

Research on Motivations of Transnational Enterprises Carrying out Disruptive Innovation in Chinese BOP Market

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Abstract

In recent years, some transnational enterprises began expanding their business to Chinese low-income consumer market, and get good return. From the view of disruptive innovation, it indicates that these transnational enterprises have carried out disruptive innovation strategy in the Chinese market. Based on disruptive innovation and BOP market theory, this paper shows that the main factors which motivate transnational enterprises to carry out disruptive innovation strategy in Chinese market are: the nature and scale of the Chinese market, and how to avoid local enterprises to become “destroyer”. On the other hand, it is necessary to develop the disruptive innovation capability for transnational enterprises to tap the above market.

Key words: Transnational enterprises; Chinese market; Base of pyramid; Disruptive innovation

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INTRODUCTION

Recently, when some domestic enterprises are “going out

the country gate” in response to national strategies, part of transnational enterprises are marching up to China’s second and third-tier cities and even reach the rural market. EIU conducted a survey among 328 foreign-funded enterprises in China who gain more than \$1 billion in global revenues, the results show that 45% of large enterprises (more than \$ 5 billion) have been doing business in the second and third-tier cities in China; some enterprises even develop well and are moving forward to fringe market^[1]. On April 28, 2009, Bradley, the global executive vice president of Hewlett-Packard (HP), issued the latest Chinese custom rural market strategies^[2]. In recently years, transnational enterprises use their own advantages to provide high quality products and services to high-end customers while leaving low-end market to local enterprises. It is unprecedented that more and more transnational enterprises are paying attention to Chinese small towns and even rural market. It is natural to question what attracts transnational enterprises to do this. What kind of capability can guarantee them to expand their business successfully in this kind of market?

A reasonable and effective theoretical explanation comes from the proposition of BOP (bottom of pyramid) market theory^[3]. From the view of BOP market, \$ 2 per day as income standard to one person, there are almost 4 billion people belonging to low income consumer market (BOP). Obviously, few transnational enterprises realized the existence of the market for a long time. Most of them serve the low income customers only from the angle of social responsibility and charity. Obvious, this market is indeed negligible just to every single individual. However, taking the total population into account, according to the purchasing power parity (PPP) standard, which is a huge potential market with a value of \$ 5 trillion. About 52% of Chinese population also belongs to this market^[4]. So the market has Business Value certainly. But transnational enterprises always take the innovation strategy of serving the top of the pyramid, where the

products are qualified but too expensive, which is totally incompatible with the affordable, available, acceptable and appreciable (4AS) products demands of the pyramid bottom market^[5-6]. In order to serve this market, innovation must be conducted based on performance-price ratio according to its consumption characteristics. This is just a basic characteristic of disruptive innovation^[7-8]. In fact, disruptive innovation is the main theoretical foundation of BOP market innovation^[9]. Thus, if the paper can deduce that transnational enterprises have got the low-end market disruptive ability in China, and already taken their disruptive strategies, then the study has both theoretical and practical significance. This is because Chinese second and third-tier cities and rural market have been the birthplace of local enterprises for a long time. If transnational enterprises enter this market by providing disruptive innovative products, the existing competitive situation will be changed absolutely. Local enterprises are facing huge challenges. On the other hand, theoretically, the classical disruptive theory argues that latecomer enterprises (local enterprises) are more willing to cultivate disruptive innovative ability. Incumbent enterprises (transnational enterprises) relatively lack the motivation to carry out disruptive innovation. Therefore, most of the previous studies always analyze how local enterprises apply disruptive innovation to acquire late-development advantages in China market^[10].

To my knowledge, the studies on how transnational enterprises build disruptive abilities to emerging market's low-end part (such as Chinese market) are relatively few. So this paper could be enriched to the research that why and how transnational enterprises carry out disruptive innovation to develop in BOP market. To do this, this paper attempts to apply disruptive innovation and BOP

market theory to find the motivation of transnational enterprises carrying out disruptive innovation in Chinese market firstly.

1. MOTIVATIONS OF TRANSNATIONAL ENTERPRISES CARRYING OUT DISRUPTIVE INNOVATION IN CHINESE MARKET

Besides commercial factor, there may be political, cultural and other factors for transnational enterprises to carry out disruptive innovation in Chinese market. For example, Chinese government publishes policies to encourage enterprises to develop rural market, while these factors will not be taken into consideration in the paper. This paper only analyzes the motivation of transnational enterprises carrying out disruptive innovation in China from the perspective of commercial factor based on the disruptive innovation and BOP theory.

1.1 Transnational Enterprises Developing Disruptive Innovation Determined by Nature of the BOP Market

The emerging market is often price-driven instead of quality-driven. The product performance of transnational enterprises in developed mainstream market usually cannot be accepted by the mainstream consumers of emerging market. Thus, the lower products performance of transnational enterprises based on disruptive innovation may be more appropriate for emerging market^[11]. Figure 1 can help readers better comprehend this, which came from Christensen C. M., 2003 and Xiaobo Wu, Ma R. F. *et al.*, 2010^[12].

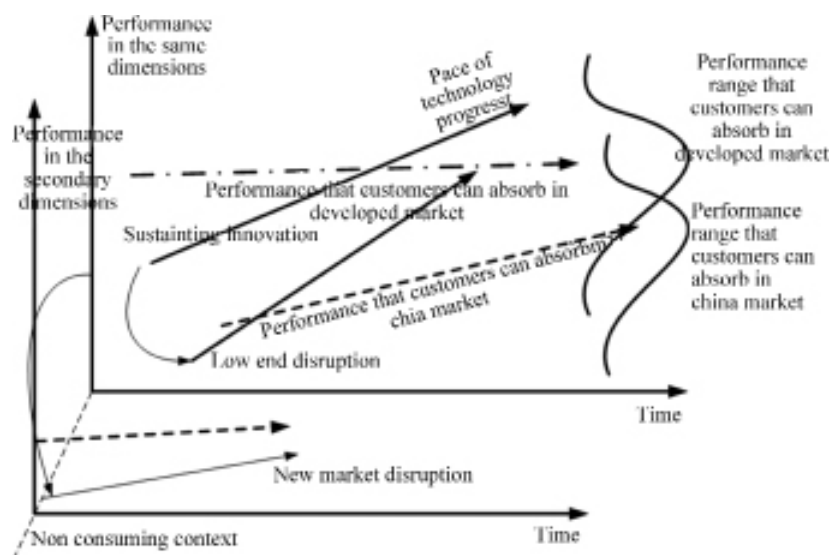


Figure 1
Differences Between the Chinese Market and Developed Market from View of Disruptive Innovation

Under the same product performance measurement standard, the dashed lines represent developed market and Chinese market's improvement rates of absorbing or applying product performance that means better quality product, which can satisfy mainstream consumer groups of developed market and Chinese market respectively. Because mainstream consumer groups of the two markets require different product performance, that is to say, the dashed line which represents Chinese market lower than developed markets' in the chart of Figure 1; the steeper solid line represents the ratio of technological progress. From the perspective of transnational enterprises, low-end disruption is suitable for Chinese market. On the other hand, under the condition that product performance measurement standard is inconsistent, as Chinese market environment is different from the developed market, which constituted another dimension in the figure. That is a new value network to use the disruptive innovation explaining. In this value network, consumption can be started only when the products' performance is more simplicity and product cost can be improved to lower enough. When enterprises develop products suitable for this type of consumers; this is called new market disruption by Christensen C. M., 2003 which mainly competes with "non-consumption". Chinese rural market is a typical "non-consumption" market, in which a large number of potential consumers have never been satisfied. As shown in the figure, no matter analyze from low-end disruption or new market disruption angle, disruption innovation in this market can more easily succeed, which is determined by the consumption nature of Chinese market, especially BOP market.

1.2 Market Size Is a Key Fact for Transnational Enterprises to Develop Disruptive Innovation in the BOP Market

Annual household consumption expenditure in China has reached about \$ 800 billion in 2011, which is more than the sum of Korea and Taiwan^[1]. According to the definition of middle-class family given by purchasing power parity (PPP): expenditure from 25000-40000 belongs to lower aspirants (middle-class), and 40000-100000 upper aspirants. According to the above standards, there will be about 270 million middle-class families before 2015; transnational enterprises need to make preparations for the potential middle-class families. Up to 2025, 67% or 612 million Chinese people will be upper aspirants, promoting China as the third largest consumption market in the world^[13-14]. In many fields, China has already completed the transition from emerging market to mature market. For example, Chinese market

has become the largest automobile, air-conditioner and LCD TV market in the world^[1]. If transnational enterprises want to get greater growth in Chinese market, they undoubtedly need to pay more attention to the rapidly forming aspirant market.

BOP market in this paper includes middle-class, especially lower aspirants. Therefore, there are tremendous opportunities in China's BOP market^{[6][15]}. At present, there are 90 cities are aspirant cities whose population are more than 250,000; most of these cities locate in the Midwest. So market research investigation institution Nielsen asserts that the third and fourth tier cities (prefecture level cities, counties) of the Midwest provinces which have 161 million families are a large market^[16]. Expected in the next 20 years, rural families with annual income of over 35,000 Yuan per year will increase by 7.6 million in these places. If transnational enterprises want to serve to the approximately 12,000 small towns and villages in China, they must carry out product innovation and expand the marketing scope to small towns and villages and even more remote areas^{[15][17]}.

"Not succeeding in Chinese market means failure in the global market". In short, no matter from the view of emerging market or BOP market, the importance of Chinese market is self-evident. However, there is big gap between Chinese consumption demands and mainstream market consumption demands of developed countries. Most families in China need drinking water machine instead of Cappuccino coffee maker^[17]. Those enterprises could not occupy Chinese market, especially low-end BOP market, if they do not take any actions, and just develop specialized products with cheap, simple and performance-sufficient standards. That means, they could not success only taking their products in mature market to china intact, transnational enterprises need to understand the BOP market consumers' demands deeply, adjust their cost structure, drive the price down, and develop localized products, to turn potential consumption into reality consumption^[13]. This requires transnational enterprises to develop products based on disruption innovation and carry out disruptive innovation strategies.

Obviously, part of transnational enterprises have realized the difference and importance of the Chinese market and repositioned it. This paper argues that transnational enterprises have changed their standpoint of Chinese market from cheap resources supplier and a marginalized market into a key strategic market. This paper reflects that transnational enterprises have changed their positioning of Chinese market, on the basis of the BOP market theory, as shown in Figure 2 and Figure 3.

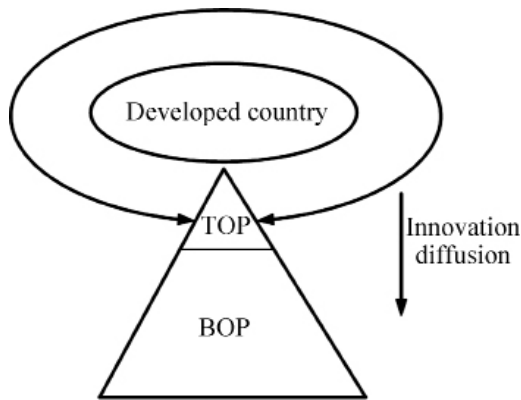


Figure 2
Fringe Market Position Map

Under the standpoint of China as a marginalized market, transnational enterprises lack motivation to develop products for it; they develop products mainly for the mainstream market of their home country. From the angle of global market, developed market is innovation source, and the innovation diffuses from developed countries to Chinese market, explained by disruptive innovation, transnational enterprises carry out sustaining innovation strategy in China. Under the positioning of China as a key market, transnational enterprises could change from focus on only high-end market to the entire market. In this way, they could carry out sustaining innovation strategy in high-end part of china market, and disruptive innovation strategies are carried out in medium and low-end part. If new products developed for Chinese low income consumer groups can find consumers in developed market that means Chinese market is able to become a new products innovation source. Imelt, CEO of General Electric Company (GE), what he had said reflects the market positioning changes of transnational enterprises. He said GE senior managers used to talking about the global market, the discuss order is always “the United States, Europe, Japan, and other countries”, now the order is “population affluent areas (such as China and India), resources rich regions and other areas”^[18].

1.3 Lessons from Local Enterprises

There are many cases that lots of local enterprises who develop disruptive innovation products in China have become a threat to transnational enterprises. For example, last century, although transnational appliance enterprises had absolute technical superiority, Chinese local enterprises, represented by Galanz started from low-end part, used just a few years to catch up with transnational enterprises and become major participants in global market even leading enterprises. The paper thinks the reason is that transnational enterprises are supported by high marginal profits consumption groups, they tend to escape the attack launched by local enterprises from low-end products. Lots of transnational companies usually

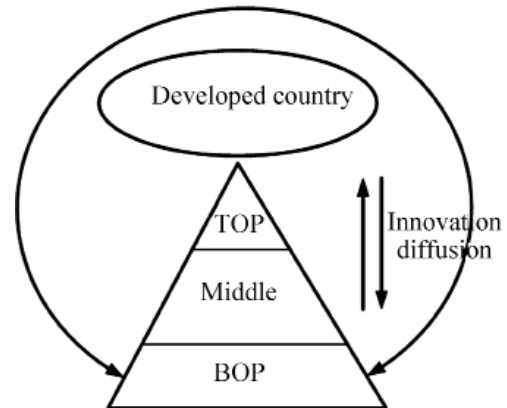


Figure 3
Key Market Position Map

would not want to start a price war with local enterprises for the mass market. So they continue to retreat from the mass market to high-end part of the market and focus on the latter. When local enterprises get a firm foothold in low-end part of the market, they continuously improve product performance, the mode of disruptive innovation is started as soon as they march up to medium and high-end part of the market. In addition, there exists special “copycat phenomenon” (shan zhai) in Chinese market. It illustrates that, on one hand, intellectual property rights still face serious challenges; on the other hand, there are indeed huge demands in the mass market especially low-end part. This paper thinks transnational enterprises should carry out “self-disruptive” strategy by adjusting products cost structure, developing high performance price ratio products to meet the requirements of the consumers in this market. More and more facts make transnational enterprises believe that they have to compete with local enterprises in low-end market. Otherwise, local enterprises will improve product performance as soon as they occupy low-end market. Eventually they not only attack the traditional high-end part of transnational enterprises in Chinese market, but will be threat to global market. The process is typical disruptive innovation phenomenon.

In 2004, the EIU survey showed that 68% of transnational enterprises think that the biggest competitors in China are foreign enterprises. While in 2011, this percentage dropped to 27%. Local enterprises became the largest threat except intellectual property rights protection. 47% of the transnational enterprises executives think that local enterprises will be their major global competitors (The EIU, 2011). Thus, transnational enterprises initiate disruptive innovation in Chinese market, especially BOP market, this can not only expand market scope, but also can compete with local enterprises in their initial stage by reaching their traditional advantageous market directly, which can avoid local enterprises become global competitors. Imelt, CEO of GE, points out this directly. He believes that the success in developing countries like

China is vital importance issue. He said if GE cannot innovate in poor area and spread to global market, then local competitors from developing countries, such as Goldwind and Haier will do this^[19].

1.4 Encouragement by the Previous Transnational Enterprises

Some researchers propose the solution of obtaining disruptive abilities in new growing: "process innovation is critical for transnational enterprises to aim at low income consumer market, they need to change their fixed cost structure in developed countries (Pralhad & Hart, 2002; Christensen, 2003; George & David, 2011)." It is interesting and maybe coincidental that the entrance of transnational enterprises into second and third-tier cities and rural markets goes after this idea and BOP theory. But before that, facing the low-end attack launched by fast growing Chinese local enterprises, transnational enterprises tend to take the strategy of retreating to high-end market (George & David, 2011). A small number of enterprises, such as Intel, paid attention to disruption innovation at initial stage, and established independent team to develop Celeron processor successfully aiming at low-end market. After that more and more transnational enterprises developed disruptive products successfully in China. We believe that when transnational enterprises reposition Chinese market from fringe market to key market, they have motivation to carry out disruptive innovation strategy in order to seize business opportunities.

CONCLUSIONS

Obvious, transnational enterprises are incumbent enterprises compared with local enterprises from the view of global market. Chinese market belongs to an emerging market and a typical BOP market. By analyzing the entrance of transnational enterprises into Chinese BOP market, this paper argues that transnational enterprises have carried out disruptive innovation strategy in Chinese market. Based on disruptive innovation and BOP market theory; the paper illustrate that the reason why transnational enterprises carry out disruptive innovation in low end part of china market is determined by following reasons. Firstly, motivated by the nature of Chinese market. Because consumption characteristics are too different between Chinese low income consumers and developed countries consumers. So if transnational enterprises need to entrance this market it is a good choice to carrying out disruptive innovation strategy. Secondly, it is driven by the size of Chinese market, especially according to the BOP market standard. Small cities and towns, especially rural market in China all have huge potential opportunities. Disruptive innovation should be carried out in order to seize the opportunity. Furthermore, transnational enterprises can not only avoid

being challenged by local enterprises but also virtually hamper local enterprises becoming global competitors by developing disruptive innovative products aiming at medium and low-end markets. Last but not least, encouraged by previous transnational enterprises' success cases based on disruptive innovation and BOP theory, which make more and more transnational enterprises are confident to carry out disruptive innovation in China especially to the low end part of the market.

Further research is concerned on how transnational enterprises build disruptive capacity in the framework of RPV (resource process and value) based on the disruptive theory.

REFERENCES

- [1] The Economist Intelligence Unit. (2011). Multinational Companies and China: What Future? Retrieved from <http://www.managementthinking.eiu.com/multinational-companies-and-china.html>
- [2] ZHENG, Di, & HUI, Pu (2009). Country Rock. *21 Century Business Herald*, (12).
- [3] Prahalad, C. K., & Hart, S. L. (2002). The Fortune at the Bottom of the Pyramid. *Strategy and Business*, 26, 2-14.
- [4] Prahalad, C. K. (2012). Bottom of the Pyramid as a Source of Breakthrough Innovations. *Journal of Product Innovation Management*, 29(1), 6-12.
- [5] Jamie, Anderson (2007). Strategic Innovation at the Base of the Economic Pyramid. *Mit Sloan Management Review*, 49(4), 83-88.
- [6] London, T., & Hart, S. L. (2004). Reinventing Strategies for Emerging Markets: Beyond the Transnational Model. *Journal of Product Innovation Management*, 35(4), 49-63.
- [7] Christensen, C. M., & Raynor, M. (2003). *The Innovator's Solution*. Boston: Harvard Business School Press.
- [8] Hart, S. L., & Christensen, C. M. (2002). The Great Leap: Driving Innovation from the Base of the Pyramid. *Mit Sloan Management Review*, 44(1), 51-56.
- [9] TONG, Yunhuan, ZHOU, Jianghua, & XING, Xiaoqiang (2010). Innovative Theory Aiming at BOP – Review and Prospect. *Scientific Research*, 28(2).
- [10] ZENG, M., & Williamson, P. (2007). *Dragons at Your Door: How Chinese Cost Innovation Is Disrupting Global Competition*. Boston: Harvard Business School Press.
- [11] Danneels, E. (2004). Disruptive Technology Reconsidered: A Critique and Research Agenda. *Journal of Product Innovation Management*, 21(4), 246-258.
- [12] WU, Xiaobo, MA, R. F., & SHI, Y. (2010). How Do Latecomer Firms Capture Value from Disruptive Technologies? A Secondary Business-Model Innovation Perspective. *IEEE Transactions on Engineering Management*, 57(1), 51-62.
- [13] Dinna Farrell *et al.* (2006). From Made in China to Sold in China. *The McKinsey Quarterly*. Retrieved from http://www.mckinsey.com/Insights/MGI/Research/Urbanization/From_made_in_China_to_sold_in_China

- [14] Diana, F., Ulrich, A. G., & Elizabeth, S. (2006). The Value of China's Emerging Middle Class. *The McKinsey Quarterly*, 4. Retrieved from [https://china.mckinseyquarterly.com/The value of Chinas emerging middle class](https://china.mckinseyquarterly.com/The%20value%20of%20Chinas%20emerging%20middle%20class) 1798
- [15] George, S., & David, M. (2011). What the West Does Not Get About China. *Harvard Business Review*, 25-27. Retrieved from <http://hbr.org/2011/06/what-the-west-doesnt-get-about-china/ar/1>
- [16] LIN, Jingcong, SHENG, Yian, & WU, Ying (2006). Marching up to Inland Market of China. *The McKinsey Quarterly*, 4. Retrieved from [https://china.mckinseyquarterly.com/Marketing to Chinas hinterland](https://china.mckinseyquarterly.com/Marketing%20to%20Chinas%20hinterland) 1796
- [17] XU, Qunjun (2004). "Seige" Appliance Market – Transnational Enterprises Adjust Strategies in China. *Chinese Foreign Capitals*, 01, 16-17.
- [18] Immelt, Govindarajan, Trimble (2009). How GE Is Disrupting Itself. *Harvard Business Review*, 56-65.
- [19] HUANG, Kai (2010). Snatch Chinese Market, 07(22). Retrieved from <http://www.21cbh.com/html/2010-7-23/znmawmde4odqznw.html>