

Tencent Game Success Factors Analysis

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Abstract: This paper analyses Tencent's key success factors from the dimensions of product design, marketing, game operation, R&D. Firstly, the product design makes Tencent games stand out among many competitors in the game market. Then Tencent has adopted a series of marketing strategies to popularize more target groups from the products themselves and their derivatives, thus expanding domestic and international markets. Secondly, the operation of the game is analyzed, and the professional team designs the operation experience to meet the players' needs, and the game operation team maintains a series of activities of the game and restrains the punishment for cheating in the game to maintain the fairness of the game. Finally, Tencent obtains notable revenue through high investment in game research and development, protects game intellectual property rights through patents, improves game experience, and attracts game development talents with benefits. This study provides implications for other online game enterprises.

1. Introduction

With the development and popularization of the Internet in modern society, the online game industry also comes into being and becomes an indispensable economic growth point in today's entertainment market. From the perspective of vertical development, China's online game industry has maintained rapid development since its inception in the late 1980s until 2020. China's online game market has reached 278.69 billion RMB, with more than 516 million users. From the perspective of horizontal expansion, the online game industry gradually radiates to film and television, literature, animation and other industries, and derives from the game live, electronic game competition and other ancillary industries. Tencent Game, as the largest domestic mobile terminal supplier, has gradually occupied market share through its product development strategy, marketing strategy, and perfect operation system, as well as reasonable technology R&D, defeating netease, a perfect world, such as competitors, the domestic mobile terminal mobile game of thrones.

Yang Yuan analyzed the factors of Tencent Game success from the perspectives of profit model and consumer behavior, and showed that the cute design and simple operation of Tencent Game products have indeed provided favorable support for the success of Tencent Game [1]. From the perspective of game operation, Zhang Tiantian mentioned in "*Study on the Communication Strategy of Mobile Online Games - Taking Tencent Mobile Games as an Example*" that in the mobile online game business, Tencent's own professional team is the biggest weight and advantage for its success, from early planning, UI, research and development, testing to later promotion and operation. Camp and brand building, each step is equipped with professional talents, such team strength is unmatched by entrepreneurial small teams [2]. However, this article does not conduct an in-depth study of the actual impact of the operation team on the game. In fact, excellent operation modes are manifold. For example, excellent activity operation can bring a double improvement in game revenue and game

reputation, and the improvement of the game anti-cheating system can also greatly improve the player's game experience. Han Zhuoyang explains in detail the connection between Tencent's patents and the company's development in "Exploration of corporate patent layout - Tencent as an example" [3]. Less articles on Tencent's games mention Tencent's scientific research capability, but Tencent, as China's No.1 Internet company, has a scientific research capability that cannot be underestimated and plays a crucial role in the company's profitability. This article collects data and briefly analyzes the impact of Tencent's scientific research on its game profitability.

The second part is the discussion part, which mainly analyzes the factors for the success of Tencent's mobile game field from the four aspects of product design, market, game operation and research and development. The last part is the conclusion part, which summarizes the reasons for the success of Tencent mobile games, as well as the limitations of this article and the future research direction.

2. Product Design

2.1 Customization

As we know, there are many ways to attract consumers, such as attracting customers' attention in the form of humor, attracting consumers with intelligence games, and attracting consumers with unexpected and surprising scenes. One of the ways Tencent attracts consumers is by making the characters interesting to viewers.

Take King of Glory as an example, it relies on historical and cultural characters and is secondary creation. The so-called secondary creation is a very interesting and even subversive re-creation of well-known characters in the game under the original character background. King of Glory takes familiar heroes and gives them a new background, bringing familiar celebrities into the game as anime characters. These novel and interesting characters not only successfully attracted a large number of young consumers, but also formed a unique cultural atmosphere. Meanwhile, King of Glory's vast system has been made into videos, cartoons and jokes by players, which are all the rage on the Internet, with rich topics for players to talk about. At the same time, the game and the fun of the characters are invisible and close the distance between us and history and traditional culture.

Furthermore, Tencent mobile game research and development work "Love elimination every day", the game design will eliminate the object set as a lovely animal image, and give its unique pleasing colors, sounds, expressions and so on, so that it has different unique charm, such as: simple and honest bear, cunning fox... Although the design of the expression is only a small detail, but the details to the extreme, for enhancing the gameplay is certainly effective. In addition, the expressions of these small animals will become dynamic when users touch them. Compared with the previous monotonous elimination design, such vivid role images will definitely attract users more.

2.2 Continuous innovation

Tencent has been accelerating its development progress of mobile games, striving to achieve comprehensive product types, and constantly updating individual game products. At present, Tencent's mobile game products cover different kinds of games such as leisure puzzle, parkour, chess and card, in order to meet the needs of players of different ages and different levels. At the same time, Tencent also pursues the continuous update of each mobile game itself. For users, it's hard to keep them in the same game for tens of days, or even months after they have a novel experience with a game, and they tend to either abandon the game or move on to other projects. Take Tencent's representative work "Happy Xiaoxiao Le" for example [4]. The game will be updated almost every two weeks, and in addition to level updates, different themed events will be added depending on the season. For example, Christmas is approaching, there will be a snowball fight with the small elk, collect Christmas bells to exchange for the game needed items reward activities. And when it comes to Halloween, Mid-Autumn Festival and New Year's Day, some elements of these holiday season will also be injected into the game, like pumpkin, moon cakes, red packets and so on. The continuous extension of the product line and the continuous updating of the product itself can

attract consumers' interest and keep players loyal to the game, thus extending the life cycle of the game.

2.3 Simple operation

For mobile network game users, a simple operation, easy to learn how to play the game is often their first choice, so that they will not waste too much time to study the game, which can be the fastest smooth experience of the game and enjoy the fun. For example, popular mobile online games Such as Railway Surf and Ski Adventure make it easy for users to play games with one hand. In this way, users can handle the games easily while taking bus or subway.

2.4 Excellent game experience

Enjoyable game experience is one of the most important goals and motivations of online game players, and game experience is nothing more than the visual stimulation and psychological cognition brought to players by the organic combination of many elements of the game. Also take the King of Glory as an example, this mobile game has experience clothing as a pioneer version of the forward looking, average every week at least twice art optimization, bug fixes and hero balance mechanism, so that the game experience is increasingly perfect, let the game players feel the excitement of winning the game through team cooperation in king canyon.

3. Marketing

3.1 Product marketing

3.1.1 Customization product designing

According to the needs of consumers in the game market to launch corresponding game products, this has been one of the main strategies of Tencent game product development.

In early Chinese Internet game beginning stage (before 2008), China's Internet users is still in the "game experience lack period", Tencent will be in the market, a large number of mild game users aiming for the target object, with "simple and easy-to-use casual games" as the main research and development products, ensure that users can easily obtain relatively complete game experience in a short time. Tencent game has developed a series of casual games such as QQ Hall, QQ Farm and QQ Pet, attracting a large number of emerging Internet users, and then gradually occupies a place in the game market [5]. Later, in 2007, has been in the domestic market is like a world of warcraft "legend" and so on large-scale network games entering the market, such games users tend to be saturated, Tencent acutely aware of the light in the domestic network game market blank, taken the lead in developing a series of moderate competitive class/bred games (such as: "QQ speed" "QQ fantasy", etc.) and the agent of "Dungeons and Warriors" and "Crossfire", to further seize the blank market, gradually beat Shanda and Netease and other traditional online game providers. As a result, in the second quarter of 2009, Tencent's game revenue reached 1.241 billion yuan, surpassing Shanda's 1.305 billion yuan to become the first domestic game supplier in China.

Identifying market demand for differentiated product competition is one of the main strategies of Tencent games in the development stage, which ensures the early development and growth of Tencent games in the industry, and is also the prerequisite for Tencent games to dominate the Chinese game market later.

3.1.2 Diversified game product completion

Tencent is well aware that it is difficult for an enterprise to expand the sales volume of its own products by competing for customers of competitors in mature sectors. In this case, the enterprise should expand the purchase scale of customers by exploring new market segments on the basis of maintaining existing key customers. Therefore, Mr. Ma Huateng, chairman of Tencent, proposed the concept of "game pyramid" for Tencent's game business: He divided Tencent's game types into three categories: "large games", "small and medium games" and "light games", and designed corresponding game products according to the current market demand. This strategy can be seen as

one of the signs of Tencent's horizontal coverage of the market and continuous expansion of the number of game products and game product types.

Based on its own strong financial resources, technology, human resources and other resources, Tencent has realized the business involved in various game types: up to now, the number of Tencent game products has reached more than 500, almost covering all categories of the current game market. From the perspective of type, it includes terminal game, page game and mobile terminal game; In terms of game scale, it includes large online games, small and medium-sized casual games and small game platforms; In terms of the specific content of the game, it includes RPG (role playing game), FPS (first-person shooter), nurturance game, board game, competitive game, etc.

It should be emphasized that Tencent still maintains a high frequency of game product launches: in the annual conference of Tencent Games on May 16, 2021, a total of 60 games were mentioned, and the number of new games announced reached more than 40, more than 70% of the total. Tencent classifies the released games into six themes: "Social service", "Energetic blood", "relaxation", "dimensional shuttle", "cultural innovation" and "technology exploration". Each game has its precise corresponding market and customer groups: For example, "Yanxi Palace: The Phoenix Flies" is a nurseries game designed for female players based on the IP of the popular Chinese costume TV series "Yanxi Palace". "One Punch Superman: Execution of Justice" is a 3D fighting game developed by fans of the animation "One Punch Superman" with the authorization of Shueisha, a well-known manga publishing house in Japan. In addition, there is no lack of "Gosling Science and Technology museum" and other children as the main audience to research and development of scientific puzzle games.

3.1.3 Internationalization of game product marketing

In the stable period of the development of China's domestic game business, Tencent took the lead in expanding the overseas market. Its purpose is: Firstly, it aims at the different development stages of the game industry in different countries and takes the lead in grabbing the market share of some countries whose game market is still in the early stage; Secondly, to avoid the fierce competition brought by the saturation of the domestic game market; Thirdly, through the cooperation with international well-known game companies, learn from their advanced technical experience and operational experience. Therefore, Tencent carries out the internationalization process of its game product marketing through the two main ways of self-research and development of overseas products and acting for the operation right of overseas games in China.

Tencent's overseas expansion dates back to 2005, when it bought an 8.33% stake in South Korean mobile gaming company GoPets Ltd., and increased that stake to 16.9% in 2006, its first big overseas gaming deal since going public.

Tencent bought a stake in US game developer RiotGames in 2008 and in 2011 spent \$231 million for a 92.78 percent stake in RiotGames. A year later, in 2009, Tencent turned to South Korea, where it and venture capital fund Capstone Partners invested in seven gaming companies, including well-known Next Play and Redduck, and used their technology to develop games such as battlefield king. In the decade after 2010, Tencent continued to accelerate its overseas expansion of games, and invested nearly 100 billion in large-scale investment and acquisition of the global game industry. In 2012, Tencent acquired 48.4% of the shares of Epic Games, the most outstanding team in mobile terminal game design in recent years, with 330 million DOLLARS. In 2013, Tencent acquired a 24.7% stake in Activision Blizzard, the world's largest third-party interactive entertainment publisher, for \$2.34 billion. In 2015, Tencent acquired League of Legends developer Riot Games; In 2018, Tencent bought a 5% stake in Ubisoft for 369 million euros.

Tencent has become one of the world's largest game makers, accounting for more than 40% of global game company investment. This is undoubtedly a decisive favorable condition for Tencent game layout in the global market.

3.2 Price marketing

3.2.1 In-game virtual currency is bound with reality

Tencent makes most of its money through "in-game purchases", in which players voluntarily top up in-game items to enhance the game experience while keeping the game experience intact. For this reason, Tencent has designed different virtual currencies for different games, such as Joy beans in "Fight the Landlord", gold coins and coupons in "King of Glory", and diamonds in "Run Everyday". In addition to the currency unique to each game, Tencent created the "Q coin payment". With Q-coin, players can buy almost all value-added services of Tencent, not only virtual props and skins of virtual characters in game products, but also monthly recharge services such as QQ membership and QQ music, establishing a complete Tencent virtual currency transaction network and realizing business intercommunication under Tencent. Whether it is "Diamond", "Happy bean" or "Q coin", virtual currency can be exchanged with real currency, so most players unknowingly add a large amount of real currency to the game in order to get a better game/service experience. This has also become the main means of Tencent currency/price marketing.

3.2.2 The game party shall cooperate with various parties to reduce the threshold of game consumption

In order to attract more players to invest money in the game, Tencent games often cooperate with multiple parties to launch corresponding bundled promotional goods to lower the consumption threshold of players. Its first cooperation between Tencent products, Tencent's other products, such as QQ music, QQ video later with Tencent released its various game cooperation bundled product package: its pricing usually only slightly higher price than a single product, so the players on the premise of extra pay a small amount of money can get two service at the same time, reduces the consumption threshold [6]. So most consumers are willing to pay for it; Followed by Tencent and other manufacturers of cross-border cooperation, such as Tencent in cooperation with China unicom launched in September 2020 the "king of Tencent game card", consumer is in only 9 yuan higher than the original service (the original service 30 yuan/month) under the condition of can enjoy extra Tencent company, through the wire within 30 gb of mobile phone game flow and exclusive game props. This undoubtedly attracted a large number of game players to recharge, so that Tencent games and China Mobile to achieve a win-win situation.

3.2.3 Integration of various pricing strategies in the game

Tencent specializes in using a variety of pricing strategies to stimulate players' spending. For example, Tencent mobile terminal games commonly have "low-price gift package for first recharge", which sells corresponding high-value game services at a low price. This pricing encourages players to spend and stimulates a group of potential consumers to some extent. In addition, the props in Tencent's mobile games also adopt the strategy of "mantissa pricing". According to consumer psychology, it tries to select auspicious numbers favored by the public from the prices of in-game products and keep mantissa, so as to make consumers feel cheap and trust them. Regular "discount sales" and "rebate sales" also encourage players to spend.

3.3 Place marketing

3.3.1 Traffic diversion on the original platform

Tencent's social platforms have an extremely large user base. Take its wechat and QQ as an example: In March 2021, Tencent's wechat users reached 1.225 billion, an increase of 61 million over the previous year. The total number of QQ users also reached 594 million. Therefore, to maintain a high degree of interoperability between product platforms, the user traffic mutual leads to become the key to the development of Tencent games [7]. Under this premise, games are increasingly promoted on social platforms: Take King of Glory as an example. King of Glory and tianmei Studio, the company behind it, have an independent wechat official account. The official account usually publishes internal advertisements focusing on the product, including preferential recharge, game guides, offline activities and so on. In addition, honor of Kings official social

accounts are also active in QQ moments, mini programs, Qzone and subscription accounts, which greatly increases the exposure and attention of the game.

3.3.2 New platform construction

Apart from the original platform channels, Tencent game is also actively developing new marketing channels. In 2012, Tencent integrated existing game and other application product resources and launched "APP Treasure", a first-line APP download/management platform on mobile terminal. In addition to providing massive downloads of software resources, the platform also provides mobile phone management, online community discussion, current affairs information acquisition and other functions. Tencent's games are also promoted and publicized by this platform, and achieved good results.

3.4 Promotion marketing

3.4.1 Brand marketing -- Tencent

After more than ten years of development in China, Tencent has become a well-known Internet veteran brand in China. At the beginning of China's Internet economy, Tencent launched QQ, an online social networking platform, in February 1999 in response to the public's demand for online social networking, laying the most important cornerstone of Tencent's business empire. In the following years, QQ has gradually become an essential social communication product for Chinese netizens, and Tencent QQ's penguin image has long been deeply rooted in people's hearts. On this basis, Tencent launched other products into the market one after another, such as QQ mailbox, QQ air, mobile QQ, QQ games. Finally, the launch of Wechat once again enhanced Tencent's position as a giant in the Internet industry. These products were bundled with Tencent's QQ brand, and were quickly accepted and recognized by the market. And its representative "Tencent" this brand, has become China's "national brand".

3.4.2 Brand marketing -- Tencent game sub-brand marketing

Tencent Games has integrated and established four game platforms (which can be understood as sub-brands of Tencent Games), namely Tencent Game Carnival (TGC), Tencent Game Competition Platform (TGA), Tencent Games Arena, Tencent Games Guild (TGG), Tencent Games Love Union (TGSR). Tencent Game Carnival (TGC) focuses on offline game activities and online and offline link. TGC will hold a big game exhibition every year, where gamers can try out the latest games, watch e-sports events and Cosplay shows. Tencent Game Competition Platform (TGA) is a platform for the new generation of competitive game players, covering heavy competition, light competition, casual competition, etc., which can provide the latest competitive information, game live broadcast and other services to game players. Tencent Game Association (TGG), Tencent's exclusive game association management platform, assists in the management of players' association groups inside and outside the game; Tencent Love Game Alliance (TGSR), Tencent's game public welfare brand, has held more than 30 game-related public welfare activities since its establishment in 2009, improving the public welfare image of Tencent's game brand.

The different functions of the four sub-brands guarantee the comprehensiveness of Tencent's game marketing in various fields, which is an indispensable part of Tencent's game marketing.

3.4.3 Game IP marketing

(1) IP marketing itself

IP marketing of Tencent games can be divided into two parts: popular IP acquisition and original IP cultivation.

Tencent has invested a lot of capital in the IP market in recent years. Corresponding to its game sector, it can be considered that Tencent games have purchased well-known IP at home and abroad, sought inspiration from literature, film and television and other fields, adapted them and integrated them into games. For example, Tencent has purchased several IP under the name of Jin Yong, a famous Wuxia novel author, and developed a series of Chinese wuxia style games (such as Tian Long Ba Bu and Jin Yong's Legend of Heroes). In terms of IP of film and TV series, Tencent has purchased popular IP of film and TV series such as "Celebrating More Years" and "Story of Yanxi Palace" in China, and also plans to launch corresponding games in the next two years. Tencent

games with a large number of fans under the original IP as the target customer, in the way of game IP innovation, successfully attracted a large number of fans to play.

Besides popular IP, Tencent is also actively cultivating its own original IP. For example, in Tencent's Tianya Mingyue Knife and King of Glory mobile games, players have created a large number of "fan works" based on their enthusiasm for the game and the theme of the game's characters and settings, such as short animations, novels and paintings. Based on this, the game operation officials actively carry out relevant online and offline promotion activities, and complete and improve the relevant Settings/characters/backgrounds in the game to encourage players to create second time. Thus, "tianya Mingyue knife" and other games to maintain high game heat for a long time.

For the games industry, IP pays dividends not only because it "brings in a large number of gamers," but also because that audience is highly loyal, with high retention, high activity, and high spending. Therefore, the operation of IP to a large extent to ensure the high flow of a game, high activity of players.

(2) IP derivative marketing -- peripheral products

The promotion of peripheral products as an important part of IP cultivation has always been attached importance to the game manufacturers.

Tencent actively develops peripheral products. Through innovative re-design of characters in game products, it produces and sells a series of related products, such as character dolls, puzzles, key chains, mugs, mouse pads and a series of daily necessities printed with characters in game products. Tencent and other game manufacturers, through the popularity of game products, drives the sales of these peripheral derivatives, so as to make profits.

Game manufacturers develop peripheral products based on the fact that users will have a high emotional cognition of the game characters in the process of playing games, which leads to their willingness to spend higher prices on peripheral products than ordinary daily necessities. As an auxiliary marketing mode, peripheral product development mode usually does not appear alone. Based on the effective operation of other business segments, this marketing expansion can help Tencent and other game companies to establish a more firm group of game players, and at the same time help establishes a good atmosphere of game community.

3.4.4 Expansion of game derivative industry

(1) Expansion of e-sports industry

Tencent established its online Game Arena Platform (TGA) as early as 2010, and began to explore the field of electronic games, and announced that Tencent officially opened its layout in the field of competitive games. In 2016, Tencent upgraded its e-sports business and established Tencent E-sports, which has become one of the five business matrices under Tencent Interactive Entertainment. In 2017, Tencent Games officially launched the "development plan" of esports, including upgrading events, building alliances, expanding industries and cultivating talents. In terms of events, it will continuously promote popularization, entertainment, internationalization and specialization to build a comprehensive event system and improve user experience [8]. In terms of alliance building, strengthen business cooperation with various e-sports clubs and give certain support to their development; In the industrial extension, the establishment of e-sports industrial park as the core. Tencent plans to establish more than ten pan-entertainment e-sports industrial parks with a certain scale and influence within five years. In talent training, and at home and abroad, vigorously cultivate e-sports talents.

Tencent's promotion of e-sports culture and cultivation of e-sports industry has established a good cultural development environment for its related games and also cultivated a considerable number of potential user groups for games.

(2) Development of live game industry

With the explosion of China's domestic e-sports market, the field of live game has also received great attention. Live games is a major way to the spread of the tournament, excellent e-sports explanation and live platform anchor as a hot resources, more and more attention of gamers and non-gamers e-sports live, according to the 2020 China network broadcast industry development

report, by the end of 2020, China's network broadcast industry account number more than 130 million host, with 617 million users watching live webcasts, or 62.4 percent of China's Internet population, this sector has huge commercial value. Tencent was keenly aware of this at an early stage: in 2018, Tencent invested \$460 million and \$630 million respectively in Huya and Douyu, two current giants in China's game live streaming industry, which also shows Tencent's determination to further operate the video game live streaming business.

3.4.5 Platform advertising and marketing

Tencent's advertising promotion of games can be divided into two aspects: "Tencent department" and "Tencent department".

"Outside Tencent" means that Tencent chooses to launch advertisements in non-Tencent products. For example, Tencent has launched corresponding short video/text promotion advertisements on Sina Weibo, Baidu Tieba and Tiktok. This way of marketing can help Tencent games to obtain a large number of new players, to ensure that the number of new players of the game growth is stable.

Advertising in "Tencent Department" and Tencent's products, such as wechat, QQ, Tencent Video, Wechat, QQ Music, etc. As Tencent's product platforms are highly interconnected, it is easier for players on these platforms to play games. Tencent's various games will establish their own official public accounts on wechat and QQ, regularly release game guides, offline activities, in-game promotions and other consultations. At the same time, the game official will contact the platform or third-party authors to produce corresponding promotion articles and videos and put them on the platform in large quantities. This kind of low cost, efficient use of the promotion way has been an important part of Tencent platform advertising marketing.

3.4.6 Cultural background marketing

Tencent games have a profound study of traditional Chinese classical culture, and often incorporate elements of traditional Chinese culture into their game promotion. Many successful marketing cases have been created based on the empathy/acceptance of Chinese people towards traditional culture. Such as "king glory" launched "twenty-four solar terms", "glory Chinese festival" series of activities such as stepped up its efforts to carry forward the Chinese traditional culture: the king of glory game every throttle system will launch a beautiful throttle wallpaper, both in the form of an easy accept to promote the traditional Chinese solar term culture, and thus won the praise of gamers.

3.4.7 Mature behind-the-scenes marketing team

Tencent game has a strong and mature professional marketing team behind. The team is responsible for marketing for everything from games to movies to anime to literature. The team has more than a dozen centers, divided into dozens of groups; Responsible content includes marketing planning, user research, data analysis, media, public relations communication, creative design, business development, activities, promotion and other marketing system needs links. Tencent/Tencent Games actively carry out marketing activities, which not only expand the popularity of Tencent games products and help them occupy the market, but also constantly change the audience's perception and improve the image of Tencent games through carefully planned copywriting publicity. A successful marketing team is the foundation of Tencent's successful game operation.

4. Game Operation

4.1 Game designer

Game Designer is an important part of the game team. Han Ji pointed out that game design usually refers to the overall design and planning of the game, which is an important link in game development and is mainly responsible for game management, project design and development [9]. Tencent's mobile gaming success is inextricably linked to the company's great staff.

First of all, When Tencent recruits game designers, it requires game designers to have good teamwork ability, a strong sense of responsibility and use Household needs have good identification ability and control ability.

In addition, after new employees enter Tencent, the company will conduct professional training for them to apply what they have learned to their work. With such a professional team and training method, Tencent mobile games can establish a good internal operation mode, thus laying the foundation for the success of the game.

Secondly, Jia Ying suggested that people like to communicate with each other and share their experiences with each other in any situation [10]. The high-quality design team knows how to establish a good communication relationship with players, is good at listening to the voices of different players, and extracts suggestions from players that are more conducive to the development of the game and removes content that is not conducive to the development of the game. Taking the Naruto mobile game as an example, in the Naruto section of Baidu Tieba, the game designer will answer questions for players, regularly listen to players' opinions, and invite players to participate in the game design process. And there are also special communication and appeal channels in the game, so that planning can better understand the players' demands. As a result, despite the fact that Naruto has been a game for six years, it continues to have a place among Tencent's mobile games.

Finally, the event designer of Tencent mobile games is one of the reasons why Tencent mobile games have made huge profits. By researching players' online time and consumption willingness, the event designer has carried out numerous promotional activities that meet the psychology of consumers.

In the 2020 "Arena of Valor" Spring Festival celebration, Tencent designers carried out promotional activities based on the fact that people had more free time and money during the Spring Festival. In this activity, the newly produced game skin was well-made and recognized by many consumers, and one of them sold one hundred million copies. On January 24, 2020, income from the iPhone surpassed RMB 190 million, and sales volume for the entire month of January was also the highest of the year.

To summarize, Tencent's professional design staff is capable of not only connecting with players and listening to their feedback, but also of selling gaming goods based on customer preferences and requirements. As the results, Tencent mobile games have taken the lead in the market, based on the assumption that the game's quality is assured.

4.2 Event management

Tencent's mobile gaming team has extensive event management knowledge, which has an indirect impact on Tencent's whole mobile game industry.

To begin, three days before to the game's maintenance, announcements will be posted on the game's official website, Weibo, and other platforms, and the maintenance time will mostly be chosen at night or when there are less users to avoid disrupting the player's gaming experience. At the same time, appropriate incentives will be provided to soothe players' feelings after each update and maintenance.

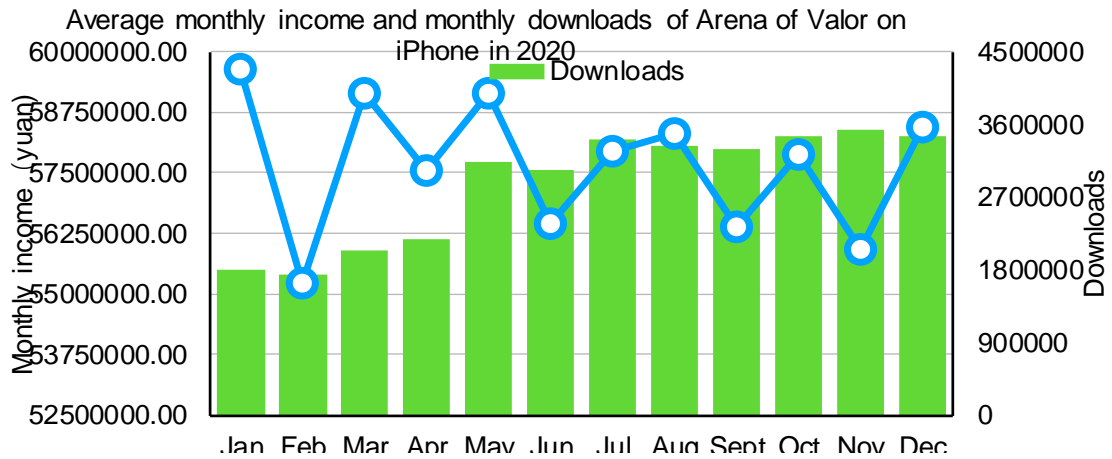


Figure 1. Average monthly income and download of Arena of Valor on iPhone in 2020

Second, Tencent Games has always placed a premium on fair competition, and Tencent's anti-cheating system has long been regarded as industry-leading. Tencent's competitive mobile games have always been highly popular as a result of this.

Tencent employs the Anti-Cheat Expert-(ACE) technology on the hardware level to detect and block players who have anomalous data.

In addition, Tencent Games collaborated with gamers to create a player reporting feature. Players can opt to observe after the game and report questionable gameplay using the in-game reporting feature. In the game hall, the submitting player will receive a feedback letter with information on the guilty player's punishment outcomes.

To summarize, Tencent's mature operating mode and effective anti-cheating system may provide players with a positive gaming experience while also assisting Tencent in achieving a dominant position in the mobile game industry.

5. Research and development



Figure 2. 2014-2020 China game market user scale change trend

Prospective industry research institute

The game industry has been in a state of rapid growth because of the high return on less investment, among which the mobile game market size has been growing at a rate of more than twenty percent every year. At the same time, the growth of game users is slowing down, and game

manufacturers want to compete for existing users, and want to stand out in these games, so the quality of the game has become the most important thing. The game quality is depend on team's research and development. Therefore, research and development plays an important role in the game industry.

Tencent, as the number one game manufacturer in China, has put many efforts in game's research and development, so it can gain a notable profits. According to the percentage of Tencent's self-research mobile flow from 2018-2020, the profits of self-research games accounts for a large proportion in whole profits gained. Tencent is also willing to pay more attention to research and development as a result.

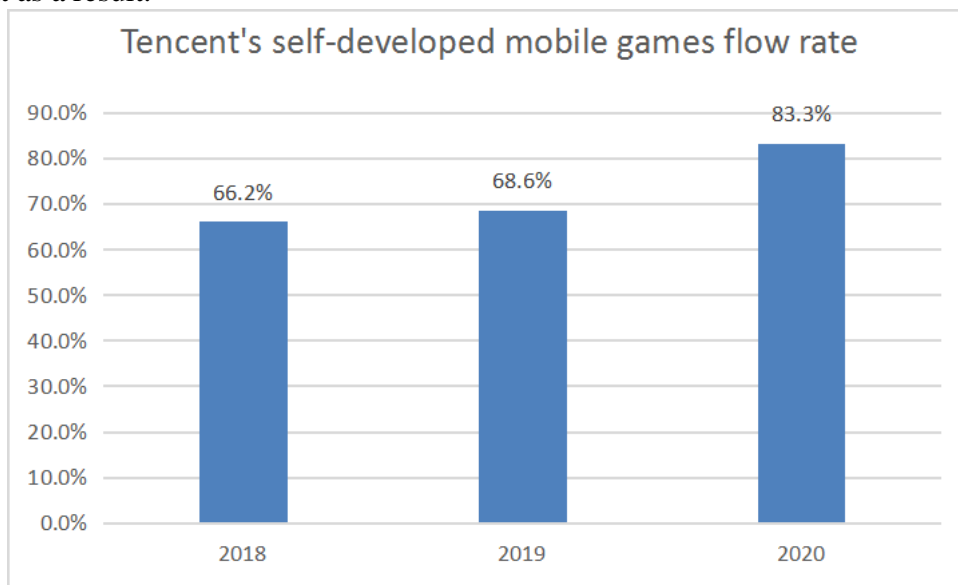


Figure 3. Tencent’s self-developed mobile games flow rate

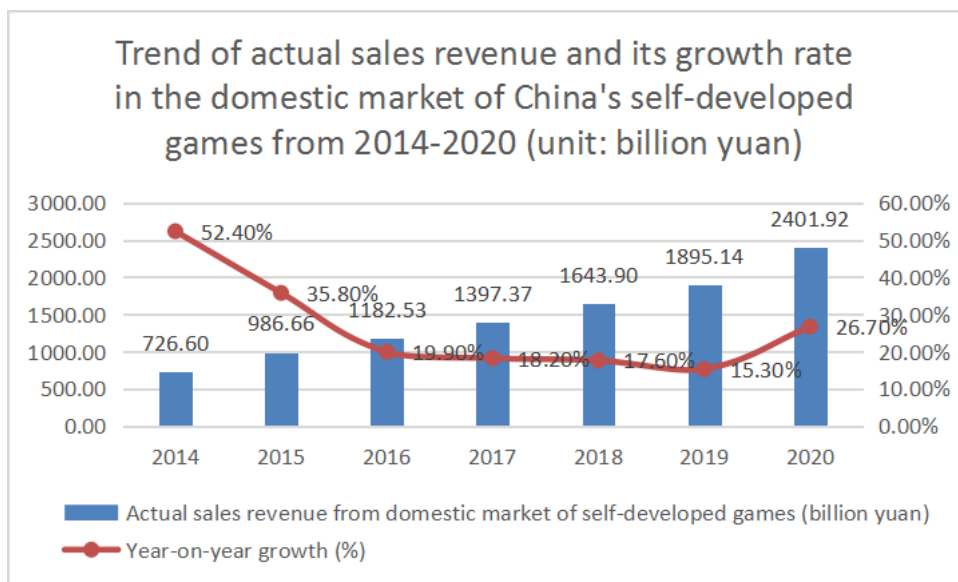


Figure 5. Trend of actual sales revenue and its growth rate in the domestic market of China’s self-developed games from 2014-2020

Prospective industry research institute

From the figure, it can be seen that the actual sales revenue of China's self-developed online game market has slowed down significantly since 2014, the influence of mobile game promotion channels on game sales situation has been determined. The content of the game will become the key factor affecting the sales than the promotion and sales channels in the mobile game market. After 2016, the growth rate tends to stabilize. In 2018, the turning point of the game market appeared. The mode of

acquiring wealth by inducing users to keep investing has hit a plateau. At the beginning of the year, due to the impact of the Covid19, the market growth rate has been greatly increased.

5.1 Input-output ratio

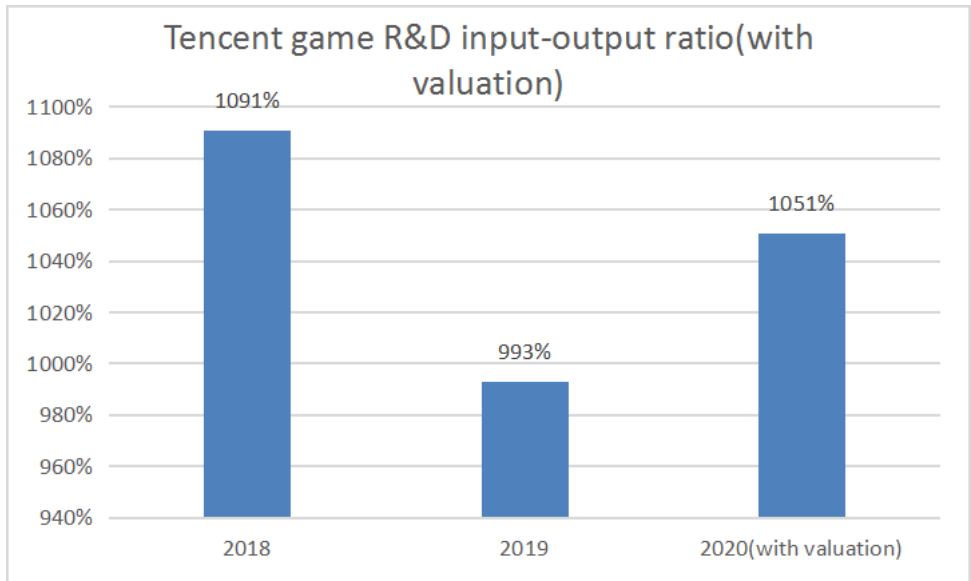


Figure 6. Tencent game R&D input-output ratio

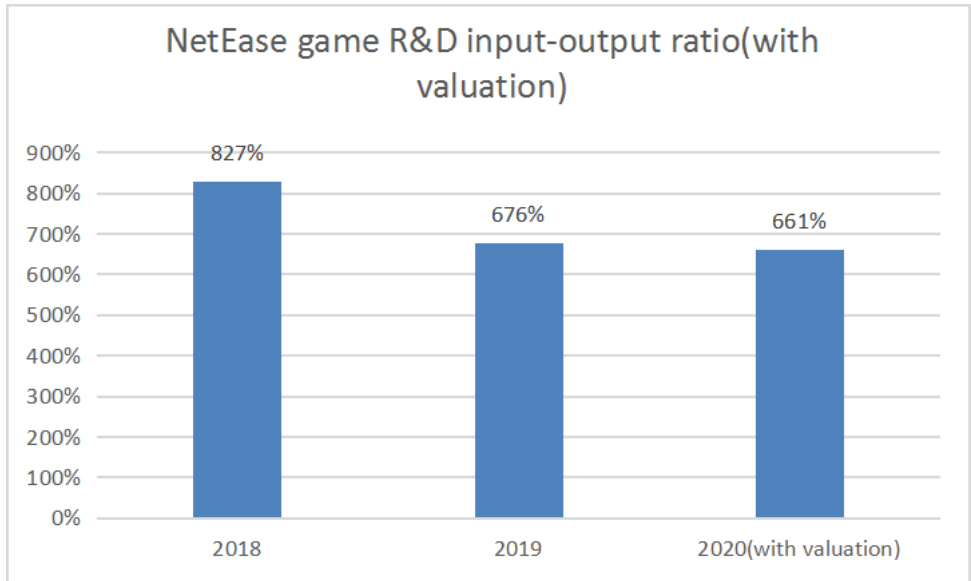


Figure 7. NetEase game R&D input-output ratio

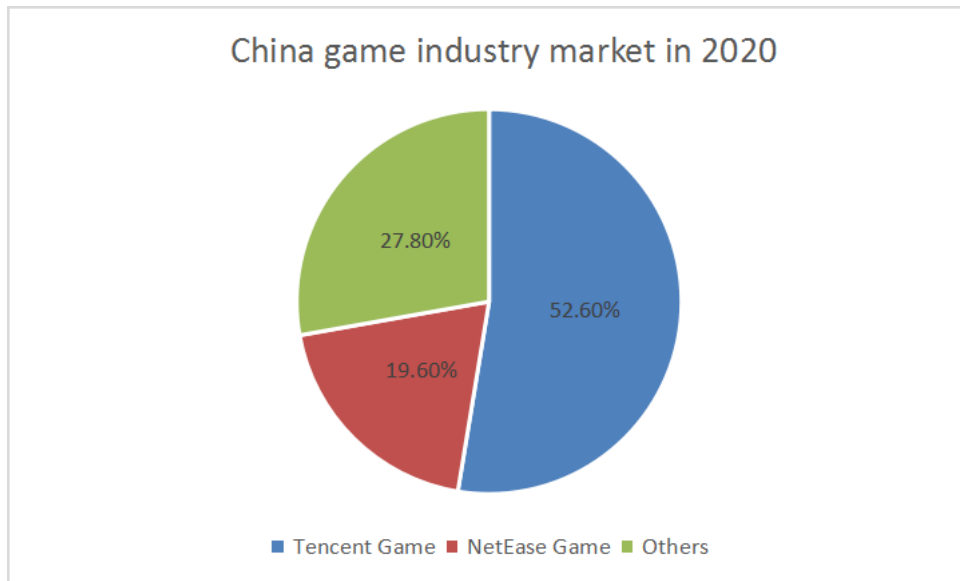


Figure 8. China game industry market in 2020

In 2020, NetEase and Tencent accounted for 72.2% of the game market, while Tencent's market share was 2.68 times that of NetEase. This paper compares the input-output ratio of Tencent and NetEase in recent years. Tencent has maintained a high input-output ratio in recent years, and the fluctuations are not significant, while the input-output of NetEase has decreased year by year, while in 2020, Tencent's input-output ratio is 1.59 times that of NetEase, which shows that Tencent research and development is very good.

5.2 Investment and patents

At the end of 2019, the world's top ten most popular mobile games (daily active users), five are developed by Tencent, in addition to create original IP, Tencent has also invested in top game studios in major game categories, such as TiMi Studio Group, Lightspeed & Quantum Studios Group, Riot Games and Supercell, all have a strong research and development ability. PUBG Mobile, developed by Lightspeed & Quantum Studios Group, contributed 29% of Tencent's game revenue in 2020.

Patent layout can maximize the role of patent weapons in competition, protecting their rights while weakening competitors' advantages [3]. Tencent's patents play a very important role in the profitability of its games. In "Game Industry Patent Analysis Report" from IPRdaily Take king of glory as an example, before the game was launched in 2015, Tencent applied for more human-computer interaction class patents involving the operation of the game, to protect the operation method of the game in time. In 2016, Tencent acquired Supercell at a price of 8.6 billion dollars, which has since solved some core technical problems in the field of hand games. In 2017, with the explosion of the game live broadcast of "King of Glory", Tencent applied for a patent for the optimization scheme of the viewing mode again.

At present, Tencent invests in game genres with broader audiences and with the development of 5G, Tencent has increased its investment in cloud games, that is, with the ability of cloud services, it can get rid of the restrictions of players' hardware and platforms and play high-quality games by networking.

5.3 How can Tencent attract research talents

Scientific research cannot be done without talents, and Tencent has taken many measures to attract talent.

5.3.1 Researcher benefits

From the article of a Tencent employee we can know that Tencent has a complete promotion system, and the salary package is clearly graded, which makes the company well competitive. The company's corporate culture has been widely recognized by its internal employees. Its management philosophy is to care about the growth of employees, and strive to create a richer material guarantee, a broader development space, and a richer spiritual and cultural world for each employee. The company will do internal satisfaction research every year.

The company's daily benefits of the company include fixed meal compensation, covering shuttle bus, free physical examination, the company's product discounts and so on.

5.3.2 Good R&D environment

Game developers tend to be highly educated and knowledgeable, and they value the games they developed more than the company, and they have a high possibility of joining other company once their career has a chance to develop [11]. And Tencent has a very good R&D environment.

Tencent has WeChat and QQ, which makes it easy for developers to promote their products to users and making the in-game payment convenient. The company itself is well funded, with plenty of IP, making development more creative. The company has launched a lot of games, thus accumulated relevant experience, also launched products are less likely to fail compared with working in small companies.

6. Conclusion

With the development of Internet technology and the popularity of smartphone devices, the mobile gaming market is booming before. Competition in the game industry is intensifying as consumers demand more mobile games than in previous years, with higher quality and new genres. After years of continuous exploration and development, Tencent games stand out from many mobile network games, constantly seize market share, can be said to be very successful. Based on this, this paper focuses on the factors contributing to the success of Tencent's game business and draws the following conclusions:

(1) From the perspective of game design, we attribute Tencent's success to role setting meets customer preferences, continuous innovation, simple operation and excellent game experience.

(2) Based on 4P model, combined with relevant data and cases, this section analyzes the success factors of Tencent Games in its "Product", "Price", "Place" and "Promotion" and relevant marketing strategies involved.

(3) Tencent Games has a great design team and skilled event management, which results in a positive gaming experience for users and, ultimately, the success of Tencent games.

(4) From the perspective of research and development, we attribute Tencent's success to its heavy investment in research and proper investment and rational measures to attract research talents.

At the same time, this paper has some limitations. The data in this paper comes from enterprise reports, so the data we get are adjusted by the enterprise itself rather than first-hand data. In the future, the analysis of the success factors of Tencent games should be updated and followed up in time with the market changes, and its success factors can also be extended to a wider range of aspects.

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