

Study on the Development Path of Cross-border E-commerce in Southeast Asia in the "Belt and Road"

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Abstract: In order to be able to participate in the activities of cross-border e-commerce for the Southeast Asian market, H-city, as an important central city in northern Jiangsu, has proposed a research method for the development of H-city for cross-border e-commerce in Southeast Asia under the policy background of "Belt and Road". Using PESTEL analysis model and Porter five-force analysis model to analyze the "external environment" of this industry, to explore the existing opportunities and threats; using Porter value analysis model to analyze the "internal environment" of related enterprises, to explore their own advantages and disadvantages; to construct a high-order SWOT quantitative analysis model to find a strategic focus; to establish a development strategy model, H-oriented Southeast Asia cross-border The development path of e-commerce should take "striving strategy" as the leading direction, and give relevant development suggestions around the two key points of "overcoming disadvantages" and "utilizing opportunities".

Keywords: Belt and road; Cross-border e-commerce; Development path; SWOT

1. Introduction

Southeast Asia is an important economic hub of China's "Belt and Road" strategy. Although its economic volume is smaller than that of the United States, the European Union, Japan and other major international trade countries, but the adjacent geographical location, similar historical and cultural background, give it a great potential for development of trade cooperation with China. Figures released by China's General Administration of Customs and the Ali Institute show that the scale of trade between Southeast Asian countries and China has risen steadily in recent years, with cross-border e-commerce activities gaining momentum.

At present, the e-commerce in Southeast Asia is in the initial stage of development, which is an excellent entry opportunity for cross-border e-commerce in China. Jiangsu Province is at the intersection of "Belt and Road", and H City, as an important central city in northern Jiangsu, how to make rational use of its own location advantage, explore scientific and efficient development path according to local conditions, and actively participate in cross-border e-commerce activities facing the market of Southeast Asia under the support of the policy dividend of "Belt and Road" is an urgent problem to be solved.

2. Exploration of Development Path

2.1. Overview of research processes

To explore the development path of H city for cross-border e-commerce in Southeast Asia, its essence is to locate the development strategy of this subdivision industry. The specific research flow is as follows: Using PESTEL analysis model and Porter five force analysis model to analyze the "external environment" of this industry, to explore the opportunities and threats of existence; Using "Porter value analysis model" to analyze the "internal environment" of related enterprises, to explore their own advantages and disadvantages; Constructing the high-order SWOT quantitative analysis model to find the strategic focus; Establishing the development strategy model and giving relevant development suggestions. The above four parts of the research flow are shown in Figure 1.

2.2. External environment analysis

Hitt, Ireland, and Hoskisson (2012), It is considered that in strategy management, external environment analysis mainly includes general environment analysis and industrial environment analysis [1]. The former uses the PESTEL analysis model to analyze the political, economic, social, technical, environmental and legal environment in Southeast Asia, while the latter uses the Porter five-force analysis model to analyze the new entrant threat, the bargaining power of the supplier, the bargaining power of the buyer, the threat of alternatives, and the degree of competition within the industry in the city of H for the cross-border e-commerce industry in Southeast Asia.

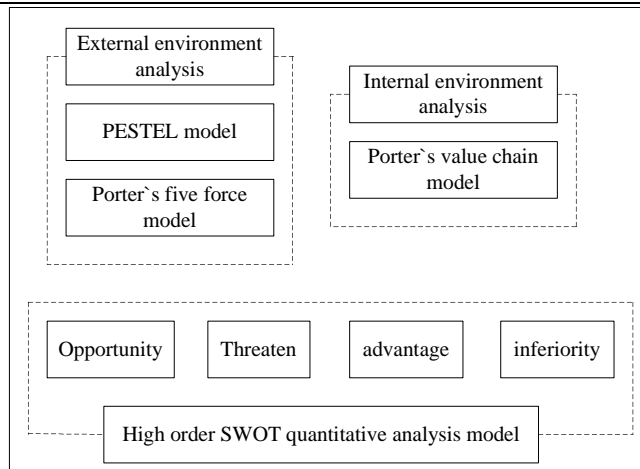


Figure 1. Research flow design

2.2.1. PESTEL analyse

Political environment: Southeast Asia's overall political environment is stable, but there is intermittent friction. Due to the positive feedback brought by regional economic integration under the influence of "Belt and Road", Southeast Asia has a good political atmosphere of economic cooperation for China, but in recent years, the rising social changes within various countries, as well as the territorial disputes between some countries and China, have become a political hidden danger to the development of cross-border e-commerce in Southeast Asia to some extent [2].

Economic environment: The economic development momentum of Southeast Asian countries is good, but the growth rate has slowed down. Globally, Southeast Asia is an important raw material supplier in the industrial supply chain and an important gathering place for labor-intensive industries in the context of industrial transfer. This has led to rapid economic development in Southeast Asia in recent years. However, due to the recent trade friction between China and the United States, there is a downside risk to the economy. The World Bank's World Economic Forecast report released by the World Bank in the first half of 2019 shows that the economic growth rates of major Southeast Asian countries are still expected to be higher than the average growth rate of the world economy, but lower than the historical period.

Social environment: Southeast Asian countries have extensive social foundations for cross-border e-commerce development. Affected by geography, Southeast Asian countries and China have similar cultural cognition, and the Chinese economic groups with high social status in Southeast Asia have a more important role in economic development. In addition, the region's demographic dividend has created a huge potential consumer market for cross-border e-commerce.

Technology environment: Most Southeast Asian countries have weak science and technology foundations, and some countries have developed science and technology rapidly. According to the World Intellectual Property Organization's National Innovation Index report published in 2019, except for Singapore, Southeast Asian countries ranked lower in the innovation index. Among them, Malaysia and Thailand have increased slightly compared to previous years, but far behind China. It can be considered that cross-border e-commerce products facing Southeast Asia have certain technological advantages.

Environmental protection: The environmental protection supervision of Southeast Asian countries has intensified, and environmental protection issues have gradually heated up. Liu (2018) pointed out in his research that legal issues of environmental protection in recent years are becoming an important factor in the failure of Chinese investment in Southeast Asia. On the one hand, cross-border e-commerce for Southeast Asia needs to guard against environmental protection legal risks, and on the other hand, cross-border e-commerce for Southeast Asia needs to consider the environmental protection properties of products [3].

Legal environment: Southeast Asian countries have certain economic-related legal foundations but lack relevant legal support specifically for cross-border e-commerce. As far as traditional bilateral trade is concerned, cross-border e-commerce is obviously a new thing. When two parties in a transaction relationship cooperate on the Internet, what new security risks need to be prevented, and once a problem occurs, it is different from the previous subject and object. How to divide and define powers and responsibilities requires new specific legal provisions. Although the international trade practice has a certain supplementary role, there are still many issues that need to be resolved.

2.2.2. Porter five force analysis

New entrant threat: In fact, the barrier to entry is a key factor in determining the level of threat to new entrants. Here, the analysis should be based on "whether to set up a cross-border e-commerce platform by itself" as the cutting point. If you set up your own platform, in fact, Southeast Asia has already entered well-known cross-border e-commerce platforms such as Ali Express, Lazada, Amazon and so on [4]. High, these increase the barriers to entry for cross-border e-commerce in H City. If you rely on these platforms, although you can reduce the cost of market development, for other cross-border e-commerce companies that are also trying to rely on the platform, these barriers to entry for these new entrants are reduced.

Bargaining power of suppliers: For traditional suppliers, cross-border e-commerce in H City has opened up a new Southeast Asian consumer market, with higher expected profits in the future, and can obtain certain policy preferences from local governments. bargaining power [5]. For platform suppliers, due to the scarcity of cross-border e-commerce platforms for Southeast Asia, cross-border e-commerce in H City has a higher dependence on the platform, which improves the bargaining power of platform suppliers.

Buyers' bargaining power: For individual buyers, most online individual consumers in the Southeast Asian market have the habit of comparing prices on different platforms. In addition, even on the same platform, there are still many alternatives to the same product. Therefore, individual buyers have higher bargaining power. For

corporate buyers, unless they are products with technological scarcity, they also have higher bargaining power.

Threat of alternatives: In addition to alternatives on the same platform and alternatives on different platforms, there are also many alternatives in the domestic markets of Southeastern countries. Therefore, the threat of alternatives is greater.

Degree of intra-industry competition: With the rapid development of Southeast Asia, huge potential consumer markets have gradually emerged, attracting a large number of cross-border e-commerce in other regions of China and cross-border e-commerce in other countries [6-7]. Although cross-border e-commerce in H City can take advantage of existing Some platforms enter the market quickly, but the barriers to entry for cross-border e-commerce platforms are low. Therefore, the degree of competition within the industry is high.

2.2.3. Opportunities and threats summary

Combining the results of PESTEL analysis and Porter's five-force analysis, it is not difficult to find that H City faces Southeast Asian cross-border e-commerce development, with opportunities and challenges coexisting. A 5-point scale was used to score the opportunities and challenges summarized above, and the Delphi method was used to assign a weight (total value 1) to each opportunity and challenge. The final opportunities and challenges are shown in Table 1. It can be considered that the opportunities for cross-border e-commerce in H City outweigh the challenges and they should enter the Southeast Asian market.

Table 1. Quantification of opportunities and threats

Number	Factor description	Weight x score	Weighted total score
O1	Political stability	0.25×4	4.30
O2	Good momentum of economic development	0.30×5	
O3	Have the social foundation to develop cross-border E-commerce	0.20×4	
O4	Cross border e-commerce products have technical advantages	0.15×4	
O5	Low bargaining power of traditional suppliers	0.10×4	
T1	Environmental protection supervision and punishment	0.05×3	3.80
T2	Lack of targeted laws	0.10×3	
T3	High threat of new entrants	0.10×4	
T4	High bargaining power of platform suppliers	0.20×5	
T5	High bargaining power of individual and enterprise consumers	0.15×4	
T6	The threat of substitutes is high	0.15×4	
T7	Greater competition in the industry	0.25×5	

2.3. Internal environmental analysis

Hitt et al. (2012) pointed out that understanding the production process of an enterprise is very important to find the value creation point of the enterprise. In practice, Porter's value chain analysis model is generally used to analyze the internal environment of an enterprise to find its own advantages and disadvantages. The Porter value chain analysis model divides the enterprise's consumer value creation activities into value chain activities and supporting activities. The former consists of five parts:

supply chain relations, operation management, distribution channels, marketing, and after-sales service. Economic activities, human resources activities, and management information system activities that serve the former.

2.3.1. Analysis of value chain activities

Supply chain relationship: The cross-border e-commerce in H City has a good relationship with its traditional suppliers and platform suppliers, which enables the high-

quality production materials and information supply that H-Cross-border e-commerce has.

Job management: In fact, with the development of modern information technology, it has become possible for enterprises to establish flexible production systems. In addition, the cross-border e-commerce network platform accurately provides market demand while reducing the cross-border electricity supply in H City. Market response time. These factors increase the inventory turnover rate of cross-border e-commerce in H City, thereby reducing costs.

Distribution channels: Cross-border e-commerce platforms can provide existing fast sales channels for cross-border e-commerce in H City, but on the other hand, channel intermediation has improved the bargaining power of cross-border e-commerce platforms. It has also increased the cost of consumer-oriented sales of cross-border e-commerce in H City.

Marketing: Through the cross-border e-commerce platform, the cross-border e-commerce in H City can provide targeted advertising for consumers in Southeast Asia. However, consumers in the Southeast Asian market and the domestic market still have language differences. This requires higher advertising design and requires professional cross-language marketing experts.

After-sales service: In view of the distance between the producers and consumers of cross-border e-commerce products, once there is a quality problem in the product, time and capital costs are relatively large. In addition, the increased quality requirements for cross-border e-commerce products in H City will also be reflected in the high requirements for the manufacturing process, which further increases production costs.

2.3.2. Supportive activity analysis

Economic activity: The company has positive cash flow and low liabilities, which is a manifestation of good economic activity.

In recent years, the H city government has established an e-commerce base and provided a large number of favorable development conditions, including lower land rent, tax reductions, and a certain amount of loan support. This has greatly promoted the cross-border electricity supply in H city. The benign development of business economic activities.

Human resources activities: Human resources are also one of the very important value chain supporting activities. A government announcement from the Labor Bureau of H City shows that cross-border e-commerce companies in H City have good employee training and personal career planning, which is a favorable condition for developing human resources activities.

Management information system activities: The cross-border e-commerce enterprise in H City is an innovative enterprise. From the initial processing and manufacturing to the after-sales service of the final product, it is not only inseparable from the management information system support, but also in the management information system. The company has developed according to the characteristics of the company, and balances cost and efficiency.

2.3.3. Summary of advantages and disadvantages

The results of the Porter value chain analysis show that the advantages and disadvantages of cross-border e-commerce in city H coexist. A five-point system is used to give a score to the advantages and disadvantages summarized above, and the Delphi method is used to assign a weight to each advantage and disadvantage (a total value of 1). The final advantages and disadvantages are shown in Table 2. In general, the disadvantages of H-city-oriented cross-border e-commerce in Southeast Asia outweigh the advantages. It needs to think carefully, choose a reasonable strategy, and promote strengths to avoid weaknesses.

Table 2. Quantification of strengths and weaknesses

Number	Factor description	Weight x score	Weighted total score
S1	Good cooperation with traditional and platform suppliers	0.05×3	3.85
S2	Flexible production system	0.15×2	
S3	Short market reaction time	0.15×4	
S4	The platform provides fast sales channels	0.20×5	
S5	Highly targeted marketing	0.15×4	
S6	H municipal government provides a lot of preferential conditions for development	0.20×5	
S7	Good staff training and personal career planning	0.05×2	
S8	The construction of management information system in innovative enterprises is better	0.05×2	
W1	Increasing the cost of enterprises through intermediary channels	0.30×3	4.20
W2	Marketing needs professional cross language experts	0.10×3	
W4	After sales service time and capital cost are large	0.30×5	
W5	High quality requirements for cross-border e-commerce products	0.30×5	

2.4. Construction of high-level SWOT quantitative analysis model

The high-level SWOT quantitative analysis model is a two-dimensional coordinate system with the horizontal axis as advantages and disadvantages and the vertical axis as opportunities and threats. In the first step of con-

struction, we need to draw points based on the weighted scores obtained from the analysis of the external environment in Section 2.2 and the internal environment in Section 2.3, and draw the strategic quadrilateral as shown in Figure 2.

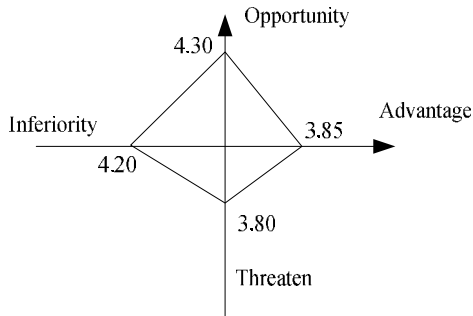


Figure 2. The preliminary construction of the SWOT strategic quadrilateral

The second step of the construction is to calculate the position of the center of gravity of the strategic quadrangle, the strategic cube angle, the strategic strength, and the strategic vector through calculation formulas.

Calculation of the center of gravity position:

$$P(x,y) = \left(\frac{\sum_{i=0}^n \frac{x_i}{4}, \sum_{i=0}^n \frac{y_i}{4} \right) = \left(\frac{3.85 - 4.2 + 0 + 0}{4}, \frac{0 + 0 + 4.30 - 3.80}{4} \right) = (-0.0875, 0.125) \quad (1)$$

Calculation of strategic cube angle:

$$q = \arctan\left(\frac{y}{x}\right) \times \frac{180}{3.14159} \approx 125^\circ \quad (2)$$

Calculation of strategic strength coefficient:

$$r = \frac{\text{Positive strategic strength}}{\text{Strategic positive strength} + \text{Strategic negative strength}} \quad (3)$$

$$= \frac{O \times S}{O \times S + T \times W} = \frac{4.30 \times 3.85}{4.30 \times 3.85 + 3.80 \times 4.20} \approx 0.50?$$

Calculation of strategic vectors:

$$a = (r, q) = (0.50, 125^\circ) \quad (4)$$

At this point, the construction of a high-level SWOT quantitative analysis model is complete, and the development strategy model is needed to further analyze the details of the current H-city's development strategy for cross-border e-commerce in Southeast Asia.

2.5. Development strategy model construction

It is generally believed that the four quadrants of the high-level SWOT quantitative analysis model correspond to the pioneering strategy (the first quadrant, the OS region), the struggling strategy (the second quadrant, the OW region), and the conservative strategy (the third quadrant, the TW region). And a counter-strategy (fourth quadrant, TS area). The position of the strategic vector α in the development strategy model is shown in Figure 3.

Further analysis shows that the strategic vector α (0.50, 125°) in the second quadrant belongs to the strategy of competition, and because it favors opportunity O, it indicates that it belongs to a more positive trend in the strategy of competition. In addition, the strategic strength coefficient is 0.5, which is not very large. In general, H-Border cross-border e-commerce needs to further gain market share in Southeast Asia, actively overcome disadvantages and take advantage of external opportunities.

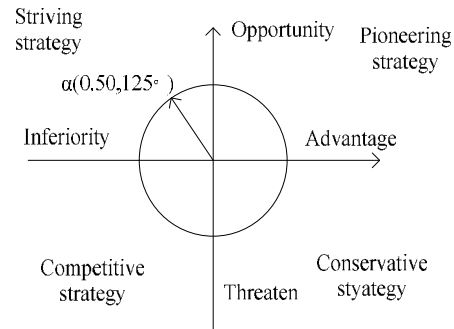


Figure 3. Development strategy model

2.6. Supplementary research

In addition to the literature review mainly used in this study, the research materials were expanded through questionnaire surveys and case studies to deepen the understanding and description of the conclusions. These supplements have been reflected in the analysis of external environment and internal environment.

3. Development Strategy Recommendations

According to the above analysis, it can be concluded that the development path of H-city's cross-border e-commerce in Southeast Asia should be dominated by the "striving strategy", while focusing on the two key points of "overcoming disadvantages" and "utilizing opportunities".

3.1. Overcome the disadvantages

Compared with other cross-border e-commerce, the time for H-cross-border e-commerce to enter Southeast Asia is shorter, and it needs to rely on the existing cross-border e-commerce platform. This is acceptable in the initial stage, but with the development of time, the cost disadvantage of cross-border e-commerce in H city will gradually become apparent. Therefore, when the business reaches a certain level and has accumulated certain consumer loyalty and related data, you can try to set up a cross-border e-commerce platform in parallel to achieve partial de-intermediation, thereby reducing production and sales costs [8].

In marketing, H-city cross-border e-commerce needs to consider cooperating with local advertisers in Southeast

Asia. In addition to breaking the single promotion model of the original cross-border e-commerce platform, it can further design to fit consumers in Southeast Asia. Language, culture, belief, lifestyle and other marketing methods will lay the foundation for the further development of cross-border e-commerce in H City.

In addition, the city's cross-border e-commerce also needs to pay attention to the quality of the product, which can effectively reduce the cost of after-sales services. It is also possible to consider setting up after-sales maintenance points in Southeast Asia and recruit local employees for training and work. Effectively reduce later maintenance costs.

3.2. Take the opportunity

Southeast Asia is a huge consumer market that is constantly growing. Cross-border e-commerce in H City should seize the opportunity to actively explore and gain market share. In view of the old overall, China's cross-border e-commerce products have certain technological advantages. While seizing this opportunity, the cross-border e-commerce in H City thinks about how to use points to connect with others, such as accumulating a large number of related products in smart interconnection. Consumer data, and then develop differentiated products that can bring more value to consumers, thereby consolidating the competitive advantage of their own products. In addition, the city's cross-border e-commerce can consider forward integration of material procurement to obtain a more stable and cheaper source of materials.

4. Concluding Remarks

The Southeast Asian consumer market is a vast blue ocean. Cross-border e-commerce in H City should seize this excellent entry opportunity. Based on the analysis of opportunities and threats in the external environment and the advantages and disadvantages of the company's inter-

nal environment, it will strive for a strategy. As the guiding direction of its own development, seize opportunities, overcome disadvantages, strengthen strengths and avoid weaknesses, and actively participate in cross-border e-commerce activities for Southeast Asian markets.

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