Research on the International Development of Cross-Border E-Commerce Branding

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Abstract
With the globalization of the world economy, more and more Chinese cross-border e-commerce enterprises are striving for internationalization. Remarkable achievements have been made, and China's cross-border e-commerce transactions have turned out to be world-leading. Compare to international well-known cross-border e-commerce enterprises such as Amazon and eBay, the international brand impact of these enterprises in China is significantly weaker, lacking core competitiveness. Recently, the competition among international market branding became intense, domestic cross-border e-commerce enterprises began to focus on international branding, and more and more enterprises began to develop international brands. Based on the perspective of brand internationalization, the developing characteristics, problems and strategies in the process of international branding were discussed in this paper. The Chinese enterprises should improve brand awareness, adopt diverse development strategy for international branding, to improve the brand image comprehensively and ensure the core competitiveness of enterprises.

Keywords: Cross-border e-commerce, branding, internationalization.

1. Introduction
With the strengthening of the globalization trend for the world economy, enterprises around the world encounter a broader internationalized market. By optimization of resource allocation in the global market, enterprises achieved maximum utility, and promoted their products in a broader market. Meanwhile, the competition among the companies around the world are increasing, therefore has become the external engine for Chinese enterprises to enforce international branding. The development of brand internationalization strategy is particularly important for Chinese enterprises involved in foreign trade transactions. As a bridge of China's new foreign trade, Cross-border e-commerce platforms have made outstanding contributions to the development of China's foreign trade. Its own brand internationalization is not only conducive to the development of the platform itself, but also conducive to the foreign trade of merchants on the platform. As a result, it is necessary for cross-border e-commerce platforms to implement brand internationalization.

At the beginning of 21st century, famous international cross-border e-commerce platforms (such as Amazon, eBay, etc.) took advantage of branding and expanded the global market. Relying on their abundant capitals and brand advantage, they quickly occupy the international market, successfully create a strong international brand, taking up the advantageous position of global market competition. By contrast, Chinese cross-border e-commerce companies were struggled at the initial stage of development,
many cross-border e-commerce enterprises are at an exploration stage of brand internationalization, and thus their brand advantages for competition are inconspicuous.

With the outbreak of the U.S. economic crisis in 2008, the economic development of developed countries is not optimistic, and the economic situation of world economy is no longer clear. Under the background of globalization, the economic crisis of the United States has been transmitted worldwide. The economic development of western developed countries is far less than before, both in virtual and in real terms, especially those countries with close U.S. trade ties are particularly affected. The global business of world famous cross-border e-commerce enterprises in these countries shrink partially, and the international branding process was blocked, leading to risk of huge losses for global business, offering an opportunity for the rise of Chinese cross-border e-commerce companies.

As the world's second largest economy and a major trading nation, China is also deeply affected by the global financial crisis. In order to deal with the impact of the world economic situation and the transformation of foreign trade development on China's economic development, economic structural adjustment was initiated by the national leadership. The economic structural adjustment not only contributed to the steady development of China's economy, also provided better internal conditions for the development of cross-border e-commerce platforms in China. Besides, with the rapid development of global internet technology and the increasing number of users, e-commerce business model emerged at a global scale. Meanwhile, China's cross-border e-commerce transactions experienced a "peak" development trend, and international branding can provide many benefits for the development of cross-border e-commerce platforms. Therefore, investigation on international branding on China's cross-border e-commerce platform is very necessary.

2. Development status of China's cross-border e-commerce

Combination of the rapid innovation of computer technology, information technology and network technology have promoted the flourish of the global economic integration. As a new model of international trade, cross-border e-commerce has become a new trend in the development of global trading. In recent years, As China's "population dividend" disappears and the price of production materials rises, traditional products made in China have gradually lost the cost advantage, taking the Chinese traditional foreign trade enterprises into a dilemma. Traditional trading companies want to break the dilemma by entering the field of e-commerce, and get back to springtime through the transformation and upgrading to cross-border e-commerce.

2.1 Rapid and scale development of China's cross-border e-commerce

In 2015, China’s gross merchandise volume (GMV) of imports and exports was 3953.03 billion US dollars, with negative growth rate of 4.95% (Fig.1). While at the same period, the transaction volume for cross-border e-commerce of China was 772.88 billion US dollars (Fig.2), accounting for about 19.55 percent of total imports and exports according to the survey. The transaction volume for cross-border e-commerce of China in 2015 increased by 14.28% compared to 2014. Similar trend was observed in 2016, China’s gross merchandise volume (GMV) of imports and exports was 3685.56 billion US dollars, with negative growth rate of 6.77% (Fig.1). While at the same period, the transaction volume for cross-border e-commerce of China was 1014.57 billion US dollars (Fig.2), accounting for about 27.53 percent of total imports and exports. The transaction volume for cross-border e-commerce of China in 2016 increased by 39.58% compared to 2015.
After the financial crisis in 2008, the growth rate of China's export or import volume is relatively slow (Fig.1). The import and export growth rate in 2012 was only 4.96%, and showed a slight increase in 2013 of 6.00%. However, the growth rate in 2015 and 2016 decreased to -8.10% and -6.77%, respectively. Oppositely, the development of cross-border e-commerce has shown a promising trend in recent years. The growth rate of cross-border e-commerce reached a peak in 2013 of 55%. The transaction volume of CBEC was 316.77 USD billion in 2012, while increased to 1211.02 USD billion in 2017, with an average annual growth rate of 33%, far higher than that of GMV with 5.17% among the year 2011-2017. The minimum growth rate of CBEC was observed in 2015 with 14.28%. Rapid growth of CBEC transaction volume, and continuous increase of CBEC to GMV ratio have confirmed the important role of CBEC in the import and export trading. The booming of the development for cross-border e-commerce has become the new drivers for Chinese international trading.

Fig. 1. Gross merchandise of imports and exports of China, 2003-2017 (Source: Chinese Statistics Yearbook)

Fig. 2. Gross merchandise volume (GMV) of imports and exports, and cross board e-commerce (CBEC) transaction volume of China, 2011-2017 (Source: China E-business Research Center)
Fig. 3. Growth rate for GMV of imports and exports, and CBEC transaction volume, and CBEC/GMV ratio of China, 2011-2017 (Source: China E-business Research Center)

2.2 Scale structure of China's cross-border e-commerce

China's cross border e-commerce has been dominated by exports. Though the development of import cross-border e-commerce increased by about 40 folds from 2011 to 2017, the ratio of import/export was relatively low (0.03-0.30) (Table 1). In 2011, China exported a very high proportion of cross border e-commerce, accounting for 96.88% of the total transaction volume, while imported cross border e-commerce only accounts for 3.12%.

Table 1. Transaction volume of cross board e-commerce (CBEC) in China, 2011-2017 (USD billion)

<table>
<thead>
<tr>
<th>Year</th>
<th>Gross value for CBEC</th>
<th>Export value for CBEC</th>
<th>Import value for CBEC</th>
<th>CBEC/GMV ratio</th>
<th>Growth rate for CBEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>246.48</td>
<td>238.78</td>
<td>7.70</td>
<td>6.77%</td>
<td>33.33%</td>
</tr>
<tr>
<td>2012</td>
<td>316.77</td>
<td>294.60</td>
<td>22.17</td>
<td>8.19%</td>
<td>25.00%</td>
</tr>
<tr>
<td>2013</td>
<td>499.40</td>
<td>436.57</td>
<td>62.83</td>
<td>12.01%</td>
<td>55.00%</td>
</tr>
<tr>
<td>2014</td>
<td>638.71</td>
<td>581.15</td>
<td>102.56</td>
<td>15.89%</td>
<td>40.00%</td>
</tr>
<tr>
<td>2015</td>
<td>772.88</td>
<td>727.80</td>
<td>45.08</td>
<td>19.55%</td>
<td>14.28%</td>
</tr>
<tr>
<td>2016</td>
<td>1014.57</td>
<td>832.86</td>
<td>181.71</td>
<td>27.53%</td>
<td>39.58%</td>
</tr>
<tr>
<td>2017</td>
<td>1211.02</td>
<td>930.42</td>
<td>280.60</td>
<td>29.49%</td>
<td>22.39%</td>
</tr>
</tbody>
</table>

In recent years, with the rise of "cross border online shopping group" and improvement of the import cross border e-commerce environment, the market share of China's import e-commerce gradually expanded. In 2011, imported cross border e-commerce only accounted for 3.12% of the total transaction volume, while the ratio reached 23.17% in 2017. Though the developing speed of exports are slower than imports, the dominating of cross border e-commerce is still exporting, with 76.83%-96.88% in 2011-2017. Among the total transaction volume, B2B transaction far outweighed the retails parts, with 98.29% in 2018. As for the exporting part, B2B transaction also far outweighed the retails parts, with 80.95% in 2017. Therefore, the important role of B2B transaction should be emphasized during the development of
international branding.

3. Factors affecting international branding

3.1 Policy and law

The enterprises cannot develop well without the support of government policy. In terms of policies, the State Council has proposed to energetically develop e-commerce, expand cross-border e-commerce pilot projects and increase the government acquisition using e-commerce platforms, encourage major cross-border e-commerce enterprises to go global. The State Council pointed out that local governments should give full play to the role of industry unions, improve the development environment for branding of cross-border e-commerce. Quality supervision mechanism for e-commerce should be established, to promote application of normalization and standardization production of entity enterprises in e-commerce actively, to guide e-commerce enterprises to implement intellectual property strategy and strengthen the protection of intellectual property in the field of e-commerce.

A number of policies on cross-border e-commerce logistics, payment and associated aspects have been issued at national level, to ensure facilitation and legalization in the process of trading, to promote the settlement of relevant issues in the process of cross-border communication, to improve the quality of service system for cross-border e-commerce enterprises. In the aspect of national strategy, the development of APEC and implementation of the “belt and road” strategy was energetically promoted, cross-border e-commerce enterprises were encouraged to participate in the APEC meeting actively, so as to strengthen partnerships between enterprises and governments, to increase the profile of enterprises abroad. Based on these background, the cross-border e-commerce enterprises and platforms can make use of the state profile and influence, to promote their own international branding, and become the light spot on the new Silk Road.

Table 2. Relevance of e-commerce legislation by development level, (World trade report 2018, WTO)

<table>
<thead>
<tr>
<th>Region</th>
<th>Number of economies</th>
<th>Share in e-transaction laws</th>
<th>Share in consumer protection laws</th>
<th>Share in privacy and data protection laws</th>
<th>Share in cybercrime laws</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developed</td>
<td>42</td>
<td>97.6</td>
<td>85.7</td>
<td>97.6</td>
<td>97.6</td>
</tr>
<tr>
<td>Developing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Africa</td>
<td>54</td>
<td>51.9</td>
<td>33.3</td>
<td>38.9</td>
<td>50.0</td>
</tr>
<tr>
<td>Asia and Oceania</td>
<td>50</td>
<td>70.8</td>
<td>41.7</td>
<td>37.5</td>
<td>68.7</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>33</td>
<td>87.9</td>
<td>63.6</td>
<td>48.5</td>
<td>72.7</td>
</tr>
<tr>
<td>Transition economies</td>
<td>17</td>
<td>100.0</td>
<td>17.6</td>
<td>88.2</td>
<td>100.0</td>
</tr>
<tr>
<td>All economies</td>
<td>196</td>
<td>77.0</td>
<td>50.0</td>
<td>57.1</td>
<td>71.9</td>
</tr>
</tbody>
</table>

As depicted in Table 2, many developing countries still lag behind in terms of the relevance of their e-commerce legislation. For instance, while almost 98 percent of developed countries set clear rules governing digital transactions in their legal systems, only 52 percent of African countries have implemented e-transaction laws. Table 2 also shows that developing countries including China have been slow in updating their legal systems compared to the rapid pace at which the digital economy is evolving. Only one-third of African countries have adopted consumer protection laws, and the share of developing countries that have implemented privacy and data protection laws in their legislation ranges from around
38 percent in Africa and Asia to 49 percent in Latin America and the Caribbean. Outdated legal and regulatory frameworks reduce consumer trust in digital transactions and may be one of the main reasons why consumers in those countries are active on social media and yet are reluctant to engage in online shopping.

3.2 Economy factors

Since the beginning of the 21st century, the world economy has entered a prosperous stage for a new economic cycle. China has also got rid of the shadow of deflation, and made impressive success by actively participating in international trade. As listed by WTO statistical database report, China’s GDP climbed from 8.4% to 14.2%, with an average annual growth rate up to 10.3% from 2000 to 2007. Since the outbreak of the global financial crisis in 2008, the growth rate of the world economy has dropped by a large margin, while China is still growing at a decent pace. In 2010, China's GDP hit a new peak of 5.9 trillion US dollars, and became the world's second-largest economy. At present, China has shown its strength as an economic giants. As a result, the brand value of excellent Chinese companies, such as Huawei, Tencent and Alibaba also rose sharply, which is so called country of origin effect. Brands are evaluated more favorably when the brand is positioned in a manner that is congruent with the brand’s home country personality stereotype than when brand positioning is incongruent [1]. The strong economic strength of a country can enhance the recognition of local brands for consumers, therefore is the solid backup for its local brands to enter the global market.

China is closely related to the development of the world economy and has become an important driving force for development of global economy. On one hand, China has developed to be the world's largest trading country in goods, which promotes the development of international economy and the intensification of global integration to a large extent. On the other hand, China's production level and consumption level of residents has been greatly raised, the import and export volume ranks around the top in the world. Under these background, China’s cross-border e-commerce industry has achieved great success and continuously increased its influence in the world (Fig. 4), which provides a good opportunity for local enterprises to create an international famous brand.

![Fig. 4. Composition of world e-commerce transaction by value, 2015(World trade report 2018, WTO)](image-url)
3.3 Technical factors

Technology is the strong support for an enterprise to achieve brand internationalization. The marketing of a successful international brand requires the products or services with global and advanced international technology ensured quality. In the new century, a series of major breakthroughs have been achieved in computer, data processing and Internet technology in China. Together with the development of cross-border e-commerce, the past offline payment and logistics model cannot give good user experience for consumers, these new technologies can play a very good role in promoting the whole business. At present, mobile phones and other mobile clients have replaced PC as the new medium of e-commerce, people can use their mobile phones and tablets without limiting by time and space. Logging onto an e-commerce platform for transnational shopping, has become a reality more than a trend.

With the advent of the big data era, many insurmountable problems in the past, such as insufficient storage space and weak data service capacity, will be well solved. Cloud computing technology provides strong computing power for cross-border e-commerce services, and offer strong technical support for trading platform. Information communication technologies such as radio frequency identification (rfid) and global positioning system (GPS) will make social logistics observable and greatly improve the transmission rate.

3.4 Social and cultural factors

Over the last few decades, the internet has entered every corner of our lives, from social communications to entertainment and work, and has fundamentally reshaped our economies, slashing the cost of acquiring and trading information. It has fueled the digital revolution, overly changing the ways in which we communicate, consume and even produce; it has profoundly transformed international trade, in terms of what we trade, how we trade, where we trade and who is trading. With the rapid development of Internet technology, e-commerce has been widely used worldwide, affecting the buying behavior of consumers globally. The number of global cross-border e-commerce consumers presents an exponential increase.

![Fig. 5. Breakdown of international sales of Amazon by region and product, 2014-2016](World trade report 2018, WTO)

Pitney Bowes (the world's leading provider of integrated postal service management solutions) published the 2016 global network shopping report, and found that cross-border e-commerce has become
a popular trend. According to the survey, 68 percent of consumers had a cross-border shopping experience. Singapore, Australia and Hong Kong, with the largest percentage of cross-border e-commerce consumers among the countries and regions worldwide, are all over 80%. While the ratio of cross-border networks shopping consumers for Japan, South Korea, China and the United States accounted for less than 50% of the national consumers, but the scale of its cross-border online shopping consumers is tremendous due to the huge population base.

The development of cross-border network shopping brings great opportunities to the international development of brands, especially in South Korea and China and India, with huge potential cross-border online shopping market. About half of the world’s online shopping consumers say most of their online shopping is targeted on single e-commerce platform. More than two-thirds of Japanese, Chinese, and Indian consumers prefer to go to the same e-commerce site for shopping. Amazon was one of the earliest retailers and has become one of the world’s largest leading internet retailers and service providers. The company is based in the United States, but like many leading internet business, its activities and earnings are global. Nearly one-third (32 percent) of Amazon’s net sales are international (Fig. 5). The North American segment consists of earnings from country-focused websites such as amazon.com, amazon.ca, and amazon.mx, including export sales from these websites. “International” sales consist of earnings through internationally-focused websites (e.g. amazon.de, amazon.fr, etc.), including export sales to customers in Canada, Mexico and the United States but excluding export sales from North American websites. International export sales mostly consist of electronics and other merchandise goods (75 percent), as opposed to digital media content (24 percent). Surprisingly, 67 percent of Amazon’s international sales are exported to the United States, which is also its biggest “international” market.

![Pie chart showing Alibaba revenue by activity and region, 2016-2017 (World trade report 2018, WTO)](image)

Alibaba, based in China, was the largest retail commerce company in the world in 2017 although it mostly serves its domestic market (Fig.6). Chinese market online retail activities earned the company US$ 547 billion in 2017. For its global retail activities, Alibaba operates AliExpress, which had 60 million customers in 2017, buying directly from manufacturers and distributors in China. In 2016, it
acquired a controlling stake of Lazada, a company that operates e-commerce platforms in Indonesia, Malaysia, the Philippines, Singapore, Thailand and Viet Nam. A majority (84 percent) of Alibaba's revenues came from core commerce activities in 2017, of which 87 percent was domestic Chinese commerce retail.

4. Development status of international brands

The international competition between an innovating firm in a developed economy and generic producers in developing countries always exist [2]. Most firms in China used to be OEM (Original Equipment Manufacturing), they work for the innovating firm in a developed country, which the exported the branded product to a developing country. Chinese cross-border e-commerce companies were struggled at the initial stage of development, many cross-border e-commerce enterprises are at an exploration stage of brand internationalization, and thus their brand advantages for competition are inconspicuous. Corporate signals, such as corporate image and corporate reputation, are potentially effective tools to alleviate consumer uncertainty about brands in emerging markets and may therefore enhance product brand equity [3]. However, most studies targeting the effects of corporate signals are set in developed countries and also fail to compare different emerging markets to explore possible moderators to these relationships. Perceived uncertainty towards brands differs between emerging markets and the difference is shaped by the institutional background in the country. This, in turn, influences the effectiveness of corporate signals. Using structural equation modeling, based on large consumer samples from China and India, corporate image is found to be a more effective signal in China than in India.

A brand-culture approach was applied to analyze the export of Turkey's soap operas to diverse locations around the globe, particular to the Middle East and the Balkans [4]. The conceptual links between nation brands, international relations, and politics was discussed through a brand-culture lens, nation brands and cultural and creative goods were interpreted using historical and political discourses as resources, a dialogue across disciplines was forged on how consumers make use of historical and political discourses informs both commercial and diplomatic co-creators of nation brands [4, 5]. In the 21st century, the growth of each country's economy is now mostly influenced by the assets based on physical or non-physical grounds. The correlation between the growth rates of 38 countries between 2008 and 2017 and the Top 500 brand values was analyzed for short and long-term by using the ARDL co-integration analysis [6]. The effect of investing in national brands and increasing brand values of the country was observed to be negative in the short-term, but positive on the long-term with regards to the country's economic growth.

Most consumer-based brand equity (CBBE) models are linear and fail to capture the complexity of the brand equity construct and its benefits in terms of key consumer behavioral outcomes. More complex and dynamic models focusing on CBBE as a process often lack empirical support particularly from more than one country. Differences on key consumer behavioral outcomes (namely, willingness to pay a price premium, brand recommendation and repurchase intention) were investigated vis-à-vis, and the results are postulated and explained through culture theory particularly the cultural dimension of individualism/collectivism. The model shows that overall brand equity and consumer behavioral outcomes are created through the brand building, brand understanding, and brand relationship blocks [7].
A key marketing strategy decision area for firms in the international marketplace concerns the standardization or localization of brands across national markets [8]. Four brand elements (Brand name, Symbol & Logo, Trademark and Slogan) were discussed for brand localization upon international marketing and brand management. From the contingency perspective, a set of internal and external environmental determinants are hypothesized to influence the localization of brands in foreign markets. (1) The extent of brand localization is positively associated with the extent of a firm’s internationalization. (2) The extent of brand localization is negatively associated with research and development intensity. (3) The extent of brand localization is negatively associated with firm size. (4) The extent of brand localization is negatively associated with market similarity.

A survey based on field interviews with 232 Korean exporters across diverse industries was conducted, via e-mail from Korean firms engaged in exporting. The results from a structural equation model indicate that firms’ extent of internationalization, research and development intensity, firm size, foreign market similarity vis-a-vis home market, and market uncertainty are significantly related to brand localization [8].

Social media (SM) provides a cost efficient means for a brand to reach out to a large internet audience and diffuse product and brand information online. International brands increasingly adopt social media (like Facebook) as a branding or advertising tool [9]. An international brand’s strategy of establishing market-based relational ties with SM users in local markets was evaluated by the resource-based theory, on the basis of three resource attributes: value, inimitability, and rarity. Whereas value is the initial basis for a relational resource in SM, inimitability and rarity are the foci of an international brand’s strategy in local SM networks. The brand managers and SM users in China and New Zealand were interviewed and direct observations on brands’ SM sites were conducted, and it was concluded that combined incentives offered in SM must be tailored to the type of brand-user tie.

The rapid growth of social media has prompted B2B firms to incorporate social media platforms into their marketing communication [10]. Notably, for B2B firms, social media has become a useful tool for corporate branding. However, how B2B firms can leverage benefits from social media marketing is less obvious, especially in new markets.

5. Conclusions
More and more Chinese cross-border e-commerce enterprises are striving for internationalization under the background of world economy globalization. The Chinese enterprises should improve brand awareness, adopt diverse development strategy for international branding, to improve the brand image comprehensively and ensure the core competitiveness of enterprises. Suggestions for internationalization and management for brands are listed as follows:

(1) Brand awareness must be strengthened to improve the execution power of brand building. Most enterprises in China have low awareness of product brand, especially in the process of internationalization, rarely taking brand as the core for the development of international strategy.

(2) Pay attention to brand marketing, and integrate all aspects of marketing channels (Social media, search engines, email lists and etc.). In addition to marketing and promotion of goods, the brand value and brand image should be propagandized, to cultivate customer loyalty. Public praise from customer is the core of effective brand propagation, brand marketing strategy must be developed based on the demand of customers, and the consistency between brand and enterprise products or services should be committed, to improve the recognition of brand for consumers.

(3) Management on the quality of product or service must be strengthened. Through the quality improvement of product and service, better consumption experience can be achieved by the consumers. Loyalty of brand can be gained by brand recognition, product purchase and repeated consumption by consumers.

(4) International talents should be introduced to improve international operation and management ability of the enterprises. The biggest problem for internationalization of Chinese cross-border e-commerce enterprises is "international talent". Cross-border e-commerce enterprises communicate with global customers directly, therefore need talents not only with language skills and international business background, and more in need of talents with complex cross-border e-commerce skills, with international vision and integration ability of international resources. To create an international brand for Chinese cross-border e-commerce enterprises, the key point is establishing a thorough training system for international talents.

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