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RESEARCH ON CHINA'S CROSS-BORDER E-COMMERCE BASED ON THE BACKGROUND OF DIGITAL TECHNOLOGY

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Against the backdrop of economic globalisation and the rapid development of digital technologies, the digital economy, which applies internet-based digital technologies to the production and trade of goods and services, is becoming an increasingly important component of the global economy. E-commerce, on the other hand, is a business activity centred on the exchange of goods using information network technology as a means. So e-commerce is growing with the development of digital technology and is becoming a vehicle for digital technology in business. At the same time, with the evolution of mobile technology and the replacement and spread of electronic products, cross-border e-commerce in China has developed and expanded rapidly, becoming an integral feature of modern business. China's e-commerce market continues to expand, growing from US$0.94 trillion in 2011 to US$5.39 trillion in 2020, with an average growth rate of 47%, China's e-commerce growth rate is already higher than the global average. This research integrates recent data on e-commerce and cross-border e-commerce in China and estimates the fraction of cross-border e-commerce in China's e-commerce, claiming that cross-border e-commerce has become an important part of China's e-commerce.Moreover, this paper employs SWOT analysis to assess and summarize the current strengths, weaknesses, opportunities, and threats of cross-border e-commerce in China, coming to the conclusion that China's cross-border e-commerce platforms are developing rapidly and the country is the world's largest e-commerce market and the third largest cross-border online shopping market in the world, along with policy support from the Chinese government and the establishment of logistics warehouses, but faces many challenges such as lagging cross-border trade services, relatively high logistics costs and contradictory product quality, which are not conducive to development. Finally, suggestions are made to promote the development of cross-border e-commerce in China through the development of independent brands, good market positioning, strengthening quality management and efforts to reduce logistics costs.

Keywords: *digital technology; cross-border e-commerce; SWOT analysis; suggestions*
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INTRODUCTION

With the development of economic globalization and digital technology, as well as the popularity of smart phones, the scale of China's e-commerce market is growing and expanding. As part of China's e-commerce market, cross-border e-commerce has gradually become a point of development for China's foreign trade, but cross-border e-commerce is also facing some problems in the process of development. Through relevant data and the SWOT analysis method, the current Chinese cross-border e-commerce is analysed and relevant suggestions are given to promote the development of China's cross-border e-commerce.

LITERATURE REVIEW

The development of cross-border e-commerce has been analysed by research scholars in other countries around the world, including scientists such as Estrella Gomez-Herrera, Bertin Martens, Geomina Turlea, Ángel Valarezo, Teodosio Pérez-Amaral and others, who have analysed the drivers and barriers to cross-border e-commerce. This issue has also been studied in China by scholars such as Wang Wailian, Wang Mingyu, Sun Lei and Wang Fang, who have analysed the current state of development of cross-border e-commerce in China and put forward corresponding countermeasures. In an era of economic globalisation and digital technology revolution, cross-border e-commerce is overturning the traditional import

and export model and has become an extremely important part of the world's economic trade. Therefore, in order to achieve better development of cross-border e-commerce, it is necessary to strengthen the security and convenience of electronic payment in terms of digital technology, and build overseas warehouses or third-party logistics in terms of logistics, so that consumers can have a better consumption experience.

OBJECTIVES OF THE ARTICLE

The purpose of this paper is to examine the current state of development of cross-border e-commerce in China in the context of digital technology, to analyse it and to make relevant suggestions.

RESEARCH METHODS

The research used literature research method, statistical analysis method, logic summary and SWOT analysis method.

RESULTS

The Internet has created an economical and efficient communication "bridge" between buyers and sellers around the world. Along with advances in digital technologies such as secure payments, order tracking and customer service, the global e-commerce market has grown exponentially. At the same time, China's e-commerce market is expanding, from US$0.94 trillion in 2011 to US$5.39 trillion in 2020, with an average growth rate of 47%, China's e-commerce growth rate is already higher than the global average.

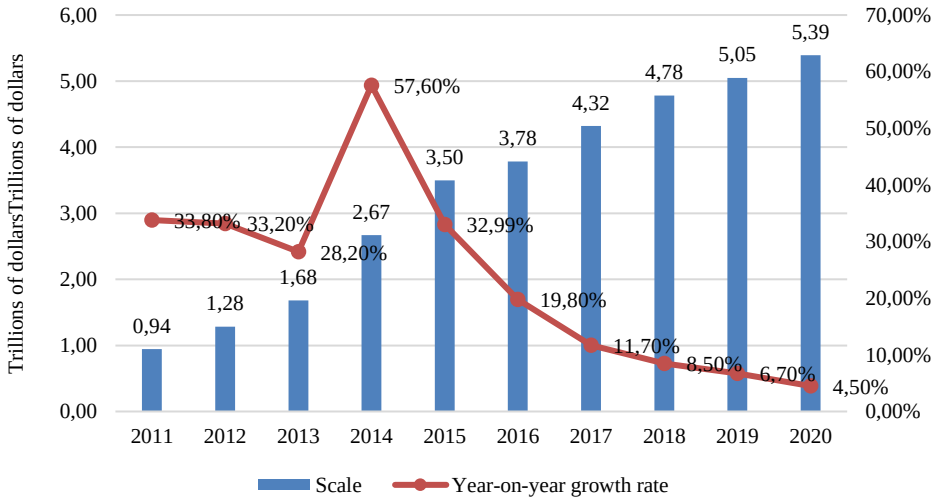

Figure 1 – The scale of China's e-commerce from 2011 to 2020
Source: China National Bureau of Statistics

Figure 1 shows that China's e-commerce market will continue to flourish and expand over the decade, with year-on-year growth at a maximum of 50.76% in 2014 and a moderate decline in year-on-year growth from 2015 to 2020, but with a gradual increase in market size, indicating that China's e-commerce model has matured past the explosive growth it began with.

As part of China's e-commerce, Figure 2 shows that the market size of cross-border e-commerce is expanding from US$0.26 trillion in 2011 to US$1.81 trillion in 2020, with an average growth rate of 59.6%. Figure 3 shows that cross-border e-commerce has also become an important part of China's e-commerce through its share of China's e-commerce. The main driving factors behind this are as well as

innovations in digital technology, the high penetration of smartphones and the internet, the fierce competition for various products, and the further increase in consumer awareness. Looking back over the past decades, the lack of local products, the gradual disappearance of brick-and-mortar shops, the decreasing costs and the rising level of logistics in international markets have all subconsciously increased the importance of cross-border e-commerce.

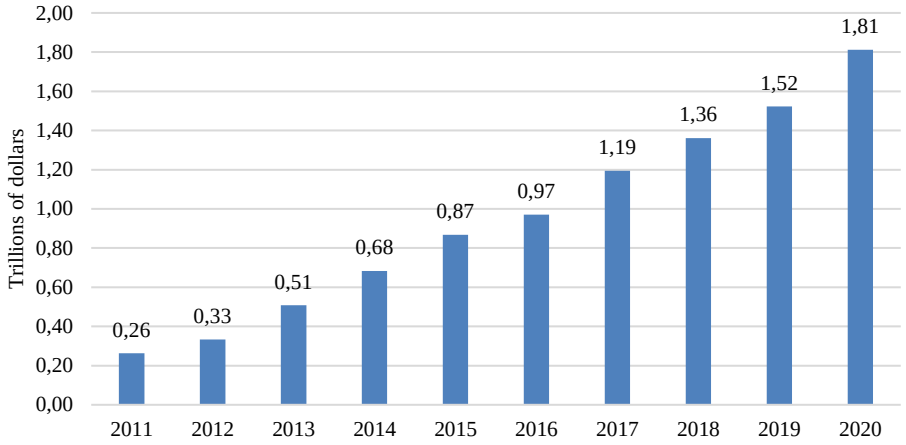

Figure 2 – The scale of China's cross-border e-commerce from 2011 to 2020
Source: China e-commerce report

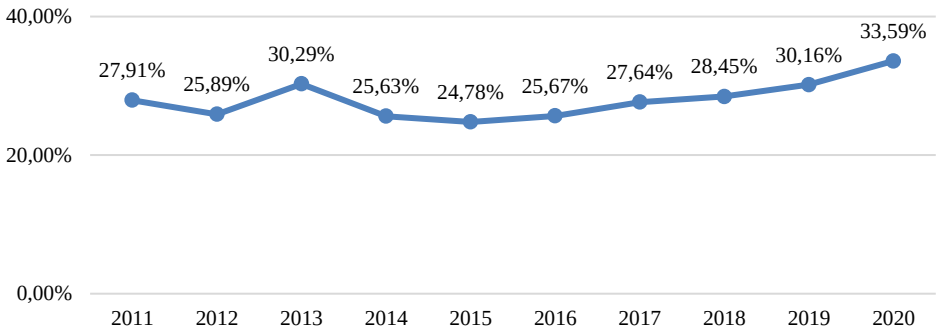

Figure 3 – The proportion of China's cross-border e-commerce in China's e-commerce in 2011-2020
Source: compiled by the authors

The SWOT analysis, also known as the Dawes Matrix, was introduced in the early 1980s by Verrick, a professor of management at the University of San Francisco. It is mainly used for corporate strategy development, market environment analysis and competitor analysis. It is based on the internal and external aspects of a company. The analysis of the environment and competitive market dynamics considers the internal strengths and weaknesses of the company, as well as the opportunities and threats of the company's external competitors. The information gathered is analysed and integrated to arrive at a development strategy that is beneficial to the company.

SWOT analysis of cross-border e-commerce is the application of SWOT analysis to the cross-border e-commerce industry. S (Strength) and W (Weakness) are inherent factors that exist in the cross-border e-commerce industry. O (Opportunities) and T (Threats) are the external factors that affect the development of cross-border e-commerce. The SWOT analysis is used to identify the strengths and weaknesses, opportunities and threats of the cross-border

e-commerce industry, and to make recommendations on the problems encountered in cross-border e-commerce.

Strength analysis: cross-border e-commerce platforms are growing rapidly. China is the world's largest e-commerce market and the third largest cross-border online shopping market in the world. With the rapid development of digital technology, there are over 5,000 cross-border e-commerce platform companies in China and over 200,000 companies using the platform to conduct cross-border e-commerce business by 2020. Among them, Ali International Website is an industry leader, catering to global customers and gaining a good reputation and popularity. With the globalisation of the economy and the increasing demand for Chinese goods in the international market since China's accession to the WTO, Chinese businesses can promote themselves through cross-border e-commerce platforms to smoothly access the global market and offer quality products. In addition to this, cross-border e-commerce platforms also provide a way for buyers and sellers to trade quickly and save time.

Weakness analysis: cross-border trade services lag behind. A successful cross-border e-commerce transaction inevitably includes cross-border services and cross-border logistics. Currently, most Chinese export companies collect payments and international shipping costs through third-party platforms. While this is more professional and systematic, it also causes delays in the associated transaction services, which limits the development of cross-border e-commerce. In addition, the lack of security, convenience and scalability of third-party payment platforms due to the limitations of digital technology development and the influence of political and geopolitical factors also limit cross-border e-commerce transaction services. Secondly, logistics service is arguably the last step in cross-border e-commerce, but at present, cross-border e-commerce logistics is mainly focused on postal parcels, special line logistics and overseas warehouse construction. This is a relatively high logistics cost for small and medium-sized enterprises, which is not conducive to development.

Opportunity analysis: policy support from the Chinese government and the establishment of logistics warehouses. Since 2014, the Chinese authorities have moved from proposing support for the development of cross-border e-commerce to the implementation of specific policies on the ground, including policies such as preferential tax policies for cross-border e-commerce retail exports, RMB settlement for cross-border trade and guidance on foreign exchange payments for cross-border e-commerce. These policies have created a favourable environment for cross-border e-commerce in China. In addition cross-border logistics and warehousing have been gradually upgraded with the help of digital technology, with smart logistics and overseas warehouse construction being the main focus, attracting major e-commerce platforms and various branded e-commerce companies.

Threat analysis: competition from overseas companies. With the development of digital technology and the popularity of smartphones, cross-border e-commerce has become an important part of international commerce, so this huge "cake" is bound to attract many industries and companies to compete. Firstly, in terms of e-commerce platforms, Chinese cross-border e-commerce platforms are facing challenges from Amazon. In the area of international logistics, which is often monopolised by foreign companies, these companies have applied digital technology to modern logistics and created smart logistics, which has greatly improved efficiency. The logistics experience is also part of the consumer shopping experience, so if Chinese companies are less efficient in the logistics of their goods than companies from other countries, this will greatly reduce consumers' desire to buy Chinese goods and reduce their competitiveness.

Cross-border e-commerce model development suggestions:

1. Accelerate independent research and development and build independent brands. Since the globalisation of the economy, China's cross-border e-commerce has developed rapidly, but the quality of products in overseas markets varies, and there are even shoddy and counterfeit products, and these make consumers' shopping experience much less enjoyable. With the popularity of internet technology, consumers worldwide are doing cross-border shopping through e-commerce platforms. Consumers use the platforms to find the products they need around the world, and the rarer the product and the better the quality, the higher

the price consumers are willing to pay. Therefore, cross-border e-commerce enterprises should create their own brands and enhance their own value according to foreign market demand and then combined with corporate positioning.

2. Strengthen quality management and do a good job of market positioning. Product quality is the root of an enterprise's survival, and enterprises must ensure the quality of their products if they want to internationalise. Manufacturers need to comply with relevant product international standards, pass international product quality certification and obtain relevant quality certificates for domestic products. Such products help win the trust of international consumers and open up foreign markets. In addition, companies can design different packaging for different target markets in order to improve customer shopping experience and satisfaction and increase the probability of secondary purchases.

3.Reduce logistics costs. By setting up overseas warehouses or creating smart logistics, sellers can send their best-selling products to overseas warehouses in advance through third-party logistics and then sort and send them to customers, not only reducing delivery times but also reducing the risk of lost parcels. By creating a smart logistics system, overseas shipping costs can be effectively controlled and deliveries can be made faster, enhancing the customer's shopping experience.

CONCLUSIONS

With the globalisation of the economy and the development of digital technology, China's cross-border e-commerce market has maintained a good growth trend and cross-border e-commerce is becoming an important part of China's e-commerce, and it is also becoming a trend in China's international trade development. However, while the scale of China's cross-border e-commerce is growing, it is also facing problems such as backward logistics services, lagging payment and weak product competitiveness. However, with the development and innovation of digital technology, which will further improve the shopping experience, electronic payment, after-sales service and overseas logistics, China's cross-border e-commerce will also usher in a new period of development. The paper concludes with recommendations for accelerating independent research and development, building independent brands, strengthening quality management, positioning the market well and reducing logistics costs in the context of the current situation of Chinese cross-border e-commerce.

REFERENCES

1. *China National Bureau of Statistics*. (n.d.). Retrieved from http://Www.Stats.Gov.Cn/.
2. *China E-Commerce Report.* (n.d.). Retrieved from http://Dzsws.Mofcom.Gov.Cn/.
3. Gomez-Herrera, E., Martens, B., & Turlea, G. (2014). The drivers and impediments for cross-border e-commerce in the EU. *Information Economics and Policy*, *28*, 83-96.
4. Valarezo, Á., Pérez-Amaral, T., Garín-Muñoz, T., García, I. H., & López, R. (2018). Drivers and barriers to cross-border e-commerce: Evidence from Spanish individual behavior. *Telecommunications Policy*, *42*(6), 464-473.
5. Xue, W., Li, D., & Pei, Y. (2016). The Development and Current of Cross-border E-commerce. *WHICEB 2016 proceedings*, *53*.
6. Pickton, D. W., & Wright, S. (1998). What's swot in strategic analysis?. *Strategic change*, *7*(2), 101-109.
7. Zhang, H. (2015). SWOT Analysis and Countermeasures of Cross-Border e-Commerce Development. *Journal of Shandong Institute of Business and Technology*, 29(*03)*, 93–98.
8. Han , C. (2015). Analysis of the Problems and Countermeasures of China’s B2C Cross-Border e-Commerce Overseas Warehouses. *Logistics Technology*, *15*, 63–66.