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APPLYING THE AHP METHOD TO EXAMINE FACTORS INFLUENCING PLAYERS' INTENTION TO USE ONLINE GAMES

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Abstract

With the rapid development of online gaming technology and the growing demand from players, online gaming has firmly established itself as one of the mainstream segments in the global gaming market, holding significant market potential. In this context, this study aims to explore the factors influencing players' intention to use online games. The study begins by reviewing relevant factors from previous research and incorporates these into an AHP hierarchical structure, designing a questionnaire that is then distributed to online game players for data collection, followed by AHP hierarchical analysis. A total of 115 questionnaires were collected, of which 13 were invalid, resulting in 102 valid responses. The findings indicate that among the three main dimensions influencing players' intention to use-game design, information systems and service quality, and game reputation-game design is the most valued dimension by online game players. In the game design dimension, entertainment is the most important factor for players; in the information systems and service quality dimension, system quality is considered the most significant; and in the game reputation dimension, peer influence is seen as the key factor. In terms

of the overall ranking of ten factors, system quality is the most important factor for players, followed by information quality, entertainment, user interface design, and service quality.

Key words: AHP Hierarchical Analysis, Game Design, Entertainment, Intention to Use

Introduction

With the rapid flow of information today, the gaming and entertainment industry has led to the emergence of various international largescale online gaming e-sports competitions worldwide. Taiwan has also developed a professional e-sports league. Online games have evolved from traditional role-playing games (RPGs) focused on monster hunting and leveling up to the current most popular Massively Multiplayer Online Role-Playing Games (MMORPGs). The entertainment habits of game players have gradually changed.

Taiwan's online gaming market experiences peak seasons during summer and winter vacations, driving related consumer markets such as animated films, graphic design, comics, gaming entertainment, toy models, and music composition. In the fiercely competitive online gaming industry, how to enhance player retention has become one of the most critical management issues for gaming companies. Apart from improving game quality and features, companies have begun to explore how to provide a social platform that meets players' social needs. By fostering team interactions and community engagement within the game, they aim to build player loyalty.

Although the past few years have been affected by the pandemic, the world has gradually returned to normal post-pandemic. However, digital transformation has become an inevitable trend, with industries such as cryptocurrency, electronic payments, and e-commerce emerging rapidly. The gaming industry has also grown significantly within this wave (SinoPac Securities, 2023). The global pursuit of Non-Fungible Tokens (NFTs) and the Metaverse by users and media have further fueled the Metaverse trend. Liu (2022) cited a forecast from the consulting firm Plus Eight Star, which estimated that the first-quarter global market transaction volume of Game Finance (GameFi) reached $6.3 billion, with a peak daily trading volume exceeding $200 million and a total of approximately 1.2 million players.

There are numerous types of online games, each with varying levels of success. Increasingly, players earn revenue by selling in-game equipment or virtual items. Whether through computer-based online games or mobile and

tablet-based games, many "play-toearn" games offer real monetary rewards rather than virtual currency. Currently, the most discussed topics in online gaming are the diversity of game choices and the ability to earn money while playing. Therefore, this study aims to explore the factors influencing players' willingness to use online games and analyze their relative importance. Many previous studies have explored factors influencing online game player motivation and willingness to play, providing recommendations to the gaming industry.

However, given the constraints of limited resources, companies cannot invest in all possible aspects. Therefore, this study consolidates factors identified by past research that influence players' willingness to engage in online gaming. It analyzes the relative importance rankings of these factors based on players' perspectives and provides recommendations for industry stakeholders. According to Saaty (1980), the Analytic Hierarchy Process (AHP) can be used for prioritization and decision-making. Hence, this study adopts the AHP method as the primary research approach to analyze the weight rankings of factors affecting the continuous usage of online games among players.

Literature Review

Analytic Hierarchy Process (AHP)

In 1971, Professor Saaty from the University of Pittsburgh developed a decision-making method applicable to uncertain situations with multiple evaluation criteria, known as the Analytic Hierarchy Process (AHP). In 1980, Saaty compiled this theory into a book and published it. Since then, AHP has been widely applied in international academic journals, demonstrating its broad application scope and practical significance. Many studies have utilized AHP as a research tool, covering a wide range of topics, from evaluating complex cases (Al-Harbi, 2001) to supplier selection (Raut, 2014). This demonstrates that AHP is a highly suitable tool for assessing multiple decision-making factors and selecting optimal solutions.

AHP is commonly used for analyzing and ranking key factors. For example, recent studies on social media, e-commerce, and mobile applications have employed AHP. Liu and Kwon (2007) used AHP to study critical factors for e-commerce websites, identifying "page system" and "relevant information" as the two most important factors. Hsu (2018) applied AHP to explore key factors influencing consumer engagement with Facebook advertisements, concluding that video advertisements were the most significant. Li and Ji (2018) analyzed key factors affecting consumers' choices of OTT video service platforms, ranking importance in the following order: "product," "website design," "service," "company," and "function." In addition to ranking, AHP is also used for selecting between multiple options based on weight analysis. For example, Tseng and Lee (1998) ap-

plied AHP to evaluate design project decision-making, assigning weights such as customer satisfaction (0.383), delivery time (0.297), cost (0.203), and product maturity (0.117) to determine the best solution, ultimately selecting option two.

This study applies AHP to explore factors influencing the continuous usage intentions of online game players. Previous studies utilizing AHP in online gaming research include Lo and Wen (2010), who examined design decision-making in MMORPGs and found that diverse character skill sets were the most valued design feature among players. Hou (2012) also analyzed key success factors for online game company operations in the same year, concluding that after-sales service played the most significant role in determining success. Tsai et al. (2016) explored key factors influencing players' hardware purchasing decisions, revealing that gaming enthusiasts prioritized graphics processing capability, followed by processor performance and cooling functionality. Yuan et al. (2018) initiated research into in-game consumer behavior, identifying the enhancement capabilities of virtual items as the most influential factor in players' purchasing decisions.

Overview of Game Industry Development

Due to the global outbreak of the pandemic in 2020, digital transformation was accelerated, leading to the rise of the "stay-at-home economy." As people sought to avoid outdoor activities and physical contact, new lifestyles such as working from home and remote learning emerged. In addition to the rapid adoption of industries like e-commerce, electronic payments, and cryptocurrencies, the gaming industry also experienced significant growth under this trend. The video game market experienced significant growth of 27.12% from 2019 to 2021, with global revenue reaching USD 192.7 billion, setting a new all-time high. Although a slight decline was observed in 2022 as the pandemic eased, global gaming revenue still reached USD 182.9 billion. In 2023, the industry showed signs of recovery, with global revenue reaching USD 184.0 billion, marking a modest increase.

According to Newzoo's 2024 report, the number of paying gamers worldwide has reached 1.5 billion in 2024, and is expected to increase to 1.67 billion by 2027, with more players spending on gaming software every year. The United States and China made up 49% of global game spending, while the Middle East and Africa contributed 4.7%.

The Asia-Pacific region accounted for 46%, making it the largest gaming market worldwide. Moreover, Data.ai (2023) and the global mobile gaming market report for the first half of 2023, Taiwan has surpassed Germany to become the fifth-largest mobile gaming market in the world. In the previous

quarter, Taiwan's mobile game revenue increased by 7% year-over-year, reaching nearly USD 700 million. Among the top ten highest-grossing mobile games in Taiwan, the most popular genres are casual games, MMORPGs, and competitive games, indicating that players prefer games that are easy to pick up and familiar. This highlights the vast business potential of Taiwan's mobile gaming market.

The growing popularity of games has made the online gaming market highly diverse and intensely competitive. To generate profits, online gaming companies have introduced subscriptionbased payment models, where players pay a fee to access the game for a certain period of time. In addition, one of the commonly used business models in online games is the free-to-play model, which is a form of freemium applied to gaming. Players can access the online gaming environment for free, but they need to purchase various in-game items or enhancements to strengthen their virtual characters in order to unlock special features and enjoy a better gaming experience.

In recent years, with the growing popularity of online games, an increasing number of scholars have focused on users' willingness to participate in such games and the factors that influence their behaviour. Overall, the intention to use online games is a complex behaviour shaped by the interplay of psychological motivation, social influence, and technology acceptance.

Numerous studies have explored related issues in online gaming. For example, Tondello et al. (2019) all indicated that players' participation is significantly affected by factors such as game design, interactivity, and entertainment value. In addition, as a technology-driven product, online games are also evaluated based on their underlying information systems, which significantly influence users' intention to continue playing. Key factors include information quality, system quality, and maintenance services. For instance, Hou et al. (2018) found a positive correlation between players' perceived quality of game information and their intention to continue using the game.

On the other hand, online games exhibit significant network externalities, where player interaction, peer influence, and game-related word of mouth can also affect participation behaviour. Players often choose to engage based on their preferences for specific game genres. When game design aligns with these preferences, it can lead to a higher level of immersion or even addiction, thereby enhancing their intention to continue playing. As a result, whether game design meets user needs has become a critical consideration for developers in the online gaming industry.

Keraf, et al. (2025) applied the Expectation Confirmation Model (ECM) to investigate key factors influencing players' continuance intention to

play online games. The study found that flow experience and perceived enjoyment had significant positive effects on continuance intention. Additionally, social influence was identified as an important factor, suggesting that players are more likely to continue engaging with games that are popular within their social circles.

Zhang et al. (2025) found that immersion-based gamification significantly enhances users' perceived value and behavioural intentions, emphasizing that aligning gamified experiences with task and technology fit can effectively improve consumer engagement. Moreover, Costa, et al. (2024) explored how artificial intelligence (AI) can be integrated with gamification to enhance user engagement through personalized interactions and dynamic challenges, thereby promoting the adoption of new technologies. Their study proposed a mathematical model for adaptive and predictive gamification design, emphasizing AI's potential in real-time adjustment of game mechanisms, delivery of personalized feedback, and prediction of user behaviour.

Some research has highlighted the complex relationship between immersion and user behaviour in digital environments. Slater and Sanchez-Vives (2024) emphasized that an excessive sense of presence in virtual reality (VR) can lead to "virtual-reality confusion", affecting users' perception of reality and subsequently influencing their behavioural choices. Similarly, Li and Zhang (2024) explored how emotional factors, such as perceived coolness and joy, drive mobile game players' in-game purchase intentions. Their findings revealed that immersion plays a mediating role between perceived coolness, enjoyment, and behavioural intention, suggesting that emotional responses and design features significantly shape user engagement and purchasing behaviour in gamified environments.

In addition, Lee, et al. (2025) examined the behavioural consequences of game addiction and found that while it significantly enhances user loyalty and in-app purchase intentions, it can simultaneously weaken the relationship between satisfaction and loyalty, indicating potential long-term drawbacks. Similarly, Lum and Chang (2024) highlighted the importance of social presence in digital environments such as Facebook Live, showing that elements like immediacy and sociability significantly promote user interaction and participation—insights that are highly relevant to multiplayer online gaming contexts.

Through a review of the literature, this study synthesizes the insights proposed by previous scholars and reveals that players place significant value on aspects of game design such as entertainment and interactivity. As online games are inherently products of technological advancement, users not only care about game design but also emphasize the quality of information systems, including information quality,

system quality, and maintenance services. Therefore, whether the game design aligns with players' preferences is a critical factor in game development. Based on the above literature, this study categorizes the factors influencing users' intention to engage in online games into three main dimensions: game design, information systems and service quality, and game-related word of mouth.

Research Methodology

This study primarily explores the factors that influence online game players' intention to use, as well as the players' perspectives on the relative importance of these factors. Therefore, the Analytic Hierarchy Process (AHP) is adopted as the main research method. A questionnaire survey is conducted among online game players to obtain the weights of the criteria. The AHP evaluation framework in this study is established through a literature review, referencing relevant studies and compiling all the factors that affect players' willingness to use online games.

The framework consists of three main criteria: game design, Information system and service quality, and Game reputation. Game design includes story structure, user interface, 'entertainment, and interactivity; information system and service quality include system quality, information quality, and service quality; game reputation includes peer Influence, eWOM, and brand awareness. The following figure 3-1 illustrates the AHP hierarchical analysis framework of this study.

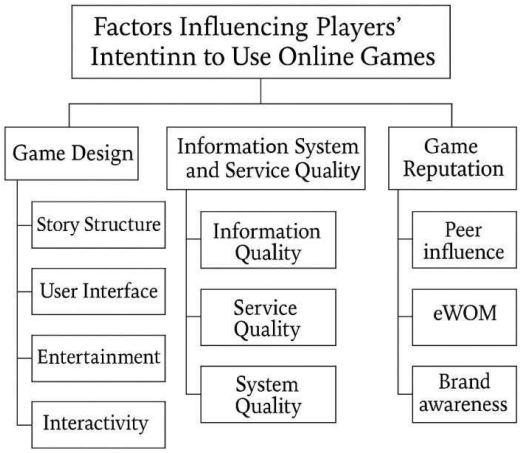

Figure 3-1. The AHP hierarchical analysis framework of this study

Operational Definitions

Game design.

Spors et al. (2024) noted that game design significantly shapes the ecological dynamics of gaming environments by influencing how players perceive and interact with virtual nature. Table 3-2 presents the operational definitions of the sub-criteria under game design. In terms of game design, story structure is defined as "the content progression of the game, as well as its specific style and narrative background". User interface refers to "the sound effects, graphics, and character appearance design in online games that provide players with visual and auditory satisfaction, as well as whether the communication interface used to issue commands during gameplay allows players to easily learn the game" (Chen,

1994; Crawford, 2003; Chen, 2011). Entertainment refers to “the extent to which the game content provides players with a high level of enjoyment, a sense of achievement, and feelings of comfort and pleasure” (Moon & Kim, 2001). Interactivity refers to “the mutual influence of behaviors between players, as well as between players and the online game itself” (Voiskounsky et al., 2004).

Information Systems and Service Quality.

System quality is defined as “the ease of use, efficiency, and error rate of the game system, as well as its integration capability, flexibility, and completeness” (DeLone & McLean, 2003). Information Quality is defined as "the accuracy, relevance, timeliness, clarity, usefulness, currency, and reliability of the information provided within the game and on the official website" (Bailey & Pearson, 1983; Rai et al., 2002). Service quality is defined as
“the capability of services provided by the online game, including game masters, customer service staff, and the official game website, such as the efficiency and effectiveness of problem resolution during system crashes” (Parasuraman et al., 1988; Chen, 2011).

Game Reputation.

Peer Influence is defined as "the attitudes of a player’s classmates and friends toward the online game being used, as well as whether they are also players of the same online game" (Savin-Williams & Berndt, 1990; Chen, 2011). Electronic Word-of-Mouth (eWOM) is defined as “sharing product and information experiences through the Internet as a communication channel” (Park et al., 2011). Brand Awareness is defined as “the extent to which consumers can recognize or recall a product and the prominence of the brand name in the minds of consumers” (Keller, 1993).

Questionnaire Design and Survey

After establishing the hierarchical structure and defining the operational definitions, a questionnaire survey was conducted. Respondents were asked to assess the relative importance between pairs of criteria. Saaty (1980) recommended using a 1-to- 9 scale, where 1 represents “extremely unimportant” and 9 represents “extremely important”. In addition, the questionnaire included detailed guidance and instructions for respondents. In this study, questionnaires were distributed using a random sampling method. The target respondents were online game players, and a total of 108 valid responses were collected. Based on the pairwise comparison results obtained from the questionnaire survey, pairwise comparison matrices (A) were established for each level of the hierarchy. The Analytic Hierarchy Process (AHP) recommends using a ratio scale as the standard, with comparison values ranging from 1/9, 1/8, ..., 1, 2, 3, ..., 8, to 9. Smaller values indicate lower importance, while larger values

indicate higher importance. The collected results were represented using mathematical matrices as follows.

$$A = \begin{bmatrix} a_{11} & a_{12} & \cdots & a_{1n} \\ a_{21} & a_{22} & \cdots & a_{2n} \\ \vdots & \vdots & \ddots & \vdots \\ a_{n1} & a_{n2} & \cdots & a_{nn} \end{bmatrix} = \begin{bmatrix} w_1/w_1 & w_1/w_2 & \cdots & w_1/w_n \\ w_2/w_1 & w_2/w_2 & \cdots & w_2/w_n \\ \vdots & \vdots & \ddots & \vdots \\ w_n/w_1 & w_n/w_2 & \cdots & w_n/w_n \end{bmatrix}$$

After establishing the pairwise comparison matrix, the vector values (also known as eigenvectors) must be calculated to determine the relative weights among the elements. Finally, a consistency check is performed to verify whether the analysis results are logically sound. Only if the results pass the consistency check can the respondent's judgments be considered consistent; otherwise, the questionnaire is deemed invalid. Therefore, Saaty recommends using the Consistency Index (C.I.) and Consistency Ratio (C.R.) to evaluate the consistency of the pairwise comparison matrix.

Research Results

This study used Expert Choice as the statistical analysis software for conducting the Analytic Hierarchy Process (AHP). The analysis results are summarized in this chapter. A total of 115 questionnaires were collected, among which 13 were invalid, resulting in 102 valid responses.

Demographic Data

Among the 102 valid questionnaires, 61 respondents were male (59.8%) and 41 were female (39.2%). In terms of age distribution, 16 respondents (15.7%) were aged 20 or below, 71 respondents (70%) were between 21 and 30 years old, and 15 respondents (14.7%) were between 31 and 40 years old. There were no respondents over the age of 40. As for educational background, 2 respondents (2%) had a junior high school education or below, 16 (15.7%) had a high school or vocational school education, 5 (5%) had a junior college education, 57 (56.9%) held a university degree, and 23 (22.5%) had a graduate degree or above.

Analysis Of Relative Weights Of Main Dimensions

The first level of the AHP hierarchy represents the overall goal. In this study, the main objective is to explore the factors influencing online game players' willingness to continue using the game; therefore, this level does not require analysis. At the second level, three key dimensions related to players' continued use are considered and analyzed to assess their relative importance, effectiveness, and consistency. The primary evaluation dimensions established in this study are Game Design, Information Systems and Service Quality, and Game Reputation. First, the geometric means of the pairwise comparisons are calculated to form

the pairwise comparison matrix. Then, the pairwise comparison matrix and the eigenvector are computed. The geometric mean of each row is calculated, and each value is then divided by the total sum of the geometric means. The resulting vector represents the priority vector (weights), which indicates the relative weight of each factor in comparison to the others.

In the AHP hierarchical structure of this study, the main dimensions influencing online game players' willingness to use include game design, information systems and service quality, and game reputation. As the results showed, game design accounts for 40.7%, information systems and service quality account for 35.7%, and game reputation accounts for 35.1%. Among the main dimensions, game design is the most important factor for online game players, followed by information systems and service quality. In this dimension, the C.R. and C.I. values are both ≤ 0.1, indicating that the analysis results have good consistency. In the information systems and service quality dimension of the AHP hierarchy, the components include system quality, information quality, and service quality. The pairwise comparison matrix is shown, where system quality accounts for 38.6%, information quality accounts for 33%, and service quality accounts for 28.4%. In this dimension, system quality is the most important factor for online game players, followed by information quality. The C.R. and C.I. values are both ≤ 0.1, indicating that the analysis results exhibit good consistency. In the game reputation dimension of the AHP hierarchy, the components include peer influence, electronic word-of-mouth (eWOM), and Brand Awareness. The analysis results show that peer influence accounts for 38.7%, eWOM accounts for 32.8%, and brand awareness accounts for 28.5%. In this dimension, peer influence is the most important factor for online game players, followed by eWOM. The C.R. and C.I. values are both ≤ 0.1, indicating that the analysis results demonstrate good consistency.

Overall Hierarchical Factor Relative Weight Analysis

This study calculates the weight values of factors at each level, and multiplies the weight of the previous level by the relative weight of each element at the current level to show the importance of the elements at each level in the overall evaluation. As shown in Table 4-1, among the 10 factors influencing online game players' usage, system quality is the most important, followed by information quality. The next factors, in order of importance, are entertainment; special effects interface design, and service quality.

Data Results & Analysis

After completing the hierarchical weight calculations for all the evaluated factors, the relative importance of the third-level evaluation indicators was ranked. This study summarizes the

Table 4-1 Overall level evaluation results

Main Dimension	Weight	Rank	Sub-Dimension	Weight	Overall Weight	Overall Rank
Game Design	0.407	1	Story Structure	0.249	0.1013	6
			User Interface	0.261	0.1062	4
			Entertainment	0.268	0.1091	3
			Interactivity	0.222	0.0900	8
Information System & Service Quality	0.357	2	System Quality	0.386	0.1378	1
			Information Quality	0.330	0.1178	2
			Service Quality	0.284	0.1014	5
Game Reputation	0.237	3	Peer Influence	0.387	0.0920	7
			eWOM	0.328	0.0777	9
			Brand Awareness	0.285	0.0675	10

Table 4-2 Overall weight ranking

Main Dimension	Sub-Dimension	Overall Weight	Rank
Information System & Service Quality	System Quality	0.1378	1
Information System & Service Quality	Information Quality	0.1178	2
Game Design	Entertainment	0.1091	3
Game Design	User Interface	0.1062	4
Information System & Service Quality	Service Quality	0.1014	5
Game Design	Story Structure	0.1013	6
Game Reputation	Peer Influence	0.092	7
Game Design	Interactivity	0.090	8
Game Reputation	eWOM	0.0777	9
Game Reputation	Brand Awareness	0.0675	10

Conclusion

overall hierarchical factor weight rankings influencing online game players' willingness to continue usage, as shown in Table 4-2. The weights are as follows: system quality 13.78%, information quality 11.78%, entertainment 10.91%, special effects interface design 10.62%, service quality 10.14%, story Structure 10.13%, peer influence 9.2%, interactivity: 9%, eWOM 7.77%, brand awareness 6.75%.The main objective of this study was to explore the factors influencing online game players' intention to use the game and the importance they place on these factors. Through literature review, relevant studies were gathered and analyzed, including previous classifications proposed by scholars on factors affecting usage willingness. These factors were then used as the primary research method, applying the AHP hierarchical analysis framework. Finally, an AHP-based questionnaire was distributed and responses were collected and analyzed using the decision-making software Expert Choice to determine the weight rankings. The study found that among the three main factors influencing the willingness to continue using online games - game design, information systems and service quality, and game reputation-game operators place the greatest emphasis on game design, followed by information systems and service quality. In the game design factors, among the four elements storyline structure, special effects interface design, entertainment, and interactivity-online game players place the most importance on entertainment, followed by user interface design.

In the information systems and service quality factors, among the three elements-system quality, information quality, and service quality-online game players place the most importance on system quality, followed by information quality. in the game reputation factors, among the three elements-peer influence, eWOM, and brand awareness-online game players place the most importance on peer influence, followed by eWOM. Overall, in terms of the entire framework, system quality has the highest weight among all factors, followed by information quality. The remaining factors, in order, are entertainment, user interface design, service quality, story structure, peer influence, interactivity, eWOM, and brand awareness.

Research Implications

Based on the conclusions from the literature review and AHP hierarchical analysis, the following research implications are summarized: Game design is highly important for online game players. This study found that among the three main factors influencing the willingness to continue using online games, game design is the most valued aspect. It indicates that players consider the enjoyment, focus, and curiosity generated by the game experience as very important. Among the elements of game design, entertainment is the most crucial factor, representing players' evaluation of whether the game can provide a high level of entertainment, a sense of achievement, and feelings of comfort and pleasure, which help players, stay

focused and stimulate their curiosity, ultimately influencing their decision to continue playing the game. System quality is the most important factor affecting online game players' willingness. This study found that within the information systems and service quality dimension, system quality is the most important factor for players. Additionally, among all ten sub-factors, it is the most emphasized. This highlights that as online games evolve and require higher specifications for computer equipment and servers, system stability remains a key concern for players, even in an era where computer hardware has improved. This remains a critical issue for game operators to address in the long term. Peer influence affects online game players' willingness. This study found that within the game reputation dimension, peer influence is the most important factor for players. It shows that online game players place great importance on their peers' attitudes toward the game, as well as whether their peers are also players of the same online game. While eWOM is also an influencing factor, players tend to prioritize the attitudes and participation of their peers, especially given the rapid information flow and the advancement of the internet.

Recommendations

Based on the conclusions of this study, the following recommendations are provided for game operators and future research: For game operators, this study reveals that game design is the most valued factor influencing online game players' willingness to use the game. Among the elements of game design, entertainment and user Interface design are considered relatively more important. Therefore, this study suggests that online game operators should invest more resources into game development, such as thinking about how to make players more focused on the game content and how to stimulate their curiosity. Additionally, operators should invest more in the development of user interface design to make the game's special effects rich and the interface user-friendly. Furthermore, this study also found that within the information systems and service quality dimension, system quality is the most valued factor by players. It is recommended that online game operators invest more resources into server maintenance and improving system stability. Lastly, the study found that within the game reputation dimension, peer influence is the most important factor for players. Thus, it is recommended that online game operators think about how to leverage network effects in marketing strategies to attract players through players themselves. For instance, launching activities such as inviting friends to receive virtual rewards could help promote the game.

Suggestions For Future Research

This study explores the factors that influence online game players. Although we have identified the factors that player's value, it is still unclear

what strategies should be adopted to improve specific factors and successfully increase players' willingness to use online games. Therefore, this study suggests that future research could focus on exploring improvement methods, such as conducting qualitative interviews to gain deeper insights into players' views on specific factors. Additionally, although this study has quantified the factors influencing players' willingness to use online games, it has not yet confirmed whether these factors indeed influence usage behavior. Thus, this study recommends that future scholars investigate the factors identified in this study through statistical analyses such as variance analysis or regression analysis to determine whether the factors significantly impact players' usage behavior.

Limitations of the Study

This study explored the factors influencing online game players' willingness to continue using the game through the AHP (Analytic Hierarchy Process) method. The framework for the analysis was established through a literature review. However, although the factors gathered in this study were derived from the literature review, they lack further validation through factor analysis. Additionally, although this study quantified the factors influencing players' willingness to use online games, the research methods employed do not verify whether these factors indeed influence usage behavior.

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