

Study of B2B E-Commerce Supply Chain of Small and Medium Enterprises (SMEs) on Retail Export: Case Study of Alibaba Model System in Bangkok Metropolitan Region

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Abstract

E-Commerce supply chain managed today helps support the logistic growth. The indicators used to measure the success of this business type include quantity and circulation which gives higher results when activities relevant to logistic E-Commerce are conducted and applied which help increase the income and export of Thailand for more than 50%. Moreover, the relationship between the factors both internal and external organizations and level of organizational self-evaluation were analyzed to study the internal factors of the organizations that supported the entrepreneurs to achieve success when they applied the business to E-Commerce, and to study the crucial activities emphasized by the organization to apply Alibaba.com in the B2B Small and Medium Enterprises (SMEs). The analysis results carried out by Multiple Regression Analysis revealed that the competitive factors had the relationship with the level of organizational self-evaluation by statistical significance at 0.05 levels. The relationship moved in the same direction which included the internal factors of the organization that helped increase the success based on the strategies, the models used in the E-Commerce system, and strategies used in the E-Commerce system and SMEs. If the competition increases, the organization will adapt itself to bring all product types of SMEs to distribute through the E-Commerce system further.

Keywords: Supply Chain, E-Commerce, Business to Business) B2B, (Small and Medium Enterprises (SMEs), Retail Export

1. Introduction

When considering the increasing values of the growth rate on E-Commerce in the regions all over the world each year, it is found that the E-Commerce in China had the highest growth rate in 2014. The expansion rate was higher than last year for almost 64% by the values of purchasing and selling of B2C (Business-to-Consumer) at 1.5 trillion US Dollars. If comparing the values of purchasing and selling the B2B E-Commerce between China and leading countries in the world, it is found that the growth tends to be higher than India for 2 times and higher than America up to 5 times. This is because of the Open-Door policy and the continuous and increasing investment of trade allies and multinational corporations in China. It is expected that China will have the highest growth rate. According to the expected data of E-Marketer, it reveals that the growth of B2C increases the market values of online market consistently. Some parts are from the Electronic Commerce Declaration conducted by the World Trade Organization (1998) by issuing the rules and regulations to support and drive the operation of E-Commerce in 2014. Regarding this research, it started from the study of

various data on supply chain E-Commerce in Thailand which have been growing rapidly or by leaps and bounds when comparing with all data many years ago. The crucial factors which affect the E-Commerce to grow rapidly include all businesses in this world need to expand their selling through this channel, the coming of sellers and service providers from foreign countries, as well as the development in every aspect of the supporting sector through online trade, which include, online payment system which is highly developed today, online financial security system, or products management system and transportation by warehouse and fulfillment system. And the most important is that a number of Thai people who use the internet (growth rate), a number of total users on broadband internet both wire internet and wireless internet will increase to 36.0 – 34.6million people, which is expanded for more than 19.3%24.1 – % from 2014, and the access rate also increases to 53.6%55.8 – %. It is expected that a number of users on broadband internet via wire internet along the households will increase to – 6.6 7.1million households, which is expanded for more than 20%29.1 – % from 2014, or the access rate increases to 29.9%32.1 – % while a number of users on broadband internet via wireless still expand well in the frame of 17.4%23.1 – %, which reach the level of 34.6 – 33 million people, the access rate is more than51.2 %53.6 – %.This is likely to get the drive after the price of mobile equipment moved down to the low level from 4G service provision which was expected to have an auction within the quarter of 3 years (2013-2015) (KASIKORN Research Center ,2015). There are Thai consumers who access the mobile broadband highly at 51.2% for total image of broadband internet today as shown in the Figure 1 below:

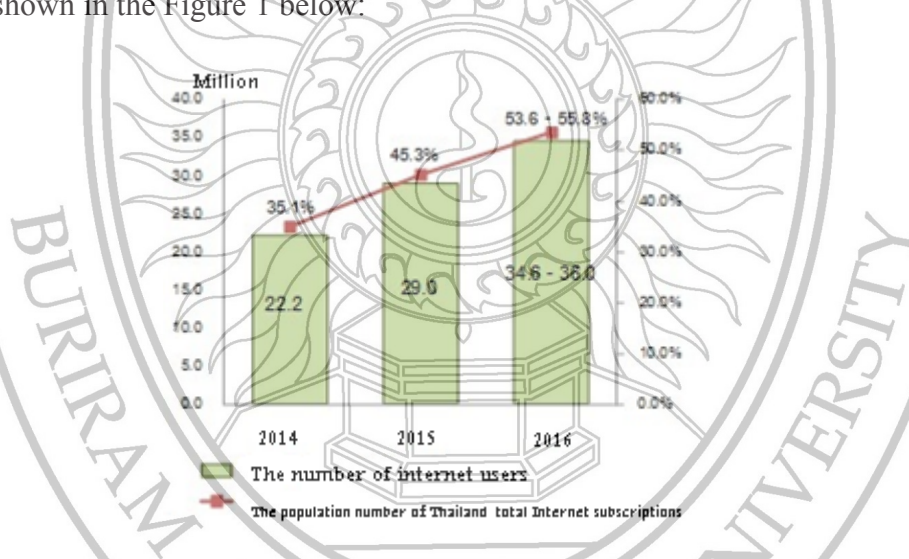


Figure 1. A number of broadband internet users both wire internet and wireless internet from the service in Thailand

Source: KASIKORN Research Center (2015)

According to the Figure 1, there is the use of wireless system by 3G and 4G because there are many cheap smart phones to be distributed which is considered as a factor to make Thai people almost all classes start to enter into the internet system more easily through mobile phone or smart phone system. All of mentioned above are the factors interested by the researcher to collect the data from purchasing and selling via B2C E-Commerce (Business-to-Consumer), or this can be regarded that all over the countries in South-East Asia grow and famous highly especially in Thailand where there are E-Commerce service providers debut themselves immensely. Moreover, the

payment system and transportation system which offer the service fully help enhance this high growth (Pawut Pongwittayapanu, 2014). Concerning the data collection for the research, it is found that Thai consumers spend money almost equally to buy the online products via websites in the country, or 6.1 billion baht (41%) comparing with the foreign country websites of 6.4 billion baht (44%), and the rests of 2.2 billion baht (15%) is from the buying without indicating the country of the websites. Moreover, the study results identify the motivation of Thai people who decided to buy the products from foreign country websites that because there were no types of products distributed in Thailand (45%), the products and services were cheaper (36%), and there was convenience to buy as equally as to buy via online system in the country (30%). The sellers can store, deliver, and present the products conveniently, as well as having lower cost that makes the price of products cheaper while the manufacturer got profits more. In addition, the form and method of typical selling, the manufacturer has to sell via dealers but when the manufacturer sells the products via online, they can directly sell to the consumers immediately that help the manufacturers be able to set the selling price cheaper than the market places. Moreover, the buyers come from all over the world and can buy the products in cheaper price because of the factors as the following; 1) retail and corporate move to e-commerce, 2) regional competition, 3) E-Commerce bubbles, 4) personalize promotion & marketing, 5) online promotion war, 6) niche market, 7) E-Commerce Data scientific and analytic, 8) glory of mobile commerce, and 9) red ocean of fulfillment.

According to the mention results, the researcher is interested to study Alibaba.com which is the website of Chinese nationality established by Jack Ma. Alibaba.com is really famous and acceptable through China factories which need to export their products to the foreign countries. Today Alibaba.com is considered as the B2B (Business to Business) website considered as the biggest wholesales website in the world. Alibaba.com emphasizes the service of small and medium enterprises by supporting the E-Commerce fully. Alibaba.com entered into the market share of Hong Kong in 1997 and announced itself as the biggest wholesales website in the world. Alibaba was established in 1999 in Hangzhou city, China. It is divided into Alibaba.com, the biggest wholesales website in the world, gives service in English language, and the other is 1688.com, the wholesales website used in China specifically, give services in Chinese language. Moreover, there is Aliexpress.com, which is the retail website considered as high safety for purchasing and selling emphasizing retailing buying in the wholesale price, The buyers can be confident with the payment system. The Aliexpress uses the Escrow system to guarantee the safety of payment since there is the medium to control every payment closely. Currently, 3 mentioned websites have the subscribers and use these websites for running the business for more than 72.8 million codes from the members more than 240 countries all over the world. This is regarded as the most in the world. Today, the major purpose of Alibaba.com is that to help the small size of entrepreneurs to have potentials to do the marketing via Alibaba.com without paying numerous expenses for making publication to their business. In addition, Alibaba gives service on internet and software as well as export service. Currently, Alibaba has been established its head-office in 70 countries all over the world including China, India, Japan, Korea, European countries and America, etc.

Regarding the previous time, the order from China by the businesspersons or merchants had to travel to China to see the real products. The products needed included computer and various equipment, they had to travel to Shenzhen to walk and find

numerous sellers who gathered mutually because they believe that going to buy the products gathered mutually is the best since not only being able to compare the various products, the buyers can select the products buy themselves. Therefore this is considered as the safest method. However, the disadvantages are that it consumes time to travel and expenses, and the language used. After the internet period developed continuously, the website like Alibaba began to be famous among modern merchants and businesspersons because of its easiness and quickness as well as saving immense expenses from ordering products. The advantage of Alibaba is that it is unnecessary to travel to China to see the real products. If the buyers are not confident about the products, they can order the samples to investigate the products first. Alibaba is the channel to contact with the Chinese seller the most easily and quickly, and being able to update new products everyday by using the Trade Alert or asking for the quotation from the Chinese sellers. The products can be ordered only one piece or a few pieces. The sellers can deliver products via airplane which uses time only 2-3 days. This is really quick and appropriate for contemporary SMEs business which has to be competitive with the speed.

The products distributed via Alibaba can be compared the price with several sellers without analyzing their properties because the system will perform this duty of comparison elaborately before making decision, therefore the opportunity to make a mistake of comparison is really little. Moreover, the order from Alibaba helps the sellers get the discount more than buying the products from factories because the sellers in Alibaba have to compete with other numerous competitors, and the expenses in Alibaba is less than opening the big front shops in Shenzhen, Guangzhou or Siang Hai which have high expenses. Therefore, to order via Alibaba, the buyers have the opportunity to get cheaper prices than travel to China by themselves. However, to order or import the products from Alibaba.com, it has to be extremely careful from the cheat by the gang. This is because the buyers have to transfer money to pay for the products before receiving the products, therefore the opportunity to be cheated is really high especially in the case of buying the products from factories called free members or buying the products from the Chinese sellers who sell the products cheaper than the market place. For ordering products via Alibaba, the SMEs already can use this service. According to the mentioned data based on the research process, it can be proposed as follows:

Today, Alibaba.com is the wholesale B2B E-Commerce website which combines the buyers and suppliers for total 65 million persons from more than 240 countries all over the world altogether. No matter small or big business or in any part of the world, the online business can be done conveniently; therefore it is regarded as the trade stage which is effective, credible, and be the best alternatives of the export and international trade entrepreneurs who can create the new opportunity to their trade. *Alibaba.com* is like the *products exhibition which has no limit for exporting* the products from the country to the universal trade by online channel which helps the sellers and buyers be able to visit 24 hours per day, 7 days per week. This is the opportunity of the buyers from all over the world to be able to see the products and increase the opportunity of selling as well as having the guarantee by a number of buyers for 90% from Alibaba.com members for more than 36 million people who buy the products from this channel, the SMEs who need to distribute the Thai products to various countries, the persons who are finding the products or materials from foreign countries to distribute or conduct the business, the representatives who have sources in their hands numerous according to the members system of Premium Website which

will become the Mini-Site to promote the products unlimitedly, the Top Tier Ranking Stay which will get the position of the results shown at the first page of website, the Third Party Verification which creates the credibility from the buyers that the person really exists, and the Full Access to Buyers which can find the persons who need the products which is unnecessary to wait for the buyers to visit the sellers only one side.

2. Purposes of Research

According to the research, the researcher set the questions as follows:

- 2.1 To study the models of selling online via the Alibaba system of the B2B SMEs entrepreneurs in Bangkok Metropolitan Region;
- 2.2 To study the Alibaba Model as the guideline for E-Commerce business through the export expansion;
- 2.3 To study as the knowledge base to enhance the E-Commerce business skills for helping Thai entrepreneurs export and distribute their products successfully.

3. Methodology of Research

The methodology to study B2B E-Commerce supply chain in the Small and Medium Enterprise (SMEs) business of Alibaba.com users for engaging in the E-Commerce consists of the management service and transportation operation, and inventory management, the service providers who do all activities of logistics or some parts of them collect various kinds of services such as transportation, inventory, products distribution, and financial service, etc. The conceptual framework of this research is described as follows:

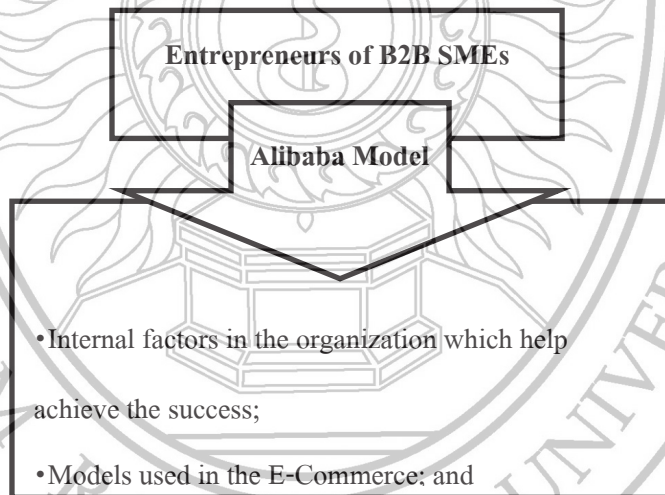


Figure 2. Conceptual framework of the research

To support the research results on the study of internal factors in the organization and the study of crucial activities emphasized and applied by the organization which help achieve the success of business conduction, the methods are as follows:

1. Population and sample group

This research collected the data from the sample group of small and medium enterprises which used Alibaba.com to conduct their B2B e-Market Place (Platform) of E-Commerce for total 15 enterprises, and did the interview 5 sets of questionnaire per

each enterprise starting from the executives to operational employees. The enterprises selected were from leading enterprises in Bangkok Metropolitan Region.

2. Research instrument

The researcher created an instrument to develop from research questions into a questionnaire, and got experts to investigate that instrument to meet the completeness so that the researcher could use it for studying the results of data collection.

3. Data Analysis

This research is divided into 2 parts, which include studying secondary data and studying the relevant researches. The questionnaire developed from the research was used for studying the results of data collection. The questionnaire is divided into parts as follows:

3.1 The general data of the organizations used for responding the questionnaire consist of the position which the respondents are holding in the organization, number of years which that organization has conducted, the number of registered capitals, and the number of employees in that organization, as well as the types of products sold on the Alibaba.com. The researcher analyzed the data by using Mean and Percentage. The respondents were from 15 companies. 75 questionnaires were responded. When investigating the completeness of the data, 71 questionnaires were found according to the statistical calculation (95%), which there was the selling by B2B system on Alibaba.com;

3.2 According to the knowledge test about Alibaba.com, it was found that some entrepreneurs still lacked of perception on E-Commerce especially in terms of management based on B2B system on Alibaba.com;

3.3 The questions about the factors which push the organization to achieve the success on adapting itself to the selling by B2B system on Alibaba.com. The questions were set by letting the respondents evaluate the level of significance in terms of being the drive for organization to use Alibaba.com system by dividing the value of evaluation into 5 levels. The measure selected was Likert Scale, and the data were analyzed by using Frequency, Percentage, and Standard Deviation. The factors were divided into 7 main factors which included laws and regulations in the producing country (of origin), laws and regulations in the import country, customers, markets, competition, society, and materials and costs procurement. According to the data analysis, it was found that the factors of customers and markets were the factors which affected the adaptation of the organization the most, secondly was the laws and regulations in the producing country (of origin), and the laws and regulations in the import country which affected the E-Commerce entrepreneurs to specify them as goals in the long terms. For the competition and society factors, they are the factors affecting the organization to turn to focus on and study the feasibility. And for the factors of materials/products/service procurement, and total costs factor, they highly affected the adaptation to E-Commerce, and the development of products transportation system on logistics technique by the Third Party Logistics (TPL) service;

3.4 The questions about factors which make the organizations achieve the success to adapt themselves to the products selling on Alibaba.com by B2B type. The questions are about to let the respondents evaluate the opinions level to make the organizations achieve the success. The evaluation value is divided into 5 level measured by Likert Scale type. The data was analyzed by using frequency, percentage, and

standard deviation. The factors were divided into 2 main factors which included policy and resources. The data analysis revealed that the resources of the organization were the factor which the organization agreed that it affected the organization to achieve the success for adaptation in the Alibaba system. The higher, clearer tendency, and higher compensates, and be able to create the fame of the trading both tangible and intangible aspects;

3.5 The questions about the benefits which the organizations are expected to receive from using Alibaba.com. The questions are about asking the opinions by dividing the evaluation value to be 5 levels using Likert Scale. The benefits were divided into 3 main aspects including marketing, finance, and conduction. The data analysis revealed that all 3 aspects affected the organizations to change in the better ways very much, reduce the financial burdens, storage, and products delivery. The arrangement is as follows; benefits of conduction, benefits of marketing, and benefits of finance.

3.6 The activities which are interested by the entrepreneurs to apply the Alibaba.com system are about the questions which let the respondents rearrange the activities which the organizations are interested to apply the concept of E-Commerce Logistics from the most to the least. The data analysis results revealed that the activities which the organizations emphasize are arranged as follows: research and development, materials and parts provision, selling and distribution, warehouse and inventory management, waste elimination, and marketing and selling. For the reverse logistics, it was found that the the convenience of return the products in case of dissatisfaction or the need of changing size were the primary factors crucial for the consumers to order via the online system.

Moreover, there are the questions to let the entrepreneurs evaluate the level of adaptation according to the Alibaba.com system which the organizations conduct today or nearly future within 1-2 years. The data analysis revealed that most of the organizations determined the policies to conduct the activities about E-Commerce, secondly was about the organizations started to study about applying the E-Commerce Logistics by conducting in terms of the Third-part logistics (TPL) for conduction and the success of the organizations, respectively. Moreover, there was the survey of the B2B E-Commerce entrepreneurs in the SMEs from Alibaba.com system which was conducting the activities to be successful from applying the E-Commerce for the activities used by the SMEs the most, which included, 1) How would Alibaba.com be able to help the business of B2B group?, 2) Creating the Alibaba Mini-site, 3) Promoting the information of products with correct method would help opportunity of selling, 4) management with the request of product information from the customers, 5) use and benefits from Alisourcepro system, 6) effective method of products payment via Alibaba.com, 7) effective transportation management, 8) caring and effective customers 9) safety transaction, and 10) form of members of Alibaba.com and benefits expected. These can be analyzed for marketing and creating the strategies well, respectively.

4. Research Conclusion

According to the study, Thai entrepreneurs begin to realize the significance of E-Commerce increasingly at a very high level. The SMEs entrepreneurs start to be interested in and study the feasibility of applying the E-Commerce in their business. The crucial channel for selling is doing via the website of Alibaba.com. This is regarded as a good sign of increasing the competitive competency of Thai entrepreneurs in the

world market. It can be seen that the competition had the relationship with the level of organizational self-evaluation that the organizations have conducted the B2B E-Commerce activities of SMEs by using the service of selling through the Alibaba.com system by having the relationship in the same direction, namely, if the competition increases, the organization will adapt itself to E-Commerce more. Moreover, the need of consumers is considered as another main factor which will influence the organization to adapt itself. The crucial thing that the entrepreneurs should be deserved is the support from the government sector such as the knowledge or perception acquisition, consultancy, establishment of responsible organization, orientation of a frame or guideline to mutually develop for the same direction of supply chain, the enhancement of entrepreneurs to be enthusiastic through activities conduction relevant to the E-Commerce, and the benefits which the organization will get especially in terms of finance considered as the main goal of the organization. In addition, it includes the management and consultancy for solving supply chain problems. This will consist of various activities and complete services which have to associate and take over each mode of products transportation from the origin to the destination. The Third Party Logistics (TPL) in Thailand supports or prepares resources, knowledge, or assets to the members in the supply chain as shown in the Figure below:



Figure 3. Alibaba model

Source: Adapted from <https://classes.soe.ucsc.edu>

It can be concluded from Figure 3 that the sellers who make the benefits include Typically SMEs, Ten to a few thousand employees and more than 5000 product categories in more than 30 industries. This is regarded as an opportunity to make incomes to the country immensely if SMEs study and sell the products via Alibaba.com system. While the buyers who can make benefits in terms of across more than 200 countries, companies of all sizes, and diverse end markets through B2B E-Commerce according to the Alibaba model system. Moreover, the support from executives of each organization to determine the policies and allocate the resources of the organization is also important because it is the expansion of cooperation throughout the supply chain by all relevant departments to get benefits mutually. In addition, this research indicates the behaviors of Thai consumers when they buy the products via online and mobile system. For the additional discovery from this research, it is found that buying via mobile phone identifies that the M-commerce is at the beginning stage but full of potentials to grow increasingly in the future. This can be noticed by the supply chain, the adaptation of strategies by leading and famous E-Commerce

enterprises in foreign countries in terms of E-Commerce service all over the world, such as ebay.com, and the market in America like amazon.com, etc. The expansion of previous business channel has the specific location and shop fronts but the principle to adapt and change the supply chain by using E-Commerce system for marketing gets good results increasingly and continuously, which helps the organization can deliver the products immensely and begins to be famous in the other markets not only in America. This is because Alibaba.com and other wholesale websites are mostly created by the countries in Asia especially in China, hence the rules and regulations, and standards of website use are designated to support the sellers in Asia more although these wholesale websites try to create their own standards to become the universal standards, it still have several problems which have to be solved, such as the cheat, deception, payment safety, etc. Therefore, Alibaba.com might not be appropriate for the marketing in America much although there are some customers from America to contact this website for buying the products; they are still less than the customers from other countries. However, the potentiality of Alibaba.com from the respondents who just began to do the business on Alibaba.com took their time to study the purchasing and selling system from this website as well as the techniques of closing the selling, import and export via Alibaba.com for 6 month fully, eventually they could achieve the success by this online selling strategies in various forms.

5. Research Discussion

The trend of E-Commerce in Thailand and ASEAN community today is continuously and highly growing. The internal factors in the organization enhance the entrepreneurs achieve the success of adapting themselves to the products selling by using Alibaba.com system that has to develop the management and service to be effective and can satisfy the customers, as well as being able to support high growth of this online business. If the Thai entrepreneurs still do not improve all types of business to enter into the E-Commerce on the online world, it will cause disadvantages extremely for running the business in the near future. Therefore, this research has high tendency to support the entrepreneurs to be able to develop the business to the products selling and service through the online channel before the rivals of the same products come to open the market in Thailand and ASEAN region. For the entrepreneurs who have already conducted this system also have to expand their enterprises both small and medium enterprises. This time period is considered as the time of improvement through selling online system, studying the techniques of online business to get more effectiveness by cooperating with strategic alliance for service use of the Third Party Logistics (TPL) in terms of Order Fulfillment, to reduce the steps of delivery service and financial transaction provided effectively by Alibaba.com system that helps being able to focus on marketing and strategy of increasing the circulation to enhance the organization to grow sustainably. This is in accordance with the concept of Pawut Pongwittayapanu (2014). Hence, the entrepreneurs have to expand their online market to the foreign market more which can be done through the E-Commerce of foreign countries by selling the Thai products to the customers directly via such system, such as E-Bay, Amazon, etc., which will be able get benefits and powers if the entrepreneur can manage Thai products to sell and offer service for the consumers all over the world.

6. Recommendations

6.1 Recommendations of research application:

6.1.1 To apply this research results additionally in the factor of process adaptation through business conduction from selecting the service providers of Alibaba.com by B2B E-Commerce strategically for bringing Thai products to distribute all over the world.

6.1.2 To transfer the knowledge or perceptions and techniques of business conduction through purchasing and selling online via Alibaba.com system to let the entrepreneurs, products manufacturers or SME who have to increase the channels of selling products by focusing on foreign markets.

6.2 Recommendations for further research

For further research, it should additionally study about factors to select the service providers of Alibaba.com and the development of systematic techniques to keep them up-to-date all the time as well as studying the factors entirely throughout the country to create the model plans for developing the techniques of selling via E-Commerce system by emphasizing the foreign markets or Import-Export SME of today.

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