SCOT Analysis of Corporate Social Responsibility of Gaming Corporations

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On my honor as a University Student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments

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Introduction

Videogames play a part in many young people's lives. Online gaming is one of the most popular forms of gaming, pitting users against each other in competitive environments. Microtransactions are features in many games that allow users to pay real-world money for digital assets and in-game advantages. At first glance, these microtransactions may seem harmless, allowing users to spend their own money as they wish. However, given the competitive environments of online games, users can feel inclined to take advantage of these microtransactions without any guarantee of worthwhile rewards. This can lead to microtransactions playing a part in gaming addiction and negative mental health effects of video games.

The widespread presence of gaming microtransactions has sparked considerable concerns regarding their potential links to gaming addiction and adverse mental health impacts. As players immerse themselves in interactive digital realms, microtransactions introduce a monetary dimension that might contribute to addictive tendencies. The accessibility of in-game purchases, often crafted to augment gaming experiences, could indirectly cultivate impulsive spending habits, contributing to financial strain and heightening mental health issues. Moreover, the allure of microtransactions, coupled with the psychological influence of reward mechanisms, may escalate the likelihood of gaming addiction, as players become ensnared in a cycle of continual engagement to secure virtual rewards. This intricate relationship between microtransactions, gaming addiction, and detrimental mental health consequences underscores the importance of a comprehensive exploration of these phenomena, guiding potential interventions and gaming ethics.

In my research, I plan to employ the SCOT framework to scrutinize the intricate landscape of gaming microtransactions. Through this analytical lens, I aim to thoroughly investigate the diverse impacts of microtransactions on gamers, considering elements such as their experiences, behaviors, and overall well-being. Moreover, my exploration will extend to assess the responsibility of gaming corporations concerning the consequences of microtransactions. The application of the SCOT framework will offer a methodical and nuanced approach to unravel the intricate interplay of societal and technological factors, shedding light on the perception and acceptance of gaming microtransactions. Ultimately, this research will contribute to the ongoing discourse surrounding ethical corporate practices within the gaming industry.

Background

On December 6th, 2023, a lawsuit was filed against Activision Blizzard Inc., Epic Games Inc., Roblox Corp. and around a dozen other video game developers (Poritz, 2023). The lawsuit regarded a nine-year-old who allegedly suffered from addiction to the companies' videogames such as *Fortnite*, *Call of Duty*, and *Grand Theft Auto*. The lawsuit claims that the games' reward systems aim to ensure maximum playing time from users. It also claims that microtransactions are the driving force behind gaming addiction and compulsive behavior. The nine-year-old gamer, who's name is D.G., allegedly "experienced severe emotional distress, diminishes social interactions, loss of friends, poor hygiene, and withdrawal symptoms such as rage, anger, and physical outbursts," according to the claim (Poritz, 2023). The lawsuit claims that the layouts and schemes of these games push users into higher playing time and spending money on microtransactions in order to increase profits for the gaming corporations. A representative from the Entertainment Software Association, a trade organization for the video game industry,

emphasized that the sector places a strong emphasis on fostering positive experiences for the entire player community. They also highlighted the industry's commitment to developing user-friendly tools for players, parents, and caregivers to effectively manage various aspects of gameplay. While the case is still ongoing and has yet to reach a verdict, the claim itself is not crazy to believe. I and many others I know have experienced these types of negative mental health effects from videogames, and yet continue to play them. This calls for a closer look into the ethics of microtransactions of videogames and the accountability of gaming corporations for the content they publish.

Social Construction of Technology (SCOT)

The Social Construction of Technology (SCOT) framework offers a lens through which to view technology as more than just the result of scientific advancements or innovative breakthroughs. Instead, it emphasizes the significant influence of social dynamics, values, and interests on technological development. SCOT suggests that technologies don't possess inherent qualities of being good or bad. Rather, their meanings and impacts are shaped and defined by interactions among various actors and stakeholders, including inventors, users, policymakers, and other different social groups. This framework focuses on the importance of understanding the broader context in which technologies emerge and evolve in the ever-changing landscape of society and politics, considering factors like cultural norms, power structures, and economic motives. The framework pushes that it is humans that shape and determine technology and its effects, not technology that influences human action. Relating to videogames and their effect on their users, the SCOT framework will allow me to closely study and analyze how gaming corporations influence their technology of games, which in turn effect gamers. This approach

should very clearly point out the extent of accountability gaming corporations should be taking for the games they publish.

Literature Review

Given the recency of the case against Activision and the other gaming corporations, it is important to look towards other studies and cases of mental health in relation to gaming. These analyses focus on the relationship between gaming and addiction and erratic behavior.

Diving deeper into one of these specific games, *Call of Duty*, the game employs a loot box system, where players can purchase mystery boxes for a chance at an exclusive in-game asset or advantage. The loot box system is comparable to traditional gambling, as gamers are spending real money on a change to receive certain in-game items. A study published in 2022 investigated the "loot box expenditure alongside peer engagement, perceptions of gaming value, self-worth, and problematic gambling" of 130 Call of Duty gamers (Hunt, 2023). The results of the study identified many more scores for high and medium-risk gamblers than non-problem gamers. Overall, the findings supported associations between loot box systems and problematic gambling. I recognize that this study is not decisive, but its suggestive findings about associating gaming and gambling are a cause for concern. This study's findings support the 2023 lawsuit's claim that microtransactions were a driving force in D.G.'s gaming addiction and behavior.

In another study published in the *Journal of Youth and* Adolescence, behavioral effects of gaming on teenagers was studied. Conducted in 2013, the study surveyed 1500 high school students annually from ninth grade through twelfth grade about their video game play, gambling, and aggression (Adachi and Willoughby, 2013). The study found that increased involvement in competitive video game play along with increased gambling predicted high levels of aggression.

Vice versa, higher levels of aggression predicted increased competitive gaming and gambling. This study helps support the claim that D.G.'s behavioral changes might be influenced by the videogames he played.

Another case study referencing the addictive and negative behavioral influence of gaming is found in a research article by Pilios-Dimitris Stavrou. The article delves into the therapeutic journey of a 14-year-old, referred to as Michael, who is deeply engrossed in computer games, leading to aggressive behavior and withdrawal from social interactions (Stavrou, 2018). The study's objective was to scrutinize the impact of psychodynamic psychotherapy over two and a half years on Michael's gaming addiction, his self-esteem, and his tendency towards aggression. Michael's addiction was impacting his daily functioning and family relationships. Through the use of various projective tests (Thematic Apperception Test, Kinetic Family Drawing, the Family Apperception Test) and the Rosenberg Self-Esteem Scale at the start and conclusion of the therapy, the study aimed to track his progress.

Initial findings highlighted a correlation between Michael's excessive gaming and his issues with aggression, low self-esteem, and strained family relations (Stavrou, 2018). The tests at the beginning of therapy portrayed Michael's aggression, particularly towards his family, and a feeling of being socially isolated. The therapeutic sessions revealed that Michael turned to gaming as an escape from real-life challenges, such as being bullied and feeling excluded, allowing him to feel in control within a virtual setting. The therapy aimed at addressing these underlying concerns, enhancing his self-worth, and fostering healthier interpersonal relationships. By the therapy's end, notable improvements were observed in Michael's behavior and emotional health (Stavrou, 2018). The concluding tests indicated a decrease in aggression, improved family relationships, and enhanced self-esteem. Michael's case underscores the

effectiveness of psychodynamic psychotherapy in tackling the intricate factors behind gaming addiction, including emotional and psychological issues beyond the addiction itself.

This investigation underlines the significance of an in-depth therapeutic approach for adolescents caught in the throes of video game addiction, by addressing not just the symptoms but the root psychological and emotional triggers. This case is another demonstration of the negative influence of gaming. On the surface, gaming positively offered Michael an escape from a harsh reality and real world challenges. However, a closer look into his gaming experience revealed that his gaming was correlated with negative behavior, such as aggression and social isolation. A comforting prospect, however, was the positive improvement of his mental health through therapy. His improvement shows that, just as other mental issues, therapy can offer positive mental assistance to gamers who suffer negative mental health impacts of gaming.

Delving further into potential negative mental health impacts of gaming and microtransactions, I found and studied another investigation into video games, specifically microtransactions, and its relation to gaming disorder and gambling disorder. The investigation by Raneri and colleagues (2022) delves into the intricate connections between video game microtransactions, the phenomenon of Internet Gaming Disorder (IGD), and the issues surrounding Gambling Disorder (GD). Raneri and his colleagues first state that recently, in the domain of digital gaming, microtransactions have risen (Raneri, 2022). Microtransactions have been introduced in the form of loot boxes, which almost replicates traditional gambling. Adhering to the established Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines and registered in advance with PROSPERO, the review set specific inclusion criteria focusing on empirical, peer-reviewed studies that analyzed microtransactions in relation to IGD and GD, published within the 2013-2021 timeframe.

Searches across five databases culminated in 14 studies being selected for in-depth analysis after a meticulous screening process. The AXIS, Appraisal Tool for Cross-Sectional Studies, tool was utilized for quality assessment, and the findings from the studies were synthesized qualitatively.

The analysis uncovered a pronounced positive correlation between microtransactions and both IGD and GD, particularly emphasized with loot boxes, which are characterized by their randomized reward mechanisms akin to those found in gambling contexts (Raneri, 2022). The findings suggest that engaging in behaviors associated with risky purchases of loot boxes could act as a mediator in these relationships. Moreover, the data indicated an escalation in microtransaction spending concurrent with an increased risk of GD, especially among adolescents who engage in loot box purchases, marking them as a demographic at heightened risk for GD. Nevertheless, the study acknowledged limitations regarding the external validity of its findings, pointing to the cross-sectional nature of the included studies, reliance on convenience sampling methods, and a focus on predominantly Western samples which might not universally represent the broader population. The conclusions drawn from the systematic review by Raneri et al. (2022) shed light on significant concerns regarding the mental health implications tied to gaming monetization strategies, especially microtransactions. The link between microtransactions, especially through loot boxes, and increased risks of IGD and GD underscores the potential psychological hazards these game features pose. This is particularly alarming given the wide accessibility and appeal of video games among younger audiences, who may be especially susceptible to the enticing yet potentially detrimental aspects of microtransactions. The stronger correlation found between loot boxes and GD, as opposed to other forms of microtransactions, suggests that the random nature of loot boxes might be particularly captivating and, by extension, more harmful, mirroring the dynamics observed in

gambling activities. In essence, the systematic review by Raneri et al. (2022) highlights the intricate relationships between microtransactions, IGD, and GD, raising critical ethical concerns about the psychological risks associated with current video game monetization practices. The findings advocate and push for the establishment of uniform methods to evaluate IGD and engagement with microtransactions, emphasizing the necessity for gaming corporations, developers, and future research to mitigate potential adverse effects linked with these gaming elements.

Survey

Given the prevalence of gaming among myself and my college peers, I decided that conducting a survey at the University of Virginia would give a more personal and prevalent analysis of the effects of gaming and their relevance. I created a questionnaire through *Google Forms* asking student specific questions regarding their time spent playing games, frequency of positive mental health effects of gaming they have experienced, frequency of negative mental health effects of gaming they have experienced, and their opinions on the ethics of microtransactions and the level of accountability of gaming corporations. I then posted this questionnaire via its QR code, and posted it in the many text group conversations I am in. I also printed out paper copies of the QR code and hung them up around the University of Virginia campus. I recognize that a flaw in this method of research is its reliance on user responses. However, this method does offer an unbiased and fairly random study on the population that this research is relevant to: college students.

32 students at the University of Virginia responded to the survey. The ages of the respondents ranged from 18 to 22. In response to the question, “What drives you to play videogames?”, the main responses centered around friends and social interaction, having fun and

facing boredom, and playing out of habit. I then asked the respondents to report any notable positive and negative effects of their gaming experiences. Looking at the positive effects of gaming, the most prominent effects were stress relief (32% of respondents) and increased social interaction and relationship bonding (65% of respondents). Other notable positive effects included passing time, taking a break from work, and rewarding oneself for completing a task. On the other hand, the most prominent negative effects were decreased productivity (77% of respondents), increased anger and stress (16% of respondents), and poor sleep (13% of respondents). Other notable negative effects of gaming included physical issues such as eye strain and poor posture and decreased time outside.

From there, I separated the data into people who frequently play games with microtransactions and people who do not play games with microtransactions. 17 of the 32 respondents reported playing games with microtransactions frequently while the other 15 respondents reported not playing games involving microtransactions. Separating the data into these two groups allowed me to compare the effects of gaming in relation to microtransactions.

When looking at the microtransactions group, 59% of them stated that their gaming experiences had been affected by microtransactions while the other 41% stated that microtransactions had no affect. Of the 59% that were affected by microtransactions, the common effects were: buying exclusive in-game cosmetics, giving them or their opponents an unfair advantage, progressing easier in the game, and making the game more fun and enjoyable. 88% of these respondents play in competitive online modes while only 12 % do not. I then asked this group of respondents if they believed gaming companies should hold accountability for microtransactions and their effects. 29% of these respondents believed gaming companies should be held accountable for their microtransactions, citing reasons such as monetary greed and

predatory practices towards gamers. 47% of these respondents replied that they did not think gaming companies should be held accountable, with gamers' free will being the main reasoning. 18% left this question blank, while the remaining one person responded that it depended on the situation.

Then, I looked at the 15 of 32 respondents who do not play videogames involving microtransactions. Only 20% of this group responded that their gaming experiences were affected by microtransactions, while the other 80% stated their experiences were not influenced by microtransactions. This group of respondents spend much less time playing videogames on average per week. The majority of this group stated they played videogames for less than an hour per week. Only 20% of these respondents play in competitive online game modes, while on the other hand 80% do not. When asked if companies should be held accountable for microtransactions and their effects, only 20% of these respondents replied yes, citing reasons such as company deception and non-equivalent values for purchased items. 40% of these respondents replied no, with the main reasoning being gamers' free will. 33% left this question blank and 1 respondent replied "maybe".

When comparing these two groups of respondents, based on if they play games with microtransactions, there are some key differences. Firstly, the majority of gamers who played games with microtransactions also played in competitive online game modes. In contrast, only a small minority of the gamers who did not play games with microtransactions also participated in competitive online modes. When looking at some of the ways respondents described how microtransactions affected their gaming experience, one of the prominent influences was giving people an unfair advantage in online modes. This aligns with the fact that if a gamer played a game with microtransactions, they were much more likely to play in a competitive online mode.

This makes sense, as gaming corporations add incentives to purchase microtransactions to many competitive online games, such as the chance for gamers to receive a competitive advantage against their opponents. Another key difference in the two groups of respondents was that gamers who played games with microtransactions were much more likely to play videogames much more that gamers who did not partake in games with microtransactions. This correlation possibly aligns the idea that gaming corporations who utilize microtransactions try to create incentives for gamers to spend more time on the videogames, sometimes leading to gaming addiction. For clarity, this is only a correlation between two variables. It does not necessarily demonstrate causation. However, it does call for worry and a closer study of competitive gaming, microtransactions, and mental health. When looking at if the respondents believed gaming corporations should hold accountability for microtransactions and their effects, the majority of both groups stated that they did not believe so. Many of them believed that it is ultimately the gamer's decision and free will to utilize and purchase microtransactions, claiming responsibility for the aftereffects. It is worth noting, however, that a higher percentage of respondents who play videogames with microtransactions compared to the respondents who do not play videogames with microtransactions claimed gaming corporations should hold some form of accountability due to naiveness of gamers and the withholding of effects of microtransactions. This difference could signal that the effects of microtransactions are better seen when they are experienced firsthand, rather than from an outside perspective.

Overall, the data from the survey indicates a more detrimental effect on gamers from games with microtransactions than games without microtransactions. In both cases, it is only a minority of gamers who believe that gaming corporations need to hold higher accountability in relation to microtransactions. However, it can still be seen that if a respondent played games with

microtransactions, they were more likely to experience negative effects of gaming, such as stress, rage, and addiction. It is important to note the small sample size of the survey. The low sample count makes the data unreliable, calling for a larger sample size in the future.

Argument

The application of the SCOT framework to the analysis of gaming microtransactions and their effects sheds light on the urgent necessity for gaming companies to elevate their level of ethical responsibility. The legal action involving the young plaintiff, D.G., against prominent gaming firms such as Activision Blizzard Inc., Epic Games Inc., and Roblox Corp., underscores the significant debate around the ethical implications of microtransactions and their capacity to encourage addictive behaviors and adverse mental health consequences. These gaming corporations were the prime actors in the case involving D.G., producing and publishing their content involving microtransactions and leading to D.G.'s negative change in behavior and health.

Microtransactions exploit the competitive and rewarding essence of contemporary video games, manipulating the psychological vulnerabilities of players. Various research findings throughout the study demonstrate a clear link between microtransactions, addiction to gaming, and negative mental health effects, including heightened aggression, isolation from social activities, and potential gambling problems. The cases in the literature review highlight different studies that found the negative influence of microtransactions, including addiction, social isolation, and gambling-like behavior. The survey also supported the same negative effects on some of the respondents. The situation of D.G. is yet another example of a gamer being affected by gaming corporations through the web of microtransactions.

Utilizing the SCOT framework reveals the complex interaction between the development of gaming technology and its societal effects and acceptance. This analysis shows that technology, and by extension, video games, become harmful through the intentions and actions of their developers and the societal frameworks that support their use. Therefore, gaming companies significantly influence the gaming experience and carry substantial responsibility for the results of their technological innovations.

The strategic use of microtransactions by gaming companies, seen through the SCOT lens, is not just for revenue but to deepen player engagement and dependency. This strategy, although financially beneficial, overlooks the potential harms, especially to younger audiences. The lawsuit involving D.G. thus represents a legitimate criticism of these companies, highlighting a neglect of social responsibility and ethical consideration in favor of profits.

Gaming companies are urged to embrace a higher level of responsibility, recognizing how their design decisions impact player mental health and behavior. This means re-evaluating the deployment of microtransactions to ensure they do not prey on psychological vulnerabilities or foster addictive tendencies. There is also a need for clear communication regarding the risks tied to in-game purchases and for tools that help players and their guardians manage or restrict access to content that could be harmful.

Additionally, the gaming industry should work together with mental health experts, educators, and policy-makers to set standards that protect players from identified risks. Such cooperation could lead to the creation of gaming environments that balance entertainment with the health and welfare of players.

In essence, the SCOT framework offers a detailed perspective on the dynamics between gaming technologies and their impact on society, emphasizing the ethical obligation of gaming companies to reconsider how microtransactions are implemented. The case of D.G. serves as a poignant reminder of the tangible adverse effects of disregarding this duty. As such, gaming companies are called upon to reassess their practices to ensure their innovations are beneficial to society and do not negatively affect the mental health of their audience.

Conclusion

Using Social Construction of Technology (SCOT) framework, I have argued that Activision, Epic, and other gaming developers are the prime actors responsible for the effects of gaming microtransactions. Their objectives were to build and sell a profitable game to target audiences of young adults and adolescents. In their vision to make profitable games, they employed schemes and microtransactions to encourage further game time from users. Indirectly, these microtransactions led to D.G. and other users experiencing gaming addiction and behavioral effects. It is the publishers, these gaming corporations, who are responsible and should be accountable for these adverse effects of their technology.

It is important to analyze and expand on the social corporate responsibility that should be held from these gaming companies, as new games are published every year and the system of microtransactions becomes ever so more popular. Failing to recognize the actors and their ethical responsibilities towards their stakeholders could lead to more and more gamers falling into the trap of gaming addiction and negative mental health in the event of game developers prioritizing profits over gaming experience and quality.

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