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Predatory Monetization Schemes in Free-To-Play Mobile Game

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Abstract: ***Predatory monetization techniques in video games refer to payment methods that hide or delay the actual price of a game until after participants have invested financially and emotionally. to it. As gaming and gambling become more comparable, such programs raise the risk of financial harm for people who have Internet gaming disorder.***
A video game publisher may benefit from a specific video game product through a process known as video game monetization. Though game monetization tactics differ, especially when games are developed for many platforms or genres, the goal is usually the same: to recompense copyright holders, game designers, and other stakeholders.
Keywords: Predatory monetization techniques, payment methods, true cost, true cost, Internet gaming disorder, video game monetization, financially and emotionally

I. INTRODUCTION

Predatory monetization schemes in video games are schemes that withhold the players until they are addicted financially and psychologically. This type of scheme leads to the creation of similarities between gaming and gambling. It is a billion-dollar global industry that is growing too fast. Digital purchase options have led to the evolution of this industry. In this game, players are provided with small purchasing options to unlock the virtual goods and these transactions are known as microtransactions. Mainly these options are available in free-to-play games but later on, players are promoted to buy premiums to get additional game content.

Game monetization techniques have evolved, and they are now increasingly prevalent in well-known online games. Predatory monetization tactics include in-game purchases made from online games that are designed to entice players to buy them and get invested in the game. These strategies can include utilizing a limited-time offer for a product or a combination of products, having a limited time frame to buy a product, receiving exclusive in-game perks by buying a product, etc. This motivates players to spend money on these in-game items repeatedly.

Even some popular game producers have registered patents for microtransaction systems that encourage players to spend money. The "loot box" money-making scheme is particularly important. A loot box is a term used to describe an in-game reward system that involves buying virtual goods by paying real money. Loot boxes are similar to gambling slot machines. However, because money spent on loot boxes is not regarded as a financial "loss" and because virtual products are not regarded as "anything of value," they do not fulfill some legal definitions of gambling. Additionally, there is no chance for a direct financial return in these deals.

These predatory financial strategies entrap the gamer as they play the game longer, leading them to assume it is too late to stop because they have spent more money on in-game items. The players will start to further invest money into the game. The money spent on these games is not retrievable. Players show a purchasing behavior of spending more on these loot boxes. The players will also be intrigued by other online players who have special items purchased from the online store, which urges the player to invest more.

Another important component of predatory monetization is the gathering and use of player-specific data to offer particular specific purchases and make them feel a requirement for the purchase. Some techniques may make use of information asymmetry, where the game's programming system may know more about the gamer than the gamer knows about the game. The probabilities of acquiring desired things via microtransactions may not be known to players, and the game may utilize such techniques to encourage purchases (such as so-called "limited-time" offers). Some players who have access to credit cards may be trapped by these schemes to spend more than they can afford.

These technical advancements show the changing financial outlook of gaming items and the patterns of financial overspending seen in electronic gambling machines. The financial dangers of these schemes are starting to be represented by newly emerging research evidence and clinical case reports. Teenagers have reportedly spent thousands of dollars on microtransactions, according to certain news reports.

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Microtransactions have been blamed for significant debts incurred by those seeking treatment for internet gaming disorder. There are regulatory obstacles, including the requirement for protections and countermeasures to protect consumers. The Chinese government established legislation in 2016 requiring game creators to reveal the likelihood of acquiring specific things from loot boxes. Loot Boxes are illegal under Belgian gaming law, according to the Belgian Gambling Commission's 2018 ruling.

More research is needed on the financial impacts of online gaming, particularly in relation to persistent play and the increase of problematic gaming. Internet Gaming Disorder cases involving paid games may involve more money and exhibit gambling disorder characteristics. This type of research has the potential to improve our understanding of people who appear to be overspending on video games and may be suffering as a result of their gaming habits.

The games using loot boxes are considered a form of gambling since real money is used to gain an item randomly based on luck. The difference between loot boxes and gambling is that in the former, the items purchased cannot be converted back to real money by any means within the video game. Countries such as China, Japan, South Korea, Singapore, etc. have taken certain regulations to reduce the number of loot boxes in video games.

A. Using Several Virtual Currencies to Conceal or Distort Actual Financial Costs

In the majority of video games, the world is ruled by a set of game mechanics known by many names such as gold, coins, gems, points, action points, or credits. Internet and smart device hardware advancements have made it possible for game developers to put more money into creating better games. Additionally, the creators of these games included gameplay elements that required virtual items; as a result, they added virtual money to the game world. In-game microtransactions have become a common element in video games due to players' growing desire to pay real money in return for virtual products. When in-game currency spending reached billions of dollars, governmental monetary authorities became cautious of virtual currency schemes and started researching the economics of virtual currency and the virtual economy.

Users must enter their credit card information in video games to purchase or make microtransactions in online video games. This information can be stolen by criminals to perform money laundering activities. Reports have been made about how fraudsters use video games to launder money from criminal sources. For example, in the game Fortnite, criminals used stolen credit card data to buy V-Bucks (the virtual currency in the game used for microtransactions), which they then sold to other players for real money. Similar types of fraudulent practices were committed in games such as Clash of Clans, Counter-Strike, etc. New regulations are being made to control money laundering activities, and it is believed that this will reduce the fraudulent practices in online video games. If strict laws are not made against these activities, it will increase the number of cyber criminals in the video gaming sector.

B. Objectives

The main objective of this research is to:

1) Understand behavioral studies on loot boxes and addictive designs.
2) Investigates the use of in-game purchases and other forms of monetisation, as well as any potential behavioral impacts, particularly on young customers.
3) How game developers mask real-world financial costs using virtual currency.
4) Show how fraudsters are using online video games as a means of money laundering.
5) Showcase the manner in which players become psychologically and financially dependent on these unethical monetization methods.
6) Understand how loot boxes are used to extort money from you and how they are a form of gambling.
7) Know what precautions are being taken by governments around the world to stop these unethical schemes.
8) Describe the financial exploitation of gamers through the usage of microtransactions in video games.

II. LITERATURE REVIEW

The term "in-game goods" is commonly used to describe the numerous types of in-game items available for purchase in online games. Researchers have classified in-game commodities into two groups based on their functionality: ornamental items and utilitarian goods. In-game products that improve a player's functionality and stats are referred to as "functional-based goods." "Ornament-based goods" are in-game objects that serve only as a means of customising and do not improve the gameplay experience. According to Jaeyoung Lee, Suh, Park, and Lee, in-game commodities can be classified as probability-based or non-probability-based.

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The distinction between the two lies in the fact that non-probability-based in-game products have an identical value to the amount spent, whereas probability-based in-game goods have an item's worth that may be higher or lower than the amount paid. Loot boxes are the most popular instance of in-game commodities that are based on probability. Six categories are used to group in-game items: time-savers, playable characters, cosmetics/skins, power-ups, expansion packages, and loot boxes.

Power-ups are useful products that instantly improve a player's gaming experience. This can be used as a last-ditch attempt to get out of a challenging gaming situation. Video game expansions are the addition of new storylines and gameplay components to already-published games. Players' gaming experiences are significantly enhanced by this. Playable characters are the additional characters in a video game that can be bought but aren't otherwise accessible without doing so. Video game skins and makeup are decorative items that are only used to personalise in-game gear and characters. They don't change how in-game components look. Loot boxes are virtual "lucky draws" in games that reveal the outcome until the player opens them. Time-savers are items that, while they normally require a significant amount of effort to achieve, may be gotten instantly by paying money.

The games' incentives urge players to make in-game purchases. Researchers who study video games have thoroughly investigated and evaluated in-game purchasing incentives for players. Several in-game purchasing incentives have been demonstrated from several perspectives, including perceptions, psychological aspects, video game designs, and service quality. According to Park and Lee's (2011) research, the impulse to buy an in-game commodity stems from a combination of many values associated with in-game purchases, such as character competency, entertainment value, visual authority value, and monetary value. The two qualities that players felt had a favourable influence during their in-game buying experience were loyalty and affordability. Researchers divided participants into two mood groups at random in one of their experiments: the bored group and the worried group. The researchers discovered that whereas the bored group was more inclined to buy useful in-game products, the worried group was more likely to buy ornamental in-game goods.From a psychological point of view, Hamari and Keronen in 2017 conducted a meta-analysis on 20 published studies and found 11 aspects of in-game purchase motivations (good aspects of service use, project method, flow, purchase attitude and intention). use. The psychological characteristics were found. service). It was found , ease of use, network size, value, personal expression and community. The words "flow" and "flow experience" are used when everything comes together to create a unique sense of immersion and enjoyment in an activity. Loss of control over one's actions, lack of self-awareness, fusion of action and perception, and diminished physical perception are signs that this is a wrong experience. Motivation in video games is the primary function of the player. - Game purchase process. There are many other steps in the player purchase process in the game. Although free play, social media, and financial incentives are closely related to in-game purchasing behavior, previous research has shown that this is not the case for three other motivational factors: contests, child rewards, and public information. The study was carried out by the Ministry of Information and Economic Services in 2016. This study shows how the motivations of the actors in the recruitment process are combined. In the study, a list of specific studies became a study. This research shows how purchasing dynamics are integrated across multiple sectors. Research shows that there are six factors that drive consumers to buy products: (1) endless play, (2) social inclusion, (3) competition, (4) economic relevance, (5) child preference, and (6) open content. The study also revealed how players spend their time and money on in-game purchases. Researchers from the Office of Economic Information and Services concluded that game designers implement artificial restrictions and barriers to how players spend money in games. Guo and Barnes conducted qualitative research with 24 Chinese video game players in 2009 and found a number of factors that explain game purchasing behavior. The results show that factors such as effort, virtual product resources, and ability are important in predicting virtual product purchase behavior in virtual worlds. A single in-game purchase does not terminate a video game player's access to that game. Of course, there are many aspects to selling. All consumables in the game are designed to be sold multiple times. According to the research so far, happiness has been shown to have a positive effect on user satisfaction and perceived value, while in-game enjoyment has a positive effect on the desire to purchase and instructions to purchase. In a study of the immersive 3D video game Second Life, Animesh et al. (2017) used the stimulus-organism-response (S-O-R) model to investigate the effect of technological context and spatial location on the intention to purchase in-game items. Their empirical model revolves around the flight experience, but other variables such as external stimuli and virtual experiences influence purchase intention through changes in the flight experience. Suddaby (2006) believed that conducting a literature review before starting a study is a myth because it is based on the false assumption that the researcher is a blank canvas with no prior experience or academic knowledge. If researchers ignore past research, they may end up wasting time and using outdated methods. According to Charmaz (2014), instead of considering current experience or knowledge as a barrier to action, a literature review is used to determine an area of study and develop related research questions. According to research by Informa Media Group, the value of the mobile games market will surpass that of console and PC games in 2010. "Content aggregators, publishers, mobile phone manufacturers, consumers and network providers " they may face competition from new players.

Compete for a share of this growth phase. Game industry. The main players in the gaming industry must prepare to take advantage of the new opportunities that will present themselves in the future. A 2004 In-Stat/MDR study predicted that 78.6 million Americans would play mobile games in 2009. It also predicted that mobile game downloads would increase tenfold between 2003 and 2009. Additionally, approximately 6.5 % of US mobile device subscribers being "very interested" or "very interested" in purchasing mobile gaming services. According to 2003 Frost and Sullivan estimates, European mobile gaming revenue increased from less than $800 million in 2002 to $7 billion in 2006. According to an IDC report, the wireless gaming market in Asia Pacific will grow at a rate of 40% annually, reaching $1.3 billion in annual revenue in 2008. According to a 2004 analysis by In-Stat/MDR, mobile gaming will only become more significant in terms of its revenue contribution to the telecom sector. By 2006, 114 million people worldwide would be playing online games, the majority of which would be mobile games, according to a 2002 DFC Intelligence study report .Industry observers agree that the move toward mobile gaming is significant, but there are still a lot of unanswered questions. In 2009, Thorngate and Tavakoli stated that "we who indulge in policy relevant simulations are inclined to believe that they are powerful tools for improving policy choices." Admittedly, most policy makers do not share our delight and continue to be unaffected by the beauty of our predilection. Tang,Allie(2016) Applications created for use on smartphones, tablets, and other personal mobile devices are referred to as "apps," which are an acronym for "mobile applications." Although most smartphone applications are free, more and more of them are generating enormous profits. The widespread adoption of smartphones and the growth of mobile app businesses have significantly altered conventional company structures. Joseph, Marco (2017) This study introduces 'gacha', a lottery system developed in Japan that allows players to win virtual prizes, as a risk phenomenon found in games that mobile phones used to pay for freemium business models . In this article, we will examine the differences in regulations between Japan and the West for mobile games based on gacha theory and historical research. King,Daniel (2018) Billion dollar video game industry continues to grow and expand worldwide. The emergence of virtual goods that can be purchased in-game for a reduced price, known as "microtransactions", is one of the most important innovations that have developed rapidly in the industry. Other developments that have contributed to this growth include the proliferation of digital shopping options. Video game publisher Activision Blizzard reported that microtransactions generated more than $4 billion in 2017, more than half of its annual revenue. It focuses on gambling techniques known as "cheating," which "use psychological or behavioral manipulations to encourage spending." Additionally, loot boxes are aggressively advertised "advertising potential rewards," a practice the studio says is flawed. Muller, Eitan (2020) Despite the size and rapid growth of the mobile app market, most app developers are struggling to monetize their products. Your app can make money in two ways: (a) buy ad space in the free version and (b) offer a paid version (also known as free sales strategy, in-app sales strategy). Markle, Tracy (2021) Behavioral psychology is a tool used by video game companies to motivate players before making an in-game purchase. This method of monetization is so effective that it is now used by all types of video games. Studies have shown that the risk of spending money on a game is not related to the duration and frequency of the game. This means that parents of gamers and gamers themselves have concerns in addition to video game addiction. Most people do not meet the requirements for supplementation. However, overspending on games and unexpected or unplanned expenses are common among video game players. Katia,James,Lloyd,James (2021) Video games where you can get loot boxes and have a randomly generated reward system. Due to its similar structure and psychology to gambling, there is concern that loot box purchases may be linked to pathological gambling. The monthly spend is relatively small (less than $20), but very high, low spenders or "whales", have a low distribution percentage. It is not known how much commercial profit these artists, rich people or high-risk gamblers make. Ernesto (2021), The same idea is in everyone's pocket, not only in casinos where slot machines require a lot of power to play. There is no way to protect users from scams that trick them into paying large sums of money. Most companies accept backdoor cheat codes because they know that very few users will be able to figure out the hack. This just annoys users and forces them to pay extra to keep it. After speaking with a Google Play representative, we heard that customers can spend between $500 and $5,000 per day. Berger, Steven (2021) Among the world's largest entertainment sectors is the video game business. While video entertainment marketing is a major source of revenue for the industry, the market's revenue is on the rise.Despite this, legal control of the video game industry has so far been largely avoided. Many experts consider the video game industry to be a unique industry, with their business strategies being technical or unique. NCC and its partners are applying a wide range of measures from the EU and government authorities due to the size of the industry and the number of customers affected. These include better protections for children, prevention of fraudulent designs and "dark models" and greater transparency (so consumers know what they are really getting). Partise, Danielle (2021) Backed by 20 consumer groups from 18 European countries, the Norwegian Consumer Council has published new research into the lasting impact of loot boxes on the gaming industry. Zendle, David (2022) The prevalence of these micropayments has increased significantly in recent years. Although high-quality public data is not available to fully understand the spread or effectiveness of microtransactions in global markets, we can present some examples.

For example, in April 2019, 85.8% of players on the desktop Steam platform were said to have used cosmetic microtransactions to play, up from 8.3% in 2010 alone.

III. RESEARCH GAP

The existing study environment on predatory monetization in free-to-play mobile gaming lacks thorough knowledge and empirical investigation. While studies have looked at monetization tactics in general, there is a noticeable lack of dedicated research on the specific effects of predatory practices like loot boxes and pay-to-win systems.

Existing research frequently ignores the different demographics and motivations of mobile gamers, failing to account for differences in vulnerability to predatory approaches. Furthermore, the ethical implications of these behaviors, such as transparency and consumer protection, are underexplored.

Longitudinal investigations into the long-term consequences of predatory monetization on player engagement and spending habits are rare. Such research would provide vital insights into how these practices evolve over time.

Given these shortcomings, more empirical research is needed to understand the complex implications of predatory monetization on player experiences and industry dynamics. Addressing these gaps will help shape policy conversations and industry practices, encouraging fair and ethical monetization in the mobile gaming industry.

IV. RESEARCH METHODOLOGY

A. Title of the Study

Predatory Monetization of free-to-play mobile games

The rise of free-to-play models in mobile gaming has resulted in a shift in how games are financed, with money often coming from microtransactions and in-game purchases. However, concerns have been expressed concerning the use of predatory monetization tactics, which have the potential to exploit players' psychological vulnerabilities and result in bad consequences such as excessive spending, decreased enjoyment, and unfair advantages for paying users. This study delves into the complex environment of predatory monetization in free-to-play mobile gaming, examining its impact on user behavior and experiences.

B. Research Questions

How do predatory monetization techniques affect player behavior and the overall gaming experience in free-to-play mobile games?

The inquiry focuses on how diverse monetization techniques used by game creators impact players' attitudes, behaviors, and perceptions. This study seeks to shed light on the larger consequences of predatory monetization in the mobile gaming industry by investigating the interaction between monetization tactics and user responses. Implementing predatory monetization tactics in free-to-play mobile games has a detrimental influence on user pleasure, engagement, and spending behavior.

Quantitative research is a careful way of collecting and investigating numerical data to understand mysteries, relationships, or patterns in a population or experiment. Information gathering can be measured and analyzed using established strategies such as research, testing or intelligence. The main objective of this method is to ensure the effectiveness and repeatability of the research process. Secondary information includes information collected by others for purposes unrelated to the current research. This data comes from a variety of sources, including government agencies, experts, private organizations and warehouse surveys. Analysts can obtain secondary information from distributed files, databases, or documents. There are different areas of secondary information collection. First, it provides cost-effective options for collecting valuable information. Obtaining secondary information is less expensive and takes less time compared to research or non-research. This cost-effectiveness is very useful for analysts working with limited budgets or using many documents to research a topic. Second, it's a good time to collect secondary information. Analysts can quickly access and analyze existing information sets, avoiding time-consuming manual information gathering. This rapid approach allows analysts to accelerate the research cycle by expanding the review of information, interpretation, and testing different theories from time to time. These materials may include general population tests, longitudinal interviews, or cross-sectional studies to improve the validity and generalizability of findings. A large data set allows analysts to note patterns, patterns, or relationships that might be missed with smaller samples. Analysts can use historical data sets to track changes over time, understand long-term patterns, and assess the impact of adjustments or approaches. Such insights can strengthen research insights and inspire decision-making in areas from open living to financial policy.nn Despite its needs, collecting secondary information comes with many caveats and challenges. Analysts must carefully evaluate the quality, lack of quality, and validity of secondary sources to ensure relevance for research purposes.

There may be issues such as completeness, accuracy or consistency of information that require careful investigation and verification. of secondary information, such as the need for evidence, the lack of information and the need for the necessary. data you should. Overcoming these limitations often requires changes in methodology, changes in facts, or other sources of information to advance robust quality and precision of findings.

King, D. L., & Delfabbro, P. H. (2018),For several reasons, the online semi-structured interview was the main mode of data collecting in this study. First, due to their open-ended nature, interviews are a good fit with the theoretical framework. We needed to record the views, attitudes, and behavior patterns of video game players along the behavioral model to understand why and how they buy various in-game commodities. In this instance, interviews enabled us to perform an extensive, open-ended investigation of a subject the interviewee has vast experience in. Second, rather than using an unstructured or structured interview, we opted for a semi-structured one because it allowed us to guarantee a certain level of consistency in the topics addressed in each interview while keeping the major conversion open-ended.The study included semi-structured interviews with eligible individuals who had recently played video games and purchased in-game items. is willing Online interviews were conducted simultaneously using QQ, the most popular instant messaging application in China. To compensate for the lack of non-verbal communication in text-based online interviews, respondents were instructed to use punctuation.Research participant (006) was one of 11 informants who completed the questionnaire and were eligible to participate (006) doesn't see. 001~011) Entered the first sample, but did not participate in the interview for unknown reasons. In the first phase of sampling, ten interviews were conducted. They interviewed five informants who had previously participated in the original purposive sample during the first wave of conceptual sampling. In the second round of conceptual sampling, we interviewed six respondents, including three who had already participated in the first two stages of sampling and three new respondents who had not yet participated in the survey. The theoretical analysis should start at the end of the first interview and continue throughout the study.

Markle, T. (2021)Two types of data are possible. Collection: quality and quantity. If the research produces or uses numerical data, it is called quantitative data. In this case, the information is obtained from several samples and the information is summarized. (Saunders et al. 2009, 151.) The authors use both qualitative and quantitative research methods. Because I believe that doing so will help you gain a broader understanding of the subject from multiple angles. Interviews with the Chief Marketing Officer (CMO) of the case company are conducted as part of the benchmarking process to better understand the case company and its five values. We collect quantitative data in online surveys of mobile game players to understand the situation from the user's perspective.

Bertaut,Michael(2023) says that 93% of developers say they use in-game ads as part of their revenue. According to 2019 data from App Annie [now data.ai], fewer mobile games generate revenue through in-app purchases alone, with only 83% of mobile games having post-installed ads.

V. DATA ANALYSIS

The data analysis for predatory monetization in mobile gaming entails reviewing secondary sources to determine the prevalence and impact of monetization strategies in the sector. Academic literature, industry studies, and news stories provide information about the various techniques utilized by mobile game creators, such as in-app purchases, loot boxes, and virtual currencies. Quantitative data from market research organizations and industry surveys provide information on revenue, user spending habits, and market share for various monetization schemes and game genres. Comparison of measurements across periods and geographies can reveal trends and changes in predatory monetization methods. User reviews, forums, and social media platforms provide qualitative data that supports the quantitative study by revealing player perceptions and experiences with mobile game monetization. Sentiment analysis and theme coding of user-generated content reveal common complaints and ethical issues over aggressive monetization techniques. This qualitative data helps to contextualize quantitative findings and provides more insight into the effects of predatory monetization on player engagement and pleasure. Finally, the data analysis of predatory monetization in mobile gaming combines many secondary sources to provide a full picture of the market landscape. By combining quantitative and qualitative data, researchers can uncover relevant trends, problems, and ethical considerations for monetization techniques. This study contributes to a better understanding of the interactions between game producers, players, and monetization strategies in the lucrative mobile gaming business.

VI. FINDINGS & SUGGESTIONS

A. Suggestions

In conducting a comprehensive investigation into exploitative monetization strategies in gaming, various research methodologies can be employed to gain nuanced insights. Qualitative analysis would involve surveying players to discern spending habits and potential correlations with exploitative monetization tactics. Experimental research methodologies could be employed to design tests aimed at assessing player reactions to a range of predatory monetization methods.

Additionally, a longitudinal study would be essential to monitor player behavior over time, offering a deeper understanding of the enduring effects of predatory monetization on gaming communities. Comparative case studies across different games would enable researchers to discern the impact of diverse monetization strategies employed within the gaming industry. Ethnographic research would involve immersing oneself in gaming communities to observe firsthand how players interact with and respond to exploitative monetization practices. Lastly, policy analysis would entail a comprehensive review of existing regulations pertaining to gaming monetization, with the aim of formulating recommendations for fostering more equitable and consumer-friendly practices within the industry. Through the integration of these diverse research methodologies, a holistic understanding of the complexities surrounding exploitative monetization in gaming could be achieved, paving the way for informed interventions and policy reforms

B. Findings

After conducting an in-depth analysis of secondary data pertaining to the monetization of free-to-play mobile games, several key findings have emerged. Firstly, it is evident that in-game purchases represent a substantial revenue stream for developers of free-to-play mobile games, accounting for a significant portion of their overall earnings. The data indicates a wide variety of monetization strategies employed within these games, including in-app purchases, advertisements, and loot boxes, among others.

Furthermore, there is a discernible trend towards the implementation of "freemium" models, wherein the initial download of the game is free, but players are encouraged to spend money on in-game items or enhancements to progress more quickly or access additional content. This strategy has proven to be highly lucrative, with data indicating that a small percentage of players contribute a disproportionately large portion of revenue through in-game purchases.

However, the data also highlights concerns regarding the potential for exploitative monetization practices within free-to-play mobile games. Instances of aggressive marketing tactics, addictive gameplay mechanics, and predatory monetization strategies, such as randomized loot boxes, have raised ethical and regulatory concerns within the gaming community and among policymakers.

Moreover, the data suggests a correlation between certain monetization tactics and player engagement and retention rates. While some strategies may lead to a short-term increase in revenue, they also contribute to player dissatisfaction, churn, and negative opinions about your game, which ultimately affects long-term profits and brand popularity. of interactions. Explore monetization strategies, player behavior and industry dynamics in the free-to-play mobile games industry. These games provide access and entertainment to millions of players around the world, but care must be taken to ensure that player lives are transparent, fair and respectful. Continued research and investigation are essential to promote ethical and sustainable practices in the growing mobile gaming landscape.

C. Limitations of the Study

1) *Sampling Bias:* Because the study relies on voluntary participation, the samples may be biased and not representative of the overall gaming population.
2) *Self-Reported Data:* Survey and interview data may contain response bias and mistakes due to participants' subjective judgments and recollections.
3) *Generalizability:* Results may not be generally applicable because they are influenced by individual gaming situations, player demographics, and cultural factors.
4) *Ethical Constraints:* Ethical factors like as privacy and informed permission may limit the amount of data collected and the range of research methodologies used.
5) *Temporal Dynamics:* Because mobile gaming is always growing, conclusions may become outdated or irrelevant over time, especially in rapidly shifting monetization landscapes.

VII. CONCLUSION

Our research has many educational and practical purposes. On the academic side, our study provides the first in-depth analysis of product sales in a video game environment based on qualitative data. Thanks to our study, researchers have an additional way to examine the online shopping behavior of gamers. More research is needed on each of the key components of word of mouth identified in this study, such as the role of flow experiences in the internal product selling process. Our analysis reveals the unique characteristics of many game-based product categories. The findings of our study shed light on the purchasing procedures for various in-game items, which is anticipated to alter the traditional method used in video game research, which treats in-game items as a single, homogenous notion.

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Based on our findings and their potential practical applications, we have identified certain typical practices in the videogame industry that are ineffective. In order to push players outside of their comfort zone and profit from their response—the purchase of functional in-game goods or probability-based in-game goods to acquire functional in-game goods—video game operators frequently engage in the practice of raising challenges or creating obstacles to limit players' skills in the game. The findings of our study, however, indicate that this strategy carries some risk: protracted or repeated episodes of worry or boredom may cause players to give up on the game altogether. Therefore, video game developers shouldn't make the game too difficult or restrict players' ability growth too much if they want to maintain their revenues. Second, especially during promotional campaigns, video game developers will occasionally purposefully make it easier to select uncommon cosmetics or skins through a variety of methods. Multiple bosses can create an evasion pool, which can reduce the demand for an item and force game developers to create new items while losing their other rarity value and increasing the difficulty of obtaining rare items for industrial workers. don't underestimate yourself This item contains game restrictions.

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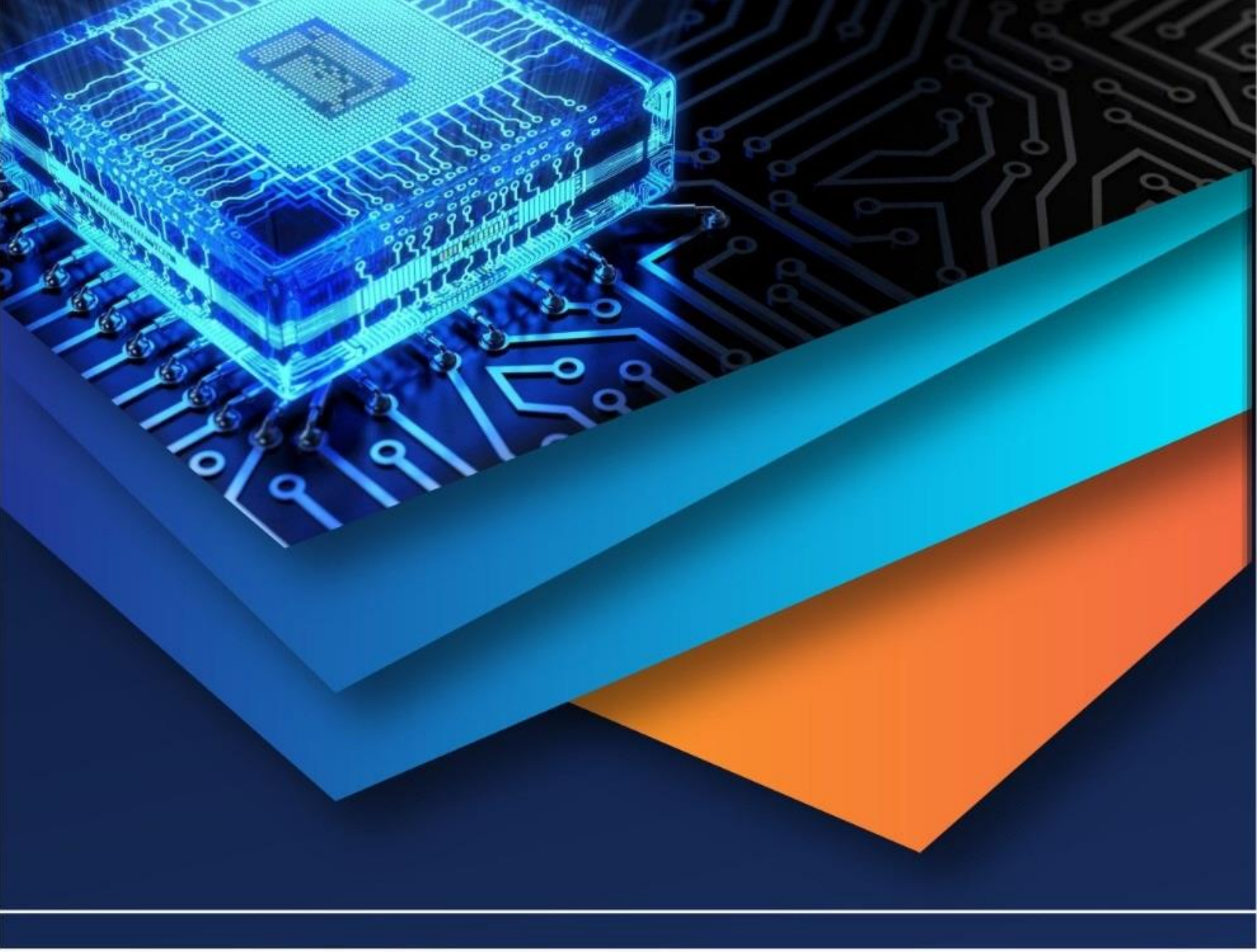

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