# Current Situation and Development of Trend of Chinese Mobile Game Development

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#### ABSTRACT

The primary aim of the current study aims to assess the current situation of the mobile game industry, determine how the Chinese gaming industry developed in the past few decades, and examine the marketing model game developers use to succeed in China. Mobile game industry has significantly expanded in the past few years due to increase smartphone adoption and lifestyle changes. It's worth noting that majority of young people in China would prefer mobile game to any form of physical games, and this has impacted the industry positively. The mobile game industry is estimated to be \$41.5 bn in 2021 and it's expected to increase in the next few years. The study concludes that mobile games have fundamentally altered the gaming business, providing a consistent level of pleasure via cloud-based videogames and offline applications. This implies that the ease of on-the-go Entertainment will keep attracting many customers, particularly in major economies such as China. The current study has examined prior researcher's perceptions on the current situation and development of mobile video games in China by assessing their challenges, solutions and recommendations.

Keywords: Mobile Game, Development, Videogame

#### **1. INTRODUCTION**

A mobile game is a prime indicator of the effectiveness of smartphone apps, demonstrating the expanding breadth of channels for the film and television sectors [1]. Gaming has been an integral aspect of social life and everyday actions [2]. It is projected to become very popular and lucrative in the following years [3]. As the name implies, a smartphone application is a computer entertainment that can be played on smartphones and computers [4]. Smartphone games are supposed to be a highly global kind of media, with distinct advantages over other significant forms of enjoyment like Movies and television. Like films and fun, the identities, trademarks, and pictures of the most famous games are progressively recognized by gamers and customers across the globe.

The rapid expansion of omnipresent computer technology has heralded a new age of pervasive games [2]. The worldwide portable gaming industry has undergone exponential growth over the last decade, driven by the pervasiveness of mobile applications in human lives and the rising broadband accessibility of WIFI routers [5]. Like cross-platform video games, the smartphone industry has significant seen internationalization, as shown by systems, marketing approaches, game production tactics, and user behavior. All indications are that its position as the worldwide superpower in this sector will be reinforced soon. S. Korea, Japan, and China have risen as innovators in various facets of the mobile gaming business and user behavior amongst Asia's three main competitors. China has been at the forefront of the global growth of the mobile gaming industry. Against this background, the current study aims to assess China's mobile game industry's current situation and development trend [6].

Zhu did research in 2021 to assess China's gaming industry growth situation and strategies in light of "One Belt, One Road." According to the researcher, the grand plan of "One Belt, One Road" opens up new chances for the growth of Asia's video games sector. "One Belt, One Road" may be defined as a bright street for game firms since it not only explains the growth path for games developers but also offers preferential policies for publishers and developers. Nevertheless, whenever Chinese video games are "getting out," keep your eyes peeled. Zhu further said that one could only surf the springtime wind of the "Belt and Road" and sail away if one is adept in many sorts of fighting like innovation, excellence, and administration [7].

Kshetri studied the evolution of the Chinese internet gaming sector and the causes that led to a distinct internet gaming tradition in 2009. The investigator provided a comprehensive and up-to-date summary of the evolution of the Chinese gaming market. According to the data, video games are an incredible sector requiring rapid increase due to Chinese entrepreneurs' creative business methods. According to Kshetri, Chinese businesses are also collaborating with the countries to improve official structures to foster the expansion of online gambling. Moreover, we discovered that the Chinese internet gaming sector is similar to other technology sectors, such as phone and Personal computers. While Chinese firms have typically been slow to develop new technology, they have shown success in several contemporary advancements [8]. Overseas players controlled the Chinese game sector in its early stages of development. In the past few years, this business has been defined by the predominance of local firms in the environment that caters to the whole production chain.

Using in-depth, up-to-date, and comprehensive research, Tai and Hu examined the mobile gaming environment in China in 2017, focusing on the interaction of the three factors of the business: multiplayer gameplay creators, social games, and the sector as a whole [9]. It examines how the commercialization of smartphone games has evolved into a central focus of cordless telecommunications companies thru the centralization of a distinct approach integrating a wide range of wellcoordinated delivering systems, marketing establishments, application stores, and value-added assistance designed to target tiers of gamification. It is best understood in centuries of the governmental policy of strenuously gestating a nationwide pillar sector while preserving a strict grip of video games and new competition. Tai and Hu also examine the stages of development of the Chinese mobile gaming community, which has progressed from obscurity to economic success in a short period of fewer than two generations and examine the diverse complexities of hardcore gamers and the new games that are currently available on the business in China. It concludes with some thoughts on the company's opportunity for advancement and developing patterns in China's mobile gaming business.

He evaluated the present state of the mobile gaming business in China and the sector's potential prospects until 2021. He pointed out that because the smartphone game business has had a massive expansion in China, the entertainment industry integration has continued apace [10]. Individuals are slowly anticipating that the new gaming business would provide new employment and income for the general public. There has been little discussion on whatever new economy will offer to communities and the difficulties that will arise due to this. Cities differ even more in terms of the growth of the mobile gaming business than they do in terms of geography. Also included in the research was an investigation of how the mobile gaming business in China has developed and a discussion of how the video games industry has influenced China's growth structure and design of the metropolis. He emphasizes the recent development platform of a portable gaming community to comprehend how the smartphone game industry is evolving in the metropolitan area and incorporate data to discover an appropriate orientation for the growth of the digital gaming community in China. He (2021) is a doctoral dissertation that was written in English. China's mobile gaming business will benefit from some helpful building and solutions provided by this report in the foreseeable.

China's current mobile game industry has significantly changed in the past few decades due to the increased adoption of smartphones. Most Chinese youths use smartphones to access the internet or play games, which positively impacts mobile game competition. As such, the current study aims to assess the current situation of the mobile game industry, determine how the Chinese gaming industry developed in the past few decades, and examine the marketing model game developers use to succeed in China.

#### 2. MOBILE GAME DEVELOPMENT SITUATION

Smartphone videogames, the fastest-growing area of the video game business, are estimated to generate over \$110 billion in sales this annum. Approximately 40percent of that worth will occur in China, which is home to roughly one-third of all phone games worldwide [11]. Statista Digital Industry Forecast shows that the Chinese portable gaming business has rapidly increased [11]. The entire sector was estimated at \$19.2 billion in 2017; however, it has almost quadrupled in worth, reaching \$41.5 bn in 2021. Mobile games have fundamentally altered the gaming business, providing a consistent level of pleasure via cloud-based videogames and offline applications. The ease of on-the-go Entertainment will keep attracting many customers, particularly in major economies such as China.

Two years later, the Chinese mobile gaming sector had roughly 450 million consumers [12]. Increasing smartphone adoption and the Covid-19 have contributed 113 million additional subscribers, bringing the number to nearly 563 million by 2021. Throughout the coming three years, approximately 50% of the Chinese population is predicted to play smartphone games, well, with the popularity of smartphone gamers exceeding 662 million.

Ranking	Players		Revenue	Growth
			(bn, Yuan)	
1	Tencent		77.8	19.7%
2	NetEase		28.52	5.7%
3	37	Interactive	5.58	69.6%
	Entertainment			
4	Alex		2.94	-21%

Table 1. Mobile Game Market Competition in China2022

In 2020, the operating profit of China's ten leading registered portable gaming firms was lower than in prior years. Interactive Entertainment has the most significant growth in sales amongst these top competitors for the third year in a row. Its average growth during 2020 is 69.65 percent, whereas it achieved 100.68 percent in 2019 [13].

It's essential to keep in mind that, while the rise of leading competitors has all been mild, the barrier to top ten competitor's rankings has been growing, from 960 million Yen in 2016 to 1.2 trillion Yen in 2017 to 1.76 trillion Yen in 2018. It demonstrates how fierce the rivalry in the mobile gaming sector has become. The top ten smartphone game firms' share of the Chinese mobile gaming market increased to 78.86 percent in 2018, 67.0 percent in 2016, and 73.82 percent in 2017. Cooperation with large game firms is ideal for small and medium-sized mobile gaming industry climbed by 10percent in the last three years, propelling it to a dominating lead.

Over the projected 2021 to 2026, the Chinese gaming sector is expected to develop at 14%. One may find the Chinese market among some of the world's most lucrative gaming markets [14]. Many global firms are becoming involved in the gaming sector by purchasing shares in Chinese game providers or providing financial assistance to professional gaming teams. One of the primary factors contributing to the rise of the games industry, in particular, is the rapidly expanding significance of e-sports, a professional aspect of the gaming industry in which various individuals participate in gaming tournaments. At the same time, the whole championship is televised live [14]

The demand for mobile games in the nation is expected to grow steadily over the next several years due to the country's growing mobile gaming audience. Chengdu and Zhengzhou, two of China's tier-2 cities, are home to most participants. From 62.5 percent in FY2018 to 68.5 percent in FY2019, China's gaming sector saw an increase in the proportion of mobile development expenditures accounted for in revenue. It is also expected that the rise of inexpensive smartphones would shift away from mobile subscribers' current characteristics to cellphones.

As per SensorTower, the world's leading Chinese videogame companies contributed 26% of worldwide popular mobile revenues in July 2020. Famous companies such as Tencent and NetEase led the rankings, with other well-known names such as Lilith Gaming, FunPlus, Lingxi Games, etc.

#### 3. MOBILE MARKET CHARACTERISTICS IN CHINA

# 3.1. Smartphone and Mobile Game Development

Because China's digital phone has progressed towards 3G (third-generation smartphone communications systems) and an expanding range of digital devices and cell telephones, the smartphone market system has evolved in tandem with the country's fast expansion, laying the groundwork for the development of mobile games in the country [15]. Because of the advancement of mobile video games in 2013, China's smartphone game industry progressed in 2014 towards a higher degree of complexity and more internationalization. According to a study conducted by Niko Partnership, portable console games is the fastest-growing area of the Chinese video games business. Portable console games are displacing PC-based recreational and social video games [16]. Chinese smartphone game market research from 2013 - 2017 published by Sino Communication and information estimates that the Chinese smartphone game marketing will be worth  $\neq$  9.67 bn in 2015. The analysis also indicates that operating profit in China's smartphone game industry has outpaced subscriber growth.

# 3.2. Current State of Chinese Mobile Game Business

Several sophisticated game analysts assert that the Chinese mobile game business is unquestionably thriving and will soon surpass all other mobile game markets globally [17]. In the Chinese mobile gaming sector, a huge number of international game developers are actively looking for business prospects in China. China's gaming business is now experiencing rapid growth and is very competitive. It is estimated that there have been up to 23,7000 smartphone gaming companies in China during the previous two years [16]. However, many creators are still optimistic about their chances of releasing their game in that market because the business stream is shifting towards the mobile gaming sector [20]. To succeed in this market, many developers and designers need a thorough grasp of the Chinese application distributing ecosystem and knowledge into the local phone games' interests, habits, and behaviors.

It is necessary to examine the distinctive features of the Chinese mobile gaming market. While the Chinese mobile gaming industry is less factionalized than the marketplaces in other parts of the world in terms of delivery streams, it is more factionalized than the markets in other parts of the world in aspects of the content. For example, the paid portion of the Android Market is not accessible to Chinese customers; however, there seem to be more than literally thousands of application stores in China's mobile marketplace through which users can access the gameplay [19]. These factors impact the number of Mainstream mobile game creators who wish to be successful in China, but they face several significant hurdles. For example, the Chinese smartphone game industry, where there is widespread theft of game titles by unscrupulous hackers, who are often aided and enabled by Chinese app shops [21]. Several appearances by Western game creators who feel powerless while counterfeits of their top titles get millions of sales in the Chinese market are shown on the show. Occasionally their games are openly hacked, allowing the hackers to divert the income generated by the game directly into their wallets.

# 3.3. Difference Between Chinese Games and Western Games

Another point of view to consider is the conduct of Chinese game players unfamiliar with western society [21] since this will provide a different viewpoint. For example, the America game [22], which was based on famous US football and volleyball, would not perform well in China. When it comes to game genres, recreational games continue to be quite popular throughout the board, with videogames and role-playing games following closely behind. (Sports-related video games, for instance, fall well behind their counterparts in terms of quality.) On the contrary, consumers from other nations, Chinese consumers tend to choose small-volume smartphone games that need them to play for shorter periods, as opposed to clients from other countries.

On the other hand, mobile gaming is the quickest increasing part of the overall Chinese games business, and it is an exceedingly hard market to navigate. Increased mobile gaming business participation results from the proliferation of cutting-edge innovations, whereas technological innovation and services need more collaboration among players than ever before [23]. Beyond game makers, the Chinese smartphone industry includes a diverse range of participants, including telecommunications firms, payment processing businesses, technicians, vendors, apps, portable game corporations, shareholders, organizations that provide video games and other software to development companies, corporate communications, and marketing firms, and a wide range of software social media channels, among others. As a result of operating in such a setting,

every member must cope with complex trade systems that may span different sectors.

### 4. PROBLEMS FACING GAMING MARKET

### 4.1. Differentiating Products Challenge

In China, the computer game sector is expected to gain momentum globally. Each firm has an item that is a direct competitor to the product of the other business. The challenge in differentiating products is also a contributing factor to the increased competitiveness. They are all in the business of developing gaming systems, with the only difference being the capabilities they provide. There is no difference in principle, and it is a cause of intense competitiveness. The firms make certain that they have the edge over their competing products to outperform the levels of rivalry established by the marketplace [22].

To provide an instance, consider that Tencent had a one-year advance lead on the next-generation innovation whenever it launched in 2012. This provided a competitive edge over other enterprises. The industry had already been established when the other businesses debuted their goods, and it was difficult to cope with them once they had solidified their position. Tencent was able to take advantage of this one-year competitive edge. It was able to get the greatest possible results from the industry. Another example of competitiveness is producing a wide range of games for different platforms. It was designed at a relatively cheap cost, and it included characteristics that appealed nongamers.

## 4.2. Competition Challenge

One of the global gaming industry's critical challenges, especially in China, is competition. In the past few decades, there has been intense competition among games manufacturers, leading to less competitive companies' collapse. In this case, it's worth noting that the resurgence of the COVID-19 pandemic attributed to gaming industry competition as most companies enhanced their activities intending to attract most players at home. The global gaming industry is approximated to be \$162.32 billion in 2020, and it's expected to reach \$295.63 billion in the next few years. This implies that the industry is thriving and is becoming competitive. The competing companies in the gaming industry are experiencing the Red Ocean Strategy, whereby each firm wants to overcome the competition by reducing the gaming price. Another issue is a game type, whereby each company offers a specific game intending to remain competitive and reliable.

A game's competition with other videogames for the customer base, on the other hand, is not limited to that. These activities are also in direct competition with

different types of amusement that often use people's free time, such as socializing, visiting events, watching films, studying, and other similar activities. The videogame that users build should, as a result, be intriguing and engaging sufficient to propel it to the head of the priority list of individual preferred pastime activities during their free time. According to the number of problem categories and kinds identified, the gaming business suffers from managerial and logistics issues in almost equal proportions to one another. On the other hand, production difficulties are centered primarily in the engineering and functional areas, whereas management defects are discovered in all issue categories.

There are just a few firms in the games industry. These businesses compete worldwide, and as a result, they need significant sums of cash to survive. They gain many benefits in production, sales, delivery, and promotion, and these benefits are particularly noticeable. The industry follows the same developments as other businesses, such as dominating the sales and supply networks and promoting websites on the internet, for example. This guarantees that the product is completely visible and readily available. The industrial assessment in performance may have been doctored to indicate that the sector has developed. Predicting disruptions is typically quite crucial in this business. The average incomes of a family are a good indicator of their purchasing power, and identifying these earnings is an essential aspect in creating a promotional campaign.

## **5. SOLUTION**

#### 5.1. Enhancing Marketing Capabilities

As presented in the challenges section, the gaming industry's main challenge is intense competition. Red Ocean Strategy and games type have also been proven to affect the industry in China in the past few decades. For gaming companies to remain competitive in the market, they need to adopt alternative strategies; for instance, they can enhance their marketing capabilities to attract a significant population. The adjusting strategy would also help the companies alter their plans after sensing the outcome. In this sense, the company is expected to use data to assess the resources and market capability, remaining relevant.

Given the enormous income potential and the expectation of further growth in the gaming sector, it is obvious that there is still a great deal of interest in the industry. Due to a lack of regulations, the obstacles to entry into the industry have been lessened. Still, the hurdles to market saturation have been elevated due to the increased number of games available to contend with. To defeat the competition, gaming firms must first and foremost make their game fascinating for it to be the favored leisure activity among the general public. When people are not preoccupied with other activities, gaming

will be the only item occupying their minds, and this is only feasible if the games are both intriguing and compelling. As a result, gaming firms should be built uniquely, and the action should be seamless and the characters properly developed. This method will help you get an advantage over other leisure activities, but it will also assist businesses in beating the competition in the market.

#### 5.2. Increase Video Quality

Tencent and NetEase must increase the quality of their videos and features. They should include a small amount of new technology and go beyond basic board games. Because everyone is eager to see their latest brand, they will be able to build a stronger consumer base. Additional innovation, growth into undeveloped regions, and the acquisition of new players may be the road forward for Tencent and NetEase in the future. They should design gaming consoles with fewer peripheral functions rather than more.

The acquisition of content development capabilities and integrating them with core strengths may be one instance of a system that depends on the important skills and expertise that Tencent and NetEase need to flourish in their respective industries. Among these essential capabilities are, for instance, technological competence, successful advertising, and the establishment of critical distribution networks. To expand, Tencent and NetEase must apply their skills to areas that have the chance to grow and strive to manage a business in Online multiplayer that cannot be altered by anybody [23]. Video games companies have benefited from online platform because they are only one obliged to change their operation or activities without interference from other users.

#### 5.3. Investing in Technological Capabilities

To be successful in the China mobile gaming industry, Tencent and NetEase need also to invest in technological capabilities and company resources, which are the two most significant factors to consider. Whenever it comes to the two firms in question, Tencent and NetEase, almost all get the advantages of their extensive technological tools and knowledge to release their products in the Chinese marketplace. In the instance of Tencent and NetEase, the gaming code is written should be provided to them in exchange for a huge amount of advantages and profits. This would allow the firms to redesign game material without asking game creators to update gameplay themselves. Furthermore, as a co-founder of Tencent, the company is primarily focused on technological localization to provide smartphone games with tiny game file sizes or less broadband to meet the needs of the present Chinese mobile gaming market. Take a look at Tencent and NetEase for examples of how

a company may successfully launch smartphone games in China by maximizing the use of Facebook integration and focusing the well-optimization of firm-based resources to create and provide the finest videogames to the marketplace.

#### 5.4. Training to E-Sports Participants

In the evolution of the mobile gaming industry, by providing good training, Guangzhou should concentrate on teaching popular esports participants and anchoring as well as instructors, pundits, regulators, and associated personnel, as well as other specialized training institutes. Learners may be routed to the appropriate live stream platform and, therefore can join up for the proper gaming club if they want. Professional schools and universities can have a goal of cultivating professional play abilities to satisfy the demands of the gaming business. They may also give new directions for struggling students to find work. To sustain this massive mobile game business, the market forces of gaming skills must be balanced. This is the only way for a city to get an edge over other locations to build its mobile gaming industries. According to the authors, the combination of the mobile game sector with conventional businesses and the building of famous sites is critical to the successful adoption of the home matches concept in video games. To accommodate the demands of various sorts of many smartphone game activities, Guangzhou primarily employs a variety of venues for smartphone game sector contests, including stadiums, cultural exposition halls, gaming halls, and cafés.

#### 6. CONCLUSION

The article has examined the current situation of the mobile game industry and how the Chinese gaming industry developed in the past few decades. The paper has revealed that Tencent and NetEase has experienced various challenges such as competition, which has significantly affected their operations in the country. The paper also found that differentiating products challenge is one of the key issues affecting the game industry operation and attributed to stiff competition from the international gaming companies. The paper has highlighted that the gaming industry in China faces challenges such as competition. There has been an increase in gaming competition in the past few years, leading to the collapse of less competitive companies. Based on the findings, the study recommends that Tencent and NetEase should increase the quality of their videos and features since players are eager to see their latest brand. This will allow them to build a stronger consumer base. Moreover, Tencent and NetEase need also to invest in technological capabilities and company resources to remain successful in the market.

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