Analysis of the Development of China
Online Game Industry

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Abstract:
With the rapid development of Internet usage and broadband penetration, China’s online game industry is recognized as one of the fastest-growing in the world. China is now No.2 in the world for the number of internet users and the trend will keep on rising, which indicates that the online game market will still have huge potential. In this paper, we will present data that speaks directly to China’s online gaming industry’s rapid growth and use Porter’s diamond theory of national advantage to analyze the national competitive advantages which China online game industry has occupied. The primary analysis focuses on the successful application of development strategy of Shanda Interactive Entertainment Limited, the largest operator of online games in China and how the Chinese Government makes efforts to promote the creation of its national competitiveness in online game industry. The strong development of China online game industry brings about many chances of foreign investment and kinds of cooperation between China and EU.

Key words: rapid growth, national competitive advantages, Shanda’s application of development strategy, efforts of Chinese Government, chances and cooperation

1. Introduction

1.1 Background:
It is apparent that there were some prospects of global recession at the end of 1990s. The terrorist attacks of September 11, 2001 and the fallout from the global economic bubble (esp. that of Information Technology industry) even gave the slowdown reinforcement. We can feel the knock-on effects of less activity, the decline of consumption, particularly in areas of eating-out and holidays, because people think it better to stay at home. By comparison, the world online game market went against the stream. In the past five years, online games have grown to reach a large and diverse market. Online gaming has in many ways revolutionized the interactive entertainment industry and has created an important new source of revenue. Most industry analysts agree that online gaming will generate significant revenue. According to DFC Intelligence, some of massively multiplayer online games (MMOPGs) are projected to generate more than $300 million each in lifetime revenues (Passione & Hong, 2002). US research house International Data Corporation (IDC) revealed that the online gaming market in Asia/Pacific commands a US$ 533 million market in subscription. The history of China Online Game is quite short, the large scale of development started since 2000. However, the rapid growth of Internet usage as well as the broadband penetration promoted the development of China’s online gaming industry. It can be shown from the China online gaming market growth (2001-2003). The most authoritative investigation unit of China Internet Network Information Center (CNNIC) pointed...
out, the revenue of online-gaming industry in 2001 in China was only ¥0.37 billion, soared to ¥1.21 billion in 2002. The growth of broadband connections starting in 2003 speeded up China’s online gaming industry, which grew 111% in 2003 over 2002, to ¥2.52 billion (US$ 310 million). It is expected that the market revenue will be up to ¥6.65 billion in 2005 (See Table 1). With the continuing increase of the number of the on-line game consumers, there seems to be a great potential in the future online game market of China. Besides, the value brought by China online game industry to other industries is $10^4$ times of that produced by the online game industry itself. However, according to the government-run Korea Game Development and Promotion Institute (KGDPI), China is Korean game industry’s largest foreign market, Korean online game companies earned around $150 million in China and Taiwan in the sectors of online game and mobile industry in 2003. The latest statistics of CNNIC (July, 2004) confirms that the China online game market is mainly under the dominance of games developed by South Korea (52%), while Chinese developed games account for very small market shares (27%) (http://www.usito.org). How to get rid of the control of South Korea in the China online game industry is the imperative task ahead of Chinese Government and its domestic online games companies.

1.2 Research Problem:

The research problem in this article is whether China has the capability to create its national competitive advantage in the online game industry. After careful study, the author here will discuss the problem with the application of the diamond theory of national advantage (Michael Porter, professor of Harvard Business School), the efforts of Chinese Government, and the analysis of successful strategy development by Shanda Interactive Entertainment Limited (the largest China online game operator) and conclude with a positive answer. Finally, it will be clarified that there is the right time to strengthen the China-EU cooperation in the online game industry.

Table 1 China Estimated Online Game Market Growth 2001-2005

<table>
<thead>
<tr>
<th>Year</th>
<th>Online Game Market Revenue (RMB billion)</th>
<th>Annual Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>0.37</td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>1.21</td>
<td>227%</td>
</tr>
<tr>
<td>2003</td>
<td>2.52</td>
<td>111%</td>
</tr>
<tr>
<td>2004</td>
<td>4.20</td>
<td>65%</td>
</tr>
<tr>
<td>2005</td>
<td>6.65</td>
<td>58%</td>
</tr>
</tbody>
</table>

Source: adapted from CNNIC, iResearch 2004

2. Research Methodology:

2.1 Secondary Data Application:

According to Saunders et al (2003, p.189), that “For certain types of research project, such as national or international comparisons, secondary data will probably provide the main source to answer your research questions and to address your objectives.” So, secondary data collection is chosen as the main research method for the study of the problem. Internet contributes much to the collection of the valuable information. The secondary data collection of this paper mainly refers to the timely publication of the contents of the website of Shanda (http://www.shanda.com.cn), online news of authoritative Government-run paper such as Korea Herald of South Korea, People’s Daily of P.R.China, and authoritative research reports on the Internet. The reports are: CNNIC 14th Statistics Survey Report on the Internet Development in China, The 4th Online Game Research Report, China Online Game Internet Report of Morgan Stanley.

4 The datum is from: http://english.peopledaily.com.cn/200312/08/eng20031208_12968.shtml.
5 The datum is from: http://www.itbizway.com/kma/kma_newlist.jsp?vecNum=0&pageNo=1&amp;kmaNum
6 Shanghai iResearch Co., Ltd. is the leading research firm in China, its target is to be the No.1 professional research firm during this Internet ages. The website of iResearch (http://www.iresearch.com.cn) is the professional provider of all-around Internet industry, Internet news and services for the Internet operators, marketing developers, government industry researchers and other people who have interests in Internet economics.
7 Morgan Stanley has earned a worldwide reputation for excellence in financial advice and marker execution. The
2.2 Interviews:

The interview is useful when the research is based on social issues where personal emotions, values and attitudes are investigated (Clark et al, 1998). Interview has the characteristic of “validity” and “high response rate” (Denscombe, 1998). At the same time, interview's flexibility will permit the interviewee develop ideas and speak on the issues in depth and in detail. Here, the author adopts the way of telephone interviewing. The telephone interviewees are:

- Yichi Feng, analyst of N. America & Europ Investment & Overseas Business Center, Shanda Interactive Entertainment Limited, P. R. China (September, 2004);
- Junfang Zeng, Associate Professor of Internet Research & Development Centre, Institute of Automation, Chinese Academy of Sciences (CASIA), P. R. China (August, 2004);
- Liangping, Zhang, Professor, former Director of the International Office of Cooperation and Exchange, Tsinghua University, P. R. China (May, 2004).

During the research, all the survey data are combined and made careful comparison which helps to ensure the objectivity and comprehensiveness of the research results.

3. Findings:

3.1 Determinants of national advantage in the China online game market

Michael Porter’s diamond theory is used to identify those factors that contributed to the national success in international markets. The four interrelated factors are: factor conditions, demand conditions, related and supporting industries and firm structure, strategy and rivals, as shown in Figure 1. In addition, Porter thought the role of government was a key variable in influencing the four determinants. The following is the national competitive advantages existed in the China online game industry.

![Figure 1: The determinants of National Advantage](source: Porter, Michael. E (1990) The Competitive Advantage of Nations)

3.1.1 Factor conditions:

3.1.1.1 Skilled resources

According to the 4th Online Game Research Report (p.6), the number of the China online game companies has risen rapidly from 38 to 77 and the operators of this specific field increased from 3,000 to 6,000 within the period of only one year.

3.1.1.2 Advanced online game technology base

Morgan Stanley (2004,p.9) thought that China has mastered advanced online game technology which is only behind that of South Korea, but far above that of Japan, Europe and US. (See Figure 2). Lim Chang-kyu, an analyst at Samsung Investment Trust Management said, “The Chinese software makers are nearly reaching the level of their Korean counterparts in terms of graphic skills and other technical aspects at least in the case of the conventional 2D games. What
they lack is a decent business model for generating profits, which they expect to learn from their business partnerships with Korean companies. (Korea Herald, 2004).

Figure 2: World leadership in online gaming

<table>
<thead>
<tr>
<th>Relative Internet Technology and Services Leadership</th>
<th>US, Europe, Japan, South Korea, China</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Korea</td>
<td>Japan, Europe, US, China</td>
</tr>
</tbody>
</table>

Legend: Strong — Weak

Source: Morgan Stanley’s China Internet Report 2004

3.1.1.3 The pressure to weaken the South Korea Control of the China online game market

The pressure to get rid of the South Korea control to the China online game market stimulates and speeds up the innovation which leads to a national comparative advantage. In 2003, the Chinese Government showed its decision to support the dominance of domestic online games and has taken a series of active measures. Following the favorable policies is the rapid rising of China’s domestic online game companies and their conspicuous improvements.

3.1.2 Demand conditions: Rapid growth of online gamers in China

In the Forum of the Second China International Digital Interactive Entertainment which was held on Oct.5, 2004, the Vice General Administrator of the General Administration of Press and Publication of China, Yongzhan Yu said, “the total online game playing population is 13.8 million in 2003 soaring 63.8 percent from 0.84 million in 2002.” President of USA Entertainment Software Association pointed out in the Forum that, “There are 0.2 billion youngsters in China. With the improvement of China network technology, China’s online gaming market will be the most conspicuous one in the world”. Based on the experience of the online gaming market of South Korea, Morgan Stanley concluded that (2004, p.31), “More broadband may mean more online gaming, and vice versa...” Morgan Stanley (2004, p.31) estimated that the broadband users in China will be 32,906 in 2004 and 43,817 in 2005 (See Figure 3). “The strong rising trend of the broadband penetration of China indicates the demanding size of online gaming will keep on going up.” said Junfang Zeng of CASIA in the interview in August 2004.

Figure 3: China’s Estimated Broadband Users

3.1.3 Related and supporting industries

3.1.3.1 Chinese telecom industry

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Korea Herald is the No.1 National English newspaper in South Korea.

The data are from: http://iresearch.com.cn/online_game/detail_news.asp?id=8909
According to the latest CNNIC report (July, 2004), for most China online game players (69.4%), connection speed is the main factor that influences on their game choosing. 39.3% of players list cost as the second important factor, because broadband Internet users conduct more online sessions, play more complicated online games than narrowband users. The following is the effort of telecom industry to enhance the speed online.

**Huge investment in broadband:** China Telecom10 and China Netcom11, the dominant carriers, have been increasing investment in broadband from RMB 2.7 billion ($327 million) to RMB 4.5 billion in 2003, according to a Norson report12.

**Rock-bottom prices:** Tele operators have managed to expand volume through changes in pricing. China Netcom and China Telecom – who admittedly have no competitors – are charging rock-bottom prices for basic ADSL services. For example, China’s primary ADSL-based broadband access provider in the Northern ten provinces offered monthly ADSL fees as low as $10/month for 30 hours of usage at the speed of 500Kbps in 2004, which declined from $18/month in 2003. (Morgan Stanley, 2004,p.31)

1) A **healthy broadband user base:** Broadband penetration now tops 10% in Shenzhen, and other large and relatively modern cities like Beijing, Shanghai and Xiamen also have broadband user numbers approaching 10%, according to numbers provided by Alcatel’s chief China market rival, Huawei. Demand for broadband is no longer limited to large metropolitan areas, and the operators have tried to keep pace.

2) **Boosting the broadband speed:** China Telecom will utilize optical and data solutions from Nortel Networks (NYSE: NT) to expand its networks across Southern and Eastern China. The expansion, scheduled for completion by the end of 2004, enables up to 28 million simultaneous Internet connections on a single strand of fiber, and increases by 640 times the Internet’s backbone speed and capacity to carry data, video and voice services.13

### 3.1.3.2 Internet Cafes

Internet cafes (or cybercafés) are the important locations for accessing the Internet both in Korea and China. Viktor Ma of Morgan Stanley estimates in the China Internet Report (p.20), “Majority of PCs in Internet cafes are outside major metropolitan areas and the low cost of access is the key to attract new users.” The survey of the 4th iresearch online game report (p.22) said families and Internet Cafes are the most popular places of online game players, 55.2 percent and 29.98 percent of online games are played in them respectively (See Figure 4). The statistics of IDC said, in 2003, 82 percent14 of Shanda’s game usage was conducted in Internet café’s. According to the statistics of Report of the survival conditions of China’s Internet Cafes completed by the China Youth Network Association, Internet Cafes contribute at least RMB 15 billion15 to the whole country each year. Besides, as an industry, Internet Cafe and related areas offer kinds of employment to over 1.5 million people16. It can be said that Internet Cafe plays an important role in the development of China online gaming industry.

However, the Chinese Government has shut more than 8,600 unlicensed Internet cafes over the last couple of months because the online games they offered included pornography, violence and gambling, and will install a special surveillance system for all Internet cafes nationwide by the end of 2004, according to an official statement from China’s Ministry of Culture (MOC). Shanghai serves as a testing centre for the scheme. Many people begin to worry the future of online game industry. But after the study of the development and situations of Korean Internet cafe, the author

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10 China Telecom Corporation is an extra-large telecom enterprise formed according to the state telecom structural reform scheme. It was officially established in May 2002 after the split of the former CHINA TELECOM into two groups: CHINA TELECOM (south) and CHINA NETCOM (north). The corporation has 21 provincial (municipal and autonomous regional) corporations, holding 70% of the national trunk-line transmission network assets owned by the former CHINA TELECOM.
11 China Netcom, full name China Netcom Corporation Limited (CNC), was originally formed in August 1999 to build high speed Internet communications in China. It now offers a variety of wireline telecommunication services in the People’s Republic of China. It is widely seen as the number two fixed-line operator in China after China Telecom, and operates a semi-mobile PAS or xiaolingtong system.
12 The data are from: http://www.telecomasia.net/telecomasia/article/articleDetail.jsp?id=71305.
13 The data are available from: http://www.chinatechnews.com/index.php?action=show&type=news&id=1892
14 The datum is from: www.shanda.com.cn
15 The datum from: http://iresearch.com.cn/others/detail_news.asp?id=8910
16 The datum from: http://iresearch.com.cn/others/detail_news.asp?id=8910
think the intention of the Chinese Government is farsighted and will not bring negative impact to the online gaming at all. The reasons are below.

**Figure 4: Primary China online game playing places**

- Family, 55.20%
- Internet Cafe, 28.98%
- Office, 8.50%
- School, 6.19%
- Others, 1.11%

Source: June, 2004 iResearch Inc www.iresearch.com.cn

1) **Lessons from the decline of Korean Internet Cafe**

According to the Internet PC Culture Association (IPCA)\(^{17}\), the number of Internet Cafes peaked 27,000 in 2000 in South Korea but afterwards plunged by about 2,000 per annum, and the number of Internet cafes declined to around 20,000 in 2003.\(^{18}\) The rapid decrease is mainly due to two reasons. One is the high penetration rate of broadband Internet to house holds. The other important reason is the rise of the juvenile delinquencies caused by the online game addicts. A poll by the Commission on Youth Protection in South Korea in 2004 showed 60% of 1440\(^{19}\) juveniles surveyed said they believed they were addicted to online gaming and the Internet. “There are 30 new troubled cases every week but the numbers keep rising. Parents are only now becoming aware of the seriousness of the problem.”

2) **Different Government attitudes to the management of Internet Cafe**

The South Korean government has been kept its noncommittal attitude to troubles brought by the online game addicts. “The possibility of authorities imposing regulations on a lucrative 500 billion won industry seems unlikely. Neither the game makers nor the government are fully prepared to tackle the problems once and for all.” said Lee Wang-sang, an analyst at LG Investment & Securities.\(^{20}\)

Just realizing the importance of Internet Cafe in the development of China online game industry and youngsters are the main online game players, Chinese Government strengthened the management of Internet Cafe. It aims at protecting youngsters against unhealthy online information such as pornography, violence and gambling so that to keep and extend the lifecycle of Internet Cafe industry in China. The following points can explain why the management of Internet Cafe is important in the development of China’s online game industry.

i. China ranks No.1 in the world for the average number of hours per week that the Internet is used outside of home/work/school. The data indicate the importance of Internet Cafes as the access location in China (See Appendix 1).

ii. China’s household broadband penetration is not as advanced as that of Korea. Income levels and home PC penetration in the middle or small size cities are relatively low. Internet Cafes are the main Internet access locations due to their low cost. For example, even in Chongqing, the biggest city in South western china, Internet cafes charge only RMB 0.30($0.03-0.04)/hour (Morgan Stanley, 2004, p.20).

iii. According to the CNNIC report (July, 2004), of all online game players, male online game players account for 83.39% and only 1.83 percent of the online game players are above 35 years old. (See Appendix 2). Students are the main online game consumers, which amount for one third of the whole online game players.

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\(^{17}\) IPCA is the abbreviation of the Internet PC Culture Association, which is a Korean lobby group of Internet cafe owners, to cooperate in the “saving Internet cafe campaign” which began since December 2003.

\(^{18}\) The data are available from: http://articles.findarticles.com/p/articles/mi_m0PJQ/is_18_1/ai_111363304

\(^{19}\) The data are available from: http://www.itweb.co.za/sections/internet/2004/0401120849.asp?S=Reuters&A=REU&O=FRGN

iv. China Unicom, the nation’s second-largest mobile phone carrier, plans to open up 3,000 Internet cafes by the end of 2004 (http://english.iresearch.com.cn/internet_access/detail_news.asp?id=4638).

According to the four points above, it is obvious to see that in the next few years, Internet Cafes will still play an important role in the development and popularization of China Internet access and online gaming. Youngsters will still be the major online game players in the Internet Cafe. The plan of China Unicom to open 3,000 Internet Cafes can ensure that Chinese Government has no intention to clampdown the online game development. Instead, in order to make the management effectively, Chinese Government announced in 2003 the introduction of a chain store concept into the business, letting up to 100 companies run the vast majority of Internet cafes.

3.1.4 Firm strategy, Structure and Rivalry

Several excellent domestic Internet portals are active in developing their own online games and contribute a lot for the rising and thriving of the domestic dominance of China online game industry. The representatives of the organizations and their masterpieces are: Netease’s Westward Journey, based on the classic Chinese novel “Pilgrimage to the West”, Shanda’s The Legend of Mir II, and Kingsoft’s Legend of Knights Online. The huge profit of the online game industry does not mean it is easy to earn money. Except for the few well-known online game companies, most of others have to struggle for survival. Even so, the leader of the China online game industry, Shanda Interactive Entertainment Limited, has created amazing improvement with the application of its forward-looking strategy. In this article, the case study of Shanda will be elucidated as follows.

3.1.4.1 Introduction about Shanda

Shanda Interactive Entertainment Limited (Nasdaq:SNDA) is the largest operator of online games in China in terms of estimated 2003 game revenues according to International Data Corporation(IDC), a leading market research firm in the world. Shanda operates both massively multiplayer online games, including massively multiplayer online role-playing games (MMORPGs) and casual games. Before analyzing its strategy application, let’s take a look at Shanda’s financial report of the second quarter, 2004.

- Revenues for the second quarter of 2004 increased 108.8% year-over-year and 25.8% quarter-over-quarter to RMB 302.2 million (US$36.5 million) and net revenues increased 109.3% year-over-year and 26.1% quarter-over-quarter to RMB 287.0 million (US$34.7 million);
- Total peak concurrent users for all the games in commercial service in the second quarter of 2004 increased 14.3% quarter-over-quarter to 1.6 million and total average concurrent users increased 23.6% quarter-over-quarter to 1.2 million;
- Net income for the second quarter of 2004 was RMB 141.0 million (US$17.0 million). Diluted earnings per ADS were RMB 2.04 (US$0.24) for the second quarter of 2004.

From the viewpoint of finance, “While objectives such as profit maximization, social responsibility and survival represent important supporting objectives, the overriding objective of a company must be that of shareholder wealth maximization.” (Watson & Head, 1998, p.17). The excellent financial results of the second quarter show that Shanda is the genuine online game giant of the world. The following analysis focuses on why and how Shanda can be able to apply its strategy to obtain the rapid and stable progress.

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21 The datum is available from: (http://english.iresearch.com.cn/internet_access/detail_news.asp?id=4638)
22 Diluted earnings per share: In companies with a large amount of convertibles, warrants and stock options, diluted earnings per share are usually a more accurate measure of the company's real earning power than earnings per share.
23 An American Depositary Share (ADS) is a security which has been created to permit investors in the US to hold shares in non-US companies and trade them on the stock exchanges in the US. Like many other British companies, BT shares are listed on the New York Stock Exchange in the form of ADSs. ADRs (American Depositary Receipts) are issued by JPMorgan Chase Bank, the Depositary for the ADRs.
3.1.4.2 Why Shanda can obtain the rapid progress?

A. Favorable hypercompetitive environment:
Johnson & Scholes stated (2002, p.351), “In the circumstances of hypercompetitive market conditions, every advantage is temporary and will be eroded. However, long–term advantage may be sustained through a series of temporary advantages.” It can be said, as the fastest-developing one of the IT industry, online game industry is in the hypercompetitive environment. This kind of environment makes the national competitive advantage of Korea online gaming difficult to sustain; its technology is easy to be imitated by competitors. It is also in this hypercompetitive market environment, Shanda has the possibility to catch up and even override the advanced Korea Online game companies with its efforts.

B. Leader not a follower on speed, flexibility and innovation
Johnson & Scholes stated (2002, p.354) said, “In hypercompetitive conditions, speed, flexibility, innovation and the willingness to change successful strategies are important bases of competitive success.” Porter said (Btsddington & Pettitt, 2003, p.1053) that in IT marketing, those that fail will be those that adopt “me too” attitude. The result of Intel’s success is that competitors were not clear as to where its next move would take place (Johnson & Scholes, 2002, p.354). Shanda’s success contributes to a series of unpredictable and speedy application of strategies.

C. Correct comprehension of “core competence”
It is important to identify core competence as the basis of an organization’s competitive advantage. “A core competence is an activity or a process that gives advantage because it fundamentally underpins value in the product, is performed better than competitors and is difficult for competitors to imitate.” (Johnson & Scholes, 2002, p.516). Shanda’s success is based on its correct comprehension of its core competences. Its core competence is in the processes of linking technologies together rather than the technology per se, which ensures a constant flow of improvements and in the ability to bring improvements to market quickly and gain first-mover advantages. According to Yichi Feng (Personal communication, Oct 18, 2004) “Shanda’s core competence focuses on four points: i. deep understanding of the local market; ii. Capability to develop own games; iii. Strong and extensive distribution network; iv. Vast user base.”

D. Outstanding management capability
People are the heart of strategy. Managers of Shanda have the ability in arranging their staff to integrate resources quickly and effectively. Tang Jun, former president of Microsoft China Co., Ltd, joined Shanda as the new president in February, 2004. His valuable management experience in USA and Microsoft China in the IT industry is important part of Shanda’s “deep pockets”.

E. Seeking dominance by first-mover advantage
These farsighted investment, acquisition and kinds of cooperations help Shanda to obtain its first-mover advantage in many areas of domestic online gaming, which allows Shanda to gain benefits of economies of scale and customer loyalty. It will also take a long time for the competitors to catch up.

3.1.4.3 How to apply strategies to enable Shanda’s success?
How Shanda manages the resources and controls with the application of strategy and lead to its success step by step will be discussed as follows.

A. Balanced portfolio strategy:
Majority of companies adopt product portfolio strategy. To be reliant on one product or customer carries immense risk clearly. “Too many new products could put the organization at risk, as product launch is resource intensive with no guarantee of success. Too many declining products could threaten the future of the business, as sales and profits start to fall.” The ideal product portfolio is one that can reflect the existing strength and emerging opportunity. (Btsddington

24 Johnson & Scholes points out (2003, p.349), the advantage of “deep pockets”, or substantial surplus resources is that “a competitor can withstand an intensive competitive war. They added that such deep pockets are most obviously financial, but also in terms of talent or perhaps global reach which gives an organization the opportunity to gain competitive knowledge worldwide.”


1) **Concept of BCG matrix.** Before analyzing Shanda’s portfolio strategy, it is necessary to mention about one of the most common and long-standing ways of conceiving the balance of a portfolio of business --the Boston Box, or the BCG matrix, identified by the Boston Consulting Group (BCG). It is used to assess products on two dimensions: relative market share\(^{25}\) and market growth rate\(^{26}\). Relative market share and growth rate are combined in a diagram which has four areas. They are Stars, Cash cows, Question marks (or problem children) and Dogs.

i. **Star (high share, high growth):** It needs heavy investment to retain its position, to support further growth and maintain its lead. However, because of high market shares, it can generate large amounts of cash. So it is likely to be self-sufficient or Cash neutral. Stars could be the cash cows of the future.

ii. **Cash cow (high share, low growth):** It is mature and assumes to require only lower level of investment. On this basis, it is likely to be Cash generator. Any excess cash can be used to support the stars.

iii. **Question mark (low share, high growth):** The market growth means that it is likely to require considerable investment and low market share will mean that such products will have difficulty in generating substantial cash. It may simply a relative new product in the process of establishing its position in the market, or an old product that needs far more investment to keep up with the market growth rate. Hence, question marks are likely to be Cash users.

iv. **Dog (low share, declining growth):** A dog is a product that will need low investment and are unlikely to be major profit earners. Hence, these tow elements can balance each other and it should be cash neural. It is regarded as unattractive for the long term and a candidate for disposal.

2) **Shanda’s product portfolio:**

Shanda’s portfolio of online games includes massively multiplayer online role-playing games and casual games, which are licensed from third parties and that are developed in-house.

**Cash cows:**

Three games which are being operated commercially by Shanda are cash cows. They are *The Legend of Mir II (MMORPG), The World of Legend, BNB (Bomb and Bubble)*. They ranked among the top five most popular online games in China for 2003, according to an IDC survey in January 2004. The Legend of Mir II which was developed by South Korea and operated by Shanda was the most popular online game in China for 2003. The World of Legend (developed by Shanda itself) and BNB (which was introduced from Korea) ranked fourth and fifth, respectively, in the top ten most popular online games list. In addition, The World of Legend, ranked first in the list of the top ten most popular made-in-China games. On September 23, 2004, Shanda and Nexon\(^{27}\) Corporation announced that BNB reached the recording of 700,000 peak concurrent users and became the most popular online game in terms of having the largest peak concurrent users in the world.

**Stars:**

Two games of Shanda are stars. One is *Maple Story* which is licensed by Korea and highly anticipated by user. It won "Most Anticipated Game of 2004" in the second Annual Summit Forum and Award Ceremony of Chinese Online Games\(^{28}\) in September 2004. The other is *The Age*. It is developed by Shanda and also given high level of anticipation by the Chinese online game players.

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\(^{25}\) Relative market share: For each product, relative market share refers to the ratio of the share of the organization’s product divided by the share of the market leader (Lynch, 2003, p.140).

\(^{26}\) Market growth rate: For each product, market growth rate refers to the market growth rate of the product category (Lynch, 2003, p.140).

\(^{27}\) Nexon pioneered the massive multiplayer gaming experience as it launched onto the Asian online market in the early 90's. Since then, the South Korean enterprise has won great acclaim as an online game developer because of the great popularity of its titles.

\(^{28}\) The second Annual Summit Forum and Award Ceremony of Chinese Online Games was supported by Ministry of Information Industry and Ministry of Culture, sponsored by CCID and co-sponsored by Software World Magazine and was held in September, 2004.
**Question marks:**
There are three question marks in Shanda. They are still accepting or just have finished beta testing and launch for only a short period of time, so the market share are low by comparison. They are: *The sign, Magical Land, and D.O.*

**Dogs:**
MMORPG *Tactical Commanders* and casual game *Fortress 2* are dogs. Both were introduced from South Korea in 2002 and belonged to the games operated earlier by Shanda. Compared with the new and high-skill demanded games, they are not the main profit earners of Shanda though they have bright past. Now they are in the declining period of their lifecycle.

**Figure 5: Shanda’s Balanced Product Portfolio**

![Shanda's Balanced Product Portfolio](image)

Therefore, three games operated by Shanda are cash cows which have generated huge profits. Two games are stars which are cows of the future. Three question marks all have specific vivid characters. Given enough investment in their marketing, they all have the possibility to become stars and then cash cows. Two dogs are cash neutral. Different styles of games and their corresponding services can be able to extend the lifecycle of each game from the largest extent. The balanced portfolio strategy necessitates the excellence of the financial result of Shanda in the second quarter, 2004.

**B. R&D and Innovation**
“There is one key word in the competition of the online game market in China, this is R&D.” Chen Tianqiao said (China Daily, Feb.04, 2004, p.11). In June, 2004, Shanda and Intel signed a plan to establish a digital home and game testing and innovation center and focus on creating client, content and infrastructure solutions for the online entertainment business.

**C. Market Development by Investment and Acquisitions**
“Mergers and acquisitions are a common method of development, largely because of speed and the ability to acquire competences not already held in-house.” (Johnson & Scholes, 2002, p.401) The competitive situation influences Shanda to prefer investment and acquisitions.

1) Acquiring a stake in Haofang
On July 29, 2004, Shanda signed an agreement to purchase for cash a minority stake in Shanghai Haofang Online Information Technology Co., Ltd (Haofang), a privately-owned company that develops and operates the largest network PC game platform in China. Haofang’s platform is especially appealing to home users because it is otherwise rather inconvenient for them to find other gamers to play together at the same time.

2) Acquisition of Bianfeng
According to the 14th CNNIC report, about 68.5% online game players chose casual games. Role-playing games ranks second and wins about 48.2% of online game players (See Appendix 3) (http://english.iresearch.com.cn/online_game/detail?views.asp?=4512). On August 4, 2004, it has acquired Hangzhou Bianfeng Software Technology Co., Ltd (Bianfeng), a leading developer and operator of chess and board games in China. Chess and board games are deep rooted in Chinese culture and have a large and loyal user following, especially among the more mature age groups.

3) Acquisition of Mobile games developer Digital-Red
Forecasting the rising trend of mobile gaming popularization in China, On September 7, 2004, Shanda signed an agreement to finish its acquisition of Digital-Red Mobile Software Co., Ltd. Digital-Red has developed more than 200 game applications. Its pre-loaded games are deployed by Nokia, Motorola, Sharp Sony, and Ericson, etc. and are played by users all around the world.

The key motive of the Haofang investment and Bianfeng acquisition is the speed with which it allows Shanda to enter the home-based user market. Both the Haofang investment and the Bianfeng acquisition add new game offering to Shanda’s platform and broaden Shanda’s user base demographics by capturing more home users as well as more mature age groups so that to strengthen Shanda’s strategy of penetrating the fast growing home-based game user market. The acquisition of Digital-Red marks the third important step that Shanda has taken to expand their interactive games offering platform. Digital-Red has already established a successful mobile games development platform, the addition of Digital-Red places Shanda at the forefront of another emerging market opportunity - wireless games. Shanda’s three unexpected and speedy steps in the investment and acquisition have confirmed its unique No.1 position in the development of online game and wireless game products.

D. Service management
Shanda has built a nationwide distribution and payment network. Shanda’s e-sales system enables them to sell virtual pre-paid game cards, which simplifies logistics by eliminating the need for, and the cost of, physical game cards. As of March 31, 2004, the e-sales network covers 63 regional distributors and over 900 sub-distributors. It is estimated that there are over 137,000 retail points of sale in Shanda’s e-sales network. It also has developed a customer service system, which includes a 24-hour call center.

E. Financial management
Just as mentioned above, the advantage of “deep pockets” or substantial surplus resources is that “a competitor can withstand an intensive competitive war. The strong finance power and top financial management backed the smooth implement action of acquisitions and investment, product development, exploring service systems, etc. The following are the two important measures of capital financing.

1) Receiving US$40 million in Financing from SoftBank Asia
On March 4, 2003, Shanda received the completion of a US$40 million strategic investment from SoftBank Asia Information Infrastructure Investment Fund (SAIF). Just as Chen Tianqiao said, “In addition to the financial resources, the SAIF investment also brings international management concepts to Shanda. This successful financing marks not only a key milestone in our journey into the global market but also the recognition of China’s online game industry by international capital markets.”

2) Shanda Listed on Nasdaq
May 13, 2004, Shanda Interactive Entertainment Limited announced that its initial public offering of 13.8 million American Depositary Shares (ADSs), consisting of 9.6 million ADSs offered by Shanda and 4.2 million ADSs offered by its selling shareholders, was priced at US$11 per ADS. In the second quarter of 2004, Shanda had diluted earnings per ADS of RMB 2.04 (US$0.24), representing a 67.2% increase compared to diluted earnings per ADS of RMB 1.22 in the same period of 2003 and a 78.9% increase compared to diluted earnings per ADS of RMB 1.14 in the first quarter of 2004.

Bianfeng offers over 50 different games, which attracted over 200,000 peak concurrent users in July 2004, according to data provided by Bianfeng’s management.

SoftBank Asia Information Infrastructure Investment Fund was founded in 2001 by SoftBank and Cisco Systems. The fund invests in broadband, wireless, media and information technology firms in the Asia Pacific region and the United States.
F. Cooperation and partnerships

Lynch said (2003, p.138) that “Cooperation have been used with success to beat larger rivals”. Strong cooperation can lead to a feeling of satisfaction and partnership and lead to strong and organizational ties that are difficult for outsiders to break ((Btsddington & Pettitt, 2003, p.494). The cooperation with leading organizations of other industries is a key factor for the success. Kinds of important cooperation are listed below. It should be noted that the cooperation has brought Shanda its first-mover advantage in the competition of online game market.

1) Cooperation between the online game and banking industries;
2) Cooperation with Alcatel Shanghai Bell to drive broadband entertainment service development in China;
3) Cooperation with Intel to Advance the Digital Home;
4) Cooperation with China’s second largest mobile phone carrier Unicom.

Summarization:
Above is the analysis of the application of strategies of Shanda. Good coordination and management link the separated improvement together. The financial results in the second quarter 2004 can explain the conspicuous achievement of Shanda. “Trading decisions in capital markets reflect information on company performance, insight provided by financial analysts, expectations on the future levels of interests and inflation, the investment decisions of financial managers, and so on” (Watson & Head, 1998, p.23). The rise of Shanda’s Earnings per ADS confirmed Shanda’s good performance and it has gained the expectation worldwide. The broadening of its game offering ensures Shanda to have occupied a more diversified revenue base and broader user base demographics. From this point, there will be sufficient space for Shanda to keep growing. Hopefully, Shanda equity will keep on its rising trend so that it can create its deep-pocket advantage and the global competitiveness.

3.2 Chinese Government Policies

Porter pointed out (1990, p.126) that “Government’s real role in national competitive advantage is in influencing the four determinants of national advantages positively or negatively.” He added that “Government, it seems, can hasten or raise the odds of gaining competitive advantage but lacks the power to create advantage itself.” (1990, p.128). Since 2003, the explosive growth of China online game industry has attracted the attention of Chinese Government and got its support, Realizing developing the high-qualified domestic game software is the only way to grab the Chinese online game market from the Korean online developers, Chinese Government enacted many favorable policies to promote domestic online game industry.

3.2.1 External Policy:

A. Chinese government only grants licenses to the foreign companies with local business partnerships. The Korea Herald thought (April, 22), “Establishing joint ventures could hurt their competitiveness in the long run since their core technology is transferred to Chinese software developers.”

B. Yichi Feng of Shanda said in the Interview (September, 2004) “The strict censoring system and the prolonged period of entry application to customs bring negative impact on the importing games’ entry to China. However, it helps the domestic online games gain more time to strive for domestic online gamers’ loyalty”.

C. Game licensing costs were a mere US$300,000 in 2002, but now have been soared up to US$ 1 million (China Daily, March 15, 2004), not including sharing revenues from operations. The increasing costs of importing a game from overseas markets such as South Korea inspire the enthusiasm of domestic companies.

3.2.2 Internal Policy:

A. Training of game developing personnel and technology devotion

1) Ministry of Science and Technology listed two projects on online game technology development in the ‘863’ High-Tech Program.\(^{31}\)

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\(^{31}\) “863” High-Tech Program is the national science and technology development program of China initiated
2) In October 2003, as a response to the demand for online game professionals, Sichuan University in Chengdu, capital of southwestern China's Sichuan province, set up the department of game software, the first of its kind in China.

3) China announced in August 2004 that it has its first college to provide training for the Internet games industry. The college has also licensed 15 training centers to provide the same training program throughout the country.

4) The newest training plans of the General Administration of Press and Publication (GAPP): 
   i. 1+10 plan. 1 means to establish a training unit to foster advanced online gaming developers whose academic level is similar to the master degree and set up 10 online gaming departments in the currently established universities.
   ii. Setting up 4 national online gaming bases which are located in Shanghai, Beijing, Guangdong Province and Sichuan Province and several national online gaming developing centers which combine the development and operation.
   iii. The China Government will invite advanced foreign online game companies to impart their experiences and arrange certain amount of Chinese online game technicians to accept training abroad.

5) In China, many development platforms have been set up in famous universities and high tech innovation center in order to support the online game technology research. They are (Klaus Oesch, 2003):
   i. State Key Lab of CAD and CG, Distributed Computing, Zhejiang University.
   ii. The Institute of Automation, Chinese Academy of Sciences.
   iii. Media School, Tsinghua University.

B. Favorable policies:
1) Kou Xiaowei, a department director at the General Administration of Press and Publication (GAPP) said at the Second Chinajoy Exhibition held in Shanghai on Oct.5, 2004 that they will take the follow steps in promoting the development of China online gaming industry.
   i. Invest RMB 1 to 2 billion in developing about 100 domestic online games in the following five years.
   ii. Try to offer the most preferential tax policies for domestic Chinese game developers.
   iii. Set up national-class substantive awards for the development of domestic online games.

2) The Ministry of Information Industry (MII), plans to provide for China’s online game industry from the Ministry’s IT and Electronics Fund. Zhang Qi director of MII’s electronic Products Bureau, recently announce that MII will appropriate funds to support some domestic online game companies.

3) Ministry of Culture calls for public contributions to a plan to promote China’s animated-game industry.

3.3 Cooperation Perspective between China and EU

Many foreign companies of South Korea, Japan, USA are tapping the China online gaming market. The fast development of China online gaming industry and high demand size brings about lots of chances of investment and cooperation. Rapid growth and huge potential of China’s online gaming market arouse the interest of Finnish Project Fenix (EUR 39 million is provided by Tekes). The Finnish Government has encouraged networking by financing technology

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March 1986.

The policies are from: http://iresearch.com.xn/online_users/detail_news.asp?id=8911

Fenix timeline is four years (1/2003-5/2007) and the total budget of the programme is EUR 84 million, out of which Tekes provides EUR 39 million. The programme has five focus areas, including Content management applications, Game and entertainment applications, Community network services, Industrial and service company network services and Mobile applications and services for companies and consumers.

Tekes, the National Technology Agency of Finland, is Finland’s principal public promoter of research and
programmes through Tekes. The project team entered into the China online game market and made a comprehensive survey in November 2003. Compare with other foreign online gaming organizations, the entry of Finnish project has the following competitive advantages.

3.3.1 Competitive advantages of Finnish entry to China market:

A. China published its first policy paper on the European Union (EU) on October 13, 2003, in hopes of furthering bilateral ties using its detailed layouts on cooperation in nearly all fields. “China-EU relations now are better than at any time in history”. Said Shen Jiru, chief of the Division of International Strategies of the Institute of Economics and Politics of the Chinese Academy of Social Sciences. Therefore, it can be said that Fenix Project entered the China’s online gaming market at the optimal time.

B. Neogames is a national game research and development centre in Finland. It builds cooperation networks globally and acts as a mezzanine between Tekes and the game industry. It has set up the International partnership with China Game Industry Association (www.neogames.fi).

C. The dissatisfactory attitude from older Chinese family members and society and the issue of monitoring system put forward by the Chinese government make Korean online games unable to last long in China.

D. In order to promote the domestic online game dominance, China online game industry needs not only technology support, but also more in financial support, the business skills, organizations skills, market know-how and other skills. So, they are looking for qualified foreign partners. Finland is consistently ranked as one of the most competitive economies in the world ((Finland 2004/Focus on the Economy and Technology, p.7). Finland has sufficient capability to complement the lack of skills in China.

E. The aim of Finland is that “every Finn will have access to high-speed, easy-to-use and affordable data transfer connections by the end of 2005.” (Finland 2004/Focus on the Economy and Technology, p.11). As Morgan Stanley said (2004, p.31), “More broadband may mean more online gaming, and vice versa...”. From this basis, how to develop and perfect the online gaming market so as to foster the growth of broadband market is the common goal of China and Finland. This will promote more cooperation in online gaming-related fields.

F. Mobile gaming will be a world popular trend in the world. China has No.1 mobile holders in the world (Morgan Stanley, 2004, p.17). Around 24.5 percent of Chinese will have mobile phones by the end of 2004. Finland has the most advanced technology in the production of mobiles. Nokia is the masterpiece of Finland in the international telecommunicating field. The combination of China’s huge mobile game market and Finland’s telecommunication technology will create the unique competitiveness in the mobile gaming.

G. Globalization is a world trend. Online Gaming is the culture carrier. It is the combination of art and technology. Professor Liangping Zhang, Director of International Office of Cooperation and Exchange of Tsinghua University, said in the Interview in May 2004, “Chinese people, especially the youth yearn for the understanding of real western civilization, mainly about its art and culture.” The ideal combination of Chinese and Western technology and art can ultimately develop a unique model of online gaming which is not only favorable to the Chinese online game players but to the appreciation of Finnish and EU online gamers. It will be possible to become a fresh and lasting online game tide throughout the world. After all, everyone in the world yearns for peace and true beauty.

4. Conclusion:

In this article, we have presented the bright prospective of China’s online gaming industry. With the application of Porter’s Diamond theory, we analyzed the national competitive advantages
that China online gaming industry has possessed. The rapid rising of the domestic online gaming companies, which is represented by the success of Shanda Interactive Entertainment Limited, indicates that China online gaming industry has enough competitiveness and huge potential in the severe international online gaming market. As a driving force, the efforts of the Chinese Government play an important role in protecting and stimulating the development of domestic online gaming industry. The fast growth of China online gaming industry is in need of foreign investment and kinds of cooperation. Under the good circumstances of diplomacy between China and EU, the cooperation of technology, management and other aspects will bring win-win situation for both parties and speed up the creation and consolidation of the national competitive advantages of China online gaming industry.

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Note: Other bibliographies can be found in the article or at the footnotes of the article.
Appendices:

Appendix 1: Average Hours of Internet Use at other Places per week (other than home/work/school)

Source: World Internet project, UCLA Center for Communication Policy Jan, 2004 cited by Morgan Stanley’s China Internet Report, April 2004

Appendix 2: China Online Game players Age Demographics


Appendix 3: Game Types Preferred by Online Game Players