

# Mobile phone manufacture industry in china



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Over the last century, mobile phones are widely used in the world and in our daily life. It brings much convenience to everyone both in business part and the life part. And now, it has already become an irreplaceable thing. In the past several years, because the development of the world economy and the electronic technology, the mobile phone industry grows a lot. It has been reported by International Telecommunication Union (ITU) on 2nd March 2009, that the number of the mobile phone users around the world has been over 4.1 billion[1]. This industry has developed very rapidly, and brings a huge profit, especially in China. From 2002, China has become the country which has the largest number of mobile phone users[2]. And the number is still increasing. It is known as a huge market there.

The aim of this report is to analyze the most important remote environment changes in the mobile phone industry in China, and as well evaluate the competitiveness for the key competitors who are holding the largest part of the Chinese marketing share in this industry, by using PEST analysis and Porter's Five Forces model respectively.

In the first part, the general information of the mobile phone industry in China will be introduced. This part will provide the information about the history development and the current market leaders of the mobile phone industry in China. In the second part, by using PEST analysis, I will mainly identify influence to this industry while the external environment changes. The Porter's Five Forces in this industry will be analyzed in the next part, the threat of entry, the threat of substitution, bargaining power of buyers, bargaining power of suppliers and rivalry among the current competitors will

all be considered in this part. At the end of this report, I will give a general conclusion and evaluation.

## **2. Industry background**

### **2.1 History and current situation**

As early as the eighties of the 20th century, mobile phone started being used by public in China. At that time, it is a kind of huge, heavy and inconvenient mobile phone which is made by the famous company, Motorola. And that is the product of analog signal times. In 1994, China's first digital communications GSM (Global System for Mobile Communications) network completed and put into use. It indicates that the mobile phone industry comes to GSM time. Motorola, Ericsson and Nokia are three important companies in this period[3]. Many significant classical cell phones are produced by them. Then mobile phone came to the second generation which is named CDMA (Code Division Multiple Access). Now the third generation (3G) has already put into use in China, which marks the mobile phone in China start to a new level.

From 2002, China has become the country which has the largest users in the investigation by TNS Canadian Facts, the holder rate of mobile phone in UK is 97%, and in the USA it is about 90%[4]. But in China, the holder rate is just over 50% (March, 2009)[5]. So it is to say China is still a huge market for the mobile phone industry.

## **2. 2 Market leaders**

### **Nokia**

Nokia Company is a famous Multinational mobile communications products maker around the world. In the mobile phone market has occupied the first position of the market share for many years. In 2005, Nokia has a 264million delivering amount of mobile phone, as much as 1. 8 time as the Motorola company. And it holds about a third of the world market share. In China, it is also the largest market share holder. As it has been mentioned it starts to make and sell cell phone from the late 20th century[6]

### **Motorola**

Motorola Company is a well-known American company which is famous for the mobile communication terminal. It always holds the second position of both the world market share and the market share in China in this field. From 1992, Motorola China production base which is in Tianjin has been used to make cell phones. And that is the biggest production base of Motorola around the world.

### **Samsung**

Samsung Anycall is the brand which is owned by Samsung electronics. It is the third holder of the market share of the mobile phone industry in China by the year 2008. Samsung is famous for the faddish design and its beautiful exterior condition. In China, it is the biggest market share holder of CDMA mobile phone, which is hold more than a forth of the market[7]. Some research even reported that Samsung has over Nokia become the first largest mobile phone provider in the Europe in some certain month. So it is

to say Samsung is a powerful competitor in the mobile phone industry in China.

### **3. PEST analysis**

This PEST analysis is the normal analysis method to identify the effect of the external environment changes to the business. It can be divided into four parts, which are political, economic, social and technological environments. This report uses PEST method to analyze the external environment factors which can influence the mobile phone industry in China.

#### **3. 1 Political environment**

##### **3. 1. 1 Open and reform policy**

It is known that China since 1978 start to adopt this policy and change the planned economy system to market economy system. The changes which are brought by this policy are obvious to all. And it is the beginning of the change of China. Now, 30 years has passed, but the changing step of China has not stopped. Ministry of Industry and Informatization of China are set up in 2008. It can be seen as a signal that the Chinese Government started to pay more attention to the informatization part.

##### **3. 1. 2 Telecommunications restructuring and issuance of 3G licenses**

On 24th May 2008, the Ministry of Industry and Information, National Development and Reform Commission and the Ministry of Finance jointly issued “ on the deepening of telecom reform circular”[8]. In this announcement, to encourage China Telecom to buy Unicom’s CDMA network (including assets and users), China Unicom the merger with Netcom, China Satcom’s basic telecom business into China Telecom, China Railcom  
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incorporate into China mobile. In addition, notice that the reform and restructuring will be a combination of issuing 3G license. Three 3G licenses will be issued after the completion of the reorganization of the. After the reorganization, China's telecom industry from the past six the operator of the pattern of competition come into China Mobile, China Unicom, China Telecom the three stages. On 7th January, 2009, the domestic third-generation mobile communications (3G) license officially issued. China Mobile gained independent intellectual property rights with Chinese TD-SCDMA license, while China Telecom and China Unicom respectively get CDMA2000, WCDMA license. Ministry of information industry and is expected this year and the next three operators 3G network construction will be a total investment of 2, 800 billion RMB, the 3G network in 2009 will reach 150 billion RMB of investment[9].

The restructuring of the operator gives a chance to the mobile phone manufacturers to start at the same point. And run their own strategy in order to hold their own costumers in the 3G market.

### 3. 1. 3 The national electronic information industry of the major Research and development special

On 10th November 2008, the Ministry of Industry and Information issued " A special notice in ' core electronic components, high-end general chips and basic software products' significant scientific and technological issues in 2009." The special parts of the basis of software, including six projects, 20 sub-topics, cover the operating system, databases, middleware and application software and other fields[10].

Introduction of a major national research and special purpose electronic components industry is to increase the development of technology and equipment, drive electronics and communications products throughout the manufacturing industry. Directly benefit from the electronic components manufacturing and electronics manufacturing, electronics and communications products other indirect beneficiaries of the manufacturing sector. From this notice, it can be seen that the Chinese Government try to encourage innovating in the informationization field. It encourages the development of the mobile phone industry of China.

### 3. 1. 4 Adjust the export tax rebate rate

In China, to encourage the export, there is tax rebate when the products export. In the late 2008, the rate of the export tax rebate has been adjusted 4 times, and two of them are related to the cell phone industry. From 1st December, 2008, the rates of the export tax rebate of some of the mechanical and electrical products are raised respectively, from 9% to 11%, from 11% to 13%, from 13% to 14%[11]. And on 24th December, executive meeting of State Council decided to improve the part of technical content and high value-added export tax rebate rate of mechanical and electrical products. These two increases of the export tax rebate rate affect the mobile phone industry a lot. For the mobile phone manufacturers it is positive to raise the competitiveness to the world market, as it is known that China is one of the largest export countries of mobile phone. The benefits of exports of electronics and communications products to the manufacturers include the effective release of production capacity, to increase employment opportunities, increase market share in the international market.

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### 3. 1. 5 “ Electronic Information Industry Development Planning (2009-2011)”

To deal with global economic and financial crisis, the revitalization of the electronic information industry in the national economy of strategic, basic and pillar industries of the pilot, in February 2009, the state preparation of the “ Electronic Information Industry Development Planning (2009 — 2011) “(the draft)[12]. Revitalization planning in order to enhance the capacity of independent development, promoting industrial development model to scale from the speed of innovation and economic returns the main line, making breakthroughs in key areas around the core industries, the backbone of the revitalization of industry, new applications drive the three major tasks of the new growth to start the implementation of integrated circuits, color TV six projects, such as industrial restructuring, and improve support for the implementation of 10 policies and measures to speed up the integration of information technology and industrialization process. This plan focuses on six key projects which are including improving the new generation of mobile communications (TD-SCDMA) industry. That indicates the government’s economic-oriented.

## **3. 2 Economic environment**

### **3. 2. 1 GDP and population**

It is known that China is seen as a miracle in the increase of the economy. From the year 2004 to 2007, the growth of GDP is stable over 10%. Although the global economic crisis also influence China a lot, the growth of GDP still over 8% in the year 2008. By the year 2008, the GDP is 4320 billion which is counted by USD, and about 3266USD per capital. It is the first time that the GDP per capital of China has been over 3000 USD. In addition, the population

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of China is over 1.3 billion by the end of 2008. The large population means the huge market, and linking to the growth of GDP, it means that the people have enough money to buy the products.

### **3.2.2 Global economic crisis**

It is known that from the year 2008, the global economic crisis become more and more effective to the whole world. Although during the crisis, China plays an important role and has an excellent performance, the economic still affect the Chinese economy, especially to the southeast part of China. In addition, most of the electronic companies are in that area, so are the mobile phone companies. It can be seen that this economic crisis are not mainly point to the mobile phone industry, but the external environment are not good for the industry to develop.

### **3.3 Social environment**

#### **3.3.1 Health problem**

It is known that the mobile phone will emit electromagnetic wave, especially when the mobile phone has a low battery or the phone is using. Although there is no convinced evidence to prove that the large amount of electromagnetic wave is bad for health, people are still worried about it, especially the parents. Children are always been seen are the future. And for most of the parents, they may only have one child. Therefore, the parents pay more and more attention to the health of the child. They want this child to be 100 percent health. So the mobile phone will be keeping away as early as the pregnancy. It changes a little when the CDMA technology is used.

Because the CDMA cell phone emits much less electromagnetic wave that the GSM phone. In another words, the opinion of health push the mobile  
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phone industry move forward. In addition, considering of the worrying of the parents, some company even start to create some low wave phone only for child.

### **3. 3. 2 Safety problem for drivers**

Proved by some convinced evidence that the risk of making calls is four time higher than normal rate[13]. And some scientists have said that talking on the mobile phone may decrease one forth of the reactive ability, and some important calls will decrease half of it. Therefore, it is to say that the mobile phone can be seen as a new killer on the road. Both the public and the government are all paying much attention on it. In some countries, the governments even announced the legal clauses in order to forbid the mobile phone using while driving, such as UK. Although, that Chinese government has not put it into legal level, it still thinks highly of this. The penalty should be hand in when using the phone while driving. On the other hand, it gives the accessories a good chance to develop. A lot of speakers which are based on the Bluetooth technology are widely used now, and the manufacturers of the accessories are exactly the same as the mobile phone maker.

#### **Source: I Research Inc.**

From the figure 5, which is shown above, it can be seen that in China, the users of the mobile, who are under the age of 24, stand a high percentage in the users. And for most of the people, they are right at the studying age under 24. According to the announcement by Jupiter Research, it is noted that the age of users is becoming younger and younger[15]. Therefore, many people are worrying about the effect of the mobile phone to the education. The smart mobile phone already provides lots of functions, such as short

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messages, MP3, MP4, YouTube, games and so on. They may all become the effect to the quality of the education, which are all worried by the parents.

### **3. 3. 4 Need of communication and daily life**

Nowadays, the mobile phone seems an indispensable thing in the daily life. With the help of it, people can connect to others and be found by somebody else as well. And the mobile phone brings new place for people to connect with each other (Kopomaa, 2000)[16]. It is an important invention which makes the world smaller like a village. And people all rely on it. Not only using the function of making telephone call, but also as a part of entertainment. Some people who rely too much on it even have a problem, which is named mobile dependency syndrome[17]. And these people will feel anxious when they left their phone somewhere. It shows how much people rely on the mobile phone today. For parents, they may consider that the child will be easily to be connected with the mobile phone (Manuel, 2007) [18]. It is to say the cell phone can be seen as a part of security system.

## **3. 4 Technological environment**

### **3. 4. 1 3G technology**

It is well known that the third generation technology is running in China. Although maybe the operators get the most profit, it is still a good chance for the mobile phone manufacturers to develop themselves. From the eighties in the last century when cell phones start to use in the public, then comes to the second generation (2G). Now, 3G is coming. Every movement of the tech gives a chance of the mobile phone industry to grow. Currently, every manufacturer is trying their best to produce the new cell phone which can be using in the 3G network.

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### **3. 4. 2 The development of electronic technology**

Mobile phone industry can also be seen as a part of the electronic technology. And the development of the electronic technology will push the mobile phone manufacturers to produce a higher level product. As it is known the famous “ Moore’s Law”[19]give the public a general idea about how fast the hardware develops. And the software maybe grows even faster. It is an information time. The development of hardware and software makes the mobile phone update and the development will never stop.

### **3. 5 Summary**

In this part, the report analyzes the external environment of the mobile phone industry in China. According to the situation of China, it is known that the Chinese Government has strong policy guidance. Therefore, the report uses a mount of words to explain the political environment. And due to the words limitation, other parts just give out a general idea. However, from these information, it can be seen that people need mobile phone, the growth of economy makes people have ability to buy mobile phone, and the mobile update are trying to meet the need of them. So although there are still some problems that exist now, the whole external environment is still pushing the mobile phone manufacturers to an excellent direction. The future for them is bright.

## **4. Porter’s Five Forces Analysis**

The operating environment is what the companies can do themselves to influence the environment. By using porter’s Five Forces Analysis method, this report will analyze the mobile phone manufacturer in five parts. These are entrants, substitutes, buyers, suppliers and competitors. It helps to

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identify the competition environment of a certain industry[20]. And in this part, the analysis will mainly point to the top three companies which are hold the top three market share of the mobile phone users in China. They are Nokia, Motorola and Samsung. In addition, the stated-owned bran, Lenovo may be mentioned as an additional company, which is the sixth largest market share holder in China.

#### **4. 1 The threat of entry**

Considering to the theory by Porter (1980)[21], the new entrants need to think about the barriers. As it is known that the high tech industry, just like the mobile phone industry, always has high added value. The high profit always attracts more and more companies try to entre to this industry. In China, the main threats are from three parts. They are the large household appliances enterprises, the small private enterprises, and the IT giant.

From figure 2, it can be seen that about 19. 8% of the market share are holding by some other not famous company. And except Nokia, most of the companies don't have obvious superiority in holding the marketing share, even as well-known as Motorola and Samsung. So excluding the top three, other companies include Dopod, Sony-Ericsson, Lenovo, Philips, Haier, Gionee, BlackBerry, Apple Inc., BenQ-Siemens, CECT, Sharp, LG, NEC, OPPO and so on.

Year 1999 is usually seen as the first year of Chinese Mobile phone starting. In this year, the government starts to issue the license to private companies. They are TCL, Konka, Panda, Haier and Bird[22]. Most of them are large household appliances enterprises. They try to use their influence of

household electrical appliances industry to open the mobile phone market.

And from the currently research, most of them are not that successful.

Although they have enough capital to operate this business, they have a big technical disadvantage.

Starting from the 21st century, some small private enterprises in the southeast part of China start to assemble cell phone by their own. They do not need to research and develop the technology, but only try to make the similar style products which already exist in the market. The low price makes them alive.

The third part is the IT giant, such as Microsoft, Google and so on. There are convinced report said that these two companies will try to run the mobile phone business. And Google has already issued G1. Microsoft will also issue a smart phone in June. It seems they will try to use the software advantage to open a market in this field.

## **4. 2 Threat of substitute products**

All the companies in an industry are competing, and the companies which make substitute products may be involved in this[23]. For the substitute products may reduce the need of the other products[24]. The main function of the mobile phone is still to call and connect to others. Therefore, the substitute products are just related to this part. Although the mobile phone is widely used in China for only about 10 years, the life has been changed a lot by it. It is first used just as a part of supplementary to the fixed telephone. And it can also be seen as a substitute product to fixed telephone. In addition, in the last several years, Personal Hand-phone System (PHS)[25]is

very popular, and it also can be seen as a kind of substitutes to the mobile phone.

As it has been mentioned in the former part, health problem is always considered by the public. But some relative reports has already clarified that there is no convinced evidence to prove that the mobile phone gives out bad effect to health.

From figure 6, it can be easily found out that the number of fixed telephone started decrease since year 2007. And the penetration rate went down at the same time. It is obvious that the development of mobile phone influences a lot to the fixed telephone. And the users of PHS are going down sharply as well.

Therefore, to figure out the reason, we should know the advantages and disadvantages of both sides. For the fixed telephone, the advantage is cheap price, and so is the PHS phone. But the fixed telephone is inconvenient. It can not be used outside. The PHS phone deal with the weakness of the fixed telephone, however, it can be used just in a certain area. It can not be used for travelling, and the signal is not very good. On the other hand, the price of mobile phone and the using expense becomes cheaper. The communication network becomes much better than before. Therefore, in the competition, the mobile phone stands in a better position.

### **4. 3 Bargaining power of buyers**

The most important measures of the bargaining power of buyers are the volume and the focus of the costumers (Porter, 1980)[26]. In my opinion, the

main mobile phone buyers are the direct user, the network operator and the retail agency.

It is obvious that there are too many products in the market, which are provided by different company. So trying to get the own method to hold the costumers become an important point. And it is noted that the relationship between the company and user, and trying to build the brand loyalty are key points to be successful (Mats, 2002)[27].

### **4. 3. 1 Buyer volume**

Buyers in the mobile phone industry are various. For the direct users, they only buy the ones used by their own. But for the retailers and the network operators, they usually buy a large amount of products. Therefore, it should be analyzed separately. To be specific, these retailers and the network operators have a certain power in bargaining.

### **4. 3. 2 Switching cost**

Every mobile phone manufacturers usually can provide products which are with similar functions. So the quality of the after-sale services and the quality of the products are very important. Therefore, the costumers can buy the cell phone in a similar style either from Nokia or Motorola. But for retailers and the operators, the switching cost is very high. Because nobody can imagine that China Mobile do not sell any cell phone made by Nokia, or a Nokia retailer only sells Motorola's products.

### **4. 3. 3 Price sensitivity**

In the opinion of most people, mobile phone is not a small amount of expense. Therefore, the direct users will compare the similar products from <https://assignbuster.com/mobile-phone-manufacture-industry-in-china/>



different companies, and choose the best one. Usually, for the normal people (direct users) they will not buy a phone just because the price becomes low. But, for the retailers and the operators, it is different. Most of the cell phones have their own life cycle. When a new one is issued, it is usually not sensitive to the price, and the price will stay at a high level. But after this period, it becomes a little sensitive.

#### **4. 4 Bargaining power of suppliers**

To make a cell phone, seven steps are required normally, which are industry design, mechanical design, hardware, software, project management, sourcing and quality assurance. All these steps should be done to make a mobile phone, but not all of them can be done by the manufacturer. For example, the software part, most of the manufacturers don't have the patent of it. Therefore, cooperation is needed. Then Nokia uses Symbian system, and Motorola use Linux system.

As it is known that now most of the phones which are widely use in China are based on GSM and CDMA system. However, for most of the mobile phone manufacturers, they do not have the patent to produce these systems. And they need to get support from the patent holders. For example, Qualcomm, which holds the patent in CDMA area, sells CDMA chips lonely and in a high price. And some other kinds of hardware and software which are used in make cell phone are in the similar condition. The mobile phone manufacturers do not have enough power for these patent holders. Therefore, in my opinion, it would be a better choice to build an alliance to move together.

## **4. 5 Rivalry among existing competitors**

It is noted that the rivalry which is the most obvious and important one in the five forces, will help to measure the whole industry (Porter, 1980). In this part, the rivalries are divided into two parts, the one which is between large makers and small makers, and the one among large makers.

### **4. 5. 1 Rivalry between large makers and small makers**

The largest mobile maker in China is Nokia, which hold about 40% of the market share. And then comes Motorola and Samsung, but the superior of them are not as obvious as that of Nokia. Additionally, Dopod, Sony-Ericsson and Lenovo are not far behind them. All of these companies which are mentioned above are all can be seen as large makers. The same points of them are obvious. They all have a large scale, the entire R & D and production line, with well-known brand, and so on. On the other side, the small makers have a small scale, with unknown brand. And usually the small makers do not have an entire R & D line. The most attractive point of the products, which are made by the small makers, is cheap. And the large makers usually use high quality and promotion strategy to catch the costumer.

### **4. 5. 2 Rivalry among largest makers**

As mentioned, Nokia is the world largest manufacturer of the mobile phone. The market share of it is about 40% in 2008. Nokia tries its best to keeping the volumes both in high level market by using smart phone, such as N series, and in the low level market by using some classic phone, such as 1100 and so on. The high quality, especially the strong body of the cell phone is seen as the most important advantage. Motorola is famous for the <https://assignbuster.com/mobile-phone-manufacture-industry-in-china/>

Linux system. By using this free system, the profit and the price can have a balance level. It is the second market share holder which even owns a higher market share than Samsung, which is the second largest market share holder around the world. Samsung is focus on the business phone, so the price may be a little higher, but the quality and the powerful battery are the reason for it to earn a high market share. Sony-Ericsson is also very popular, especially for the young people, although it doesn't hold a large market share. Its cell phones are well designed to be covered a beautiful, and with a high level music and camera function. However, they are not very durable.

From the competitors, who are mentioned above, I think the rivalry in this industry is very intensive. The price reduce of one product will lead to a chain reaction in the whole industry. Each company in the market has its own ability to live and own it profit.

## **4. 6 Summary**

Porter's Five Forces Analysis Method determines the profit potential of this industry. The bargaining of both buyers and the suppliers are strong.

Although the profit of this industry is seen in a high level, more and more competitive entrants will make the rivalry more intensive.

## **5. Conclusion**

This report analyzes the mobile phone manufactory in China. It uses PEST method to measure the