
72. Id. at 114.
73. Id.
easier and therefore increase the odds of achieving a high place on the leaderboard: “[a]s the leaderboard made no differentiation between players who play with or without enhancements, players needed to use these to remain competitive.”

The Currency Confusion dark pattern—another monetary dark pattern—forces users to convert real money into an “arbitrary secondary currency” in order to make purchases, rather than allowing users to directly make purchases with real money. This is done with the intention of “leading the user to be unaware of how much money she is spending.”

Microsoft engaged in the Currency Confusion dark pattern through its former Microsoft Points purchase system:

In the United States, $5.00 bought 400 Microsoft Points. Renting an HD movie cost 480 points. Very few people can perform the currency conversion in their head (it’s actually a flat $6.00). . . . The extra sting in the tail is that the 480 points don’t divide evenly into the multiples of 400 that Microsoft allowed users to buy, leaving points left over. Waste aversion may well have led users to want to spend the remaining points, in order to fully utilize their money, buying things they otherwise wouldn’t have.

By utilizing dark patterns in conjunction with microtransactions—a business model where users can acquire virtual content in games that they already own through additional purchases—the video game industry has experienced significant profit growth on a yearly basis, so much so that “some believe [the industry] will reach over $300 billion by 2025.”

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74. Id.
75. Id. at 112.
76. Id.
77. Id.
2. A Loot Box is Simply a Monetized Rivalries Dark Pattern, Sometimes Combined with a Currency Confusion Dark Pattern

Lewis, Björk, and Zagal specifically note that they “do not consider gambling (or betting) as a dark pattern, because players are complicit in the interaction. Even in cases where the odds are distinctly against the player, the player has presumably made an informed decision to participate.” \(^81\) Thus, one may initially conclude that loot boxes are not dark patterns, given that loot boxes tend to be discussed within a framework of gambling. Much of the public outcry and congressional concerns about video game monetization practices have stemmed from analogizing loot boxes to gambling within video games, available to adult and child consumers alike, and parsing whether loot boxes fit within a legal definition of gambling. \(^82\) In reality, loot boxes are more accurately characterized as an example of “gamblification” rather than actual gambling. \(^83\) The term “gamblification” means “the intersection of social media and gambling, playing on the similar terminology and concept behind ‘gamification.’ Much as gamification involves the use of game mechanics for nongame purposes, gamblification is using gambling mechanics for non-gambling purposes.” \(^84\) Loot boxes are clearly gamblification due to their usage of elements typically seen in slot machines—including “random distribution of prizes,” “variable value of the prizes,” “visual and sound cues associated with participation and reward,” and “trigger urges to play along with increased

\(^{81}\) Lewis, Björk, & Zagal, supra note 61.

\(^{82}\) See Johnson, supra note 19 (“Australian regulators have recommended making games that include loot boxes rated R. But it’s far from game over for loot boxes, and that’s because lawmakers are having a hard time deciding if popping open imaginary boxes is really gambling.”).

\(^{83}\) See Brandon James, Gamblification, LCB (Apr. 12, 2017), https://lcb.org/news/editorials/gamblification [https://perma.cc/4GLY-BT8B] (explaining the difference between gambling and gamblification, the latter of which exposes players to some gambling elements but does not give them the ability to recover or make money, thus preventing the game from falling within the legal definition of gambling); see also Moshirnia, supra note 31, at 81–82 (explaining that loot boxes are not gambling and should not be treated as gambling within a legal definition).

excitement and faster play—all coupled with the intentional exclusion of elements necessary for a legal definition of gambling. Even so, such a discussion is ultimately a minor consideration when considering dark patterns. The player’s motivation behind the purchase is far more important than the method of the purchase itself.

Loot boxes vary depending on each game, and the randomized prizes inside can include “cosmetic items, like character and weapon skins, in-game currency that can be used to purchase more virtual items, and in some cases, performance-enhancing items such as armor, weapons, and consumables.” Regardless of the kind of item that a player is hoping to acquire through a loot box, players that purchase and open loot boxes are typically trying to gain some item that they currently lack. Many players ultimately seek out new items, power-ups, or cosmetics in order to compete with their peers, both in terms of gameplay dominance and superior avatar expression and decoration. As such, a video game that employs loot boxes is just utilizing the Monetized Rivalries dark pattern via gamblification, which falls under the “monetary dark pattern” category.

It is worth noting that the Monetized Rivalries dark pattern is sometimes combined with the Currency Confusion dark pattern.

86. See id.
88. The website Casino.ca surveyed 1,003 gamers about loot boxes in video games to see all of their stated reasons for purchasing loot boxes and whether they regretted their purchases. Respondents could select multiple reasons. Although the most common reason for a loot box purchase was “[just for fun]” (42.1%), respondents also stated they purchased loot boxes “[to enhance my gaming experience” (35.2%), “[to customize my character’s appearance” (33.2%), “[to possibly gain an advantage” (32.0%), “[to ease my progression through the game” (23.1%), and “[to compete” (17.0%). See *Gimme the Loot! Analyzing Perceptions of Video Game Loot Boxes*, CASINO.CA, https://www.casino.ca/perceptions-of-loot-boxes/ (last visited June 11, 2020) [https://perma.cc/F6Z2-4DRL].
89. See id.
90. See LEWIS, supra note 60, at 7 (“When users are pitted against one another, their competitiveness can be exploited by offering paid-for upgrades. In the heat of the moment, users may well purchase something they later regret.”).
91. See id. at 114.
92. See id. at 7 (“Substitution of money for an arbitrary currency confuses users as to what the exchange rate for purchases actually is. Often this means they end up spending more money than they intended.”).
pattern.\textsuperscript{93} This is common with loot box transactions as well, as many games with loot boxes will require players to open them by paying for the ability to do so with in-game currency, which itself can be purchased with real money.\textsuperscript{94} Because loot boxes fail to satisfy the “prize” element required for actual gambling and since their design is often based on the principle of the Monetized Rivalries dark pattern, loot boxes are more accurately defined as dark patterns rather than gambling and must be recognized as such in order to be properly regulated.

\textbf{B. Psychology, Consumer Surveillance, and Data Research}

Video games are an extremely common form of entertainment. “[M]ore than two billion people play video games, including 150 million Americans (nearly half the country’s population), 60 percent of whom game daily.”\textsuperscript{95} Given that “[v]ideo-game addiction afflicts between 1 and 8 percent of gamers,”\textsuperscript{96} allowing unregulated usage of dark patterns in video games puts millions of consumers at risk of being abused by psychological, predatory monetization practices. Much like the dark patterns used by large online operators and businesses which are “drawn from extensive behavioral psychology research,”\textsuperscript{97} the video game industry’s dark patterns rely on behavioral psychology in order to hook users and promote microtransaction spending.

Video game companies are “increasingly turning to psychologists for help analyzing data and making sure their products are as effective as they can be.”\textsuperscript{98} In fact, many common

\begin{small}
\textsuperscript{93} See \textit{id.} at 114 (identifying an example of a video game, \textit{Robot Unicorn Attack: Evolution}, that combined usage of a Monetized Rivalries dark pattern with a Currency Confusion dark pattern).

\textsuperscript{94} See Freedman, \textit{supra} note 12.


\textsuperscript{96} \textit{Id.}


\end{small}
video game mechanics—even those that are likely not abusive enough to be considered dark patterns—often contain behavioral psychology mechanisms such as “fixed ratio schedules”99 and “variable ratio schedules.”100 Successful video games—the kind that make people continue to come back and play101—utilize motivational design patterns102 that allow users “to perceive that a certain piece of functionality [within the video game] offers the chance to meet one of their motivational needs.”103 Within the video game context, the more abusive that a design pattern is to the users, the more likely that it can be characterized as a dark pattern.104 Lewis specifically notes that “there’s almost always a good, normal motivational design pattern we can use instead of a dark one. As Yoda cautioned, the Dark Side is quicker, easier, and more seductive, but it is not more powerful.”105 Furthermore, Lewis argues that “[a]ll dark patterns can be converted to ethical, positive uses,” especially when the designer ensures that the dark pattern within the video game “is both optional and well signposted.”106 For example, the immensely popular Pokémon video game series utilizes motivational design patterns without crossing the line into becoming manipulative enough to be defined as the Grind dark pattern:

Collecting Pokémon is challenging (and even heart-stopping when a desired Pokémon appears, as you worry you might accidentally cause the Pokémon to faint). Every Pokémon is hard earned, and the process of finding and capturing that Pokémon makes for a wonderful player-led narrative. “I went to the power station, and then there was a Pikachu right

99. See John Hopson, Behavioral Game Design, GAMASUTRA (Apr. 27, 2001), https://www.gamasutra.com/view/feature/131494/behavioral_game_design.php [https://perma.cc/5T23-TYYA] (“For example, a player might gain an extra life after killing 20 opponents. This would be called a ‘fixed ratio’ schedule, because the same number of kills is required every time.”).
100. See id.
101. See LEWIS, supra note 60, at 99 (“[M]otivational design requires users to feel good about your products. Users who feel good keep returning, keep renewing subscriptions, and keep making in-app purchases.”).
102. Id. at 24 (Motivational design patterns are defined as “[s]emiformal descriptions of commonly recurring parts of the design of an application that concern motivating user behavior.”).
103. Id. at 25.
104. Id. at 3 (noting that dark patterns emerge when game design patterns “cross the line from being motivational to manipulative”).
105. Id. at 100.
106. Id.
there in the grass, but I only had one Pokéball left, and I was really worried that the Pikachu would escape! But I managed to get it to 3 health points, and then my Pokéball just managed to catch him!”

Modern video game developers have found success in exploiting “inequalities in information between purchaser and provider, such as when the industry uses knowledge of the player’s game-related preferences, available funds and/or playing and spending habits, to present offers predetermined to maximize the likelihood of eliciting player spending.” Before the advent of online gaming, video game developers’ access to their consumers’ user data was fairly limited. However, consumer surveillance was introduced into video games with the creation of the Xbox 360’s achievement system in 2005, in which “the system was tracking exactly how [players] were playing, and rewarding them for playing certain ways by increasing their ‘gamerscore.’” Nintendo Wii and Xbox Kinect further expanded this surveillance with the introduction of motion sensors which began “collecting biometric data like weight and facial features.” Thus, developers in the modern era have access to “plenty of data, both from product telemetry (players’ in-game behavior) and external sources.”

User data is an extremely important resource to video game developers since it can be “used to create footprints of players’ activity and to inform an intricate web of sales funnels.” Scientific Revenue, a third-party data analytics company, offers a

107. Id. at 36.
109. Patrick Stafford, The Dangers of In-Game Data Collection, POLYGON (May 9, 2019, 12:00 PM), https://wwwpolygon.com/features/2019/5/9/1852937/video-game-privacy-player-data-collection [https://perma.cc/56RC-DWMJ] (“Historically, game development was disentangled from actual data. . . . When people were still playing on non-internet connected consoles, the developers didn’t get that data back. You didn’t really have a clear view of how people were playing their games.”).
111. Id.
112. Stafford, supra note 109.
113. Id.
service for mobile game publishers called “dynamic pricing,” which factors in players’ unique gameplay and spending habits to covertly and automatically adjust prices of in-game purchases for each individual player.\textsuperscript{114} With dynamic pricing, two different players playing the same game can be sold the same in-game item at different prices. Dynamic pricing is claimed to “increase user acquisition, improve engagement, and prevent users from leaving.”\textsuperscript{115} The company notes that mobile games using this dynamic pricing have been downloaded over one hundred million times, and developers that utilize Scientific Revenue’s services could “see a revenue increase of 20 to 40 percent.”\textsuperscript{116} Through this user-behavior data, developers can “determine when and how to promote virtual goods for sale, how much to charge and more.”\textsuperscript{117} This kind of big data collection has substantial long-term value when it comes to catering to the market and encouraging users to return.\textsuperscript{118}

User data has significant profit value when used responsibly by developers, but without regulatory oversight, it is ripe for potential abuse. By allowing video game developers to gather user data to profile consumers without any form of regulation, consumers are presented with a genuine risk of exposure to “weaponized addiction,” wherein the game is designed “to manipulate someone’s physiology and dopamine responses with content.”\textsuperscript{119} Alex Champandard, an AI expert and developer who has worked for video game companies including Rockstar and Guerilla,\textsuperscript{120} highlights the immense level of danger that such unregulated data gathering can produce: “[I]f we combine [user data] with procedural systems, we can basically make a perfect


\textsuperscript{115} Id.

\textsuperscript{116} Id.


\textsuperscript{118} Kevin Rands, How Big Data is Disrupting the Gaming Industry, CIO (Jan. 26, 2018, 7:24 AM), https://www.cio.com/article/3251172/how-big-data-is-disrupting-the-gaming-industry.html [https://perma.cc/57UY-47CK] (“The big players, like Microsoft, are seeing the value of data aggregation and acquiring gaming companies, like Minecraft for $2.5 billion, because they realize the importance of big data in the long run and need data-forward firms to help them mine and understand user behaviors.”).

\textsuperscript{119} Stafford, supra note 109.

\textsuperscript{120} Id.
Imagine micro-targeted cigarettes that could deliver the cigarette right in your fingers the minute you’re feeling the most vulnerable.”

Although the psychological aspects of video game design typically go unnoticed by laypeople, the designers themselves are clearly aware of the influence that they wield over their consumers.

II. TECHLASH IN THE VIDEO GAME INDUSTRY

Rather than focusing on consumer welfare, the video game industry’s primary objective is turning “players into payers,” and it will push ethical boundaries as far as possible to achieve maximum profit. On May 25, 2019, the World Health Organization officially voted to include “gaming disorder” in the latest edition of its International Classification of Diseases. Gaming disorder is defined as “excessive and irrepressible preoccupation with video games, resulting in significant personal, social, academic or occupational impairment for at least 12 months.” Even before this official acknowledgement of gaming addiction, the addictive properties of video games have been “an open secret in the gaming industry.” The video game industry’s microtransaction models rely heavily upon those whom the industry refers to as “whales,” a derogatory casino term appropriated by video game companies that refers to the small percentage of the overall consumer population who spend large amounts of money on microtransactions.

121. Id.
122. See Jabr, supra note 95 ("The fact that video games are designed to be addictive is an open secret in the gaming industry. With the help of hired scientists, game developers have employed many psychological techniques to make their products as unquittable as possible.")
123. “Turning players into payers” is a tagline established by Scientific Revenue, the data analytics company referenced earlier in this Comment. See Fenimore, supra note 114.
126. Jabr, supra note 95.
127. Id.
whales, especially games that are considered “free-to-play,” are often designed to be highly addictive, particularly for vulnerable groups like children. Microtransactions compound this problem because the charges are so small and easy to overlook that players can rack up tens of thousands—occasionally even hundreds of thousands—of dollars in charges over time without necessarily being aware of it.

Given that playing video games presents a certain degree of danger to consumers, and that the industry has effectively capitalized on this vulnerability using their microtransaction models, it is unsurprising that a techlash would eventually emerge. This Section first recounts the events and media attention that led to a video game industry techlash. Then, it explains why government intervention is necessary in order to fully address the concerns that lie at the heart of the video game industry techlash.

A. Political Recognition of Exploitative Video Game Design

Although politicians and other public figures have frequently criticized the video game industry, their arguments

130. See Alex Walker, Someone Spent Over $150,000 in Microtransactions on a Transformers Game, KOTAKU (Oct. 14, 2019, 7:00 PM), https://kotaku.com/someone-spent-over-150-000-in-microtransactions-on-a-t-1839040151 [https://perma.cc/ZH9T-V6XR?type=image] (explaining that in the case of the game Transformers: Earth Wars, one of the highest spending gamers spent over $150,000 on microtransactions); see also Cecilia D’Anastasio, Player Spends $62,000 In Runescape, Reigniting Community Anger Around Microtransactions, KOTAKU (Sept. 18, 2019, 4:21 PM), https://kotaku.com/player-spends-62-000-in-runescape-reigniting-community-anger-around-microtransactions-1838227818 [https://perma.cc/3R9R-3564?type=image] (describing the case of an adult in the United Kingdom who accrued debts of $62,000, causing significant financial harm to himself and his parents); see also Wesley Yin-Poole, FIFA Player Uses GDPR to Find Out Everything EA Has on Him, Realises He’s Spent Over $10,000 in Two Years on Ultimate Team, EUROGAMER (July 25, 2018), https://www.eurogamer.net/articles/2018-07-23-fifa-player-uses-gdpr-to-find-out-everything-ea-has-on-him-realises-hes-spent-over-usd10-000-in-two-years-on-ultimate-team [https://perma.cc/8US5-BBW6].
have almost always been centered around the violent content of video games rather than the monetization strategies that video game companies employ. This focus began to shift in 2017. Although video game consumers have long decried loot boxes and microtransactions generally, many popular games released in 2017—including *Middle-Earth: Shadow of War*, *Destiny 2*, and *NBA 2K18*—contained loot box mechanics. Congress began to take notice of loot box microtransactions in 2017 amidst the infamous *Star Wars Battlefront II* scandal.

*Star Wars Battlefront II*, one of the most highly anticipated games among the new releases in 2017, utilized loot boxes that operated via Monetized Rivalries and Currency Confusion dark patterns, as well as implementing the Grind dark pattern for players uninterested in purchasing loot boxes. The game locked iconic playable characters like Luke Skywalker behind paywalls, forcing players to either use real money to purchase enough loot boxes to earn sixty thousand in-game credits or spend an average of 2,395.97 minutes of pure gameplay time—roughly forty hours of grinding—to unlock a single character. To put this into perspective, forty hours of gameplay is

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135. Id.

136. See LEWIS, supra note 60, at 104 (explaining the Grind dark pattern as “[r]epetition of a skill-less task in order to progress”).

137. See Jackson, supra note 135; see also LEWIS, supra note 60, at 114.

138. See LEWIS, supra note 60, at 104.

generally considered to be the standard traditional length of an entire video game. Putting such a large time constraint on the player to unlock a single character for a single game was almost certainly intended to induce further spending via loot box purchases. Players who wanted access to iconic Star Wars characters in the game were essentially forced to spend extra money on top of at least a sixty dollar initial purchase price—the standard price of new video games at their release date. Unsurprisingly, players were outraged at such blatant corporate greed.

As a result of overwhelming public backlash against the Star Wars Battlefront II loot boxes, Hawaii State Representatives Chris Lee and Sean Quinlan “vowed to take action to protect underage kids from the game’s monetization practices.” Representative Lee even went as far as to declare that the game is “basically a Star Wars-themed online casino designed to lure kids into an addictive cycle of gambling money for a chance to win game upgrades.” Although the Hawaii legislature introduced four bills in 2018 to regulate loot boxes based on the idea that they are a form of gambling, all four bills failed.

140. See Clive Thompson, In Praise of the 3-Hour Game, WIRED (Mar. 22, 2009, 9:00 PM), https://www.wired.com/2009/03/in-praise-of-the-3-hour-game/ (noting that 40 hours of gameplay time is the traditional “atomic standard in the game industry” in terms of video game length); see also AMY M. GREEN, STORYTELLING IN VIDEO GAMES: THE ART OF THE DIGITAL NARRATIVE 135 (2018) (“The division between the first set of digital narratives and this next section lies in the length of time required to complete the game. The 40-hour mark was set as the dividing line between games labeled long form and those here that come in under that mark.”); MARK J. P. WOLF, THE VIDEO GAME EXPLOSION: A HISTORY FROM PONG TO PLAYSTATION AND BEYOND 305 (2008) (“Many games already are designed to take 40 hours or more to complete, compared to the two-hour or so time slot that most movies fit into.”).

141. See Jackson, supra note 135 (“Players . . . estimate that it would take about two full days of grinding to unlock. Given that credits are available in loot boxes, it seems to fans like the developers of Battlefront II have made all of the characters expensive in order to convince players to fork over more cash.”).

142. See Michelle Yan & Ben Gilbert, Here’s the Reason Most New Console Video Games Cost $60, BUS. INSIDER (Oct. 29, 2018, 10:02 AM), https://www.businessinsider.com/why-video-games-always-cost-60-dollars-2018-10 (noting that 40 hours of gameplay time is the traditional “atomic standard in the game industry” in terms of video game length).


144. Id.

while Representatives Lee and Quinlan’s hearts were in the right place, their insistence on shoehorning loot boxes into a casino analogy is yet another example of why such an approach is ultimately doomed to fail without actually solving the problem of exploitative video game design.

In the wake of this scandal and the sudden mainstream attention being cast upon loot boxes, New Hampshire Senator Maggie Hassan asked the FTC to launch a full investigation into loot boxes, noting that “[c]hildren may be particularly susceptible to engaging with these in-game purchases, which trigger the same psychological behavior and reward systems that have been linked with traditional gambling.”146 In the course of this investigation, the FTC held a workshop, “Inside the Game: Unlocking the Consumer Issues Surrounding Loot Boxes”, (“FTC Workshop”) on August 7, 2019, in which the FTC invited game industry lobbyists, addiction specialists, academics, and consumer rights groups “to inform regulatory priorities as well as industry and consumer guidance.”147 The Entertainment Software Association (ESA), the self-regulatory body of the video game industry, used this workshop as an opportunity to announce “commitments from Nintendo, Sony, and Microsoft to mandate loot box odds disclosures for new games (or existing games updated with loot box functionality) on their platforms by the end of 2020.”148 Notably, Anna Laitin of Consumer Reports, another guest speaker at the workshop, responded to this announcement by saying “I don’t think a kid is going to make a significantly better decision with certain odds disclosures. While it’s a good step, it can’t be a step that replaces more meaningful change.”149


148. Id.

B. Consumers Should Not Expect or Be Forced to Rely Upon the Video Game Industry to Self-Correct its Predatory Practices

Previous scholarship revolving around the topic of regulating predatory monetization practices within the video game industry has sometimes advocated for a solution to come directly from the industry itself. Such ideas correctly recognize that the video game industry’s expertise means that it would be more aware of mechanisms that could improve game-related consumer welfare than Congress. However, the video game industry also has an inherent self-interest in keeping the industry as exploitative as possible. Rather than trusting the proverbial fox to guard the henhouse, the best way to ensure consumer welfare is to acknowledge that governmental oversight of the video game industry is necessary.

Although some publishers and developers have publicly criticized modern gaming companies’ often unethical, exploitative game designs, many of the most well-known video game companies and leaders have defended such practices. For example, Electronic Arts (“EA”), the second-largest video game company in North America and the first company in history to win 150. See Moshirnia, supra note 31, at 79 (advocating that the best solution for loot box exploitation—in addition to instituting a federal law that requires developers to disclose odds of each loot box item—should be to recommend that the ESRB give an automatic M-rating to games with loot boxes); see also Mistry, supra note 31, at 538 (advocating that the best solution for loot box exploitation is for the industry to create a separate self-regulatory organization that focuses on deceptive monetization techniques).

151. See Jason Hill, Ethical Dilemmas, SYDNEY MORNING HERALD (Sept. 20, 2007, 10:00 AM), https://www.smh.com.au/technology/ethical-dilemmas-20070920-gdr9a0.html [https://perma.cc/6Y53-WV7R] (statement of Jonathan Blow, creator of the critically-acclaimed video game Braid) (“I think a lot of modern game design is actually unethical, especially massively multiplayer games like World of Warcraft, because they are predicated on player exploitation.”); see also Matthew Handrahan, “If We’re Going to Be Drug Dealers, Let’s Not Literally Mine for Addicts”, GAMESINDUSTRY.BIZ (Nov. 3, 2019), https://www.gamesindustry.biz/articles/2019-11-03-if-were-going-to-be-drug-dealers-lets-offer-people-psychedelics?fbclid=IwAR0Fqs3ZAI2H4DX9Gw43Zv7EBU5J5J-3RqKf6ZRAAG0F3yFZmDcWPSTA-CM [https://perma.cc/T696-3WZW] (statement of Mike Wilson, Devolver Digital co-founder and publisher of the critically-acclaimed video game Hotline Miami, regarding the addictive properties of video games) (“We are the pharmaceutical companies. . . . If we’re going to be drug dealers, let’s offer people psychedelics. Let’s offer people something that’s going to help them expand and grow. Let’s not offer them crack-cocaine. Let’s not offer them meth. Let’s not literally mine for addicts.”).

152. See Kevin Webb, Electronic Arts, the Major Video Game Company Behind ‘Madden’ and ‘Apex Legends,’ Is Laying Off About 350 Employees, BUS. INSIDER
Consumerist’s “Worst Company in America” award two years in a row was also the company behind the aforementioned Star Wars Battlefront II controversy. When responding to a player’s complaint made on Reddit about how Star Wars Battlefront II kept the character Darth Vader locked from use even after the player paid $80 for the game and content, a member of EA’s Community Team posted: “The intent is to provide players with a sense of pride and accomplishment for unlocking different heroes.” Given the obvious fact that “allowing other players to simply pay to unlock that content negates the sense of achievement of others,” users responded to EA’s statement with scorn and ire, eventually making it the most downvoted comment in Reddit history.

In a similar attempt to brush aside legitimate criticism with an illogical excuse, Mike Warnecke—Senior Policy Counsel for the ESA—claimed at the FTC Workshop that video game developers who force players to convert real money into in-game currency for use in microtransactions (that is, the Currency Confusion dark pattern) rather than directly purchasing microtransactions with real money are merely trying “to preserve narrative integrity.” Warnecke argued that using real money to purchase items feels “a little bit jolting and a little bit odd” to players who want to be immersed in a video game’s setting, so developers are simply providing microtransaction avenues that “fit in more with the narrative of the game.” But his statement sidesteps the fact that interrupting a game’s story to

155. Id.
156. See also LEWIS, supra note 60, at 112.
158. Id. at 17.
force the player to make a real-world purchasing decision obviously interferes with maintaining player immersion.\textsuperscript{159} Manveer Heir, a gameplay designer with at least seven years of experience working with EA, admits outright that the company’s business strategy has virtually no focus on player interests: “They don’t actually care about what the players want, they care about what the players will pay for. You need to understand the amount of money that’s at play with microtransactions. . . . I’ve seen people literally spend $15,000 on Mass Effect multiplayer cards.”\textsuperscript{160} This directly contradicts the supposed goals of EA’s “Player and Developer Experience group,” a team developed within the company that is allegedly “focused on enhancing the player experience, both before and after a game’s launch” and “identify[ing] solutions so players have the most delightful experiences possible.”\textsuperscript{161} Given the tremendous amount of money that microtransactions generate,\textsuperscript{162} as well as the video game industry’s poor track record and lack of meaningful reform, a legislative regulatory model is necessary in order to protect consumer welfare from extreme corporate self-interest.

III. LEGISLATIVE ATTEMPTS TO CURB MANIPULATIVE INTERFACE DESIGN

Video games are a form of art and, as such, are a form of speech protected by the First Amendment.\textsuperscript{163} The American government’s attempts to regulate video game content have been relatively rare and largely unsuccessful, due mostly to the basic First Amendment principle that “as a general matter, . . .

\textsuperscript{159} See Sinclair, supra note 147.
\textsuperscript{163} Brown v. Entm’t Merchants Ass’n, 564 U.S. 786, 790 (2011) (“[V]ideo games communicate ideas—and even social messages—through many familiar literary devices (such as characters, dialogue, plot, and music) and through features distinctive to the medium (such as the player’s interaction with the virtual world). That suffices to confer First Amendment protection.”).
government has no power to restrict expression because of its message, its ideas, its subject matter, or its content.”164 Thus, when attempting to regulate video game design it is important that such regulation targets manipulative, deceptive user interface mechanics, rather than substantive artistic or cultural content.

There have been two notable legislative attempts to regulate manipulative user interface mechanics in recent years: the PCAGA,165 which is expressly intended to apply to the video game industry, and the DETOUR Act,166 which has no express language mentioning video games at all. Both bills demonstrate Congress’s recognition that deceptive user interfaces present threats to consumers. But neither of these bills would effectively curb dark pattern usage in video games. This Section first outlines the principles and weaknesses of the PCAGA. Then, it analyzes the DETOUR Act, showcasing the nuanced way that the bill would address dark pattern usage within online platform design. Finally, it explains the similarities between the traditional tech industry and the video game industry, arguing that the DETOUR Act could serve as an effective model for addressing dark pattern usage within video game design.

A. The Protecting Children from Abusive Games Act

Since the PCAGA was specifically written with video game regulation in mind, it may seem reasonable to rely on the PCAGA to regulate video game design. However, the PCAGA fails to achieve its regulatory purpose because it is too broad. As such, the PCAGA would be less effective at preventing exploitative video game design than a regulatory model based on the model outlined within the DETOUR Act.

1. Overview of the PCAGA

Senator Josh Hawley (R-MO), along with Senators Richard Blumenthal (D-CT) and Edward Markey (D-MA), introduced

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164. Id. at 790–91 (citing Ashcroft v. American Civil Liberties Union, 535 U.S. 564, 573 (2002)).
Senate Bill 1629\textsuperscript{167} on May 23, 2019\textsuperscript{168}—known publicly as the “Protecting Children from Abusive Games Act.”\textsuperscript{169} The bill is a direct response to the video game industry’s attempts to “mone-
tize addiction” for children with “compulsive microtransactions” through “‘pay-to-win’ and ‘loot box’ monetization practices.”\textsuperscript{170} The bill would completely ban all loot box and pay-to-win micro-
transactions within “minor-oriented games.”\textsuperscript{171} This is deter-
mined by factors such as “subject matter, visual content, use of animated characters, advertising materials, and other indicators.”\textsuperscript{172} The bill would also ban games in which “developers and distributors have constructive knowledge” that some people playing the game are less than eighteen years old.\textsuperscript{173} Under the PCAGA, prohibited pay-to-win transactions\textsuperscript{174} include down-
loadable content that eases a player’s progression through game content, assists a player in accomplishing an achievement or receiving an award within the game, allows a player access to content within the game that was previously made inaccessible due to “the expiration of a timer or a number of gameplay at-
ttempts,”\textsuperscript{175} or grants the player a competitive advantage over other players in multiplayer games.\textsuperscript{176} Notably, the PCAGA

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expressly excludes from its scope any downloadable content that increases the difficulty of a game or adds purely cosmetic alterations that provide no competitive advantages, as well as “one-time-purchase downloadable content providing new experiences for players” that would not otherwise be considered pay-to-win within the statute.

2. The PCAGA is Overly Broad and Makes Arbitrary Distinctions Between Different Microtransaction Purchases

In a press release about the PCAGA, the bill’s authors describe the bill as an attempt to protect children from exploitative monetization practices. This goal is further emphasized by the bill’s public name. However, the bill’s scope extends to any video game in which the publisher or distributor has constructive knowledge that “any users are under age 18.” Thus, if a publisher or distributor knows, or should know, that even a single person playing their game is younger than age 18, that game would fall within the bill’s scope and its developers would be subject to penalties if the game contains loot boxes or pay-to-win microtransactions. However, research shows that “most 7th and 8th graders (ages 12 to 14) regularly play violent video games.” In fact, a study by the Massachusetts General Hospital’s Center for Mental Health and Media found that “two-thirds of boys and more than one in four girls” played at least one M-rated game for extended periods of time within the last six years.

178. See S. 1629 § 2(7)(B).
180. See S. 1629 § 1(b).
181. See S. 1629 § 3.
According to a recent survey, parents rarely step in to prevent children from playing such games, as “[o]ver half of parents allow their children to play 18+ rated games without supervision or knowledge about the game” and 86 percent of parents “admitted they do not pay attention to age restrictions on games.” Thus, the PCAGA’s scope could essentially reach every video game. Since the purpose behind the bill is to specifically protect children, the scope is too wide to effectively achieve the bill’s intended purpose.

Although the bill claims to only ban loot boxes from “minor-oriented games,” the PCAGA’s scope is so broad that the bill would essentially ban loot boxes from all video games. Given loot boxes’ manipulative nature, this may seem beneficial to consumers at first glance. But an outright ban on loot boxes could be detrimental to game developers’ ability to create spectacular, engrossing video game experiences for their audience. The cost of developing video games has “skyrocketed” over the last 15 years; the cost of creating AAA games rose from “$20 to $30 million to over $100 million, and in some cases, over $200 million.” For example, the 2005 first-person shooter Call of Duty 2 cost $14.5 million to develop, whereas the 2009 entry into the series, Call of Duty: Modern Warfare 2, had a production budget between $40 million and $50 million, with a total launch cost of $200 million, including global distribution and marketing.

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184. Massachusetts General Hospital, supra note 182.
185. Although North America uses the ESRB for its video game age rating system, the European Union uses the Pan European Game Information (“PEGI”). Under the PEGI, a game receives an 18-rating when “the level of violence reaches a stage where it becomes a depiction of gross violence, apparently motiveless killing, or violence towards defenceless [sic] characters. The glamorisation [sic] of the use of illegal drugs and explicit sexual activity should also fall into this age category.” What Do the Labels Mean?, PEGI, https://pegi.info/what-do-the-labels-mean (last visited Sep. 10, 2020) [https://perma.cc/TV2T-9HVL].
187. S. 1629 § 1(a).
188. See generally Samuel Stewart, What Is a Triple-A Game (AAA)?, GAMINGSCAN (Nov. 27, 2019), https://www.gamingscan.com/what-is-a-triple-a-game [https://perma.cc/DF9G-VG3T] (“AAA (pronounced as ‘Triple-A’) is an informal classification which commonly indicates that a game is being published by a large, established publisher and that it likely has a relatively large development and marketing budget.”).
189. FED. TRADE COMM’N, SEGMENT 1, supra note 157, at 8.
Bungie’s *Halo 2*, released in 2004, cost less than $20 million to develop, while Bungie’s *Destiny*, released in 2014, cost $140 million.\textsuperscript{191} But while development costs have ballooned, the selling price for a video game remains “relatively flat, leading to developers seeking new means to monetize their products.”\textsuperscript{192} As such, an outright ban on all loot box mechanics would have a drastic negative effect on the video game industry as a whole, eliminating an important source of capital for developers.\textsuperscript{193} Thus, the PCAGA’s functional ban on all loot boxes would have detrimental consequences for the overall population of video game consumers.

Because the PCAGA would ban pay-to-win microtransactions but not purely cosmetic microtransactions, Senator Hawley and the other authors seem to believe that pay-to-win microtransactions present a harm to children that cosmetic microtransactions do not. At first blush, this idea might have some merit; purely cosmetic microtransactions are generally viewed by the video game community with less revulsion than pay-to-win microtransactions.\textsuperscript{194} However, Senator Hawley’s justifications for banning pay-to-win microtransactions could just as easily be applied to purely cosmetic microtransactions. In an interview regarding the PCAGA, Senator Hawley defends his decision to also prohibit all pay-to-win microtransactions within children’s games in addition to banning loot boxes, stating, “it’s a microtransaction that’s not necessarily expected, especially from a child up front. And it is meant to induce obviously further playing, but also further spending of money. So it works in much the same way [as loot boxes] I think. The same arguments would apply.”\textsuperscript{195} Due to his relative ignorance of the video game

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the figures are drawn from publicly available sources that have not been adjusted for inflation. See id.

191. See id.


193. Id.


community as a whole. Senator Hawley is likely unaware that there is an entire culture within online games revolving around purely cosmetic purchases where those who do not possess these virtual outfits are stigmatized by their peers.

For example, although the extremely popular game *Fortnite* is free-to-play, the virtual outfits that players can purchase with real money for their in-game avatars have become “a status symbol.” A player who does not have cosmetic items beyond the standard set available to everyone for free is referred to by other players as a “default,” a pejorative name akin to “loser” intended to characterize them as either a “newbie” to the game or someone who cannot afford to purchase any cosmetics. A child who is labeled a “default” may be subjected to ridicule by other players, prioritized for killing within the game, and will often be emotionally, and even physically, bullied by their peers in real life. Dangerous cyberbullying often goes hand-in-hand with classism: “[t]wenty-four percent of teens whose household income is less than $30,000 a year say they have been the target of physical threats online, compared with 12 [percent] whose annual household income is $75,000 or more.” Children therefore feel an immense pressure to purchase cosmetic items within *Fortnite*, not for any in-game advantage over other players, but to avoid the social stigma and cyberbullying that comes from being a “default.” Applying Senator Hawley’s logic for prohibiting pay-to-win microtransactions, these purely cosmetic purchases are similarly unexpected microtransactions that compel children to spend extra money. Yet the PCAGA draws an arbitrary distinction between pay-to-win and purely cosmetic microtransactions without any real justification.

Given the arbitrary justifications that the bill uses for determining which microtransactions should be prohibited or allowed, as well as its virtually all-encompassing scope, the PCAGA would be ineffective at combating predatory practices.

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196. In the interview about his Protecting Children from Abusive Games Act, Senator Hawley admits that neither he nor his children actually play video games. See id.


198. Id.

199. Id.

200. Id.

201. Id.
within the video game industry. Instead, a regulatory model based on the model outlined within the DETOUR Act should be used to prohibit dark patterns in video games and to encourage greater consumer welfare.

B. Deceptive Experiences To Online Users Reduction Act

Ironically, the most promising model for combatting predatory practices within the video game industry comes from the DETOUR Act, a bill that was introduced to prevent dark patterns but without the express intention of applying to video games. Rather than trying to directly utilize such a bill to regulate the video game industry's dark patterns, this Comment advocates for the creation of a regulatory model based on the model outlined within the DETOUR Act.202

1. Overview of the DETOUR Act

The DETOUR Act203 is a bipartisan bill by Senators Mark R. Warner (D-VA) and Deb Fischer (R-NE), pointedly introduced on April 9th, 2019204—a single day shy of the one-year anniversary of Mark Zuckerberg’s infamous congressional testimony.205 The DETOUR Act is intended to prohibit “large online platforms” from using dark patterns to manipulate and exploit their consumers.206 Although the bill does not explicitly use the term “dark pattern,”207 its co-sponsor Senator Warner directly referenced dark patterns in a press release for the bill where he characterized them as “deceptive interfaces . . . drawing on tricks of behavioral psychology, designed to undermine user autonomy

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202. Actually drafting a regulatory model based on the model outlined within the DETOUR Act is beyond the scope of this Comment. However, this Comment includes guidance about the necessary elements that such a model should contain. See infra Part IV.
204. At the time of writing, the Deceptive Experiences To Online Users Reduction Act has not been voted on. It has only been introduced.
205. See Senators Introduce Bipartisan Legislation to Ban Manipulative ‘Dark Patterns’, supra note 97 (“A day ahead of the one-year anniversary of Facebook CEO Mark Zuckerberg’s congressional testimony, U.S. Sens. Mark R. Warner (D-VA) and Deb Fischer (R-NE) have introduced the Deceptive Experiences To Online Users Reduction (DETOUR) Act, bipartisan legislation to prohibit large online platforms from using deceptive user interfaces.”).
206. Id.
207. See generally S. 1084.
and push consumers into doing things they wouldn’t otherwise do.”

The bill’s other co-sponsor, Senator Fischer, also expressly referenced dark patterns, adding that dark patterns within large online platforms “intentionally limit understanding and undermine consumer choice.”

Supporters of the bill include Jim Steyer, CEO of Common Sense, Tristan Harris, Co-Founder of the Center for Humane Technology, and Alan Davidson, Vice President of Global Policy, Trust, and Security at Mozilla.

Enforcement of the DETOUR Act would come from section 18 of the Federal Trade Commission Act, which allows the FTC to prescribe “rules which define with specificity acts or practices which are unfair or deceptive acts or practices in or affecting commerce.” The DETOUR Act defines its primary targets, “large online operator[s],” as (1) “any person[s] that . . . provid[e] an online service,” (2) are subject to FTC jurisdiction under the Federal Trade Commission Act, and (3) have “more than 100,000,000 authenticated users of an online service in any 30-day period.”

The DETOUR Act would prohibit these large online operators from designing, modifying, or manipulating a

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209. Id.

210. Id. (“The tech industry has gone unchecked for far too long... This bill gets to the root of the issue – the use of manipulative and deceptive design features that trick kids and other users into giving up valuable and private information, and hook them...”).

211. See id. (statement of Tristan Harris, co-founder of the Center for Humane Technology) (“Dark patterns are among the least humane design techniques used by technology companies in their scramble for growth at all costs. They use these measures to offer false choices that confuse or trap users into over-sharing personal data or driving compulsive use – especially from the most vulnerable users, including kids... A system-wide rethinking of technology policy and design is in order, so CHT fully supports Senators Warner and Fisher in this bipartisan effort to place significant constraints around the ability to deceive users online. The creation of a special standards body is especially crucial to the protection of consumers, as they keep lawmakers more up-to-date and able to iterate laws at pace with the rapid change of technology.”).

212. Id. (“People are ensnared by ‘dark patterns’ of manipulation on the Internet every day, and ending these practices is a key part of protecting people online. We need to better understand the systems that manipulate people online, and empower users to fight back.”).


216. See S. 1084 § 2(b)(C); see also 15 U.S.C. §§ 41–58.

217. S. 1084 § 2(b)(B).
user interface “with the purpose or substantial effect of obscuring, subverting, or impairing user autonomy, decision-making, or choice to obtain consent or user data.” Notably, the DETOUR Act specifies children as a protected class within the Act, prohibiting user interfaces that are “directed to an individual under the age of 13, with the purpose or substantial effect of cultivating compulsive usage.”

Consistent with the DETOUR Act’s goals of “safeguard[ing] consumer welfare,” the bill would also increase transparency in the ways that large online operators engage in “behavioral or psychological research based on the activity or data of [their] users.” Large online operators would be forbidden from “segmenting consumers for the purposes of behavioral experiments, unless with a consumer’s informed consent.” Furthermore, any large online operator that engages in said behavioral or psychological research would be forced to disclose to its users and the public “not less than once each 90 days” any experiments or studies it has conducted with the intent of “promoting engagement or product conversion.” Additionally, a large online operator that conducts this behavioral or psychological research would be required to “create an internal Independent Review Board to provide oversight on these practices.”

The DETOUR Act would also create “a professional standards body” comprised of large online operators that can “register with the [FTC] to focus on best practices surrounding user design for large online operators.” The central purpose of this professional body would be to “prevent exploitative and manipulative acts or practices, to promote transparent and fair principles of technology development and design, to promote research in keeping with best practices of study design and informed consent, and to continually evaluate industry practices.”

218. Id. § 3(a)(1)(A).
219. Id. § 3(a)(1)(C).
221. S. 1084 § 3(b).
223. S. 1084 § 3(b)(1)–(2).
224. Id.
226. Id.; see also S. 1084 § 3(c)(1).
227. S. 1084 § 3(c)(2)(D).
body would perform a supervisory role for large online operators, promulgating binding industry conduct standards through both bright-line rules and safe-harbor provisions. By utilizing the FTC as a “regulatory backstop,” this “self-regulatory” professional standards body would provide “updated guidance to platforms on design practices that impair user autonomy, decision-making, or choice.”

Finally, the DETOUR Act would set a timeline for when new, more consumer-friendly industry practices must be implemented. The DETOUR Act would direct the FTC to create rules to “carry out the requirements related to informed consent, Independent Review Boards, and Professional Standards Bodies” under section 553 of Title 5 of the United States Code “not later than 1 year after the date of enactment of this Act.”

2. The Video Game Industry Uses Business Practices That Are Comparably Complicated to the Practices Used by Large Online Operators

A regulatory model based on the DETOUR Act to prevent large online operators from using dark patterns would also effectively combat dark patterns within the video game industry’s monetization practices. The primary reason why the DETOUR Act is likely to be effective is that the bill acknowledges Congress’s unfamiliarity with the complicated nuances of the tech industry while also recognizing that allowing large online operators to selfishly act without governmental supervision has created an environment where consumers are being abused by dark patterns. The government has historically struggled to regulate tech companies, due in part to the internet’s everchanging landscape, its increasing complexity, and its “free-wheeling

228. Id. § 3(c)(3).
230. Id.
232. S. 1084 § 3(d)(3).
origins.” Even during Zuckerberg’s congressional hearing, Congress’s general lack of technological expertise was embarrassingly clear.

The video game industry has been self-regulated under the ESA for decades, and as demonstrated in this Comment, the industry’s monetization practices can be exceptionally complicated. Rather than asking Congress to become technological experts to effectively regulate dark patterns, the DETOUR Act creatively addresses the esoteric and complex technological practices within the industry. It does so by utilizing independent review boards and professional standards bodies, and charging the FTC with the responsibility of regulating these groups.

By allowing the tech industry’s professional standards bodies—under the watchful eye of the FTC—to polish and refine the best practices needed to advance consumer welfare and industry transparency, rather than trying to clumsily devise best practices for a business that it has no expertise in, Congress would be able to “curb manipulative dark pattern behavior” without destabilizing the industry. The FTC would be given “the names and resumes of every board member” of the independent review boards, confirming that the review boards are staffed by competent individuals who are able to make adroit, experienced decisions regarding technology design and consumer welfare. Furthermore, the FTC would be presented with “any conflict of

234. See Sintia Radu, The World Wants More Tech Regulation, U.S. NEWS (Jan. 15, 2020, 12:01 AM), https://www.usnews.com/news/best-countries/articles/2020-01-15/the-world-wants-big-tech-companies-to-be-regulated [https://perma.cc/7EQY-S8HW] (“The internet was developed on a permissionless innovation, a principle that allows creators to freely experiment with technology and business models. This incentivized tech companies to find an advertisement-based monetizing strategy that allowed the internet to remain free of charge, but also evolve from a U.S. government communication prototype to a service with more than 4 billion users worldwide. There were no guidebooks nor universally accepted guidelines, and internet services were left to regulate their own content for decades.”).


237. See S. 1084 § 3(d)(3).

238. Senators Introduce Bipartisan Legislation to Ban Manipulative ‘Dark Patterns’, supra note 97.

239. S. 1084 § 3(b)(5)(A).
interest that might exist concerning a board member’s participation in the Board,” which promotes greater transparency and helps ensure that the independent review boards are more than an empty gesture to regain consumer trust. Thus, it makes sense to craft a regulatory model similar to the one outlined in the DETOUR Act, in which professional standards bodies and independent review boards operate under the oversight of the FTC. Congress could rely upon actual experts to flesh out the best practices for ensuring consumer welfare and deterring dark patterns, and video game consumers would have directly comparable benefits to those listed above for the tech industry.

3. Congress Has Historically Deferred to the Video Game Industry’s Expertise for Regulating Video Games

Congress has historically relied upon industry guidance in the context of video game regulation. Amidst the growing concern of violent video games being marketed towards minors in the early to mid-1990s, Senators Joe Liberman (D-CT), Herb Kohl (D-WI), and Byron Dorgan (D-ND) introduced the Video Game Rating Act of 1994 in order to “establish a federal commission to create an industry-wide standard for game ratings.” However, “[i]t was understood that the law would not be passed if the game industry came up with an entirely voluntary system on its own.” Thus, “under the threat of official regulation,” video game industry leaders such as Nintendo, EA, and Sega came together to create both the Interactive Digital Software Association—later known as the ESA—and the Entertainment Software Ratings Board (“ESRB”), the independent ratings system that has been used for video game ratings since September 1, 1994. The ESRB is “considered one of the most effective and informative ratings systems,” and much of its efficacy can be attributed to the fact that the system was created by the video game industry’s veteran doyens rather than a few well-meaning, but ultimately ill-informed legislators. The ESRB

240. Id. § 3(b)(5)(E).
241. See generally Kohler, supra note 236.
243. Kohler, supra note 236.
244. Id.
245. Id.
246. Id.
is currently a voluntary system with no legislative overhang, but it still serves as an example of how industry expertise is required in order to create fair systems for video game regulation due to the complex nuances involved in user interface design.\footnote{247} The ESRB also serves as an illustration that government intervention can be a powerful motivating force to compel the video game industry to genuinely start taking consumers’ well-being into consideration.

4. Children Require Special Protection From Dark Patterns in Both Large Online Operator and Video Game Contexts

Children are vulnerable to dark patterns within video games. Dark patterns were at the heart of both \textit{Fed. Trade Comm’n v. Amazon.com, Inc.}\footnote{248} and \textit{In re Apple In-App Purchase Litig.}\footnote{249} two remarkably similar class action lawsuits against Amazon and Apple, respectively. The lawsuits involved complaints that Amazon and Apple’s respective platforms did not have adequate means of preventing children from making in-app purchases within freemium\footnote{250} games without their parents’ permission,\footnote{251} which allowed the children to unintentionally rack up “thousands of dollars in charges.”\footnote{252} Many of the games mentioned in the lawsuits, such as \textit{Tap Pet Hotel},\footnote{253} \textit{Smurfs’...}
Village,254 and Ice Age Village255 are primarily intended for children consumers, but they utilize Currency Confusion dark patterns256 and allow for huge purchases at a time—even as high as $500 per item.257 Dark pattern-based monetization systems within freemium games “blur the lines between what’s free and paid,” since the games are designed to “only fully function when kids use in-game items” and “[k]ids are pushed to buy these things regularly—as any parent can tell you, having experienced their kids’ begging for these items.”258

Gambification-based dark patterns, like loot boxes, seem to be especially harmful to young, developing brains, as “children and adolescents are particularly vulnerable or susceptible to the development [of] gambling problems.”259 Researchers have found a link of “moderate to large magnitude” between loot box spending and problem gambling among “16- to 18-year-olds,” which was “stronger than relationships previously observed in adults.”260 When one considers that “as many as a third of children aged 11 to 15 had opened a loot box” and “engagement in gambling activities in childhood and adolescence is a key driver of gambling problems in adulthood,”261 early use of loot boxes seems to act as a precursor for problematic correlative gambling behavior. A regulatory model based on the one outlined in the DETOUR Act should ban “user design intended to create compulsive usage among children under the age of 13 years old”262 and would help prevent children and adolescents from

255. Perez, supra note 251.
256. See LEWIS, supra note 60, at 112.
257. See Kang & Tsukayama, supra note 252.
258. Perez, supra note 251.
261. FED. TRADE COMM’N, SEGMENT 2, supra note 259, at 3.
developing gambling disorders stemming from exposure to loot boxes and other gamblification-based dark patterns. Such a provision would also thwart other duplicitous attempts to trick children into inadvertently spending exorbitant amounts of their parents’ money.

5. In Its Current State, The DETOUR Act Cannot Regulate Dark Patterns in Video Games

Although it was received with general support from both tech and public interest groups when it was introduced, the DETOUR Act has not been voted on yet, so there is still a very real possibility that it may not become a law. However, even if the DETOUR Act is voted into law, in its current state the DETOUR Act would not be able to directly combat dark patterns within the video game industry’s monetization practices. The DETOUR Act’s scope only includes large online operators who have one hundred million authenticated users in a thirty-day period—an extremely high threshold. Even children’s games starring well-known franchise characters fail to reach the required one hundred million authenticated users. For example, Strawberry Shortcake Bake Shop received only two hundred thousand downloads worldwide in October 2019. My Talking Tom and Doctor Kids only received five million downloads and five hundred thousand downloads worldwide in October.

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2019, respectively. Thus, even if one argues that the DETOUR Act should regulate video games, many of the children’s games that utilize dark patterns would not qualify for regulation under the Act’s requirement of one hundred million authenticated users in a thirty-day period. Although the DETOUR Act is undoubtedly useful as a model for video game design regulation, it cannot be relied upon directly to solve the problem of exploitative video game design.

IV. BROAD GUIDANCE FOR CRAFTING EFFECTIVE DARK PATTERN REGULATION IN THE VIDEO GAME INDUSTRY

While the DETOUR Act cannot be relied upon to directly regulate dark patterns within the video game industry, it does serve as a vital guidepost for designing such regulation. This Section explains, step by step, the necessary and recommended characteristics that should be applied in order to write effective legislation for preventing exploitative video game design.

A. A Bill Regulating Dark Patterns in the Video Game Industry Should Directly Acknowledge the Term “Dark Pattern”

For unknown reasons, the term “dark pattern” is not expressly found within the DETOUR Act’s text. That said, its authors directly acknowledge the term in their press releases and crafted the bill with the express intention of addressing dark pattern usage by large online operators. In order to regulate the predatory monetization practices within the video game industry, a bill should be created that directly acknowledges the term “dark pattern” and is crafted with the express intention of addressing dark pattern usage by the video game industry. By acknowledging the term “dark pattern” within the bill’s text, legislators would introduce the term into mainstream lexicon, unify legislative efforts, and make it easier to discuss the video game

268. S. 1084 § 2(6)(B).
269. See S. 1084.
industry’s manipulative designs. Harry Brignull’s user interface dark pattern terminology “unwittingly gave us the language to talk about” exploitative user interface design.271 Likewise, Lewis, Björk, and Zagal’s video game dark pattern terminology gives legislators and regulators the vocabulary necessary to accurately identify and target exploitative video game design. Furthermore, having the bill directly acknowledge the term “dark pattern” would finally allow political discourse to shift away from the fruitless debate of whether gamblification-based microtransactions, like loot boxes, can be considered gambling from a legal standpoint.272

B. A Bill Regulating Dark Patterns in the Video Game Industry Should Emulate the Language and Structure of the DETOUR Act

While the DETOUR Act does not explicitly use the term “dark pattern” in its text, its language is carefully constructed to encompass dark patterns’ overarching manipulative functions.273 As such, authors attempting to write an effective bill for regulating dark patterns in the video game industry would be able to emulate much of the DETOUR Act’s language and structure. Like the DETOUR Act, a bill for regulating dark patterns in the video game industry should seek to: prohibit harmful dark patterns; create professional standards bodies and independent review boards; require informed consent for any behavioral or psychological studies involving user data; ban user interfaces designed to foster compulsive usage in children; and direct the FTC to create industry rules based on industry-guided recommendations. However, such a bill must have a more inclusive scope than the DETOUR Act, as a requirement for “more than 100,000,000 authenticated users” in a thirty-day period274 is far too high of a bar for most video games to reach. Such a bar would allow many games that egregiously utilize dark patterns to escape regulation.

271. Campbell-Dollaghan, supra note 45.
272. See generally Johnson, supra note 19.
273. See S. 1084 § 3(a)(1)(A) ("In general . . . It shall be unlawful for any large online operator . . . to design, modify, or manipulate a user interface with the purpose or substantial effect of obscuring, subverting, or impairing user autonomy, decision-making, or choice to obtain consent or user data . . . .").
274. Id. § 2(6)(B).
C. A Bill Regulating Dark Patterns in the Video Game Industry Should Compel the ESRB to give a Mandatory “Mature” Rating to All Video Games Containing Gamblification-Based Monetization Practices

As discussed earlier in this Comment, children are particularly vulnerable to gamblification-based monetization practices, and can develop problematic gambling behaviors from them.\textsuperscript{275} But the rising cost of game development means that a complete ban on loot boxes could inadvertently harm consumers by stripping game developers of the necessary funding to create quality products.\textsuperscript{276} Balancing these interests, the bill should have the FTC compel the ESRB to give a mandatory “M for Mature” rating\textsuperscript{277} to any game that uses loot boxes or similar gamblification-based dark patterns.\textsuperscript{278} Because this portion of the dark pattern regulatory bill is specifically intended to address children’s unique vulnerability to gamblification mechanics, the bill should also direct the FTC to order the ESRB to label these games with warnings about the dangers that gamblification mechanics present to children’s development.\textsuperscript{279}

Rather than holding game developers to the unreasonable scope and punitive standards of Senator Hawley’s PCAGA,\textsuperscript{280} game developers would simply need to make business judgments about whether the inclusion of loot box mechanics in their game is worth an automatic M-rating. After all, an M-rating would disconnect the game from a significant audience and revenue stream. Though it is not uncommon for children to play M-rated games,\textsuperscript{281} retailers largely prevent minors from actually

\textsuperscript{275} See FED. TRADE COMM’N, SEGMENT 2, supra note 259, at 3.
\textsuperscript{276} See Orland, supra note 192.
\textsuperscript{278} See also Moshirnia, supra note 31, at 79 (advocating for a mandatory M-rating for any game containing loot boxes).
\textsuperscript{279} Obviously, such a provision would not address dark patterns that do not utilize gamblification mechanics. However, non-gamblification dark patterns may be addressed in the bill with more general language, based on the language of the DETOUR Act.
\textsuperscript{280} See S. 1629, 116th Cong. (2019).
\textsuperscript{281} See Massachusetts General Hospital, supra note 182.
purchasing such games without an adult present. Although they are not legally required to do so, most major retailers voluntarily refuse to sell M-rated games to anyone under the age of seventeen. The ESRB’s rating system is intended only to “provide information about what’s in a video game or app so parents can make informed choices.” As such, parents hold the ultimate responsibility of educating themselves about a video game’s content and preventing their children from playing games that could be harmful to their development. If the ESRB were compelled to explicitly label video games with gamification mechanics as “Mature” and give details about the dangers that these mechanics present to children, parents would be able to adequately inform themselves and decide whether to purchase developmentally dangerous games for their children. Consumers who are old enough to purchase M-rated games for themselves would be able to decide whether to buy games containing loot boxes and whether to spend additional money on the loot boxes themselves. Such a provision would help protect children from their unique vulnerability, respect the autonomy of adult consumers by not unduly intruding into their purchasing decisions, and still allow game developers the option to utilize loot boxes for generating capital.

282. See Nathan Mattise, Kid Gamers Have the Least Luck When Buying Age-Inappropriate Products, ARS TECHNICA (Mar. 25, 2013), https://arstechnica.com/gaming/2013/03/kid-gamers-have-the-least-luck-when-buying-age-inappropriate-products/ [https://perma.cc/39WD-6EWG] (outlining a study conducted by the FTC in 2012 wherein mystery shoppers between the ages of 13 and 16-years-old tried to purchase entertainment products not suitable for children from major retailers which concluded “[o]nly 13 percent of those in the study were able to successfully purchase an M-rated game”).

283. See id. (“Ars tech policy editor Joe Mullin shared that there’s no legislation allowed in this area, perhaps making this de-facto compliance by retailers even more noteworthy.”).


D. A Bill Regulating Dark Patterns in the Video Game Industry Would Not Interfere with Video Games’ Substantive Artistic or Cultural Content

As mentioned previously in this Comment, video games are a form of speech protected by the First Amendment. As such, any bill regulating dark patterns in video games should only target manipulative, deceptive user interface mechanics rather than video games’ substantive artistic or cultural content. This is not a problematic limitation, as dark patterns are disconnected from video games’ substantive artistic and cultural content. Thus, dark patterns can be regulated without interfering with video games’ ability to communicate ideas and social messages through characters, dialogue, plot, music, and the player’s interaction with the virtual world.

Several developers have voluntarily removed dark patterns from their video games in the face of public backlash against loot boxes, and such removals did not negatively impact the video games’ substantive artistic and cultural content. For example, developer Monolith Productions elected to remove a loot box system from Middle-earth: Shadow of War after receiving considerable criticism due to its inclusion, stating, “we have come to realize that providing [the option to purchase in-game items via loot boxes] risked undermining the heart of our game.” Similarly, after the Star Wars Battlefront II debacle, EA rolled back the game’s loot box system to only include cosmetic items and

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288. See generally Brown, 564 U.S. at 790 (stating that video games are a form of art because they communicate ideas and social messages through many familiar literary devices, including characters, dialogue, plot, and music, as well as through features distinctive to the medium such as the player’s interaction with the virtual world).
eliminated the ability to pay for loot boxes with real money.\textsuperscript{290} *Star Wars Battlefront II*'s former skill progression system—which was needlessly confusing and relied on items gained from loot boxes—was replaced by a simpler linear progression system that uses skill points accumulated from normal gameplay.\textsuperscript{291} And, when Belgium’s Gambling Commission ruled in 2018 that paid loot boxes contravene Belgium’s gambling regulations, developer Blizzard quickly removed all paid loot boxes from *Overwatch* and *Heroes of the Storm* players in Belgium.\textsuperscript{292} Blizzard notably admitted that “[w]hile players in Belgium will no longer be able to purchase paid loot boxes in *Overwatch* and loot chests in *Heroes of the Storm*, they’ll still be able to earn them by playing the games, and they’ll still have access to all in-game content.”\textsuperscript{293}

Although attempts at video game regulation have historically been unsuccessful, this is largely due to their focus on violent video game content,\textsuperscript{294} which is undoubtedly protected by the First Amendment.\textsuperscript{295} Dark patterns, however, are disconnected from video games’ substantive artistic and cultural content. A bill that regulates dark patterns in video games is constitutional as long as it does not interfere with video games’ substantive artistic or cultural content. Such a bill would only target manipulative, deceptive user interface mechanics within video games.

CONCLUSION

The video game industry’s predatory monetization practices are extremely complicated, and for people who are unfamiliar with the industry, trying to decipher their methods is nearly impossible. Politicians have failed to regulate the industry’s predatory practices amidst the techlash because they have lacked

\textsuperscript{290} See Sam Prell, *After Heavy Criticism, Star War Battlefront 2 Lootboxes Go Cosmetic Only - But is it Too Little Too Late?*, GAMESRADAR+ (Mar. 15, 2018), https://www.gamesradar.com/after-heavy-criticism-star-war-battlefront-2-loot-boxes-go-cosmetic-only-but-is-it-too-little-too-late/ [https://perma.cc/3XY8-NRL5].

\textsuperscript{291} See id.


\textsuperscript{293} Id. (emphasis added).

\textsuperscript{294} See generally Peterson, supra note 131.

\textsuperscript{295} See Brown v. Entm’t Merchants Ass’n, 564 U.S. 786, 790 (2011).
both the expertise and vocabulary necessary to properly address the problem. Lewis, Björk, and Zagal’s video game dark pattern terminology gives legislators and regulators the lexicon to identify and target exploitative video game design. Pedantic debates about loot boxes in the context of gambling are moot because loot boxes are simply an example of the Monetized Rivalries dark pattern, executed through gamblification and occasionally combined with the Currency Confusion dark pattern.

In order to protect consumers from dark patterns, a regulatory model must be created that acknowledges dark patterns’ existence and targets their usage. A regulatory model based on the DETOUR Act would accomplish this goal, establish better practices and greater transparency within the industry, and protect children from coercive spending and compulsive behavior.