Research on the Causes of Nintendo Switch Shortage during the Covid-19 Pandemic
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ABSTRACT
Based on the Covid-19 disease pandemic, it is worth to be discussed how to stabilize economic development. This paper studies the reasons for the global shortage of Nintendo’s product switch during the epidemic. For the videogame industry, take Nintendo Switch as a research model, the required stay-at-home policy released by the government expands its scope since it attracts an increasing number of users to participate in games in view of their physical, mental or social interactive needs. Maslow’s hierarchy theory provides a solid theoretical background to analyse customers’ purchasing behaviour within a pyramid. The research conclusions on the reasons for Nintendo Switch's shortage are twofold: on the one hand, it comes from raw materials, and on the other hand, it comes from the huge demand of customers.

Keywords: Switch, video game, marketing strategy, behaviour economics, Covid-19 pandemic

1. INTRODUCTION
Covid-19 pandemic not only poses threats on human being’s health from the globe, but also affects the overall economic and financial markets. During this tough period, customers turned their attention from physical stores to online shopping with well-developed technology, therefore entertainment industry won a splendid opportunity since it can provide people with fun via the internet when they were confined because of stay-at-home orders. People who have access to the Internet have chance to remain indoors and enjoy the entertainment activities during the lockdown without becoming boring. The shift from outdoor activities to indoor activities meant that customers or experiencers are required to study or work at home, which pushed indirectly pushed the videogame industry to boom. This paper focuses on the reasons regarding Nintendo Switch’s shortage during the Covid-19 pandemic. Generally, this research paper describes the overall game industry’s environment and Nintendo Switch’s background as introduction and then explains why the company faced shortage problems from the perspectives of customers’ physical, mental, and social needs, which would provide future product design with insights in the videogame industry for purpose.

2. GAME INDUSTRY
At the beginning of 2020, especially during the outbreak of Covid-19 pandemic, game industry emerged as one of the most popular activities since there was an increasing number of users who are willing to try video games.[1] Based on the policies issued by the local government, people must stay at home, then they spend more time in leisure activities, thus remote video game activity was recognized due to its advantages on users’ physical and mental health, communication abilities with others etc. Online game provides people who seek entertainment an opportunity to satisfy physical distancing orders, which is also recommended by the World Health Organization (WHO), therefore, a rapid boom of gaming industry benefited from the agency’s publicity. Plenty of game companies also put appropriate funds in exploiting a variety of online video games and create sales promotions to trigger consumption via the online store instead of expanding traditional retail stores.

3. SWITCH’S BACKGROUND
Nintendo Switch provides splendid online services and media support for users, which also put a solid foundation for the outbreak period. Nintendo Switch Online (NSO) is an online subscription service for
customers who have already gained the Nintendo Switch video game console successfully. This additional subscription includes online multiplayer, clouding saving, voice chat via applications, which is covered by console’s prices. Nintendo utilized its innovation to become the forefront of the video games market, which further inspires several users. By releasing Will Fit, it successfully attracts women users’ attention, which brings a series of new target consumers who are not interested in traditional video games before. Therefore, production innovation is one of the essential components of Nintendo’s success.

Nintendo’s goal is to bring smiles to people’s faces, which directly demonstrates its brand culture is to convey happiness to customers. Happiness represents one of the necessary factors of entertainment industry. Nintendo recruits professional employees and then exploit a series of unique products, design reasonable prices, release appropriate promotion methods and choose a variety of channels, combining traditional and online stores to increase sale volume and win a great reputation through its supporting service.

4. CONSUMER’S REQUIREMENTS

4.1. Physical

Due to the stay-at-home policy, the government considering public health enacts social distancing policies to restrict people’s daily activities, therefore, plenty of people spend more time staying at home than usual. A surge of consumers tends to become “self-isolated” and must discover indoor activities to keep their physical health. How do these people keep their health? Without approaching outside, approaching jogging in the parkway, doing physical exercising in the gym, how to boom their immunity at home?

Xbox is regarded as one of the entertainment activities, which can also improve health condition through a series of games. [2] Because of its dual benefits, more consumers are likely to purchase this kind of product, which further indirectly results in a shortage of Switch series products. Thus, for Switch’s marketing department, it would be attractive if they can design more creative supplements, i.e. engaging games’ storyline, equipment that can record how those customers utilize to conduct a physical exercise at home instead of outdoor locations. Take Ring Fit Adventure as an example.

4.2. Mental

Although playing video games for a long time would pose threat to users’ eyesight and is also likely to increase the probability of being addicted to virtual video games, people cannot deny that adequate video game experiences bring users happiness and satisfy their requirement for pursuing relaxation during the Covid-19 pandemic.

Video games also bring healthier brain stimulation [4]. When users challenge the similar tasks that set by gaming designers, they repetitively practice the same way
to succeeding and thus they would become more familiar with some specific tasks as the number of practice time increases. [5] Moreover, recent evidence reveals that playing video games bring users another benefit, the growth of size and competence of their brains. Through video games, they are likely to identify visual and spatial relationship among objects. The conclusion-their right hippocampus is enlarged-also confirming the previous viewpoint in terms of experiment results. [6] Therefore, the Nintendo products provides consumers a platform to release pressures and satisfies physiological needs, which results in sale’s boom when it comes to Coronavirus.

4.3. Social Interactive

From social purpose, multiple player interactions, forming a small group to battle with another group can enhance the social interaction among participants compared with single-player games. Increasing personal participation and obtaining praises from teammates bring a sense of fulfillment and encourage players to be engaged more actively in the same game. Through constructing game communities and individual identity, players can interact with their teammates via the virtual environment without feeling isolated during the whole playing period. Once they feel isolated afterward, they are more likely to approach the same game to regain this kind of reconciliation to smooth their loneliness.

Collaboration with other players is designed as the prerequisite of online multiplay games, which aims to enrich video game types and help single player seek for his/her teammate. Unlike traditional message communication, players can choose their familiar friends or strangers randomly to develop games. Without talking about daily lives, they can qualify within a game setting with own character, weapons, and special skills. Sometimes, people who feel anxious about the current pandemic from reality during the Covid-19 stay-at-home regulations tend to release pressures in the fictitious network world, they can choose strangers as their partners and choose unfamiliar characters, just like to act as another character and to experience additional storyline. Due to the Covid-19 pandemic, people used to become isolated, thus Nintendo’s game satisfied their love and belongingness needs in terms of theories about Maslow’s Hierarchy of Needs, which emphasizes the importance of friendship, intimacy, and trust. Since customers are willing to become part of a group during the virtual world, they are driven to purchase Nintendo’s game products.

5. SWOT ANALYSIS

5.1. Strength

5.1.1. Popularity

Nintendo Switch launched its console in 2017 and the sales reached over 91 million from the globe [7]. Nintendo’s exclusive games only allow users to utilize unique consoles, which means that customers are required to purchase a specific console as a supplement if they are interested in Switch games. Thus, the first-party games that directly increase console’s sales, which is also competitive among other brands. The target group is wide, whose ages from 4-year-old to 94-year-old have the ability to find suitable games from Nintendo Switch since it provides a series of video game types and lists detailed instructions for novices.

5.1.2. Firm reputation

The facial masks that can be regarded as one of effective self-protection ways to fight with Covid-19 outbreak also experienced shortage at the beginning of this epidemic. Nintendo of America donated 9500 N95 face masks as first responders in Washington in March to do volunteering. In fact, this kind of volunteering is invisible but effective brand promotion, which also conveys the message that this firm is concerned about the public and is willing to contribute necessary supplies for free.

5.2. Weakness

Nintendo Switch chose to produce hardware in Asian countries to lower costs. However, due to the quarantines and stay-at-home policies, workers could not proceed essential components of hardware with normal efficiency, which led to reduced supply. Besides that, physical stores were forced to close, therefore, customers have no access to experiencing their favourite video games, being instructed by shop assistants. These factors made negative effects on Switch’s sales.

5.3. Opportunity

As people from the globe are getting vaccinated, then they return to previous study or work mode, which means that they don’t need to stay at home to avoid coronavirus. Therefore, Switch has the ability to design suitable market strategies to attract users to focus on their new video games. For example, design competition in the
physical stores and invite users to witness with professional explanation, which can impress customers’ attention towards brand image, and remind them of participating new games for fun. Furthermore, the technology provides game industry with wonderful opportunities to prosper.

5.4. Threat

There are several competitors in the market, such as Electronic Arts, Zynga, Activision Blizzard, CCP Games, and Bandai Namco [8]. From the graph, we can obtain that compared with other competitive companies, the number of Nintendo’s employees occupies the middle positive, which implies that the cost of human capital is moderate in this industry. Also, considering the Twitter Followers, the graph demonstrates that the followers are skyrocketed from 2017 to the beginning of 2021 and then plummeted vertically until the September of 2021, which implies that Nintendo can promote new products or design a series of activities via the social media to achieve potential customers’ attention.

![Figure 2. Competitive companies’ Statistics about Employees and Twitter Followers](image)

6. CONCLUSION

The research paper generally analyses how external factors, the Covid-19 outbreak, affected the overall economic trends from the global scope since public health is correlated with a variety of industry. From the perspectives of physical, mental, social interactive, Nintendo Switch satisfied users’ needs and provide them with great services, including detailed instructions about how to use equipment, and how to play specific games. The shortage occurred due to high demand from customers and lack of supply due to manufactories that focused on Asia where is affected by Covid-19.

REFERENCES


