# Chapter 6
# The Impact of the Rise of Mobile Games on the Creativity and Structure of the Games Industry in China

**Anthony Fung**

**Abstract** The rise of mobile games is one of the most influential events in computer gaming in this decade. This rise not only has introduced significant changes to the platform of gaming but also potentially has transformed many important aspects of gaming, including game communities, game culture, game design, market structure, and industry structure. Based on data collected from China and Hong Kong, this study explores the following: (1) how the rise of mobile games has affected industrial structure; and (2) whether these structural changes have affected the level of creativity in game design. Although the rise of mobile games is global in scale, in China, they were popularized in 2012, and this market has grown rapidly since then. Through the analysis of data collected on market revenue and market share, in-depth interviews with key figures from mobile and online games companies, and secondary data including game market reports, this study investigates the transformation of the industrial structure. The results of the analysis showed that since 2013, the highly concentrated industrial structure that was established in the 2000s has been significantly decentered. This finding corroborates the results of current studies on the rise of mobile games, which were based on global data. Through in-depth interviews with game designers and participant observations of game communities, the study determines whether a less concentrated industrial structure would improve creativity and whether this high level of creativity would be sustainable.

**Keywords** Mobile game • Game industry • Industrial structure • Creativity

A. Fung (✉)
School of Journalism and Communication, The Chinese University of Hong Kong, Hong Kong, China

School of Arts and Communication, Beijing Normal University, Beijing, China

School of Journalism and Communication, Jinan University, Guangzhou, China
e-mail: anthonyfung@cuhk.edu.hk

 
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## 6.1 Introduction

The gaming industry in China is currently experiencing a dramatic change. Since 2009, the market for client games has demonstrated an end to the rapid growth that has occurred over several years. In 2012, the year-on-year growth rate dropped to less than 10 % (Analysys 2015). However, in 2012 and 2013, there was a significant shift in user activity from PCs to mobiles, which was driven by the rapid expansion of China's mobile Internet-user base, including smartphones as well as new mobile apps and games. Even though client games are still by far the biggest segment, the market share continues to increase (Newzoo 2015a). According to the China Game Publishers Association Publications Committee (GPC 2015a), 2014 saw a 15.1 % year-on-year increase in the number of mobile gamers to 358 million. Revenue growth was much stronger, and mobile games generated RMB 27.5 billion ($4.4 billion), which accounted for a dramatic year-on-year increase of 144.6 %. Thus, mobile games are expected to become the largest game segment with a compound annual growth rate of 59 % from 2014 to 2018 (Nomura 2014). Newzoo (2015c) even predicted that in 2015, the Chinese mobile game market would overtake the US and Japan to become the largest market in the world.

## 6.2 The Structure, Ecology, and Marketing of Mobile Games

The mobile game industry has three important components: developers, publishers, and platforms. In the age of client-based games, the gaming market in China is dominated by a few giants, including Tencent, Netease, Perfect World, ChangYou, Giant, Kingsoft, and Shanda. In addition to the shift from PC games to mobile games, all these major companies are expanding their mobile teams and releasing new mobile titles. In 2013, Tencent (the WeChat platform and the mobile QQ platform), Shanda (G Home), and ChangYou (PengYou) launched gaming platforms. According to iResearch (2015), in the first half of 2015, there were 905 mobile game enterprises in China. Although their superior research and development (R&D) advantages ensures the dominance of traditional client game companies, the emergence of a large number of mobile game enterprises has increased the competition. According to Sootoo Research (2015), in the fourth quarter of 2014, Tencent led the market with a market share of 15.8 %, whereas small and medium mobile game companies accounted for only 2.4–6.5 % of the total market. The outstanding new companies include CMGE, Locojoy, Chukong Technology, Yinhan Technology, LineKong, Longtu, Playcrab, and Digisky. Although the Chinese game market can be said a monopoly or an oligopoly, it cannot be denied that the highly concentrated industrial structure established in 2000 has been significantly decentered since 2013.

Game publishers act as intermediaries between developers and distributors. As a greater number of game companies act as developers and distributors, it becomes much more difficult for both sides to find the right partners. Therefore, fragmented situations serve to upgrade the status of publishers in the mobile game ecology. Given that the domestic game-developing team is very small, and a variety of distribution channels co-exist in the mobile game market, small-scale game developers tend to hand new games to publishers who are able to leverage various marketing channels to monetize them. Similarly, those large-scale game companies cannot guarantee continuous success. Hence, in order to reduce financial risk, a greater number of game companies acting as publishers. Well-established game companies, such as Shanda, Kingsoft, Tencent, and Netease are newly emerging firms. Moreover, Chukong technology, LineKong, Kunlun, and iDreamsky games have transformed their roles from game developers to publishers. Therefore, the competition among publishers has become extremely fierce (Li, ex-Planner of Perfect World, personal communication, January 20, 2014).

Platforms are in a favorable position because they have accumulated huge numbers of users and therefore usually share roughly 50 % of the game billing. Specifically, the iOS and Android game platforms are two camps in China's mobile game market. An open-source platform, the Android operating system holds two thirds of the Chinese mobile market (Newzoo 2015b). However, because of Android's open platform and the competition within the Android market, Apple is the top brand in terms of distribution. The profits generated by iOS-based games are 2.3 times greater than by Android-based games (App Annie and IDC 2015a, b) because of the single iOS operating system. In contrast, the Apple platform benefits from its very strong position in the high-end smartphone market with a huge number of wealthy users. Even though Android-based mobile games hold 62 % of the market revenues (GPC 2015b), this position was unrelated to the Google Play app store. Because of the tense relationship between Google and the Chinese government, independent third-party app stores are important for distribution. According to Newzoo (2015b), the top 10 Android-based distributors are 360 Mobile Assistant, Tencent Myapp, Baidu Mobile Assistant, MIUI app store (Xiaomi), HiMarket, Wandoujia, Huawei App Store, Anzhi Market, 91Mobile Assistant, and Google Play. It is worth noting that (i) Internet giants, such as Baidu, Tencent, and Qihoo dominate the app ecosystem in China, and (ii) app stores owned by handset manufacturers (i.e., Xiaomi and Huawei) are likely to gain more ground because of strong unit sales and rising penetration rates.

Because of the highly fierce competition, in 2014 mobile game channels shifted from horizontal to vertical. The rapid development of channels fosters a large number of vendors distributing mobile games across multiple downloading platforms. Such horizontal stretch and destructive competition have gradually eliminated the weak channels without substantive operation model, and retain those platforms with comprehensive vertical strategies (PR Newswire 2014a, May 12). Instead of a one-off provision of mobile games, a competitive vertical strategy also includes quality hosting of the games, after-sales support, and establishing online gamer communities (PR Newswire 2014a, May 12). Correspondingly, channel vendors have been pushed to refine their mode of operation to attract more publishers (MarketWatch 2014). Therefore, in contrast to the assumption that distribution channels in China have been becoming more fragmented, Newzoo (2015c) revealed that more than half of Chinese mobile gamers could be reached by focusing on 3–4 local stores in a list of more than 20. In the developing mobile game market, distributors have become the biggest beneficial owner according to Jiang Nanchun, the Chairman of the Board of Focus Media. When mobile games reached the market scale of RMB 40–50 billion, distributors had a share of RMB 20–30 million. Hence, within the game ecology, the distributing channel always benefits the most (Jie 2013). In summary, platforms enjoy the most power, followed by publishers and content developers.

Other participants in the mobile game ecology include payment service providers, data vendors, and so forth. Currently, third-party payment solutions are the mainstream choice of mobile online gamers, and telecom operators play a more important role in the payment for single-player mobile games. Third-party payment vendors, such as Alipay and Yeepay, charge less than 5 % of the game bill, whereas telecom operators charge over 30 % because of the bad debt allowance. Data vendors, such as Umeng and Talkingdata, provide data analyses to help publisher/developers improve their content.

Traditional mobile game marketing is done through advertising online, which is charged according to the cost per action (CPA) model. The advertiser pays for each specific action, such as impression, click, submit form, and so forth. This model relies on the advertising platform of website coalition, which is responsible for distributing ads to various small websites. Recently, preloading by handset manufactures has played an important role in the distribution and marketing of mobile games, but it requires negotiation with smartphone sales in advance. For example, with regard to Chinese mobile games, half of the total flow comes from preinstallation, while another half is derived from the advertising platform of the website coalition (Li, interview, January 20, 2014).

Recently, the China Mobile Games and Entertainment Group Ltd (CMGE) has devised a creative way to do mobile game marketing by cooperating with free Wi-Fi service providers to set up local area networks (LAN) on a long-distance buses. Currently, there are 500,000–600,000 long-distance buses in China, which carry an average of 3 billion passengers per year. During long commutes, passengers have little to do, so the free Wi-Fi provided will become the next tipping point (Xiao, CEO of CMGE, personal communication, December 14, 2013).

## 6.3 Game Creativity

Creativity is the act of turning new and imaginative ideas into reality. Creativity is the foundation of dynamic economic systems (Feinstein 2009). Moreover, economic growth brings vitality to creative industries and motivates individuals to generate innovative ideas. Therefore, the emergence of mobile games brought creativity to the game industry.

Compared to client games and web games, mobile games are easy to play, less time consuming, facilitate social interaction, and focus on entertainment and informality (Omori and Felinto 2012). These new characteristics have prompted developers to think innovatively about meeting players' needs. First, mobile gaming provides a means for players to spend leisure time. The creativity of the game, if any, is in gauging the content that meets the demand by players and their new user habits. Second, because mobile games are played on mobile devices, developers need to re-consider the construction of a game world by providing an appealing story, characters, and reward systems in the mobile game context. For example, because of the touch screen on smartphones, players can use different gestures to control the skills of the characters. Developers are also aware that for gamers, if an excessively high learning threshold and memory capacity are required to operate the characters the players' willingness to use the games will be decreased. Thus, creativity is necessary to devise games with new features and easy operation.

In addition, the severe competition between emerging companies has encouraged creative game development. In the first half of 2015, there were 905 mobile game enterprises (iResearch 2015), so every player in the market tries to devise strategies to satisfy the needs of the target users in the segmented market. A recent trend is to cater to the tastes of female users, who accounted for 42 % of the mobile game players in China (Tencent 2014). Additionally, compared to the client game era in the last decade during which MMORPG dominated the game market, the current market includes various game genres, such as cards, casual use, strategy, puzzles, and adventures. The development of these games comprised a relatively short period, usually within a period of 3 months, whereas it takes around 2 years to develop an online game. The demand for having market shares has driven game companies to use creative ideas to invent new games to meet the unique needs of players.

Despite the positive changes generated by mobile games and fierce market competition, the power still resides with major game companies, such as Tencent, Netease, Perfect World, ChangYou, and so forth. Occasionally, these giants develop some creative games, but the most popular way to ensure the next popular game is to leverage popular intellectual property (IP). For example, *Tian Long Ba Bu 3D* (Demi-Gods and Semi-Devils 3D) is a role-playing mobile game developed by ChangYou, and it is the mobile version of the client game with the same name. Not surprisingly, the PC version of this mobile game attracted a large number of players. According to the data released by ChangYou, there were 1.51 million daily active users on 29th October 2014, and the first day's gross income from the mobile version reached RMB 12.57 million (around $2 million) (Karvin 2014). In fact, *Tian Long Ba Bu* 3D (Demi-Gods and Semi-Devils 3D) and its PC version were both adapted from a classical martial arts novel created by Jin Yong, so the content was not new. This case demonstrates that the creativity in the market is limited. Instead, the external demand and market forces sustain the creativity of mobile games.

## 6.4 The Export of Domestic Mobile Games

The rapid expansion of the global mobile game market has become an incentive for the reform of China's mobile game industry. According to Newzoo (2015c), the global game industry generated roughly US$ 83.6 billion in 2014. Considering that the revenues from the domestic mobile gaming landscape have reached a plateau, it is time for mobile game companies to go beyond the national borders of the home market and reach out to the three main global key markets: (1) Japan and South Korea, (2) Southeast Asia, and (3) Europe and the US.

Following the early success of online game exports in 2005–2006 (Kshetri 2009), a great leap of China's mobile game exports was recorded in 2013–2014. Without the sale barrier of using the mobile phone platform, overseas sales revenue had achieved $1.273 billion by the end of 2014, which was a year-on-year increase of 366.39 %. It also accounted for 41.39 % of the total revenue from online games (GPC 2015a, b). These data indicate that the overseas market has undoubtedly become a new, rising profit point for China's mobile games industry.

Benefiting from the worldwide penetration and coverage of the App Store and Google Play, several mobile games have quickly entered multiple markets and gained recognition in their distribution overseas. App Annie pointed out that the top 10 app publishers were all in the game industry (Huxiu 2012). Because of the relatively fixed mode of promotion and game operation, in 2012, 60 % of the mobile games exported were on the iOS platform.

According to GPC (2013), mobile game companies can use four models to enter the international arena. The first is the authorization model. A local agent is authorized to handle mobile games' operation, which is the early model used for the globalization of China's mobile games. In the beginning, the export of games advanced slowly and cautiously because Chinese mobile game companies needed to rely on the experience of local agents in foreign countries to expand the market. Such collaboration was costly for China's game exporters because it required them to provide a complete and localized product and after-sales services, such as game maintenance and version upgrading. In this model, revenue is commonly generated from copyright and post-operation. Even if the game eventually is a failure, the copyright fee is enough to compensate the cost. Thus, this model is considered a relatively lower risk. However, in a long-term view, game authorization with minimal revenue does not benefit the development of game companies. Moreover, because of the physical separation from local markets, little is known about the users and the market. In some cases, Chinese games were popular overseas, but the Chinese game companies shared very little revenue.

In the second model, independently operating branches of the company are established. With their accumulated experience in game authorization, Chinese mobile game enterprises with solid financial strength begin to establish branches globally. In this model, game companies could acquire credible information about unique markets and their users, which are determining factors in the success of the game. For example, Perfect World has established subsidiary companies in America, Singapore, Malaysia, Japan, Thailand, and Korea in order to export its 3D MMORPG mobile game *Xiaoao Jianghu OL* (The Smiling, Proud Wanderer Online) in 2014 (PR Newswire 2014b). The first-hand data acquired from the local market helped Perfect World to adjust the content, style, and strategy of the operation, which made *Xiaoao Jianghu OL* (The Smiling, Proud Wanderer Online) extremely popular in the global market. However, because setting up local branches requires the investment of a huge amount of capital, only game giants can afford this option.

The third model based on is cooperative R&D and joint operation. Currently, this model is common in mature and competitive game markets such as Japan and Korea. In Asia, because domestic policies protect the local market and enterprises, collaboration with local companies is perceived as the best way to enter these markets. For example, Rekoo, a Chinese mobile social game company, cooperated with Japan's second-largest telecom operator KDDI to launch the mobile game platform *Au One Sunshine Kingdom* (Liang, interview, November, 8, 2011). This partnership with KDDI maximized the benefits of Rekoo at the lowest cost. More importantly, Rekoo learned from KDDI about the local market and Japanese players. Indeed, it is believed that this model will continue to enhance the profits of China's game companies.

The fourth model of global expansion is overseas R&D with global operations. To penetrate the US and global game markets, the Chinese game giants have started to acquire successful game companies and teams in order to develop international-level mobile games. Specifically, Mochi Media, an American Flash game advertising network and payments platform, was acquired by Shanda Games for $80 million in 2010 (Arrington 2010). In 2011, Tencent acquired the majority stake in the online game firm Riot Games for nearly $400 million (Takahashi 2011), and Perfect World acquired a 100%-equity interest in Cryptic Studios (IGN 2011). There is no doubt that highly reputable development teams, global talent, and their technology platforms will strengthen the R&D and creativity capabilities of Chinese game companies.

At this point, my argument about export of China's mobile game is in line with the views of these companies which rely on export. Even giant companies such as Tencent and Netease which gain their major revenues from local market, nowadays they also attempt to explore new strategies such as acquiring game companies overseas. The question concerns how localization can be done creatively. The CEO of

CMGE, Xiao Jian, shared five determinative factors (information, channel, payment, quality, and localization) that are necessary to survive in the global mobile game market. The importance of information and distribution channels was mentioned earlier, so next we are going to discuss how to localize game in overseas market. Adapting China mobile games to overseas markets not only includes language conversion, but also aesthetics, gaming logic (Youxiweixun, March 23, 2015), playability, fairness, and contextualized virtue communities (IDCquan, December 7, 2013). First, game developers need to cater to local gamers by introducing the appropriate genre. Specifically, Taiwanese game players like cute graphics, while Korean gamers prefer heavy game titles and visual effects (MarketWatch 2014). In the European and US markets, casual games are the most popular genre (DoNews 2014). Thus, it is extremely important to meet the tastes of local players. Second, the payment habit is quite different in a local market. The game players in the Southeast Asian market prefer buying point cards for games, and they tend to pay their bills at the end of the month, while in other countries, the payment formats are very complicated. For example, the provinces of Brazil have different payment policies (DoNews 2014). Therefore, it is necessary to adopt a payment format that follows local rules and regulations. Third, differences in gaming habits should also be taken into consideration. For example, players of web games in Southeast Asia tend to ponder the plot and the mechanics of the game, which would lower its tempo, whereas Chinese gamers prefer to click at a high speed when performing a game task.

Government policy is another important factor in the exportation of games. China's game industry was initially a complete commercial operation, but as games became increasingly popular, the authorities intervened. In other words, the legislation of game-related policy and law followed the expansion of mobile game industry. With the soaring growth of China's game industries, the Ministry of Culture puts the game sector in high priority of policy support in "The Twelfth Five-Year Plan", demarcating the supportive role of game industries to China's economy (People.com 2012). In China, the Press and Publication Administration is responsible for the development of the game industry. Generally, the government holds a positive attitude towards the global expansion of mobile games because the revenue generated by the international game market contributes to the so-called soft power of China (Feng et al. 2015).

Currently, there are two ways to support and reward export game enterprises: cash incentives (around RMB 500,000) and tax refunds (Ma, Deputy Secretary-General of Beijing Animation & Game Industry Alliance, personal communication, July 22, 2011). According to *The Catalogue for the Export Guidance of Cultural Products and Service* (Ministry of Business 2012), in order to receive government support, key game companies should meet the following three requirements: (1) the annual revenue of export should be over US $500,000, or the copyright export is larger than US $100,000, or the export revenue from game derivatives is more than US $1 million; (2) the company should own its original game images and content or core technology; (3) the content of the game should be positive and healthy, feature Chinese culture elements, and have the potential to be developed in the international market. Kou Xiaowei (personal interview, July 14, 2011), the Ex-Deputy Director-General of Department of Technology and Digital Publishing of State Administration of Press, Publication, Radio, Film and Television of The People's Republic of China (SARFT), acknowledged that the government should provide more than money and policy: it should offer practical services to help game company internationalize. Similarly, Tuo Zuhai (interview, July 13, 2011), who is in charge of the Cultural Market Department, Ministry of Culture, highlighted that the government should negotiate with its overseas counterparts regarding the entry of China's online game companies into their markets. There are some incentive policies in Ministry of Culture, from which Perfect World received a reward. However, according to the data gathered in the interviews, large enterprises do not care much about such monetary awards because they have already invested 100 million or even 200 million RMB. However, they lack local knowledge of specific markets.

In China, if a game company wants to receive support, they have to deal with 20–30 different departments and ministries. Because of this complex and time-consuming process, financial support is mostly honorary. Liu Hang (interview, November 9, 2011), the Vice-President of Perfect World, said that policy support has limited effects on big companies. By navigating internal channels, leading game companies can go to America to attend investment meetings, but organizing such events is not the government's strength. Therefore, game companies know that they should not count on the government's support even though they sometimes help small companies without sufficient resources to expand into the global market. According to Liu (2011), game companies such as Perfect World, which has already expanded into the international market, the presence of governmental support may even have a negative influence on game promotion overseas. The instability of policy is a risk for game companies listed in overseas stock markets. Hence, the presence of the government is not necessarily advantageous.

In summary, in the domestic market, the purchase and sale of influential intellectual property have become the most popular ways to ensure the next big hit or at least generate revenue. However, there is little creativity within the domestic market because IPs are repeatedly sold among the players. When they go abroad, those giants need to compete with global mobile game companies. However, ironically, this competition serves to inspire China's companies. Severe competition may force them to pursue creativity, so they actually learn from their rivals in terms of game design, localization, promotion, and distribution, and even make breakthroughs. Therefore, it is believed that the overseas expansion of this industry will drive innovation at least in mobile gaming.

## 6.5 Conclusion and Discussion: What Good Is Creativity?

From 2009 to 2015, we witnessed the rise of mobile game industry. In general, this environment is still monopoly driven, in which the online game giants dominate the market. However, thousands of small mobile game companies have sprung up, which has induced fierce competition within China's domestic game market. The ecology of the mobile game market is similar to that in the online game era, in which the major players were composed of game developers, publishers, and platforms (distributors). Because of the emergence of the iOS platform and Android platform, homemade games are able to appeal to global players. The Android operating system holds two thirds of the Chinese mobile market, which however is fragmented. Hence, Apple is still the top brand in terms of distribution (Newzoo 2015c). However, there is little new creativity in the market although the rise of mobile games has changed the market structure, company ecology, and marketing of games. For the clients of game giants, cloning successful online game content, or buying popular entertainment IPs that ensure profitability remain the major strategies. Although they face fierce competition, small game companies may occasionally develop creative games and new inventions. Nevertheless, because of the cloning culture in the Chinese context, the market is flooded with similar mobile games with the result that the overall level of creativity in the industry does not change much. This paper argues that cultural exportation has become a strong factor in potentially revitalizing creativity of China's mobile game industry. Currently, the domestic mobile game market has become relatively stable, and powerful game companies have attempted to go overseas to explore new markets. Through collaborating with local distributors and publishers, learning how to localize, and working with global talent, domestic game companies must face the problem of creativity. Therefore, it is believed that eventually a highly competitive environment will push game companies to generate creative ideas although over a longer period.

When creativity increases, the mobile game market will be developed in ways that are not yet experienced in China. First, mobile game playing will become a complex gamer behavior. The complexity will reside not only in product content but also in the invention of different modes of interaction to satisfy mobile game players' demands and need for entertainment. One trend in the mobile game market is the emergence of mobile social games, which are subtype of mobile games that are integrated with social networking platforms to facilitate the user's interactions (Wei and Lu 2014). Specifically, mobile social games not only allow SNS friends to play together but also encourage competition between them. Thus, multiplayer online game participants experience different social function as they involve in the virtual communities. Bartle's (1996) character theory provides an initial typology describing the motives of four types of players in Multi-user Domain (MUD), "achievers" play hard for points, levels, and showing off their gaming skills, which turns into peer recognition; "explorers" eager to look for gaming knowledge, and exhaust the possibilities within a game; "socializers" aim to interact with other players and establish a sense of community; whereas "killers" thrive on competing with others, the distress and failure of opponents are the killers' satisfaction (Bartle 1996). In brief, this market-driven need for creativity and social interaction seems a positive signal for both gamers and the labor in the industry.

Second, the range of IP licensing is broadening. Traditional IPs such as novels, movies, television programs, cartoons, and animation have been widely used in the development of mobile games. *OMG Kingdoms*, *Dad, Where are we going*, *Boonies Bears*, and *Return of the Condor Heroes* are several best-known adaptions. In 2015, celebrity endorsement became the most popular IP; for example, *Dragon and Summon* invited the national singing group Yu Quan to act as their representatives. Similarly, *Anhei Liming* (The Dark Dawn), which was launched by Perfect World, was endorsed by the famous actress, Bingbing Fan. It is believed that the celebrity's appeal will increase the profits of game companies considerably. As IPs are copyrighted, and game companies start to operate with other industries domestically and globally, China's game companies will start to move towards normal development.

Third, specific to the business model, the industry, and mobile game companies will start to collaborate with payment service providers. Currently, third-party payment solutions are the mainstream choice of mobile online gamers, and telecom operators play an important role in the payments made by single players of mobile games. Currently, telecom operators charge over 30 %, and third-party payment vendors charge 5 %. If mobile game companies changed these payment terms, their profit model could be significantly improved (Sykong 2014). In other words, creativity will not be limited to mobile games. There will be an entirely new way of thinking about innovation in the structure of the game industry.

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**Anthony Fung** is Director and Professor in the School of Journalism and Communication at the Chinese University of Hong Kong. He is also a Professor at Beijing Normal University at Beijing and Pearl River Chair Professor at Jinan University at Guangzhou, China. His research interests and teaching focus on popular culture and cultural studies, popular music, gender and youth identity, cultural industries and policy, and new media studies. He published widely in international journals, and authored and edited more than ten Chinese and English books.

# Part III
# Mobile Gaming and Youth Culture