

Opportunity Market: Firm Strategy and Business Behavior in the China Context- Case of BYD

XiaohongQuan
College of Business, San Jose State University
Xiaohong.Quan@sjsu.edu

Jihong Sanderson
Hass School of Business, University of California, Berkeley

Abstract:

In this paper, we have proposed a concept of opportunity market in the China context, where opportunities emerge from both a free market milieu and a controlled economic environment. Rapid changes in China provided the conditions for such an opportunity market. Discussions are given on the characteristics of the opportunity market. The defining characteristics of the opportunity market create a new strategic landscape for firms operating businesses in China. The case of the BYD Auto Company shows how a successful domestic firm managed to well utilize the environment of China's opportunity market.

Introduction

The Chinese economy has experienced huge changes in the past two decades. Rapidly evolving changes in the business environment challenge both domestic Chinese firms and multinational corporations operating in China. Not only do we see many local firms surge in 'the ocean of business'¹ up and down struggling for survival, but also we observe some world renowned firm equipped with superb technologies and billions of dollars in pockets have lost money in China such as Microsoft. What differences does the Chinese market have compared with many western country markets as traditionally understood? What can we tell firms in their strategy making and business behaving in the volatile Chinese market?

There are many perspectives and approaches to understand a situation as large and complex as China's market. We do not intend to give a comprehensive treatment of the subject but instead offer one perspective to aid in its understanding. This paper proposes opportunity market as a useful concept to describe the Chinese market, unveils some major characteristics of such opportunity market, and helps understand how firms should

¹At the early stage following the reform and opening up of the Chinese economy, doing business is usually referred to as "going down to the ocean".

respond to this specific market. This unique perspective can add to existing management theories, which mostly have been developed from practices in the western countries.

Research method

In-depth case study is the method in this paper. The case analysis based on eight in-depth interviews with senior managers of BYD Auto totaling 12 hours and 31 minutes' interview time resulting 143 pages of interview transcripts. Specifically, the interviewees include: 1) Wang, the founder, President and Chairman, for two hours and twelve minutes 2) Xia, General Manager for Sales, for two hours and seven minutes 3) Liu, Director of Human Resource, for forty minutes 4) Hang, Director of Intellectual Property, for two hours and ten minutes 5) Sun, Vice President for one hour and forty five minutes 6) Deng, a manager who is among the earliest hired employees for twenty minutes 7) Wang, Vice President, for two hours and two minutes 8) Gong, Director of the Central Research Institute, for one hour and ten minutes.

To supplement the interviews, we have also obtained information on BYD Auto from websites, newspapers, magazines and other research reports. For instance, we studied the transcript of the founder Wang's announcement on the new product F6 and the following Q&A section with a length of 50 minutes' talk (2007).

The Opportunity market

The reform and opening policy by Deng Xiao Ping inaugurated a process of societal experimentation and innovation rarely seen on such a vast scale. Deng's policies started a "radical transformation" that changed the value of both the assets and the activities of the centrally planned economy and its institutions. (McGahn, 2004) The carefully managed revolution created a huge amount of business opportunities in many industries from manufacturing to logistics to services.

The dramatic changes contribute greatly to the huge uncertainty about the design or functions or price that end users will prefer, the distribution channels that will be most effective, and the players that may dominate the market. Changes lead to various opportunities in the Chinese market. Hence we call the Chinese market an 'opportunity market', because it is best understood and differentiated by its abundance of rapidly emerging opportunities. Then the question follows that what are the characteristics of changes and opportunities that are specific to the Chinese market that can lead to different business behaviors, which will be discussed in the paper.

Opportunities in this market originated from two different aspects. On the one hand, changes at the incredible scale lead to opportunities similar to what are observed in the greenfield phase of industries in many developed countries. The development of the opportunity market can be compared to the beginning of an industry life cycle in a market economy, when numerous firms flock to what seem to be a money-making opportunity of unlimited scope. The window of opportunity is widely open to everyone and entrepreneurial spirit is prevalent. This aspect of opportunity market is not the center of discussion in this paper.

On the other hand, some opportunities are not driven by pure free market economy. They are controlled opportunities in the sense that government has played a

strong role in shaping the market. And this aspect is what we will focus our discussion in the paper. In many industries in China the government acts simultaneously as buyer, supplier, regulator, and promoter (Quan, 2008). Furthermore, these roles sometimes conflict with each other, resulting in a complicated market place that requires specifically cautious business strategies. The window of opportunity is open to only some selected groups that qualify based on specific policies or business conditions in one way or another. While multinational corporations (MNCs) may have lots of experience with and many strategies for identifying and exploring opportunities which originate from the first aspect, they are often less familiar with the politically driven model of business development. Furthermore, MNCs, which are used to competing with other sophisticated firms for small increase of market share, may fail in China due to unfamiliarity with a whole series of markets that are conceived, come into existence, and grow with extreme rapidity.

The Demand Factor

The substantial and rising number of people in the middle class with its growing incomes is transforming the Chinese consumer market. A study by Euromonitor estimated the size of Chinese middle class - with household annual incomes between RMB ¥60,000 (\$8,800) and RMB ¥500,000 (\$73,200) - reached 80 million in January 2007. In 2006, the proportion of private consumption in China's total GDP was 38.0%, well below the world's average of 59.2%. The expansion of the middle class will help to boost the role of private consumption in the Chinese economy, turning it into a key driver of economic growth. (Hodgson, 2007) With a slightly different definition, a Chinese Academy of Social Sciences (CASS) study found 19% of Chinese were middle class in 2003, up from 15% at the end of 1999. This definition includes any household with assets worth \$18,000 to \$36,000. (BBC News, 2004) A more recent estimation from CNNMoney in 2012 put the number of the middle class in China at about 300million, which is about 25% of the population².

Fast economic growth is a stunning fact of China with which few countries in the world can compare. China has maintained an average annual GDP growth of 8.1 percent over the past sixty years, according to China Daily (June 30, 2010). Indeed, the per capita gross national income hit \$2,770 in 2008, just entering the lower-middle-income country bracket. While housing in big cities and luxury products in China are incredibly expensive for the local citizens, expenditures for daily necessities for the majority of Chinese consumers are still very low. This explains why attempting to become the supplier with the lowest price is still a viable competitive strategy in this opportunity market, despite the fast growing economy and fledgling middle class.

The Chinese market, although large, remains immature. For instance, consider an essential element in many high tech products - software. Most industry participants agree that few domestic users, including government, businesses, and individuals, fully appreciate the value of investing in and/or paying for software. However it is relatively easy to sell hardware products to the Chinese consumers. This reluctance to recognize the value of software may be due to cultural, habitual, and historical reasons where physical assets were extremely in short supply and intellectual property rights were not recognized

²<http://money.cnn.com/2012/04/25/news/economy/china-middle-class/index.htm>

or protected. As a result, many software firms find it difficult to survive in the Chinese market, as illustrated in the case of Microsoft later.

For many decades, Chinese consumers have followed the tastes of the developed countries, especially for many high technology products that originated in the west. However, with the growing purchasing power of the middle class and of the government, the Chinese market has increasingly become essential for transnational firms. China has become the world's biggest auto market, surpassing the U.S. In 2009, total sales in China surged 46 percent to 13.46 million vehicles. In the first quarter of 2010, sales jumped 72 percent to 4.61 million. China's tastes have now begun to influence the appearance and functions of some global products. For instance, General Motors design group frequently considers the "C-Factor", a term referring to China's impact on American styling, according to GM global design chief, Ed Welburn. The latest design for Buick is influenced by "jade sculpture, calligraphy and a lot of the art dating back centuries", said Welburn in an interview at the Beijing auto show in April 2010. (Greimel, 2010) Even at the high end, more and more research and development activities by multinational corporations in China are focused on global markets. (Quan and Chesbrough, 2010) This suggests that demand from China needs to be carefully studied and considered by firms looking for growth in this huge market.

Demand for every sort of product or service is growing so fast in China as to confound western companies who are more used to relatively stable markets and the "trench warfare" of competing increments of for 1/100ths of a percent of market share. The concepts and processes from mature markets often do not apply.

The Supply Factor - Human Resources

When we talk about China's economy, it is inevitable that we examine the low cost labor phenomenon, which contributes significantly to China's fast economic growth. Much has been said about the immigrant workers who form the majority of the low cost manufacturing force across many industries, a deep pool of potentially 800 to 900 million workers. What is emphasized in this paper is not only the low cost but also the highly skilled nature (LC-HS) labor in China, due to expanding higher education over the past decade.

Higher education in China has experienced a huge surge since 1998. Tertiary student enrollment did not reach one million until 1997. In the decade that followed it expanded to 5.4 million by 2006. The annual growth rate was 22.2 percent during the 1998-2006 period, compared to 4.4 percent from 1985-1998. However, the job market did not expand as quickly as higher education, resulting in the overwhelming phenomenon of "educated unemployment" in China. From 2003 to 2005, unemployed bachelor degree holders at the point of leaving the university increased from 750,000 to 1.2 million. In 2004, there were 990,000 unemployed general degree holders, accounting for 41 percent of the total 2.4 million graduates. The problem worsened in 2009 when 2.0 million of the 6.3 million degree holders could not find jobs upon graduation³. As a result, many young people face the problem of unemployment immediately after graduation and those who are fortunate enough to get hired become part of the low cost but highly skilled labor force in the Chinese economy due to overly abundant reserves there.

³ <http://www.womenofchina.cn/Issues/Employment/217122.jsp>

Many of the LC-HS (low cost, highly skilled) workers had impressive fast learning capability. Their diligent and hard-working attitude contributed significantly to firms' revenue growth. However a high employee turnover rate was also observed in many industries. In fact China's staff turnover rate was the highest in Asia, more than twice that of Japan, according to a Youth Daily report. (People's Daily online, Jan 2008) Across all industries, 47 percent of companies surveyed had turnover rates of more than 10 percent in the past 12 months, and 13 percent said that the rate was more than 20 percent. Unsatisfactory compensation and limited career progression were blamed for China's high turnover level. And fast learning capability and an entrepreneurial mindset of the LC-HS workers also propelled the high turnover rate.

There is one other important human resource element in the Chinese economy that must be mentioned to understand the opportunity market in China. Between 1978 and 2000, the cumulative number of Chinese students studying overseas had exceeded 200,000. By 2004, the number had tripled to over 600,000. (Yang & Tan, 2007) The Chinese Academy of Social Sciences revealed that 1.06 million Chinese had left to study overseas by 2007, (as of the end of 2008 1.38 million Chinese students had gone abroad to study - *Zhang Xiuqin, Director General for the Department of International Cooperation and Exchange under the Chinese Ministry of Education*. Another 229,000 left China to pursue studies in 2009 – *People's Daily, June 07, 2010*. According to China Minister of Education, 339,700 went abroad for study in 2011; meanwhile about 186,200 returned China the same year. In all sectors of the Chinese economy, overseas returnees are new blood who continuously bring new ideas and experience from overseas. From the academic side, leading universities such as Peking University and Tsinghua University are competing to hire well-established academics and fresh graduates who hold “branded” overseas PhDs from American and European's top universities. In the industrial world, the contribution of overseas returnees to their home countries is also very significant (Saxenian, 1999; Saxenian, Motoyama, & Quan, 2002).

Due to their familiarity with overseas business models and philosophy, overseas returnees are able to communicate easily with the western world while playing a bridging role with local business and government based on their local roots. The list of MNCs that employ returnees as CEOs, executive VPs, or other very senior posts is impressive. They include: Google Inc., Microsoft China, UBS, Alcatel, News Corps, Siemens, Hewlett Packard, Ernst and Young, BP, General Motors, and others. (Wang & Zweig, 2008)

The tremendous surge in the numbers of graduates from Chinese Universities, the consistent improvement in the quality of Chinese post secondary education, and the increasing numbers of Chinese scholars returning from study abroad, all contribute to a very rich and deep supply of talent in China. This, in turn, helps create an environment filled with large numbers of new opportunities.

How firms respond to the opportunity market

In this section, we will discuss how firms respond to the opportunity market in China. The case of BYD shows how a domestic firm managed to utilize the specific demand and supply factors in China to exploit various opportunities, and become successful in the Chinese market in just one decade.

BYD, short for 'Build Your Dream', was founded in Shenzhen, Guangdong Province, in 1995. It began as a rechargeable-battery factory, competing in the Chinese market against Japanese imports. Within ten years, BYD captured more than half the world's mobile-phone battery market and became the largest Chinese manufacturer (and in the top four worldwide) of all types of rechargeable batteries. (Fishman, 2006) BYD Auto was formed in 2003 when BYD purchased Tsinchuan Automobile Company. BYD built on its IT expertise to produce some of China's most innovative automobiles. In 2010, BusinessWeek ranked BYD the 8th most innovative company in the world, ahead of Ford, Volkswagen and BMW. (Business week, 2010)

Meet the local taste with local culture

BYD auto had made cars for only seven years when its F3 compact model became the top-selling car in China. The F3 model led China's compact car segment in November 2008 with sales of more than 17,000 units, an increase of 92% over November 2007. In 2009, BYD sold 440,000 vehicles. (Automotive News, 3/22/2010) The success of the model in a large part comes from the appropriate design of the vehicle.

As the Chinese society emphasize the importance of face (*mianzi* in Chinese) in its social value and relations (Hwang, 1987), the concept of face also needs to be embedded in the products. This helps shape the design of BYD's F3 auto model. According to Chuanfu Wang, the founder and Chairman of BYD, "In China, besides moving people around, an important function of an automobile is to show *face*, (or status and prestige,) of the car owner. So the design of the car should be decent and show some grandiosity. In the west, people drive cars by themselves, and there is usually just one person in the car - the driver. But in China, typically you carry your whole family or several friends or colleagues in your car, and important people usually sit in the back seat. Therefore the back seat needs to be very spacious. That's how BYD designs its models. The exterior look of the F3 model is decent, and it's very spacious inside, especially for people sitting in the back seat." (Interview) The F3 model is targeted as family entry level car in China. BYD's later auto models such as F6, F8, and F3R have also followed the same design concept.

Furthermore, recognizing that the Chinese consumers are very price sensitive, the Chairman Chuanfu Wang emphasized, "The price of the car must be cheap. Our average household income is still low, compared with many developed countries. So, we set our price for the F3 model in the range of several ten thousands RMB. For about ¥70,000 RMB (roughly \$10,000 USD), you'll be able to get a very spacious car with much high quality electronics equipment in the car, and a car body length of 4.5 meters." BYD really is going to mass produce the world's cheapest automobile and bring inexpensive motoring to the masses in China. Until now, BYD's cars have been priced from ¥30,000 RMB (about \$4,400) to ¥100,000 RMB (about \$14,600), which includes their product lines from mini cars to large sedans. (China Car Times, 2010)

Firms which do not localize their product or service sufficiently are unlikely to succeed in China, as are firms which do not adapt their business model to the Chinese environment. The "copy to China" method of doing business seldom works. Opportunity market participants cannot assume that they know what opportunities the changes or gaps they observe will create. The tastes and culture of the market itself must closely inform the actions of the firm.

The Chinese way of production

To achieve low prices, BYD has found an effective way to fully take advantage of the low cost labor in China. This can be illustrated by BYD's battery products. BYD managed to slash the price of batteries by replacing robots and machines in the manufacturing process with an army of low cost workers.

When BYD was founded in the mid-1990s, the battery market in China was very large. About 90% of the batteries were imported from Japan, at extremely high prices. As a chemist and material scientist, Chuanfu Wang decided to start the firm BYD to produce batteries. At that time, a fully automated production line for lithium-ion rechargeable batteries cost at least \$100 million USD, which was beyond imagination for the young entrepreneur. "In order to achieve our goal (of making lithium-ion batteries), we had to design our own production line then. We spent a lot of time and effort to research the battery product and its production line. At the end, it cost us about \$20 million RMB (less than \$3 million USD) to build a semi-automated production line, with similar capacity of production (to the fully automated \$100 million facility). For the semi-automated line, we needed a lot of workers. Since labor costs were very low, it helped us dramatically lower our overall costs. In 1998, we could sell one lithium-ion battery at \$3 USD, while Japanese firms asked for \$8 USD for a similar battery. With a \$3 selling price, we still had about 60% gross margin for each battery. So we became very competitive then." (interview)

BYD was the first Chinese company that was able to make lithium-ion battery. The production method invented by BYD helped lower the entry barrier for many local firms, in terms of capital requirements. The company also automatically became a training base for talents in the battery industry. Due to the high employee turnover rate in China, many employees left BYD and started their own battery manufacturing. As a result, there are about 100 lithium-ion battery manufacturers now in China and the price has dropped dramatically.

The fast growth of the BYD company was made possible by the huge pool of low cost-high quality labor in China. Employment has increased almost exponentially since BYD was founded. In 1997, BYD had only a few hundred employees. In 1998, it grew to 3000. Employment expanded to 10,000 in 2000; over 30,000 in 2004, 50,000 in 2005, and about 130,000 in 2009. "We go to the best universities in China every year to recruit fresh students. It is not hard to hire good people since lots of university graduates cannot find jobs these days. Once they are hired, we train our employees well, and give them plenty of promotion opportunities and company stock options to retain good people." according to Mr. Huaming Liu, the Human Resource Director of BYD. Workers on the floor have lower education levels, and it was very easy and inexpensive to find enough of them.

BYD's Vertical Integration Strategy

BYD implements a strategy of vertical integration, unlike many firms in the western developed world. In a relatively mature market for a complicated product, typically a firm collaborates with many specialized suppliers to increase efficiency and focus its own resources on the few important elements that form their core competency, and which maximize their value creation. However, in the case of BYD, vertical

integration was adopted. This was feasible in the Chinese opportunity market, since a complete spectrum of specialist suppliers did not exist, or could not provide as high quality components as BYD needs.

The application of vertical integration at BYD started in 2003, when BYD undertook a task related to mobile phones for Siemens. At that time, a common pattern for mobile phone manufacturing was for an established firm from the West to create a design for the entire mobile phone, and also for many components of the handset. Local firms in China then undertook to manufacture these components based on the blueprints and specifications provided. "Each component supplier is usually allowed a small range of deviation from the original design parameters. There are over a hundred components for a mobile phone. When Siemens finally received all components from its suppliers, it found the phone was not able to function." says Ms. Qing Gong, the R&D Director of BYD. "Later, we found that the deviations were responsible for the problem. Even though each supplier was well within the allowable degree of deviation, the cumulative effect made the product unable to work." BYD then proposed to take over manufacture and assembly of all the components of the mobile phone, and promised a complete functioning product for Siemens. BYD's vertical integration strategy worked, and the same idea was later applied to its other customers such as Nokia and Motorola.

The experience of vertical integration in mobile phone manufacturing laid a foundation for BYD's auto manufacturing business model. "Most of the components of the automobile are done by us as well. We analyze all components at three different levels, and decide which components and their following integration may become bottleneck for the final product. We will research on that area first and solve potential integration problems. Through this method, we shortened our development cycle and lowered the overall costs." (Interview with Qing Gong, R&D Director) The difficulties of integrating poorly specialized supply chain partners makes vertical integration attractive in China's opportunity markets.

Conclusion

In this paper, we have proposed a new concept of opportunity market in the China context, where opportunities emerge from both a free market milieu and a controlled economic environment. Rapid changes in China provided the conditions for such an opportunity market. Discussions are given on the characteristics of the opportunity market from the dimensions of demand factors and supply factors. We saw how the defining characteristics of the opportunity market create a new strategic landscape for firms operating business in China. We believe that a full understanding of the differences between the Chinese opportunity market and the traditional market in the western countries is a necessary condition for predictable and consistent success in China. Much work remains to be done to test, refine, and expand our concepts and arguments. China presents both challenge and opportunity for this generation of business leaders in the world, and is also the testing ground for this generation of business scholars.

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