Analysis of Influencing Factors of Online Game Consumption Behavior

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Abstract:

This paper delves into the conceptual definition of online game consumption behaviour and its influencing factors. This paper first defines online game consumption behaviour through a literature review. It emphasizes its complexity as a particular consumption behaviour based on virtual goods and services with psychological and behavioural interaction. Subsequently, this paper analyzes in detail the multiple factors influencing online game consumption behaviour from four dimensions: player factors, game design factors, technology and platform factors, and external environment factors. To further validate the effectiveness of the theoretical framework, this paper takes "Honor of Kings" as a case study. Specifically, it analyzes how each factor interacts with each other in the actual operation and jointly shapes the player's consumption behaviour. Through the case study, this paper demonstrates how Honor of Kings accurately grasps players' psychological needs, uses game design strategies to induce Consumption, and promotes the continuous growth of consumption behaviour through technical and platform support and regulation of external environmental factors. Finally, the paper summarizes the main conclusions, emphasizing the complexity of the multidimensional and multifactorial intertwining of online game consumption behaviour and the interactions of each factor in actual operation.

Keywords: Online Game Consumption Behavior; Influencing Factors; Honor of Kings

1. Introduction

With the rapid development of Internet technology, online games, as an emerging form of cultural entertainment, have become a widely popular pastime worldwide. As an extraordinary consumption phenomenon, the consumption behaviour of online games involves individual players' psychological and behavioural motives. Game design, technical support and external environmental factors. Understanding how these factors affect players' consumption behaviour is of great theoretical significance and practical value for game developers, operators and related policymakers. Therefore, this paper aims to deeply explore the conceptual definition and influencing

factors of online game consumption behaviour through a literature review and case study and precisely analyze the role mechanism of these factors in the actual situation by taking Honor of the King as an example, to provide valuable references for the research and practice in related fields.

2. Literature review

2.1 Conceptual definition of online game Consumption behaviour

As a unique online cultural product, online games' behaviour differs from traditional commodity consumption. According to Engel, Kollat & Blackwell's (1968) definition of consumer behaviour, consumer behaviour includes the psychological activities of consumers and the process of purchase decision-making; the former refers to the psychological activities of consumers before choosing, purchasing or using a product or service, and the latter is the process of implementing these psychological activities into actual consumer behaviour. This definition considers both the psychological dimension and the transformation process of actual purchasing behaviour, behaviours a more comprehensive overview of the whole consumer behaviour process. Zaltman and Wallendorfr (1979) similarly argue that consumer behaviour is all individuals' or organizations' relevant activities and psychological decision-making processes when purchasing products or services. However, the difference is that this definition considers "purchase" as the final expression of consumer behaviour, which is slightly one-sided and fails to reflect the psychological activities before purchase fully.

In contrast, Morgan Amy J's (1993) definition is more explanatory; he believes that consumer behaviour refers to the process of choosing, purchasing, using and disposing of products or services to satisfy the needs of consumers, accompanied by psychological, emotional and physical behaviours. This definition is more comprehensive, considering the interactive process of psychology and behaviour as an essential part of consumer behaviour and avoiding the limitation of simplifying consumer behaviour to purchase behaviour. In online games, Sheng and Zheng (2014) pointed out that online Consumption revolves around information, and consumers are both users and producers of information. Online game consumption behaviour manifests itself in players' information acquisition, interaction, and purchase of virtual items inside and outside the game. Zhang et al.(2015) further classify the consumption behaviour of online games into two categories: first, the transaction behaviour between developers and users, such as game developers and operators providing virtual props or services to users, and second, the transaction behaviour between users, such as players buying and selling virtual items or substitute coaching services through third-party platforms. This two-tier market structure reflects the complexity of online game consumption behaviour.

In summary, online game consumption behaviour has the following characteristics: first, it is a consumption behaviour based on virtual goods and services, which is different from traditional physical Consumption; second, online game consumption behaviour involves psychological activities, behavioural tendencies and actual purchasing behaviours; and lastly, online game consumption behaviour includes both money consumption and time consumption and unfolds in two markets, i.e., the market between the developer/operator and the users, and the virtual goods trading market between users. Therefore, this paper argues that online game consumption behaviour refers to players' psychological activities and behavioural tendencies before consuming online game products or services and transforming such psychological activities and behavioural tendencies into actual actions. Online game consumption behaviour includes money and time consumption, and its psychological activities mainly manifest in the player's attitude and preference towards the game and related virtual goods. At the same time, the behavioural tendency is how the player implements this preference into consumption behaviour.

2.2 Analysis of Influencing Factors of Online Game Consumption Behavior

Online game consumption behaviour is a multidimensional, multi-factor, intertwined complex phenomenon. In this ecosystem, players' consumption behaviour is not only driven by personal intrinsic motivation but also jointly influenced by game design, technology and platform, as well as the external environment, as shown in Figure 1.
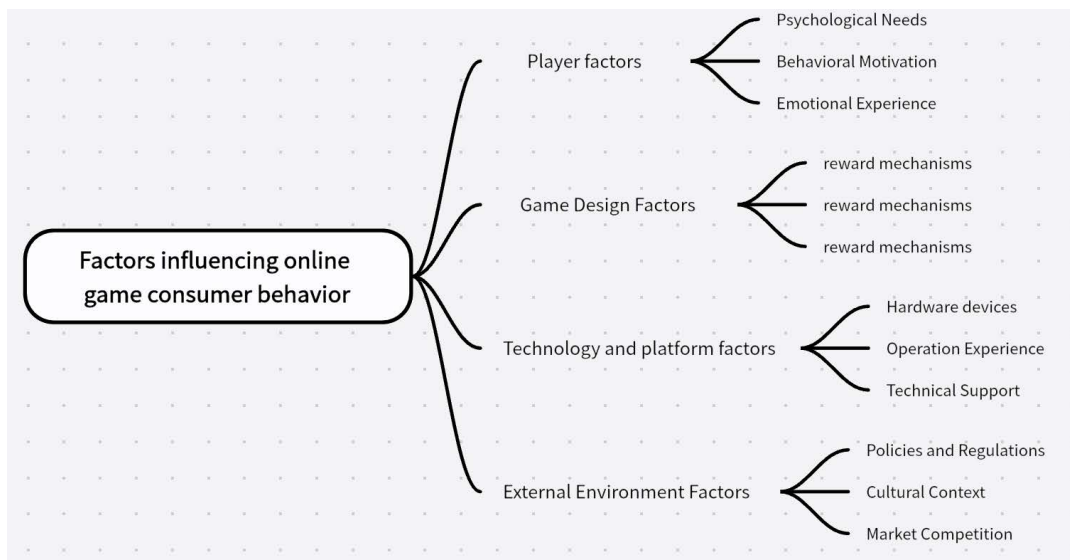
Figure 1 Influencing Factors of Online Game Consumption Behavior

2.2.1 Player Factors

Players are pivotal in the online gaming ecosystem, where their psychological desires, behavioural incentives, and emotional encounters heavily influence their spending habits. This segment underscores the intrinsic drivers of individual players. As Zhang noted in 2008, the impetus for online game consumption stems from desire, while its fulfilment lies in the utility derived. Players' desires encompass the game itself and the virtual goods within it. In this context, utility signifies how effectively online games cater to players' psychological and emotional needs. Players acquire virtual items primarily to gain control, accomplishment, and psychological gratification. Research conducted by Hao et al.(2018) highlights that players' motivations are intertwined with feelings of achievement, avatar identification, and immersion. Through acquiring virtual items, players can boost their gameplay performance and strengthen their character identification, enhancing their sense of belonging and engagement in the virtual realm. Pursuing achievement is the primary force driving players to sustain their Consumption.Moreover, the emotional fulfilment players derive from these virtual items is a crucial factor motivating their spending behaviour. Yu and Xue's (2018) study suggests that perceived value, encompassing functional, social, and emotional aspects, significantly shapes players' purchase intentions. Virtual item purchases elevate players' gameplay performance and provide emotionally rewarding experiences through social interactions. Consequently, players' psychological needs and behavioural motivations directly influence their consumption choices in online games, with emotional experiences further reinforcing this behaviour by fulfilling players' emotional requirements.

2.2.2 Game Design Factors

The Game design has a significant impact on how players spend money. CriticalReward systems, achievements, and rare virtual items are key game design factors affecting spending. Hsu and Lu (2006) said fun and rewarding games make players want to spend more. Players feel good when they get rewards in the game, which makes them want to spend more. Hao and Lu (2018) explained that achievements are essential too. They let players get special items and new features, which makes them feel good and vital in the game community. Wang and Xu (2017) talked about how rare virtual items motivate players because there aren't many of them, and they're essential for trading in the game.Wu (2019) used the Technology Acceptance Model (TAM) to examine how game quality, user experience, and social interaction affect player attitudes and spending. The results show that these things make the game more useful and easier to use, which makes players want to spend more.So, game design uses these factors to get players interested and keep them spending. This shows how important good design is for shaping how people play and spend in games.

2.2.3 Technology and Platform Factors

Technology and platform factors include hardware equipment, operation experience and technical support, which do not directly promote Consumption but indirectly prompt players to consume by improving their gaming experience. Morahan and Schumacher's (2000) research shows that the configuration of hardware equipment directly impacts the player's gaming experience, and the higher the configuration, the smoother the gaming experience and the stronger the player's immersion is, thus

increasing the willingness to spend. High-performance devices enable players to enjoy a softer and more immersive experience in the game, increasing their desire to invest in virtual goods. In addition, Wang (2003) pointed out that computer efficacy is closely related to players' perceived ease of use and perceived usefulness and that games with easy operation and smooth experience are more likely to motivate players to consume virtual goods; thus, the operation experience is a crucial foundation for player retention and continued Consumption. Wu (2020) added four factors, perceived control, path dependence, remote perception, and interactivity, when integrating the TAM model and psychological theory, and found that they can all influence game user stickiness. Although these factors do not directly drive Consumption, they indirectly enhance players' willingness to consume and loyalty by improving their immersion and satisfaction. Meanwhile, technical support, especially server stability, game updates and upgrades, guarantees that players continue to receive a smooth entertainment experience, ensuring the fairness and long-term appeal of the game. These factors become critical indirect forces supporting consumption behaviour by enhancing players' immersion.

2.2.4 External Environmental Factors

External environmental factors, including policies and regulations, cultural background and market competition, play an essential role in regulating players' consumption behaviour. Policies and legal rules are particularly significant in restricting minors' consumption. Yu and Xue (2018) point out that the government regulates the consumption behaviour of minors through means such as consumption quotas and time limits, effectively reducing the phenomenon of overconsumption. Cultural context also significantly impacts players' consumption behaviour. Choi and Kim (2004) showed that social competition and virtual achievements drive consumption motivation in different cultures, where players enhance their social status in the game through Consumption. Meanwhile, market competition plays a vital role in the online game industry, and fierce market competition drives different games to launch promotions and discounts to push players further to consume (Wu,2019). Game developers consistently refine their designs to draw a larger audience and distinguish themselves. Meanwhile, external environmental elements control players' spending habits through policy guidelines, cultural norms, and market rivalry. These external forces are crucial in shaping players' consumption patterns.

3. Case Study

This section delves into "Honor of Kings," examining how specific game design factors play a critical role in shaping player spending habits, as depicted in Figure 2.
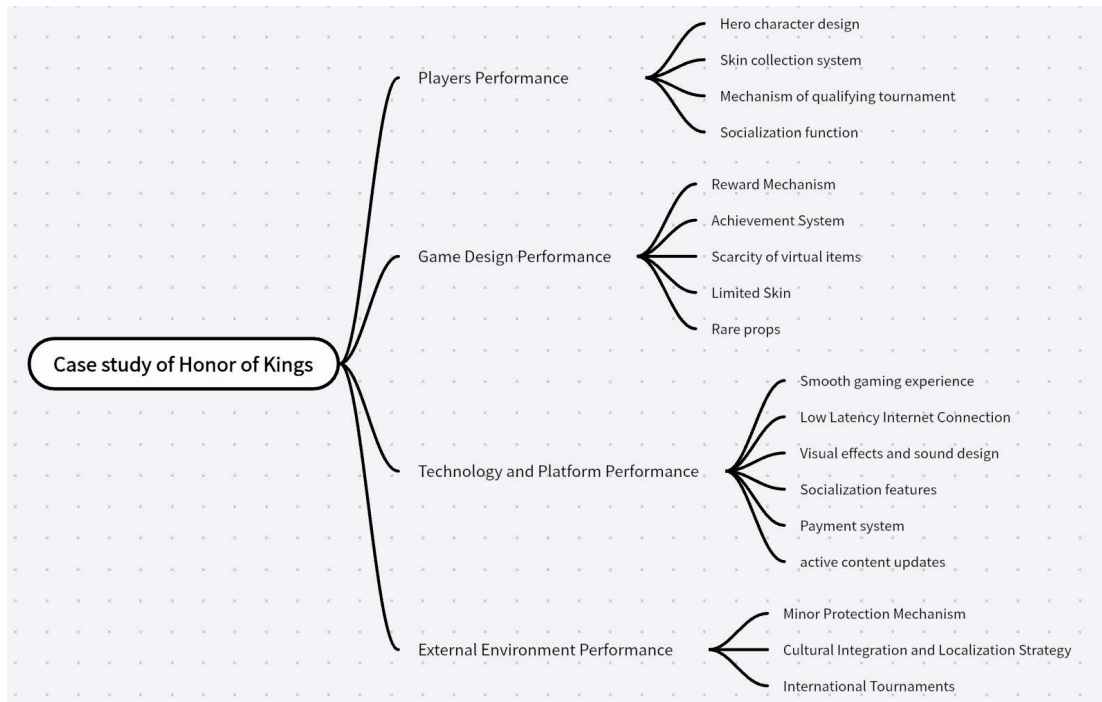
Figure 2 Case of "Honor of Kings"

3.1 The Pivotal Role of Players' Psychological Needs in Driving Consumption

The main reason why the game "Honor of Kings" is so hot is because it understands what players want. You see those hero character designs, skin collections, and ranked matches in the game; in fact, all of them are to meet the needs of players who want to have a sense of achievement, find a sense of belonging and show their personality. Players buy skins and play ranked matches to raise their level, not only to be more potent in the game but, more importantly, to show off their style and attitude to look better in their circle of friends. Coupled with the fact that you can play against and team up with your friends in the game, this interaction also makes the relationship between players deeper; naturally, they are more willing to spend money. Put bluntly, in Honor of Kings, the players' inner thoughts and needs are the key to making them willing to spend money.

3.2 Examining Game Design Tactics that Spur Consumption

The game design of Honor of Kings is brilliant; it uses the tactics of rewards, achievements and rare items to make players more impulsive to spend. For example, it will regularly introduce some limited skins, season reward skins, and rare props that can only be obtained by lucky draws, all designed to satisfy players' desire to collect and their competitive mindset. Coupled with that achievement system, players will feel a sense of accomplishment after completing some tasks, which makes them want to keep playing and spending even more. Moreover, some things in the game are limited time or hard to get, such as certain skins or heroes, so players will feel they are more precious and more willing to spend money on them. Overall, all these design tools are designed to make players more willing to spend money, and game design is straightforward.

3.3 Indirect Promotion of Consumption Behavior by Technology and Platform Support

The game "King of Glory" has improved technology to make players' play more enjoyable. The game is smooth; the Internet is not slow, and no matter what the device can play, how great it feels! Coupled with the excellent picture and sound effects, people are immediately immersed in the play and can not stop. Moreover, social features, convenient payment methods, and frequently updated activity content make spending money more accessible and more willing. To put it bluntly, although technology and platforms are not the direct reason for people to spend money, they bring the game experience to the next level and naturally make people more willing to pay.

3.4 The moderating effect of external environment on consumption behaviour

In the process of globalization, Glory of Kings also faces challenges from external environmental factors such as policies and regulations, cultural background and market competition. In response to the laws and regulations of different regions, the game has made corresponding adjustments, such as implementing the protection mechanism for minors, which not only meets the regulatory requirements but also maintains the healthy image of the game. At the same time, the game focuses on cultural integration and localization strategies during the promotion process, which reduces the phenomenon of cultural discounts and enhances the acceptance of global players. Amid fierce market competition, Glory of Kings has enhanced its brand influence and user stickiness by continuously innovating game content and organizing international tournaments, further driving the growth of consumer behaviour. Although not directly affecting Consumption, these external factors have significantly impacted the game's long-term development and sustainability of consumption behaviour.

In summary, Honor of Kings, as a typical case of the analysis of factors influencing the consumption behaviour of online games, not only verifies the theoretical framework proposed in the previous section but also demonstrates, through specific practice, how the factors interact with each other in actual operation and jointly shape the consumption behaviour of players. This analysis not only deepens our understanding of the consumption mechanism of online games but also provides valuable strategic insights for game developers and operators.

4. Conclusion

Through the in-depth analysis of the conceptual definition and influencing factors of online game consumption behaviour, as well as the empirical study of Honor of Kings as a case study, this paper draws the following main conclusions:

First, online game consumption is a particular behaviour based on virtual goods and services, unique from traditional physical Consumption. It involves players' psychological activities, behavioural tendencies and purchasing behaviour and includes money and time consumption. This consumption behaviour unfolds in two markets, i.e., the market between developers/operators and users and the virtual goods trading market between users, reflecting

its complexity and diversity.

Second, players' consumption behaviour is jointly influenced by various factors. Player factors, including psychological needs, behavioural motives and emotional experiences, are the inner core of driving consumption behaviour. Game design factors, such as the reward mechanism, achievement system and the scarcity of virtual items, directly induce players' consumption behaviour. Technology and platform factors, although not directly driving Consumption, indirectly promote consumption behaviour by improving players' gaming experience. External environmental factors, including policies and regulations, cultural background and market competition, play an essential role in regulating players' consumption behaviour.

Finally, through the case study of Honor of Kings, we verify the validity of the above theoretical framework and specifically show how the factors interact with each other in actual operations to shape players' consumption behaviour jointly. This analysis deepens our understanding of the consumption mechanism of online games but also provides valuable strategic insights for game developers and operators, i.e., they should comprehensively consider various factors and formulate targeted marketing strategies to enhance players' consumption experience and satisfaction.

In summary, this paper's research helps deepen the understanding of online game consumption behaviour and provides a valuable reference for research and practice in related fields. In the future, with the continuous development of the online game industry, we expect more research on online game consumption behaviour to emerge to promote this field's constant progress.

5. Valuation

The research in this dissertation has significant value at both the theoretical and practical levels. Theoretically, this dissertation enriches the existing research on consumer behaviour and online games by systematically sorting out and analyzing the conceptual definitions of online game consumption behaviour and its influencing factors. By integrating player factors, game design factors, technology and platform factors, and external environment factors, this dissertation constructs a comprehensive analytical framework that provides solid theoretical support for understanding the complexity and multidimensionality of online game consumption behaviour. This framework makes it easier for scholars to study how online games are consumed. It gives a new way to look at future research. It's helpful for game makers, those who run games, and

people who make policies. Game makers can use it to improve their games and marketing based on how players feel. This can make players happier and more loyal. It can also help those who run games improve the gaming experience, leading to more people wanting to spend money. For policymakers, this study shows what outside factors affect gaming spending. This can help them manage the market and protect consumers. In society, this research can also help us understand and stop gaming addiction in young people. Overall, this research is valuable in many ways. It gives new ideas to scholars and guidance to people in the industry. We hope to see more progress in this field.

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