

THE CLASS OF 1964 POLICY RESEARCH SHOP YOUNG MONEY: MINORS AND IN-APP PURCHASES



PRESENTED TO THE VERMONT HOUSE GOVERNMENT OPERATIONS COMMITTEE

Rep. Sarah Copeland-Hanzas, Chair

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PREPARED BY:
CRISTINA JAVENS
PETER LEUTZ
HAYDEN WELTY

NELSON A. ROCKEFELLER CENTER FOR PUBLIC POLICY AND THE SOCIAL SCIENCES

Contact:

Nelson A. Rockefeller Center, 6082 Rockefeller Hall, Dartmouth College, Hanover, NH 03755
<http://rockefeller.dartmouth.edu/shop/> • Email: Ronald.G.Shaiko@Dartmouth.edu

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EXECUTIVE SUMMARY

Anecdotal evidence suggests that parents sometimes discover large credit card purchases made without their authorization because a child unknowingly made in-app purchases on various entertainment and gaming apps. An in-app purchase (IAP) is the process by which users of entertainment and gaming applications on smartphones or tablets are able to make purchases within the application even if the application itself was free. Often, these in-app purchases do not require the user to enter credit card information, thus allowing unauthorized users such as children to rack up significant charges on parental credit cards. Commissioned by the Vermont House Government Operations Committee, chaired by Representative Sarah Copeland-Hanzas, this report tackles the issue of unauthorized gaming and entertainment in-app purchases made by minors. In a four-pronged study, this report diagnoses the specific issue, describing the commercial vulnerabilities of minors, labeling relevant stakeholders, outlining the legal landscape, and discussing potential state-level solutions.

After a brief introduction in Section 1, Section 2 identifies the fundamental issue of commercial vulnerability and how IAPs can exploit minors and their naivety. The lack of cognitive development in minors means they are incapable of processing and fully understanding IAP costs. The “free-to-play” gaming takes advantage of this lack of understanding by creating an illusion that the app is free, only to later prompt IAPs which minors can easily misinterpret as a part of the “free” game.

Section 3 introduces current stakeholders and actors involved in the regulation and creation of entertainment and gaming apps. The Federal Trade Commission (FTC), an independent agency of the United States Federal Government responsible for antitrust law and consumer protection, plays the primary role in regulating the major technology companies (Apple, Amazon.com, Google, and Samsung) who own the exchanges on which apps are sold—called app stores—and have recently profited from the switch to the IAP model and related lackluster regulation.

Section 4 examines the current and possible future legal landscape of consumer protections and technology regulations regarding minors making unauthorized IAPs. A bipartisan effort to increase regulations in the U.S. Senate, along with FTC complaints filed in 2014 against Apple, Amazon.com, and Google, signify that the federal government recognizes IAPs as an important issue.

Section 5 considers possible solutions and actionable steps Vermont may take toward remedying the exploitation of minors in gaming and entertainment apps. The broad scope of technology requires federal intervention in order to achieve more sweeping, impactful regulations; however, states are not powerless. Many states have bolstered their consumer protection laws. As more states recognize and take all possible steps to ameliorate the issue of unauthorized IAPs by minors, it is reasonable to predict that the federal government will follow and enact more comprehensive regulations. The general inadequacy of regulation on the rapidly growing technology industry prompts the need for new legislation. This report is intended to help the Vermont State House learn about the issue and assist the committee in developing possible state policy responses.

1 INTRODUCTION: FREE-TO-PLAY AT A COST

Rapid technological development has made gaming and entertainment more accessible to children than ever before. In particular, the recent advent of widespread tablet and smartphone usage has provided children with new easy access. On these devices, users can download applications onto the device from a store, which has the billing information of the account holder automatically attached. Designed to maximize efficiency when downloading and purchasing, these stores often require little to no password input. Requirements are particularly loose if the application being downloaded is free. Although parents willingly attach their billing information to their account, they may not authorize these in-app purchases. Design elements, such as the “Remember Me” feature, enable the automatic completion of future transactions, reducing the requirements to complete transactions and opening the possibility for children to make unlimited purchases without parental consent.

Many gaming and entertainment applications targeted at children are free to download and play; however, as the adage goes, nothing is ever truly free. These games are no exception: they remain free only up to a certain extent. Typically, applications eventually prompt the user to purchase different gaming packages, tokens, or some other form of game currency that will help them advance in the game. These so-called “in-app purchases,” “pay-to-win” purchases, or “loot boxes” are extremely common in gaming applications. Minors are specifically vulnerable because many young children may lack the intellectual ability to distinguish between game currency and real currency. Psychological evidence even indicates that some minors do not possess a fundamental understanding of currency in general. As a result, children may complete in-app purchases without fully comprehending the consequences of their actions, and even worse, they are typically able to complete them without parental approval due to a lack of password requirements.

By reducing security measures and other typical consumer protections, the free-to-play model and efficient purchase design of applications and affiliated stores can manipulate the naivety of children for profit, even as they also promote expediency. Lowered security requirements may consequently reduce parental authority, consumer agency, and purchase monitoring. Although the Federal Trade Commission has filed complaints against corporations such as Apple¹, Google², and Amazon³ for enabling unauthorized purchases by minors, consumers have minimal recourse to seek recompense. At the moment, customers may only seek refunds directly from the companies who own the app store platforms such as Apple, Google, and Amazon. However, there is arguably ample opportunity to improve consumer protection in the long run.

2 COMMERCIAL VULNERABILITY OF MINORS

Before discussing how minors potentially create financial chaos by conducting unauthorized in-app purchases, it is critical to first acknowledge how this specific problem reveals larger issues. On a rudimentary level, mobile phones typically contain a type of “Application Store” in which individuals can peruse and select specific applications (or apps) dedicated to a specific function.⁴ The main mobile device companies, such as Apple and Samsung,⁵ all offer this function: generally speaking, mobile devices with this personalized application market are called “smartphones” or tablets.⁶ In app stores, users can download apps both for free and at a cost.⁷ Users frequently connect their credit card and bank account information to their phones in order to quickly and efficiently purchase useful services without having to re-enter credit card information or user account passwords.⁸ This frictionless

functionality leaves users vulnerable to hacking, other forms of fraud, and purchases made by unauthorized users. Minors, which includes young children or adolescents under the age of eighteen,² are prime examples of such unauthorized users, capable of purchasing goods and services both on the app store and within specific apps. Essentially, the app store model, in which smartphones have direct access to financial information, leaves parents vulnerable not only to fraud more generally but also specifically to their children conducting app store and in-app purchases without their consent. Since minors are intentionally purchasing items, whether these purchases constitute fraud remains ambiguous, even if the parents do not consent to the purchase.¹⁰

2.1 FREE-TO-PLAY GAMING MODEL

Mobile video games, as consumer products, have drastically changed. Historically, most apps cost money to download, but after being initially purchased, consumers lacked options to make additional purchases within the app.¹¹ However, in recent years, companies have made a profitable shift to a “free-to-play” system in which consumers can download and start using the app for free, but in order to unlock certain features, users must pay for additional content in a continuing revenue model, awarding app development companies with a stream of purchases throughout gameplay rather than one purchase prior to gameplay. These in-app purchases (IAPs) are typically termed “microtransactions,” which are designed to promote high risk consumer behavior and increased spending. All free-to-play mobile apps, such as the wildly popular *Clash of Clans*, *FIFA*, and *Madden* games, as well as other console and computer games like *Fortnite*, *League of Legends*, and *World of Warcraft*, employ this new business model of free-to-play, but pay-to-win.

An analysis of thirteen in-game purchasing system patents published in *Computers in Human Behavior* found that some of these systems “could be characterized as unfair or exploitative” because they “capitalize on informational advantages (e.g., behavioral tracking) and data manipulation (e.g., price manipulation) to optimize offers, incentivizing continuous spending, while offering limited or no guarantees or protections (e.g., refund entitlement), with the potential to exploit vulnerable players (e.g., adolescents, problematic gamers).”¹² Such tracking and behavioral advertising is illegal to use on children under thirteen as a result of the Children’s Online Privacy Protection Act (COPPA) passed by the federal government in 1998.¹³ However, such regulation is increasingly difficult to enforce, and an estimated 19 percent of apps continue with the practice.¹⁴ In essence, unethical game design with free-to-play models has placed consumer interest and wellbeing at risk, exploiting vulnerable players. IAPs often lack typical consumer guarantees and exploit behavioral tracking data through predatory price manipulation to increase monetization.

2.2 VULNERABILITY OF MINORS

The academic literature has repeatedly shown that children are especially susceptible to predatory advertising. For instance, alcohol and tobacco advertising have historically influenced youths to adopt harmful habits.¹⁵ The predatory nature of advertising to children is rooted in the inability of children to discern the persuasive nature of advertisements, seeing the messages as purely informative. Due to this lack of aptitude in distinguishing persuasive from informative media, advertisements directed at children are alarmingly effective in altering behavior. To combat this effect, the Federal Communications Commission (FCC) ruled in 1974 that, during children’s programming on television, advertisements must be clearly separated from programming.¹⁵

Bumpers between programming and advertisement, deemed necessary by the FCC almost fifty years ago, do not exist in the relatively new and ever evolving world of mobile gaming. Not only do gamers face bumper-less advertisements throughout gameplay from outside sources, but there are also in-game stores where in-app purchases take place, marketing items that promise to improve gameplay. King, Delfabbrom and Griffiths warn in the *Journal of Gambling Studies* that IAPs are a form of gambling by encouraging minors to purchase packages with randomized rewards. These items are typically dubbed “loot boxes.” The authors went on to conclude that widespread adolescent engagement with these loot boxes (which are akin to gambling) poses “a serious concern in modern society” as they normalize addictive gambling behavior amongst young users.¹⁶ In an open letter to the Entertainment Software Rating Board (ESRB—the organization tasked with rating video games for age appropriateness) in 2018, Senator Maggie Hassan (D-NH) concurred with these academic findings. She stated that loot boxes raise “several concerns surrounding the use of psychological principles and enticing mechanics that closely mirror those found in casinos and games of chance,” calling for the ESRB to review and reconsider the presence of loot boxes in games directed at children.¹⁷ The ESRB response was to label all games with in-app purchases as such and launch an informative site titled ParentalTools.org to educate parents on how to manage the IAPs made by their children.¹⁸

Moreover, according to the American Psychological Society,¹⁹ children cannot distinguish between the apps they are using and the ads on them until they are about eight years old, which can lead minors to think of ads as just another part of the game and leads to a risk of children clicking on an ad to make an erroneous, even accidental, purchase. The ethics of targeting advertisements to kids are murky, with Lynda Sharpe Paine concluding in the *Business and Professional Ethics Journal* that since young children do not yet have the capacity to make wise choices in the marketplace, firms should not target advertisements to such a vulnerable population.²⁰ In sum, academic literature both demonstrates the questionable ethics of targeted advertising towards minors, as well as the unique vulnerabilities of that same population. In addition to not being able to effectively distinguish between ads and gameplay, children have difficulty distinguishing between in-game currency and real dollars because of how these gaming apps blur the lines between what is real and what is a part of the game.²¹ As a result, children often make in-app purchases without knowing they are spending real currency on their parents credit cards.

For example, the app “Dragon Story” is a game in which children raise virtual dragons.²² The game will inform the child that they are “low on food!” and that their dragon is “hungry,” leading directly to a screen where the player can “Stock Up!” where the child can purchase “gold” (virtual currency that costs real money) alongside “coins” (virtual currency that can only be obtained with other virtual currency) to ultimately be able to purchase “food” (a virtual item that can only be obtained with virtual currency) to feed their virtual dragon.²³

Matthew Lapierre et al, in the *Journal of the American Academy of Pediatrics*, recommend that policymakers should consider “the challenges that children face in negotiating an ever-changing and often confusing persuasion environment” and apply increased pressure on “marketers to ensure that their practices are developmentally appropriate and transparent.”²⁴

3 STAKEHOLDERS: TECHNOLOGY AND REGULATION

This section will identify and briefly describe the myriad of groups involved with the issue of unauthorized IAPs. First, several parties help process app store transactions: when a consumer purchases an item, the app store, credit card companies, and app developers are all involved. For instance, Apple, Amazon, and Google all run app stores and facilitate the payments from credit card companies to app developers for a price.²⁵ Importantly, when the Federal Trade Commission (FTC) pursued lawsuits on this issue, they chose to sue the app stores themselves, including these three companies, rather than the original app developers or the credit card companies. However, when consumers believe there has been an errant charge made by a minor on their account, they may pursue a refund by contacting both their credit card company and the merchant (which oftentimes is the specific app itself). Nonetheless the FTC chose to pursue the app stores in their lawsuits because they are the avenue through which consumers make purchases and are generally responsible for the transaction process.²⁶ The FTC's actions indicate that they believe app stores are the responsible party. It is also important to note that the app store owners, Amazon, Apple, and Google, are the stakeholders with the deepest pockets and financial capability to reimburse users.

Additionally, the primary regulatory agency governing online purchases is the FTC. Their mission is to protect consumers and competition “by preventing anticompetitive, deceptive, and unfair business practices through law enforcement, advocacy, and education without unduly burdening legitimate business activity.”²⁷ Specifically, the FTC is empowered by the “Unfairness doctrine,” allowing the FTC to pursue legal action against actors with unfair business practices whose harms are substantial, without offsetting benefits, and reasonably avoidable.²⁸ State governments are also an additional regulatory stakeholder and can enable the FTC to pursue cases by passing consumer protection legislation; their role will be further discussed in Section 4.3 and Section 5.²⁹ Finally, private, issue-oriented stakeholders lie on both sides of the issue. Parent interest groups, anti-technology lobbying, and consumer protection organizations such as the Center for Human Technology support further restrictions on unauthorized IAPs. On the other hand, large technology corporations like Apple, Samsung, and Google fight to maintain the lucrative status quo.

4 LEGAL LANDSCAPE: CONSUMER PROTECTION IN A NEW ERA

Because of accelerated technology development, consumer protections against unauthorized IAPs are generally unclear and are still being written at the state and national level. The FTC, with the help of state governments, regulates the technology industry and continues to update its laws regarding gaming and entertainment IAPs, specifically those targeted at minors. Both groups play a role in helping promote fair and healthy competition all while protecting consumer rights.³⁰

4.1 THE FTC AND THREE MAIN SETTLEMENTS

The FTC was founded to protect consumers against unfair trade practices and designed to change over time along with evolving trade practices. So far, the FTC has not utilized its rule-making power to implement industry-wide regulations. Rather, the Commission has provided consumer protection on an individual, case-by-case basis. Erik Allison in the *Southern Methodist University Law Review* concluded that state laws can provide individuals with private causes of action to seek recompense (and therefore bolster consumer protection) and that the FTC should shift to a comprehensive

approach targeting the exploitative practice of the free-to-play gaming industry as a whole. Rather than introduce these wholesale regulations, the FTC pursued individual cases in 2014, reaching settlements with the three major retailers of free-to-play games: Apple, Amazon.com, and Google.

4.1.1 APPLE INCORPORATED

The FTC filed a complaint against Apple Inc. for unfairly billing IAPs.³¹ The complaint alleged that Apple did not inform account holders that entering a password opens a fifteen-minute window without password requirements for IAPs. During this timeframe, children can make unlimited purchases without the informed consent of the account holder.³² Apple settled, providing at least 32.5 million dollars in consumer refunds for reported unauthorized or accidental IAPs made by minors.³³

4.1.2 AMAZON.COM INCORPORATED

The FTC also targeted Amazon.com Inc. on account of unfair commerce practices.³⁴ Amazon first introduced IAPs to the Amazon Appstore in 2011 without any password requirements. The following year, Amazon updated its IAPs system, requiring password input only for IAPs over twenty dollars.³⁵ This update still allowed for children to make an unlimited number of individual purchases less than twenty dollars without parental approval, which often totaled to a bill over twenty dollars.³⁶ Amazon was required to provide full refunds to those consumers who filed a report about unauthorized IAPs.³⁷

4.1.3 GOOGLE INCORPORATED

The FTC complaint against Google Inc. and the Google Play store prompt followed the other two cases. Similarly, Google violated the FTC prohibition on “unfair” practices of commerce in billing account holders for unauthorized IAPs made by minors.³⁸ Like the Apple model, a password entry opens a thirty-minute window of time during which unlimited purchases can be made. Many consumers reported unauthorized charges of hundreds of dollars,³⁹ explaining that their children were unaware that IAPs would result in real monetary expenses.⁴⁰ In the settlement agreement, Google was required to refund consumers a minimum of nineteen million dollars to any parents unlawfully billed because of IAPs.⁴¹

4.2 BIPARTISAN FEDERAL SUPPORT

Republicans and Democrats in the U.S. Senate have begun legislative efforts to protect minors from exploitative practices in gaming and entertainment apps. Senate Bill 1629 and Senate Bill 3411-KIDS Act, have both been introduced within the past two years, demonstrating the current relevance of consumer protection concerns regarding minors. Although neither of the bills have moved past their introductions, technology-related consumer protection and regulation are arguably increasingly salient topics, which may grow more relevant in future years.

The successful enactment of these laws could completely overhaul the legal landscape. Although it is within its power, currently, the FTC has not created any general regulations tackling the issue, only pursuing individual cases. Because unauthorized IAPs usually occur in small amounts, the incentive for consumers to pursue refunds and lawsuits is arguably fairly small. As long as all consumers do not aggressively request refunds, companies can profit from unintentional transactions and evade consequences, with the rare exception of FTC lawsuits. Therefore, these two pieces of legislation, by preventing predatory minor-orientated IAPs before they happen, may prove quite effective should they become law, shifting the burden of action off of the consumers and onto regulators. These bills are discussed in detail below.

4.2.1 FEDERAL LEGISLATION: S. 1629

In May of 2019, U.S. Senator Josh Hawley (R-MO) introduced S. 1629, which declares it unlawful for a game publisher or digital game distributor to publish a “minor-oriented game that includes pay-to-win microtransactions or loot boxes.”⁴² The bill defines “pay-to-win features” as any purchase that a “provides a competitive advantage in the progression in the game or product over those users who do not make such a purchase.”⁴³ Under S. 1629, only those IAPs that aid in the progression of the game are unlawful. The bill is also co-sponsored by Senators Richard Blumenthal (D-CT) and Ed Markey (D-MA), demonstrating that consumer protection of minors and IAPs is an issue with bipartisan support on a national scale.⁴⁴

4.2.2 FEDERAL LEGISLATION: S. 3411

Senator Markey also spearheaded S. 3411, titled the “Kids Internet Design and Safety Act,” or the “KIDS Act,”⁴⁵ in March 2020. The KIDS Act seeks to prohibit certain features in technology platforms directed at children, including “any design feature or setting that unfairly encourages a covered user, due to their age or inexperience, to make purchases.”⁴⁶ A “covered user” is defined as “an individual under the age of 16.”⁴⁷ After its introduction last year, the KIDS Act was read twice and referred to the Senate Committee on Commerce, Science, and Transportation. No further action has been taken.

4.3 STATE JURISDICTION

State legislatures do not have direct jurisdiction, but they can still pass legal protections regulating IAPs. By introducing protective legal language regarding consumer rights, state legislatures can provide individuals with a private cause of action to pursue legal and financial recourse for unauthorized IAPs beyond what the FTC guarantees. As a result, states with such regulations bolster consumer protections against unfair trade practices.⁴⁸

5 POTENTIAL SOLUTIONS: STATES’ LIMITED AUTHORITY

This section describes existing state-level consumer protection efforts against unauthorized purchases in gaming and entertainment applications. In addition, the report will also describe the historical context of existing regulations in Vermont.

5.1 STATE GOVERNMENTS AND THE CALIFORNIA MODEL

The states that have already bolstered consumer protection laws include: California, Connecticut, Florida, Hawaii, Louisiana, Maine, Massachusetts, Nebraska, North Carolina, South Carolina, Vermont, Washington State, and Virginia.⁴⁹ In particular, California had a unique case in which Apple faced a class action lawsuit led by parents who sued for reimbursement for unauthorized IAPs. The grounds of the allegation was a violation by Apple of two California consumer protection laws: the Consumer Legal Remedies Act of California (CLRA) and the California Unfair Competition Law (UCL). The court ruled in favor of the class on both accounts, allowing them to receive refunds for their unauthorized IAPs.⁵⁰

5.2 EXISTING VERMONT EFFORTS

California is not the only state government leading the way on consumer protection. Vermont also has a history of advocating for data privacy. Notably, Vermont was recently the very first state⁵¹ to regulate data brokers and the selling of consumer data.⁵² While data broker activity (entities that track personal information to deduce intimate insights about consumers and their behavior) is technically legal, the first-of-its-kind law Vermont passed required data brokers to register with the government, better inform consumers about how their information is being recorded and used, and bolster security practices. In addition, consumers may now sue data brokers if they engage in illegal discrimination. In sum, Vermont has a strong track record protecting consumer rights and privacy.

Following states like California and the others listed above, Vermont also has a built-in statute that is designed to complement FTC regulation surrounding unfair or deceptive acts.⁵³ Vermont has thus already strengthened consumer claims for refunds and legal action if minors conduct IAPs without parental consent. While this statute does help protect consumers, the broader legal question still remains: does advertisement targeted at children count as “deceptive?”⁵⁴ Moreover, what can the state do to prevent unauthorized IAPs before they happen?

5.3 CONSTRAINTS IN ACHIEVING EFFECTIVE SOLUTIONS

There are five key constraints to achieving effective policy solutions. The first three constraints relate to the nature of multinational technology companies who run app store exchanges. The second two constraints concern existing regulation on these uniquely powerful businesses.

Starting with these large corporations, the first constraint regards their sheer size. For one, these firms generate such tremendous revenue that individual IAPs are relatively small and insignificant, rendering individual settlement payments financially negligible. Second, significant revenue allows for aggressive spending on lobbying in Washington and in state capitals nationwide. Large technology firms retain a strong influence over the regulation of digital space. Third, a frictionless monetization model is central to the business model of app store providers. Giant technology companies profit off of consumer impulsivity, anxiety, and addiction. Their business model and marketing strategy represents a comprehensive understanding of the human psyche and carefully monetizes consumer attention. The free-to-play pay-to-win model consists of an effective business strategy in the realm of digital gaming. Any regulation on IAPs would force tech giants to rethink their business model or consider innovating new methods of profitable purchase models. Thus, perhaps eliminating IAPs specifically will not eliminate general predatory practices.

Fourth, regulations, specifically the case-by-case rulemaking process of FTC regulations, require consumers to pursue legal action to receive reactive recompense. Consumers will only invest this effort if the size of the unauthorized purchase is large enough to be harmful to their financial standing. Therefore, some unauthorized purchases that do not motivate retribution go unreported, generating revenue and benefitting the app store provider at the expense of the consumer. Fifth and finally, enforcing digital regulations, especially at the state level, is quite difficult. Regulators require serious resources to successfully combat malpractices. Such resources are more readily available at the federal level, and even with those resources, the capability of the federal government to enforce regulations has proven less than comprehensive (see Section 2.1).

5.4 PILLARS OF AN EFFECTIVE POLICY SOLUTION

Any effective policy solution would contain two characteristics. First, any solution should be proactive rather than reactive. Currently, the FTC has chosen to take a reactive approach to regulating IAPs, filing lawsuits against app store providers in response to violations. A more effective policy solution would get out ahead of the problem. This can be achieved in one of two ways: disincentivizing the use of IAPs by app store providers or educating the public on the potential danger facing their children on mobile gaming platforms. The second pillar is the prioritization of consumer convenience. As stated in Section 5.3, victims of unauthorized IAPs must pursue legal action in response to a financial harm for which they are not responsible. Oftentimes, the cost of pursuing such legal action is higher than the cost of the IAP itself. In order to provide complete and comprehensive consumer protection from unauthorized IAPs, the financial protection provided to consumers should operate with a convenience that minimizes any further costs. This convenience and cost minimization ensures not only that consumers are completely protected, but also ensures that app store providers do not further profit off of unauthorized purchases.

5.5 POTENTIAL FUTURE ACTIONS FOR VERMONT

As stated in Section 5.2, Vermont has done well to protect consumer interests by bolstering FTC jurisdiction in the state. Beyond this, keeping in mind policy constraints and best practices, there are three primary avenues for further protection that remain for policymakers in Vermont to consider. First, the legislature could restrict big tech companies in their use of IAPs. This avenue is particularly difficult at the state level given the international scope of IAPs and the difficulty of restricting app store practices over a relatively small geographic area. Second, and more attainable, Vermont can work to better educate children and parents alike to reinvigorate consumer sovereignty at an individual level. Third, Vermont could develop a tax structure to disincentivize the proliferation of in-app purchases by app store providers, and have the revenue generated feed into a trust fund pool to reimburse victims for unauthorized purchases in the future. It is important to note that no policy avenue, beyond what Vermont has already enacted, has been tested yet on the state level. As a result, there is no clear, well-tested solution.

5.5.1 TOP DOWN CORPORATE REGULATION APPROACH

As discussed in Section 4.2.1, S. 1629 seeks to outlaw the play-to-win gaming model, making microtransactions of any kind (including loot boxes) illegal, holding both game publishers and distributors accountable for their persistence. This top-down direct regulatory approach is impossible to implement at the state level given the international reach of game distributors and technology companies. The Vermont state government lacks the jurisdiction and infrastructure to implement and enforce similar legislation. As a result, the federal government, not the Vermont state legislature, should pursue this policy avenue.

5.5.2 CONSUMER PROTECTION THROUGH EDUCATION

Regulating technology firms is difficult with the resources of a single state. Beyond providing private causes of legal action, Vermont can increase consumer protection through a state-sponsored education campaign on the issue of minors and gaming. This campaign would target children of elementary age and older, teaching them best practices of how to participate in mobile gaming in a safe way. In addition, this campaign would seek to educate parents on the existing parental controls to prevent unauthorized purchases made by their children. Given the addictive nature of free-to-play pay-to-win mobile gaming, the campaign can represent a scaled down to state level version of the “Truth”

campaign launched in the 1990s to prevent teen smoking. The safe gaming education curriculum would need to target more children at younger ages than the “Truth” campaign and involve their parents as well. While existing non-profit organizations such as Common Sense Media,⁵⁵ Media Literacy Now,⁵⁶ The Digital Citizenship Institute,⁵⁷ and the National Association for Media Literacy⁵⁸ advocate for educational media literacy programs in schools and provide resources to parents, they primarily focus on the issues of privacy and identifying misinformation in the media; they have yet to address the topic of exploitative IAPs and loot-boxes. With a program that tackles IAPs, Vermont will lead the way in educating its youth on the harms of ever evolving technology and possibly bring IAPs to the attention of media literacy advocacy groups.

5.5.3 TAX AND TRUST FUND SOLUTION

Given that IAPs have the potential to harm consumers, and harmful consumer products are effectively taxed to different extents at a state-by-state level, Vermont may consider taxing in-app purchases. Not only would this tax deter the use of IAPs, but it would also generate a pool of revenue that Vermont can then use to refund victims of unauthorized IAPs. Currently, the legal process of seeking a refund is long, and costly. The trust fund solution would put the consumer first, providing repayment in an efficient manner. Furthermore, a state-level refund center would also allow Vermont to collect data on the occurrence of unauthorized IAPs. Data could eventually aid advocates of federal regulation. A potential issue with this solution is that consumers still may not take advantage of the resources available to obtain a refund and still may only seek compensation if they have been charged a large amount. Because most individual IAPs are relatively low-cost, many consumers may not seek compensation even if they are entitled to one. Thus, any measure that aids in refund procedures should be coupled with advertising and a campaign to make possible victims aware of their resources for obtaining compensation. Finally, while a fund to more easily remedy the costs of unauthorized IAPs would be a useful temporary solution, in the long-run, states and the federal government should aim to work towards prevention.

5.5.4 GAMBLING CLASSIFICATION FOR LOOT BOXES

Under current Vermont law, professional gambling is illegal.⁵⁹ As such, the operation of any games of chance is limited to nonprofit organizations. App store providers and app developers are not nonprofit organizations, therefore, under Vermont law, they are not allowed to facilitate any games of chance. The pay-to-win mobile gaming model, specifically the feature of loot boxes, could be classified as a game of chance. Players pay for the loot box and the reward they receive is based completely on chance. This is not unlike the payment and reward structure of typical gambling mechanisms, such as slot machines, which are illegal in Vermont. The Vermont legislature could make loot boxes illegal by classifying them as gambling, justifying this classification by using the reasons provided above. This would not completely solve the problems of unauthorized in app purchases, as not all IAPs are loot boxes; however, loot boxes are a significant contributor to this problem.

6 CONCLUSION: PAVING THE WAY FOR PREVENTION

The current legal landscape surrounding IAPs, loot-boxes, and the exploitative nature of marketing in gaming and entertainment apps directed at minors is not sufficient to prevent minors from unauthorized purchases, which can accrue significant costs for parents. Action on behalf of the FTC has been strictly reactionary; the only preventative efforts at the federal level—S. 1629 and S. 3411—did not move past introduction in the 116th Congress. Neither bill has been reintroduced in the 117th Congress as of March 23, 2021. Furthermore, the current reactionary process is not fully representative of the scale of the issue because it only accounts for those consumers who have taken the independent action to report unauthorized transactions. While federal preventative measures are slow-moving and not prioritized, states struggle in exercising the authority to create and enforce those regulations that the federal government has not yet been able to enact. The most effective way to protect consumers from unauthorized IAPs requires federal intervention at the corporate level; eventually, prevention would consist of the federal government putting sweeping regulations on big technological companies that facilitate IAPs like Apple, Google, and Amazon to hopefully prevent unauthorized IAPs altogether. However, until the creation of federal regulations, Vermont can take a few steps towards preventing and remedying the costs of unauthorized IAPs made by minors in gaming apps. On the preventative side, Vermont may consider an educational campaign to make parents aware of IAPs and how they occur. To provide assistance to consumers once the unauthorized IAPs have already been made, Vermont may consider implementing a tax on IAPs and using its profits to aid in refunds. While an immediate, state-level solution does not exist, Vermont can begin implementing policies that will pave the way for long-term preventative success.

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