

Conference Paper

Why Purchase Premium in Freemium Online Games: The Self-Determination Theory Perspective

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Abstract.

After the rise of the freemium business model, the video games industry emerged as a popular source of entertainment in Malaysia. In this modern free game model, virtual content trading is considered a great source of revenue generation for game developers and publishers. Millions of players around the world participate in this activity and purchase virtual items. In this study, we focus on exploring the motives of Malaysian youth for purchasing these in-game virtual products. By employing purposive sampling, qualitative data were collected by means of conducting in-depth interviews with game players who purchase virtual products. This study explored seven important factors: the desire for uniqueness, the desire for dominance, the desire for skillfulness, social interaction, the desire for freedom, social affiliation, and enjoyment, which strongly influence Malaysian players' behavior toward in-game content consumption during video game playing. Gamers and game developers can benefit from the findings of the present study to customize the in-game virtual product design strategies as per the expectations of respondents.

Keywords: free-to-play, video games, freemium, virtual purchasing, purchase intention

1. Introduction

It has been observed that due to the rapid proliferation of technology, the ways of entertainment have also changed dramatically in the last few decades. According to Nader, et al. [1] television is not a popular source of entertainment anymore and games are rapidly becoming one of the preferred pastimes among adults. In Malaysia, more than 20 million adolescents are active video game players who spends an impressive \$ 673 million in the gaming world in 2022 which will also make it one of the emerging markets in Southeast Asia [2].

Hussain, et al. [3] suggest that due to rising global Internet access and hard/software improvements, a new shift has recently taken place mainly in the realm of digital games:

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Games are being viewed not only as activities or products but also as services. Game developers enhance the monetization of the gaming content through free-to-play (F2P) or freemium business models [4]. The unique feature of the freemium business model is that game developers and publishers offer the entire video game free of cost to acquire as many users as possible, and then revenue is generated by selling virtual goods and/or virtual currency for real money [5].

In these Free-to-play video games, the transaction of in-game virtual goods grew rapidly and emerged as a multibillion-dollar industry. Due to the rapid increase in the gaming population, it is estimated that the in-game virtual goods market value will reach \$189 billion by 2025 [6]. Furthermore, the F2P video game “Honor of kings” title as a top-grossing game worldwide with estimated revenue of \$2.45 billion generated by selling virtual content during 2023.

The popularity and revenue prospects of these virtual goods in online video games have made it valuable for game developers and researchers to explore the role of these virtual products in the game world which induce virtual purchasing behavior in gamers against real-world money [7, 8]. As in-game virtual purchasing is a relatively new phenomenon, limited studies are available about why video game players want to purchase in-game virtual content. Based on this, the purpose of this research study is to explore the motives of the players for purchasing in-game virtual items in free-to-play video games.

The structure of the paper is as follows. In the next section, we summarized relevant literature on in-game virtual purchasing. Section three describes the methodology used in the study. We then present the findings of the research in section 4. Lastly, the paper rounds off with a discussion and conclusion that emerged from the present study.

1.1. In-game virtual product purchase

The virtual gaming world is a computer-generated three-dimensional scenario where individuals can experience the feeling of amusement, pleasure, social interaction, and entertainment. Like the real world, the virtual world inhabitants (users and players) also have consumption desires that motivate them to purchase and use virtual content [9, 10]. These virtual products exist in digital format, which is consumed inside a specific virtual environment, for example, Zhang, et al. [11] illustrated that the unique feature of virtual products is that they don't have physical mechanisms whilst available only in digital form. To illustrate, over 3.24 billion users across the globe play video games, generating a total annual revenue of \$196 billion in 2022 [12]. Likewise, in Malaysia,

about 76.1% of Internet users are adolescents and teenagers, with 43.7% or 13.8 million of them playing online video games frequently and spent an impressive \$673 million on games last year alone, meaning it's one of the biggest games markets in Southeast Asia [13].

The trading for virtual goods in video games is relatively new and is growing at a fast pace, prior studies have identified antecedents of virtual product purchase intention like information seeking, self-presentation, and affection as are a few examples [14, 15]. In Addition, Abbasi, et al. [16] and Jang and Park [17] reveal that artificial obstacles and gaps created in the games reflect the lower perceived enjoyment of the game and just overcome these issues purchasable in-game content offered to the players. In terms of utilitarian and hedonic perspectives, the usefulness of these in-game content is considered a utilitarian motive whilst enjoyment by the purchase of this content is considered the hedonic motive of in-game content purchase [18-20].

2. Methods

2.1. Data collection

As in-game virtual purchasing is a relatively new phenomenon in the digital realm, an exploratory research design was used to deal with qualitative data. The qualitative data is considered highly useful to understand the concepts, and other descriptions of the phenomenon that has been little researched to date, which is highly suited to our context of the study [21]. Different approaches are available for qualitative data collection like focus groups, interviews, and observations, to formulate interpretations of the subjects under study. In the present study, a semi-structured interview approach was used, as this provides more flexibility to the respondents to share the maximum possible ideas and thoughts [22-24].

For this study, a snowball-based data collection approach through purposeful sampling was used [25, 26] sample consist of Malaysian online game players who have also done in-game virtual purchasing in the last one month and were recruited against small monetary tickets from different states. To ensure consistency in data collection, an interview protocol was developed and followed before conducting each interview session. The sample consists of both male and female online game players [20].

Firstly, the potential respondents were approached by phone to ask some screening questions to ensure the appropriateness of candidate like, "how long you have been playing online video games", "what is your frequency of playing video games", "what

kind of in-game virtual content you usually purchase during video game playing “and then the focus of attention gradually shifted to a more specific topic. After explaining the purpose of the research, a day and time were requested from the interviewees, and then a formal invitation was sent via the Microsoft team for an online interview session, as face-to-face interview was not possible due to the COVID-19 pandemic situation [27].

The research team interviewed 13 online gamers with the supposition that they are well aware of the in-game virtual consumption and can provide better insight into the phenomenon. The sample size has been determined by employing the principle of saturation method, which is commonly used in the qualitative research design [28, 29]. Each interview lasted for around 30 to 45 minutes. All respondents were paid RM 50 in appreciation of their time. Before starting the interview, the respondents were informed that the interviews were being recorded for transcription purposes. Summary profiles of the interview participants are given in table 1.

TABLE 1: Respondent’s profile.

No	Gender/Code	Age	Average spend/week	time	Occupation
1	M01	23	22 hours		Student
2	M02	18	17 hours		Student
3	M03	27	20 hours		Employed
4	M04	19	32 hours		Student
5	M05	23	40 hours		Student
6	M06	28	24 hours		Employed
7	F07	22	28 hours		Student
8	M08	27	35 hours		Employed
9	M09	20	45 hours		Student
10	M10	22	30 hours		Student
11	M11	28	25 hours		Employed
12	M12	19	42 hours		Student
13	M13	20	35 hours		Student

2.2. Finding

After analysing and interpreting the key elements of the interviews, we present the finding in the form of core themes that emerged from this activity.

2.2.1. Desire of Uniqueness

It was observed in most of the interviews that the desire of looking distinct and unique as compared to other players strongly motivated gamers to purchase different in-game virtual products. For example, one participant illustrated that,

“When any player enters the gaming world with some unusual and distinctive virtual stuff, it creates a wow effect in the community, and it’s also motivated me to purchase such new in-game products to look very unique from other players.” Respondent 2-(M02)

In addition, another player explained that:

“For me, it is very important to look different from other players, so I purchased such a virtual stuff which make me distinguish from other game players.” Respondent 7-(F01)

From the above narrative, Malaysian video game players look for such items which help to express their distinctiveness and individuality, just like in the real world where people prefer expensive and high-quality products and brands that are considered prestigious [30].

2.2.2. Desire of dominance

As most players immersed in the gaming world because they found games to be helpful in achieving their wish of dispositional dominance, a desire for high status, as compared to others which may not be possible for them in the real world. Williams and Tiedens [31] defines dominant behavior as the extent to which someone wants to be superior or have higher status than others in the group. One respondent stated:

“I want to be superior and dominant from others so that I can control other payers and gaming environment according to my own preferences.” Respondent 11-(M11)

In video games, most gamers try to customize their character with power and strong avatars usually known as protagonists. By using these characters or virtual identities in the video games feel that they are the dominant player in the community, and no one can dare to stand in front of them [32].

2.2.3. Desire of skilfulness

Lack of skills in the gaming world motivates the players to purchase in-game content which helps to gain some extra expertise and make a balance between the game challenges and player skills. An interviewee declared,

“There are some difficult tasks which we have to complete in very short time duration, so I purchased such resources which help to complete such a task very efficiently and timely” Respondent 3-(M03)

Another respondent illustrated that:

“I always want to be the best player in the gaming world so mostly I purchased such a content which help me to enhance my skills and overall performance in the game” Respondent 10-(M10)

In most the free-to-play video games only the basic feature available free of cost, and different advanced in-game virtual products are offered to premium players to gain more skills and tactics as compared to other players [3]. Additionally, after completing one task or challenge successfully, players will face a trickier and more difficult task in the next level than the previous one [33]. These virtual products grant some functional advantages to the players like powerful guns which fire faster as compared to freely available guns, advanced vehicles that perform better than existing ones which help the player to progress faster and a competitive advantage over other players [34].

2.2.4. Social interaction

Online video games also consider a great source of social interaction, social interactive behavior to build a friendship with other players by offering in-game virtual gifts and also the significant motive of the gamers to purchase in-game virtual content in most cases [35]. According to one participant:

“I usually purchase an in-game virtual gift to send other gamers, because I want to have friends and social connections within the gaming from all over the world.” Respondent 6 (M06)

Another respondent said:

“Sometimes, I purchased in-game virtual gifts to send my female friends and it’s also a good way to maintain in-game world relationships”. Respondent 13 (M13)

Different games allow gamers to purchase in-game virtual products and send them as a gift to their gamer friend or partner player which may make their gaming experience more favorable (Zhou et al., 2019). In the virtual gaming world, players can purchase

different kind of in-game virtual gifts like virtual flowers, birthday cards, food items, and vehicles [36].

2.2.5. Desire of freedom

In-game virtual purchasing also offers freedom and autonomy to the players to purchase the products of their own choice without any rustication which they usually face in real-world purchasing. As one respondent stated:

“I am doing in-game purchasing because here in the games I have freedom and liberty to purchase products of my own choice.” Respondent 1 (M01)

Another respondent suggested:

“Here I can purchase products of my desire” Respondent 8 (M08)

Prior studies also illustrated that people need to present their identity in front of others also evoke user intention in virtual world participation [37]. In the case of in-game purchasing, game players also engaged in such a kind of transaction just to enjoy their freedom and express their identity in the virtual game community which he or she free difficult in the real world due to social values and norms of the real-world community.

2.2.6. Social affiliation

When spending most of the time in the virtual gaming world, players develop a strong bond with their game partners and other community members. In video games, social affiliation means players want to affiliate with their gaming partners and prefer to be known in the community by their affiliated group. One respondent noted:

“I purchase in-game products because my friend circle in the game world purchased such content. By these in-game virtual products, I also look like them and maintain a sense of belonging in the group as well” Respondent 4 (M04).

Rofé and Lewin (1986) found that individuals develop any kind of affiliation when they perceive that their own capabilities are not sufficient and can gain more benefits by socially affectioning with others. Same is the case in video games, where gamers develop such kind of social affection with other players so that they can avail different kinds of monetary and non-monetary support and assistance in order to cope with the difficulties they face at any stage during the gameplay [38, 39].

2.2.7. Desire of enjoyment

Quest for enjoyment and fun in the virtual gaming world is considered a significant motive of the players to purchase in-game virtual products during the gameplay. Most people engage in this activity just to satisfy their intrinsic motive of joy and pleasure (Liao et al., 2019). Like, one of the participants said:

“For me, using more powerful and advanced in-game tolls is more exciting and enjoyable as a sample than the normal one, this motivates me more to acquire in-game content against real-world money.” Respondent 9 (M09).

Likewise, one responded stated:

“I think by using in-game products we have more fun in the gaming world”. Respondent 5 (M05).

Wulf, et al. [40] explored that enjoyment is considered the primary motive of people to play video games, and this experience of fun and excitement also encourages them to acquire advanced in-game virtual products to make the gaming world more enjoyable. Additionally, in Free-to-play video there is some kind of mismatch between the game tasks and player skills, these in-game virtual products help the players to complete the task more efficiently which also enhances the level of enjoyment for the player [41].

3. Conclusion and implications

In sum, the present study attempts to explore the motives of the young video gamers players related to in-game virtual purchasing, such insight is important to understand the value of the virtual good in the gaming environments and their impact on the real world. The find of the study heightened that the desire of dominance, skillfulness, uniqueness, enjoyment, freedom of choice, social interaction, and social affliction aspects play the most effective role to compel the players to purchase in-game virtual content during the video gameplay [42, 43].

Furthermore, there are some important theoretical and practical implications in this research. The current study is the first step to understanding the in-game virtual consumption behavior in the young generation. In-game purchasing is not only influenced by the game environment, but it is also aroused from real-world needs. This may indicate that players are not only using in-game virtual to enhance their gaming experience but rather for some players, in-game virtual consumption allows them to pursue an extension of their real-world self in the form of more power, the dominance to control others, and to have a more social relationship which they cannot find out in the real world.

Additionally, due to the increasing competition in the video game industry especially after the rise of the Free-to-play or freemium business model, revenue generation is a crucial factor for the game developers and publishers for continuous existence. Therefore, the finding of this study helps the game developers to better understand the need of the video game players which they want to accomplish by using in-game virtual products. By employing these strategies, they can better understand the virtual game purchase behavior of the players and can achieve adequate revenue by selling these virtual products.

3.1. Limitations and suggestions for future research

Although the study provides good insight into the topic, some limitations still exist which may offer new avenues for future research. First, as the nature of the research is exploratory and data collection was done through in-depth interviews with a limited number of players, consequently, in the future, a quantitative study will be welcomed to address the generalizability of the results [44, 45]. Secondly, the participants for this study were only recruited from Malaysia [46, 47], therefore the findings may possibly have some cultural specification orientation. So, future studies should consider data from other cultures to better understand this phenomenon [48].

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