

Research on the Characteristics of Youth Consumption Behavior and Marketing Strategies of the Chinese Mobile Game Industry

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Abstract. In recent years, smart mobile terminals have rapidly occupied the world market and promoted the development of the Internet industry. China has 1.19 billion mobile Internet users, ranking first in the world. As a product of the mobile Internet, mobile games have gradually become one of the main entertainment items for netizens because of their portability and mobility. As the main force among mobile Internet users, teenagers have contributed a lot of consumer behaviors in mobile games. If a mobile game wants to occupy a certain position in the highly competitive market, it is vital to formulate an appropriate market strategy for teenagers. Through literature analysis and qualitative analysis, this paper summarizes the concept, types, characteristics, market status, and existing problems of mobile games in the Chinese market. It analyzes the characteristics of young people's consumption behaviors in mobile games, mainly including "self-identity" and herd effect. This paper also puts forward some improvement plans for game design, game marketing, and game community to promote young users' consumption behaviors in mobile games. At the same time, due to the particularity of underage users, this paper also discusses the necessity of reasonably setting up an anti-addiction system. This paper has strategic marketing significance for mobile game companies whose main target customers are young people. At the same time, based on the huge customer group of the youth in the mobile media market, this article is also very important to promote the steady development of the mobile game market.

Keywords: Characteristics; Youth Consumption Behavior; Marketing Strategies; Chinese Mobile Game Industry.

1. Introduction

1.1 Research Background

As the commercial development of China's 5G network continues to accelerate, the mobile entertainment business will also become the main reason for the increase of the mobile Internet business. As an important part of mobile entertainment services, mobile games are valued by netizens increasingly. China Industry Research Net data shows that the global game market reached 175.8 billion yuan in 2021. Occupying more than half of the total revenue, mobile games reached 90.7 billion yuan. China's mobile game market reached 296.513 billion yuan, an increase of 17.826 billion yuan over last year and a growth of 6.4% over the previous year. In 2018, the number of mobile phone users in China was 605 million, an increase of 9.2% over the previous year; In 2019, the number was approximately 620 million; In 2020, the figure was 654 million, which is an increase of 4.84% compared to the previous year; The number of users reached 656 million in 2021, which is an increase of 0.23% compared to the previous year [1]. This shows that the Chinese mobile game market and mobile users' scale are increasing daily.

According to a report published by QuestMobile, the age of current mobile phone users is undergoing structural changes. As of March this year, users over the age of 31 accounted for 50.8%, exceeding the users under the age of 30 [2]. This means that the mobile game market no longer maintains the public perception that most users are young. In order to retain the youth group and make the mobile game industry regain its favor, it becomes very important to analyze the characteristics of the consumption behavior of the youth group and research related marketing strategies. Also, due to the particularity of the youth group, how to reasonably set up the anti-addiction system has become

the top priority. Based on the macro level of the mobile game industry, it is necessary to deepen the research on marketing strategies, which is of great significance to enrich the industry's cultural connotation, improve the social atmosphere, and promote the development of the national economy.

1.2 Literature Review

Bank and others pointed out that the Internet and smartphones are developing rapidly, and the competition in the mobile game industry is fierce. In this context, whether gamers choose a mobile game depends on whether the game is innovative and distinctive. At the same time, the study pointed out that each game manufacturer has different views on innovating mobile marketing methods, creating games, and expanding market share [3].

Park believes that the mobile gaming business needs to improve its customer base, focus on promoting relationship marketing, use effective marketing strategies and comprehensively improve quality control [4].

Gao and Chen took Chinese mobile games as an example to explore the network marketing model. Both scholars believe that mobile phones have real-time interactions and are characterized by high accuracy, which is also vital to marketing. Combined with the background of mobile games, their researches explain the significance of network marketing, explores the application of network marketing in the mobile game industry, and finally proposes a new model for the development of the industry [5-6].

Jiang combined this marketing theory with the real-life case "Arena of Valor". Based on the existing 4P marketing theory, he believed that the marketing strategy for the mobile game industry are different. Cultural transmission has become an integral element of the game. [7].

Wen believes that young people's consumption of mobile games is mainly affected by the satisfaction of individual needs and group consumption. Teenagers are likelier to create relational and conspicuous game consumption [8].

1.3 Research Gap

Most scholars have studied how mobile games combine the advantages of the Internet and informatization to launch mobile game products that meet the needs of today's consumers. Jiang and Xu put forward marketing strategies for young people through market segmentation, such as doing game lives on live broadcast platforms, using celebrity effects, and holding college competitions [7, 9]. However, few scholars have proposed marketing strategies for mobile games by studying the consumption behavior characteristics of young people.

1.4 Research Framework

First, this paper introduces the research background, literature review, research gap, and framework. Secondly, the paper introduces the specific research method. Thirdly, this paper conducts an overview analysis of mobile games, an analysis of the current mobile game market situation, an analysis of the consumption characteristics of youth groups, and an analysis of the reasons for the decline of youth mobile game users. Fourthly, this paper proposes a marketing strategy for mobile games to attract teenage consumers and discusses the ethical issues of balancing marketing enlargement and anti-addiction. Finally, this paper presents the selected topic's conclusion, importance, and limitations.

2. Methods

2.1 Literature Analysis

Literature analysis means clarifying the nature and situation of a research topic by examining the collected material and drawing conclusions from one's own perspective. This paper summarizes the consumption characteristics of young people by referring to the amount of literature on consumer

psychology, consumer behavior, communication, and other fields. It researches the subject of the Chinese mobile game industry.

2.2 Qualitative Analysis

Qualitative analysis is a method in Communications field. It refers to the qualitative analysis and research of the characteristics of a certain thing through logical reasoning, philosophical speculation, historical check and legal decisions. This paper adopts the method of qualitative analysis to deeply study the definition, types, characteristics, and market status of mobile games under the background of the mobile Internet. It combines theoretical knowledge with the consumption characteristics of young people to put forward relevant marketing strategies.

3. Results

3.1 Overview of Mobile Games

3.1.1 Definition of Mobile Games

According to carriers, the Chinese game market can be divided into mobile, client, and web games. Among these categories, mobile games refer to game software running on smartphones or tablets.

3.1.2 Types of Mobile Games

Mobile games can be classified into the console and online games according to whether they are connected to the network [9]. Console games are video games that can be run independently using a single device. Unlike online games, they do not require dedicated servers which is responsible to run the game normally. Online game refer to games using the Internet as the medium of transmission, the game controller's server and the user's handheld devices as the processing stations, and the mobile game client software as an interactive window to provide entertainment, leisure, sustainable communication and virtual achievements. The types of mobile games can also be classified according to the different game content: (1) RPG (Role-playing Game) such as Tencent's "Naruto" can be designed in 2D, 2.5D, and 3D. (2) FPS (First-person Shooting Game), such as the current popular game "PUBG". (3) SLG (Simulation Game), refers to simulation management games broadly, and now it mostly refers to strategy games. (4) MOBA (Multiplayer Online Battle Arena) famous for "Arena of Valor". (5) LBS (Location Based Service) is relatively partial, such as Pokemon go, which belongs to LBS+AR gameplay. (6) RCG (Racing Game), such as "QQ Speed". (7) MSC (Music Game), such as Tencent's "Rhythm Master". (8) AVG/ADV (Adventure Game), such as "Love and Producer". (9) SPG (Sports Game), such as "Street Basketball" and many football games during the World Cup. (10) Asymmetrical Battle Arena mobile games, such as NetEase's "Fifth Personality", can also belong to Adventure Game (AVG).

The above is the type of mobile online games. In addition, there are many types of console games: Parkour Elimination, such as "Daily Cool Running", "Happy Xiaoxiaole"; Card games, such as Hearthstone, Three Kingdoms Kill, etc., including some chess and card games, which can also be classified as Card Game; Independent Game, such as Monument Valley, which was popular last year, it can also be classified as Puzzle-solving Game; IO games: Battle with Balls, Battle with Snakes, etc.

However, games are not classified so strictly; some can be classified into many types.

3.1.3 Characteristics of Mobile Games

3.1.3.1 Huge Potential User Base

In 2021, the scale of mobile phone users in China increased steadily, and the scale of 5G users expanded rapidly. At the end of August 2021, the three basic telecommunications companies had 1.626 billion mobile phone users, a net increase of 32.05 million over the end of the previous year. Among them, the number of 5G mobile terminal connections reached 419 million, a net increase of 220 million over the end of the previous year. At the same time, the amount of mobile internet traffic

used by consumers has grown significantly. From January to August, the cumulative domestic mobile Internet traffic reached 142 billion GB, an increase of 36.7% year-on-year. [10].

3.1.3.2 Portability and Mobility

One of the reasons mobile games are so popular in the age of console gaming is portability that allows people to immerse in games anytime and anywhere. Compared to console games and PC games, mobile phones may not be the ideal devices, but because nowadays people are likely to carry mobile phones at all times, mobile games have become the first choice among various entertainment methods. When in the queue or waiting for the bus, people can use their mobile devices to play games. The fragmentation of mobile games is prominent. According to a survey, after playing games on mobile phones, 29.8% of users spend less time playing computer games. When comparing time people spend on mobile games and that on computer games, 22.4% of users spend more time on mobile games, only 10% spend less time on mobile games. Mobile games have begun to snatch time people spend on computer games and have become a common form of entertainment gradually.

3.1.3.3 Support Channels

With the increasing number of smartphone users, the demand for applications is also growing. According to the data released by Ministry of Industry and Information Technology, after excluding the data of off-the-shelf applications, the total number of app distributions in Chinese app stores continued to increase from June 2019 to June 2021. In the first half of 2021 alone, the total number of app distributions in China's app stores reached 1.87 trillion times, exceeding the total distribution in 2020. As the main domestic application distribution channel, third-party app stores have developed steadily. Data shows that active users of third-party app stores are increasing, but the growth rate is gradually slowing down. In 2020, the number of active users of third-party app stores in China was about 481 million, with a growth rate of 0.8% [11].

3.2 Analysis of the Current Situation of the Mobile Game Market

3.2.1 Chinese Market

The Chinese mobile game market continues to grow. The size of the Chinese game market continues to expand under the development of mobile Internet and smart mobile terminal equipment in China. The mobile games have increased far more quickly than that of PC and web games in recent years. Since mobile games surpassed PC games in 2016, Chinese game market has formed a growth trend for mobile game development gradually.

In 2021, Chinese mobile game market sales revenue occupied 76.06% of the total market revenue; client game market revenue accounted for 19.83%; web game market revenue accounted for 2.03%. Chinese mobile game market has been growing rapidly in recent years. Specially, in 2021, the actual sales revenue of Chinese mobile game market was 225.538 billion yuan, an increase of 15.862 billion yuan over 2020, a year-on-year increase of 7.57%, and a decline in the growth rate compared with 2020. The main reason for the decline in growth rate is that there were fewer new products on the mobile game market in 2021, mainly relying on the increase in sales of old products, and the ability of products to drive consumption in the past has gradually weakened.

The rapid growth of mobile games is mainly due to the explosive growth of user scale. Since 2014, the number of mobile game users in China has continued to increase. Still, due to the impact of population structure and capacity area saturation, the growth rate of mobile game users has gradually declined. In 2021, the number of mobile game users in China reached 656 million, a year-on-year increase of 0.23% [12].

3.2.2 International Market

The Asia-Pacific region has become the main gathering place for mobile game players. In 2021, the number of mobile game players in the Asia-Pacific region led the world which was 54%. The second and third regions are the Middle East, Africa, and the European region, accounting for 15% and 14%, respectively.

In terms of market size, in 2021, the mobile game market in the Asia-Pacific region accounted for more than 60%, ranking first, and North America ranked second with market size of US\$16.4 billion, accounting for 18% [13].

3.3 Analysis of Consumption Behavior Characteristics of Youth Groups in Mobile Games

3.3.1 Awareness of “Self-identity”

There is a certain relationship between teenagers’ virtual consumption behavior in mobile games and their “self-identity” consciousness, and “virtual self-creation” has become the main psychology of teenagers’ virtual consumption in mobile games [14]. Using avatar costumes in games as an example, teenagers first realize the insufficiency and constraints of their avatars and attractiveness. Then construct their ideal virtual self through virtual consumption of costumes, and display them in virtual space to obtain symbolic value. In online interaction, these actions can expand their social circles to establish basic connections, enhance relationships and establish virtual identity and status. Moreover, stimulate psychological improvement through perception and identification of internal and external reactions, resulting in corresponding changes in virtual and real consumption concepts. Finally, improve and achieve the perfection of the virtual self through the consumption of mobile games [15].

3.3.2 Herd Effect

The herd effect is irrational herd behavior, which refers to the consumption behavior of consumers who use the consumption behavior of others as the imitation object and reference standard under the influence of other consumers.

The herd effect can analyze irrational consumption behaviors such as herd consumption and competition consumption among young student consumers. Herd consumption means that when individual consumers are affected by the surrounding consumption environment, they give up their consumption tendency actively or not, and are likely to make the same consumption behavior as the surrounding consumers. Competitive consumption means that consumers are unsatisfied with the current consumption status, unwilling to lag behind others in consumption level, so that they use the higher consumption status of others as a reference standard to consume without considering their own consumption level, which is an irrational consuming behavior [16].

The obvious feature of these two consumption behaviors is that they are mainly influenced by the surrounding consumers while ignoring their actual situation. The consumption concept of young consumers is still immature, and they are easily affected by the surrounding environment, leading to blind imitation of consumption concepts and behaviors.

3.4 Problems Existing in the Chinese Mobile Game Market

The mobile game market attracts many entrants due to its huge potential and low cost, which also leads to fierce competition in the market. Some game makers only pursue low-cost and short-term benefits. Affected by factors such as underdeveloped technology and loss of input, there are deficiencies in game design process design and task design, resulting in poor game quality. Some mobile game developers and service providers ignore the importance of game products, user experience, and marketing promotion. Most of the life cycle of a certain mobile game is approximately 3 months, so how understanding user needs and developing products that are popular with users is very important. But at the same time, how to maintain the stickiness of game products and continue to retain users has become a more urgent issue.

Nowadays, some Chinese companies are actively introducing mature foreign game products into China. Although it is conducive to rapidly improving the quality of Chinese mobile game products and attracting users, it also intensifies competition in the Chinese mobile game market.

Mobile games lack innovation and become increasingly homogenized. With the continuous growth of game manufacturers, the number of games is increasing. Despite this, mobile games have not produced more new ideas and new functions, and many "all-in-one" games have flooded the mobile

game market. Although these games have different story backgrounds, the playing methods are single, and the phenomenon of imitation is very common. Most of them are the products of one framework.

4. Discussion

4.1 Game Design Caters to Teenage Psychology

4.1.1 Incorporate Popular Elements

It is recommended for mobile games to investigate popular elements among teenagers and link with them to create game content. For example, they can team up with Disney's Linabell, who has recently become very popular among teenagers, to launch a skin or invite it to serve as an ambassador.

4.1.2 Use Fragmented Time

Teenagers are mostly in school or work and have more fragmented entertainment time than retirees. Mobile games can be set to match the fragmented time by simplifying game operations, shortening the game time, and interruptibility.

4.2 Game Marketing Caters to the Behavioral Habits of Young People

4.2.1 Leverage Short Video Platforms and Live Broadcasts

With the popularity of short video platforms among young people, game manufacturers can make advertisements in the form of short videos and put them on such platforms. And they can also invite celebrities or influencers to play the game live. Because teenagers will try a game when they find their favorite celebrities and their classmates around them playing this game. For example, "Arena of Valor" launched a competition between Chinese stars, which initiated hot topics on different social media, increased the popularity and exposure of the game, and brought in many new players.

4.2.2 Taking Advantage of the Blind Box Economy

With the rise of the blind box economy, game manufacturers can use such characteristics to promote sales. For example, launching a new product can be made into blind boxes. There are ordinary rewards and big prizes in the boxes. The price is lowered, but the probability of the jackpot is also lowered. The perception and excitement of the blind box can trigger consumers to buy, and the style of drawing the centerpiece is like winning the lottery. Under this circumstance, consumers are no longer rational economic people. Sometimes, there will be a cost-return effect: they will ignore sunk costs and repeatedly buy the blind box until the desired style is obtained [17].

4.2.3 Cross-border Cooperation

In the game industry, cross-border cooperation with different industries can be considered a win-win means. For example, the Chinese mobile game "Arena of Valor" and MAC Lipstick jointly launched a game, lipstick. Tencent also bought the copyright of a novel created with this game as the background and filmed it into a TV series. These cases all reflect successful cross-border cooperation and mutual consumption. The group promotes the benefits to each other.

4.3 Enhance In-game and Out-game Interaction to Meet Social Needs

Humans are social animals, and it is essential to meet their social needs in games. By building an in-game interactive community, players can use their avatars to interact with other players in the community, showing off their skins or rare items. Players will make purchases to gain the admiration or conformity of others. At the same time, by establishing a community outside the game, players who play the game can gather together to discuss strategies, experience, and display in-game props and achievements, which promotes users' social interaction behavior and achieves repeated brand exposure and brand "snowball" effect.

4.4 Reasonable Setting of Anti-addiction System

As one of the entertainment methods favored by minors, mobile games are overly focused on marketization and entertainment in the current development process. Ethical anomie content contradicts social morality in-game visuals, texts, and mechanisms design. It is easy for minors to indulge in the game. Therefore, in promoting games, attention should be paid to distinguishing minor users, emphasizing restrictions on minors' game duration and consumption.

5. Conclusion

5.1 Key Findings

Mobile games attract a large number of consumers with their portability and mobility. The Asia-Pacific region currently has the largest number of mobile game players and market size worldwide. With the rapid development of mobile games, the market has also attracted many entrants. With the continuous increase of entrants, the competition in the game market has become increasingly fierce, and mobile games are in the mature stage of the product life cycle. The homogenization of game content is becoming increasingly serious, and there is a lack of innovation. In the mobile game market, young people are mainly affected by the awareness of "self-identity" and the herd effect, resulting in consumption behavior. This paper believes that young consumers should be attracted by game design, game marketing, and game community. Such as integrating popular elements in game design, using short video platforms and live broadcasts to promote games, and building game communities to meet social needs. At the same time, due to the particularity of underage users, this paper also discusses the necessity of reasonably setting up an anti-addiction system.

5.2 Research Significance

With the increasing scale of China's mobile game market and mobile users, research on mobile game marketing is extremely important. With the structural changes in the age of mobile game users, how to retain the youth group and formulate relevant marketing strategies is of great significance. From a macro perspective, young users still maintain a considerable customer base in the mobile media market. This article is also significant for promoting the mobile game market's steady development and enriching the industrial culture's connotation.

5.3 Limitations

This paper mainly discusses literature research and qualitative research and uses considerable secondary data, but it lacks the use of primary data. In future research, primary data can be obtained through many surveys, interviews, focus groups, and other methods. At the same time, due to the availability bias, the references are not comprehensive enough. There are more consumer behaviors in practice, but this article does not discuss them and proposes marketing suggestions for them. Furthermore, due to the time limit, this article does not put too much theoretical knowledge into the discussion, which has certain cognitive biases.

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