



CONSUMER DECISION FACTORS OF CHOOSING TO BUY A DIGITAL FORM OR PHYSICAL FORM OF VIDEO GAME

Tanunrat Napakornwattananon¹ and Kritsada Sriphaew²

Master of Science in International Digital Business, Rangsit University International College

Rangsit University, Pathumthani, Thailand,

Email : ¹thawiwat34737@gmail.com, ²kritsada@rsu.ac.th (corresponding author)

ABSTRACT

With the advancing of the technology, which is spreading widely to many business industries, video gaming is one of them where it shows the ability of developed technologies more obviously because it increases satisfaction in player experiences. This research studies the consumer decision factors which lead to different consumer preference of choosing to buy digital or physical forms of video game, using an online screening question to qualified respondents and select 30 interviewees involved in the qualitative study. The result shows that the people who choose digital copies of video game highly care about social interaction. The people who choose physical copies see the value of connection within the group. People who are interested in both forms were convinced by the technology of the game. This research also applied the EKB model to analyze the decision-making process of 30 participants, where it shows that technology is not a main factor that leads consumers to actual purchasing but it is the social trends.

Keywords: Digital video game, Physical video game, Decision factor, Consumer Preference, Social trend

1. Introduction and literature review

The increasing of digital preferences along with the growth of digital technology definitely affect consumers in many business industries where the video gaming industry is also included in this challenging growth. In Gough (2020), it was reported that, from 2009-2018 the sale data of the video gaming in two different forms, i.e., physical and digital, changing opposingly. During 2009-2014, the physical copies of video gaming were gaining popularity more than digital copies; contrastingly, the digital edition is now becoming more favorable than those physical forms. In Davidovici-Nora (2014), it stated that digital distribution fosters also new clusters of services around the game and cross platform gaming (mobile devices, PC, console) and gave birth to a broad range of pricing and contents, among them advertisement, freemium, subscription or free-to-Play (F2P) model (about 50% of current iOS games are F2P). Therefore, the growth of these technological development in video gaming industry has affected the consumer decision-making. Up until now, there is no other research which studied about the decision factors when the consumer uses to choose digital or physical forms of video game yet. Therefore, it is the aim of this work.



2. Objectives of the study

1. To study the consumer's decision factors when they decide to buy different form of the video game
2. To explore the period of time effected on the consumer purchasing decisions

3. Materials and methods

Since we do not know which factors are the keys used for consumer decision making in buying different form of video game yet, the qualitative research is then used in this study. This qualitative research is conducted through 2 steps: 1) online screening question using a set of questionnaires that was opened to the public and 2) in-depth interview. The online screening question is handed out through popular social media platforms in Thailand such as Facebook and LINE where they have provided game features on the platforms and other real-time playing game platforms such as Garena. The research setting location is Bangkok and the metropolitan area in Thailand since these areas contain the highest number of game players (Gough, 2020).

To qualify the participants, they were asked to answer 2 parts of the screening questions: 1) demographic information, and 2) behavior of consumption in gaming industry. Among 204 respondents, only 30 participants who usually play games (more than 1 year), have bought either physical or digital form of games and gave consent to be contacted, were selected to participate in the interview. The interview is conducted through either phone call or online face-to-face interview. All participants' information was promised to be kept confidential to the author only and replaced by the order number of their responses to online screening questions when written in this research. The research clarifies the factor influencing consumer choices using Engel, Kollet, Blackwell (EKB) Model to evaluate the participant answers from the interview. All the answers are summarized to highlight the key finding regarding their choices, experiences, and satisfaction.

Engel, Kollat, Blackwell (EKB) model is defined by Longart, Wickens & Bakir (2016) that, “traces the psychological state of individual purchasers from the point at which they become aware of the possibility of satisfying a material need by purchasing and consuming a product up to their final evaluation of that consumption”. It is not to point out motivations but to clarify outcomes of dis/satisfaction from need recognition to divestment stages. The information search from this model can specify the factors influencing decision making including internal and external factors, while the post-evaluation stage identifies their satisfaction on their choice.

4. Results

The participants are divided into 3 groups according to their preference in the form of video game: (1) 10 qualified participants who choose the digital version of video game; (2) 10 qualified participants who choose the physical version of video game; and (3) 10 qualified participants who choose both.



Table 2.1: Participants who choose digital form of video game

Code number of participants (no.)	Gender	Age range	Experiences within gaming industry (years)	Form of video game in possession
04	M	25-34	9-12	Both
08	F	18-24	1-2	Digital
12	F	25-34	3-5	Digital
19	M	25-34	3-5	Digital
63	M	35-44	>12	Both
65	M	25-34	9-12	Both
75	M	35-44	>12	Both
78	M	35-44	>12	Both

Table 2.1 shows the participants who selected the choice stated that they are more satisfied with the digital form of the video game. All the males (no. 04, 19, 63, 65, 75, and 78) said that they have been sitting in the internet café to play games before and also invited their friends to do so. Besides, all of the participants actually got financial support from their family (for gaming) when they were young.

The factor influencing game playing is mostly related to socialization, meaning there are some people around the participants playing the game. Furthermore, the factor that affects their buying decision is mostly related to the game avatar features such as better game items and prettier avatar's clothes (called skins). According to the digital form allows players to interact with others online, it also incentivizes them to buy game items in order to feel involved or superior from others. Participants no. 63 and 75 mentioned that there are some games that you need to pay money to win. They said that "The more money paid, the better item you get."

The way they think about the physical form of video game is clearly divided into 2 groups: (1) own both forms; (2) own only digital form. Participants who possess both forms were persuaded by the surrounded situation including COVID-19 pandemic including their memories of sitting and playing together with childhood friends as an at-home activity. Participants who possess only digital form were persuaded by different surroundings such as living alone or tight schedule of working. In this group, the value perceived from digital form is mostly relying on the game features, time spending, social interaction, and technology. Even if participants no. 04, 63, 65, 75, 78, and 90 have the physical copies of the game in their possession, most of them find it unimportant to own those physical copies anymore.



Table 2.2: Participants who choose physical form of video game

Code number of participants (no.)	Gender	Age range	Experiences within gaming industry (years)	Form of video game in possession
05	F	18-24	3-5	Both
23	M	18-24	3-5	Physical
53	M	45-54	>12	Physical
54	M	34-44	>12	Physical
58	M	35-44	>12	Both
62	M	25-34	>12	Both
73	M	35-44	>12	Both
74	M	18-24	9-12	Physical
126	F	18-24	9-12	Both
139	F	18-24	9-12	Both

Table 2.1 illustrates the participants who prefers physical form where those who have been sitting in the internet café to play games consider this as a group activity connecting them to other people. Participants no. 53 had different background from other participants because he had never been to the internet c café before, but he was more familiar with arcade game machines. Instead of the internet café and computer games, he played the game machines and invited his friends to play. The answer for the question about the financial support were mostly “yes”, especially those participants whose ages are between 18-24 years old.

Participants no. 05 and 23 said the factor that influences their playing are their friends. There was one participant who could not answer this question and said “I don’t even remember what influenced me to play but I just grew up with it. I have been playing and I think I’m quite good. Last couple years, my friend said I could play in the e-sport competition but at that time I was not interested in competing until I knew it could make so much money” – no. 74.

The average money paid per time from this group is varied, it starts from 500-1,000 Baht. By the way, no. 62 said he paid cheaper when the game was on mobile. However, participant no. 58 said he spent around 3,000 Baht per time when he bought a game for his kids because he has 2 kids which the average for each was 1,500 Baht. For this group, the factors which were taken into consideration before buying a video game are the price, product features, and product availability. They are obviously satisfied with the physical games where most of them see the value of connection and relaxation.



Table 2.3: Participants who choose both forms of video game

Code number of participants	Gender	Age range	Experiences within gaming industry (years)	Form of video game in possession
16	M	25-34	3-5	Digital
24	M	18-24	3-5	Both
29	M	18-24	3-5	Both
32	M	18-24	6-8	Both
33	M	18-24	6-8	Both
44	M	18-24	6-8	Both
96	O	18-24	>12	Both
97	M	18-24	>12	Both
98	O	18-24	>12	Both
198	M	18-24	>12	Both

This group is the participants who prefer both physical and digital forms of video game. There are 5 participants who love to sit in the internet café, i.e., no. 24, 29, 32, 44, and 97. Participants no. 96 and 198 had been there but they said only a few times and they did not like it. Unlike participants no. 16, 33, and 98 who have never been sitting in the internet café before. Certainly, those participants who had been sitting in the internet café playing video game invited their friends to go too. However, participants who have never been sitting in the internet café instead invited friends to play at home. Most of the participants in this group are financially supported by their families.

The participants no. 24, 29, 32, 97 and 198 said they are influenced to play by their friends. Some participants just grow up playing the video game (no. 16, 33, 96, and 98). The average spending of this group is about 500-1,000 Baht at a time. For this group, the factors that they were taken into consideration before buying are game trend, price, and group of people they are hanging out with. This group of participants perceived values of group belonging and technological distribution. The technological distribution here has referred from their word called “trend”.

Validation of Results with EKB model

In order to validate the results, we applied EKB model (Longart Eugenia & Bakir, 2016) to analyze the results to look into the consumer decision process. The theory traces the psychological state of individual purchasers from the point at which they become aware of the possibility of satisfying a material need by purchasing and consuming a product up to their final evaluation of that consumption. The model is not to point out motivations but



to clarify outcomes of dis/satisfaction from need recognition to divestment stages. There are six stages in EKB model which can be divided into three stage groups, i.e., antecedents, choice considerations and post-consumptions considerations as shown in Figure 1.

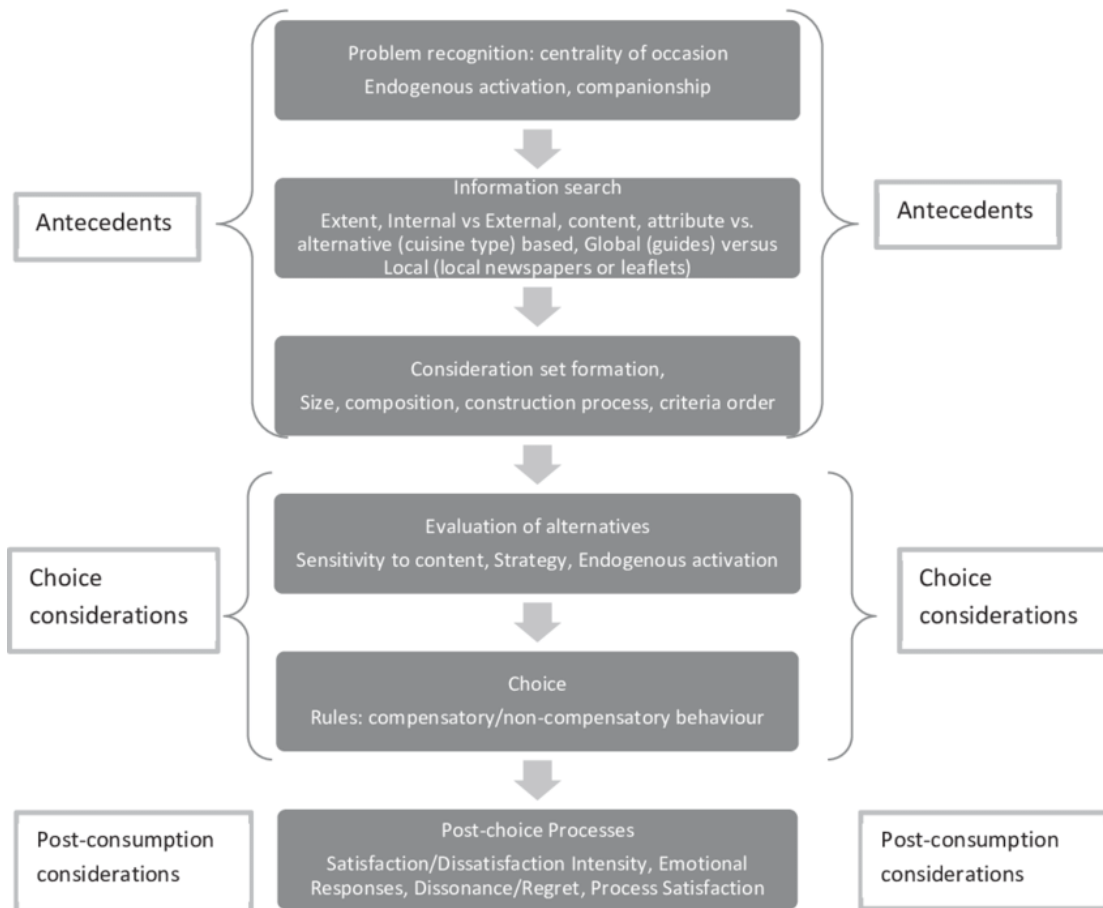


Figure 1 EKB model (Longart, Eugenia& Bakir, 2016).

The EKB model is used to analyze the participants' answers from the interview. The first stage is the need recognition. Most of the participants recognized their needs before buying which related to the factor influence buying mentioned above. They know the items, game characters, skins, game discs, and game machine that they want. During the information searching in the second stage of EKB model, many of them actually received reviews from their friends (influenced by friends) and advertisements from social media like the seasonal characters and skins or game trailers before the game launches. The price of the games is certainly in the consideration set formation stage of their decision making since a lot of participants are concerned about the price, especially the participants who choose physical form, because the physical video game price is averagely higher than digital video game. Another factor under their consideration is time spending with their friends and family. While the technology is also lied in this stage of consideration too because this factor has completely influenced the buying of participants who prefer both forms.



In the evaluation of alternative stage, the alternatives to evaluate is the period of time to get the product. Digital games are able to be installed right after they bought. Although the physical versions are available in the online stores, it takes time for shipment and delivery. The choice stage is those physical games and digital games that they owned. Finally, the post choice processes stage referred to values they perceived from the game form in possession.

5. Discussion

From the results, we can conclude into six elements impact the consumer decision making called as incentives of the consumer decision making process. First, game characters and features are influential to the participants. The answers that indicated the influence from game characters were mentioned by the words “game character, game avatars, game skins, items, prettiness, features” referred to the personal preferability of the participants. Wang, Ruan, Hsu & Sun (2019) showed that “the potential for strong player identification with an avatar increases when character personality and/or background story is vividly depicted”. Second, special game items refer to those items that increase skills and facilitate players’ ability to win which come with higher cost, including game characters that contain greater ability than other characters in that season. Third, price is what most participants are concerned about; the price of physical video game is higher than digital versions of video game in average. It emphasizes that this factor should be considered due to the majority of participants’ income which is in a range of 10,001-20,000 Baht. Fourth, rarity and limited items are those seasonal skins for game characters, the discount in coupon or game items selling within a limited time. Some participants are impacted by this factor due to their socioeconomic status which affects decision making (Thompson, Banerji, and Hamilton, 2020). Fifth, the trend seems to affect only those who prefer both forms of video game. Sixth, being involved in a group is mentioned as an incentive to buy video game in any forms. Conforming to Fernandes & Panda (2018) which referred to Zeb, Rashid, & Javeed (2011) that the more a person being involved in a group, the greater potential that they are going to acquire fashion. This research is conveying the same value of group involvement.

Regarding the effect of the period of time on consumer purchasing decisions, participants who satisfied with the digital form of video game, some of them will consider buying another version of the game due to their change in life stage since they know that they are going to perceive different values from the games. On the other hand, the participants, who love physical version, are not going to change their choice of consumption. Although some of them own both forms, they confirm that they are considering a physical version rather than a digital one. For those participants who are satisfying with both forms, the matter for this group is their reasons to buy some games in the future.

The reasons for these participants to change their choice are life stage and technology. No. 63 who prefers digital form tends to change his choice when he has a child. No. 24 who prefers both forms will change the product he usually buys when he can earn his own money. There are many participants who mention that the development of technology in this industry can change their choices of consumption. The participants who are going to change their choice of choosing include no. 12, 16, 19, 32, 74, and 96 from different groups of preference.



6. Conclusion

In conclusion, the choice of choosing to buy digital or physical form of video game can be summarized as: (1) people who choose digital form of video game or prefer it more than the physical version care about the social interaction and convenience of the game installation; (2) people who choose physical form of video game see values of the activity bringing people together; and (3) people who prefer both forms of the video game are interested in the technology called trend.

The socioeconomic does impact the buying decision of the participants in this research because they all belong to some particular groups of people who play games which is even more influential to their decision making. Knowledge and awareness are shared among their groups working similarly as a word of mouth. The technology distribution in the industry affects people who prefer to play both forms.

The suggestion for future research is to address a wider location of respondents and participants involved in the research in order to make the result more trustworthy and reliable. This research mostly emphasizes the point of consumer choices and perceived values from possessing different forms of the video game where the future research can find deeper elements in terms of the decision-making process.

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