

Strategic Development of China's Cross-Border E-Commerce Industry: A SWOT-PEST Analysis

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Abstract: The prominence of e-commerce in international trade is escalating, marking it as a pivotal sector in China's foreign trade evolution. Cross-border e-commerce (CBEC) China is advancing towards a phase of high-quality development. Nonetheless, the advent of the post-pandemic era and the tendencies towards reverse globalization pose significant challenges to the industry's adaptive capabilities and its sustained growth trajectory. This study employs SWOT-PEST analysis to dissect the strengths, weaknesses, opportunities, and threats facing the industry, against the backdrop of its current status and the overarching macroeconomic environment influencing CBEC China landscape. The analysis reveals that CBEC China benefits politically from an evolving policy and regulatory framework, economically from robust market demand, socially from an increasingly mature cross-border logistics infrastructure, and technologically from advancements in supply chain technologies. Conversely, it faces political challenges from international legal constraints, economic limitations due to inefficiencies hindering economies of scale, a social gap in industry-specific talent, and technological setbacks in international payment settlements. Opportunistically, the "Belt and Road" initiative catalyzes policy-driven economic incentives, digital economy growth presents economic prospects, and the initiative's urban development potential alongside new information technologies offers social and technological advancements respectively. However, threats manifest in the form of anti-globalization sentiments, product homogenization, consumer skepticism towards transaction success, and financial risks exacerbated by currency fluctuation. Through a comprehensive industry analysis, this paper delineates a strategic direction for the future development of CBEC China, aiming to bolster the country's international trade growth.

Keywords: Cross-border E-commerce(CBEC), SWOT Analysis, PEST Analysis, China, Industry Development

1. Introduction

The rise of Internet technology has sparked a significant change in various business sectors, notably boosting the importance of e-commerce in the economy. Popular platforms like Taobao, Tmall, and Jingdong have seen a surge in consumer uptake, establishing themselves as key players in the e-commerce sphere. With the rapid growth of e-commerce over the past decade, there has been a broadening of career options and a noticeable rise in job opportunities in China. As a result, e-commerce has become a crucial force driving China's economic growth in the present age. Following

the 2008 global financial crisis, China's international trade environment encountered significant obstacles. The government recognized the urgent need to tackle these challenges and revive China's international trade as a top priority. In light of this, the government identified cross-border e-commerce as an innovative approach to strengthen international trade. Since 2008, the realm of cross-border e-commerce in China has experienced a noteworthy surge, facilitated by the introduction of various platforms like Xiaohongshu and Yangmatou, leading to a rapid increase in transaction volumes. Starting with a modest growth rate of under 10% in 2010, transaction volumes escalated to 40% by 2015. Over the same period, the contribution of cross-border e-commerce to total import and export trade steadily rose from lower than 5% in 2008 to 19.5% in 2015. In the first six months of 2016 alone, China's CBEC market expanded to 2.6 trillion yuan, representing a 30% growth year-on-year and constituting 23% of China's total import and export trade. Projections indicate that by 2025, the revenue generated from CBEC China transactions will soar to 12 trillion yuan, accounting for 37.6% of the total import and export volume. The goal of this paper is to perform a thorough examination of CBEC China industry, assessing its strengths, weaknesses, opportunities, and threats in political, economic, social, and technological aspects. The aim is to offer perspectives that can support the strong and enduring development of the cross-border e-commerce sector.

2. Literature review

The existing body of literature on this topic can be broadly categorized into two groups: those employing SWOT analysis and those utilizing PEST analysis to study cross-border e-commerce. Within the realm of SWOT analysis, several researchers have made significant contributions. Liu Shaojie et al. highlighted the potential of emerging technologies like blockchain and big data to chart a new course for cross-border e-commerce in the digital economy [1]. They employed SWOT analysis to forecast future development trends by examining the current state of cross-border e-commerce from multiple angles. Cai Zhengyang conducted a SWOT analysis on the current state of CBEC China, identifying the need to address challenges in third-party payment, logistics, and management to further advance China's foreign trade [2]. Chen Hongtao provided a comprehensive SWOT analysis of CBEC China, proposing strategic development directions in areas such as third-party platform construction, corporate brand enhancement, government regulation, and talent development for cross-border e-commerce [3]. Huang Zhen also utilized SWOT analysis to assess the development status and strategic directions for CBEC China, noting the country's integration into the global market and the role of economic globalization and Internet technology advancements in supporting cross-border e-commerce [4].

On the other hand, literature employing PEST analysis offers insights from a macro-environmental perspective. Guo Yan et al. applied the PEST model to analyze the competitive macro-environment of CBEC China, focusing on political, economic, social, and technological factors [5]. They underscored the influence of government policies and regional economic development on cross-border e-commerce, offering policy recommendations across these four dimensions. Lin Wei analyzed the logistics of CBEC China using PEST analysis, identifying current challenges and proposing strategies to promote its growth and stability [6]. Cheng Mengxiong addressed logistics and payment system issues, quality management, and talent development within cross-border e-commerce through PEST analysis, providing actionable suggestions for Chinese enterprises [7].

The contributions of this paper are threefold. Firstly, it addresses a novel research topic by focusing on the emerging industry of cross-border e-commerce in China over the past decade, exploring its advantages, disadvantages, opportunities, and challenges, thus filling gaps in existing literature. Secondly, this study employs a combined SWOT-PEST analysis to examine the strengths, weaknesses, opportunities, and threats of CBEC China industry, bridging macro-environmental

analysis with the specific industry context. Lastly, the paper leverages real, authoritative data to support its analysis, ensuring comprehensive, accurate, and timely economic insights.

3. Introduction of classical methods (SWOT-PEST)

The SWOT analysis method stands as the quintessential strategic analysis tool for small and medium-sized enterprises, often referred to as the situational analysis method. This methodology facilitates an evaluation of an enterprise's inherent strengths and weaknesses, alongside the identification of external opportunities and potential threats. Originating in the early 1980s, it was developed by Verick, a Doctor of Management at the University of San Francisco. SWOT analysis categorizes the factors influencing the subject of research into four distinct quadrants: Strengths, Weaknesses, Opportunities, and Threats, enabling a comprehensive analysis that integrates both internal and external elements. This approach aids in deriving analytical outcomes to inform effective decision-making processes.

On the other hand, PEST analysis serves as a foundational tool in marketing analysis, aimed at examining the broader macro-environmental context. It encompasses four critical dimensions: Political, Economic, Social, and Technological factors.

In this study, we employ the SWOT-PEST analytical framework, amalgamating both internal and external factors pertinent to China, to conduct a systematic examination across a unified structure. This methodological approach allows for an exhaustive analysis of the e-commerce landscape in China, with a particular focus on identifying strategies to foster the growth of cross-border e-commerce within the country. Through this dual analytical lens, we aim to provide a nuanced understanding of the dynamics shaping the development of e-commerce in China, as well as to propose viable solutions for enhancing its cross-border e-commerce sector.

4. SWOT-PEST Analysis of China's Cross-border E-commerce

4.1. Advantages

4.1.1. Political Advantage

The establishment of a comprehensive policy and regulatory framework tailored to cross-border e-commerce in China has evolved through three pivotal stages: the initial policy phase (2004-2007), the development phase (2008-2012), and the expansion phase (2013-present). This progressive refinement of policy and regulatory systems is instrumental in fostering the rapid expansion of cross-border e-commerce within the nation.

4.1.2. Economic Advantages

China experiences robust market demand for cross-border e-commerce. Data from the Ministry of Commerce indicate that turnover for several Chinese e-commerce platforms in European and American markets more than doubled in November 2023. Furthermore, the country has witnessed a sustained acceleration in cross-border e-commerce growth since 2023, with the import and export volume reaching 1.7 trillion yuan in the first three quarters, marking a 14.4% increase year-on-year. This strong market demand serves as a key endogenous driver for the sector's development.

4.1.3. Social Advantage

The cross-border logistics transportation system in China has seen significant development and maturation. For seven consecutive years, China's logistics market has led the world. The issuance of the "14th Five-Year Plan for the Development of Modern Comprehensive Transportation System" by

the Ministry of Transport in 2022 further supports domestic and e-commerce enterprises' international operations. This progression towards a mature cross-border logistics and transportation system provides crucial social support for the burgeoning cross-border e-commerce industry.

4.1.4. Technical Advantages

The advancement of supply chain technology plays a critical role in the international competitiveness of CBEC China platforms. Effective utilization of localized, flexible supply chain strategies has been key in reducing costs and enhancing operational efficiency. This technological leverage enables the adoption of competitive pricing strategies, thereby securing a significant share of the international market.

4.2. Weaknesses

4.2.1. Political Weaknesses

Cross-border e-commerce is significantly influenced and constrained by the laws and regulations of various countries. These restrictions, particularly concerning tax advantages and trade fairness, pose considerable challenges. A prime example is the digital tax trade conflict between the United States and France in 2019, which led to extensive adjustments in VAT, tariffs, income taxes, consumption taxes, and digital taxes. Such regulatory environments subject the cross-border e-commerce industry to increased uncertainties and restrictions.

4.2.2. Economic Weaknesses

The inherent operational model of cross-border e-commerce, characterized by short cycles, small batches, limited quantities, and frequent transactions, is not conducive to achieving economies of scale. This operational trait results in higher transaction and logistics costs compared to domestic e-commerce, thus impeding the potential for expansion and development of cross-border e-commerce.

4.2.3. Social Weaknesses

The industry faces a critical shortage of skilled talent. Despite the rapid development of cross-border e-commerce, China is at a disadvantage due to the inadequate training and preparation of necessary talent. The establishment of a mature and comprehensive training model for cross-border e-commerce logistics talent in Chinese universities is still in its infancy. Furthermore, there is a significant demand for professionals fluent in less commonly taught languages, given the linguistic diversity in countries along the Belt and Road initiative, which includes more than 2,000 languages and over 20 official languages. The scarcity of professionals proficient in these languages poses a substantial barrier to the swift development of cross-border e-commerce.

4.2.4. Technical Weaknesses

The industry grapples with the issue of false declines in international settlements. Due to various factors such as opaque payment data processing, inconsistent judgment criteria, and insufficient data analysis, merchants frequently encounter false declines during transaction verification by overseas banks, aimed at consumer protection. According to a joint study by Checkout.com and Oxford Economics in 2023, false declines have resulted in trading losses amounting to \$50.7 billion over the past three years in the United States, Britain, France, and Germany alone. This issue represents a significant technical challenge, hindering the growth and development of cross-border e-commerce.

4.3. Opportunities

4.3.1. Political Opportunities

The "Belt and Road" initiative has ushered in a plethora of policy benefits for the growth of cross-border e-commerce in China. Marking its tenth anniversary in 2023, the initiative has led to the establishment of bilateral e-commerce cooperation mechanisms with 29 countries. This policy boon has not only facilitated CBEC China in leveraging the "Belt and Road" policy dividends but also expanded its collaborations with an increasing number of countries along the route. This expansion has significantly broadened the "go global" strategy for e-commerce platforms, establishing "Silk Road E-commerce" as a burgeoning avenue for enhancing CBEC China presence.

4.3.2. Economic Opportunities

The burgeoning digital economy presents significant opportunities for cross-border e-commerce by catering to the needs of small-scale, flexible trade operations. This development enables small and medium-sized enterprises to venture into cross-border e-commerce, thereby uncovering new business prospects, expanding market reach, marketing products, establishing brands, and demonstrating robust growth potential. The digital economy is poised to elevate cross-border e-commerce as a key player in the international trade arena.

4.3.3. Social Opportunities

The "Belt and Road" initiative is instrumental in transforming various regions in China into hubs for cross-border e-commerce. For instance, Heilongjiang Province has been proactive in constructing major corridors connecting to countries along the "Belt and Road" route, facilitating the regular operation of international cross-border trains, and enhancing logistics and trade flow with Kazakhstan, Europe, and Russia. Cities such as Harbin, Mudanjiang, and Suifenhe have emerged as pioneering cross-border e-commerce cities in China, with the province's integrated service platform operational and the establishment of 12 overseas warehouses in Russia by five enterprises.

4.3.4. Technology Opportunities

Advancements in new-generation information technologies, including artificial intelligence, 5G, and big data, are set to significantly enhance the efficiency of CBEC China sector. These technologies empower cross-border e-commerce businesses to refine their approaches in product marketing, traceability, logistics, payment, and selection. For example, big data analytics enables enterprises to deeply understand consumer preferences for targeted and personalized marketing strategies. Furthermore, it aids in market trend prediction, allowing businesses to adapt strategies timely and capture market opportunities.

4.4. Threats

4.4.1. Political threats

The burgeoning anti-globalization trend poses significant challenges to CBEC China. The rise of unilateralism and trade protectionism has led to increased trade restrictions and technological barriers, characterized by greater intensity, frequency, wider scope, and longer duration. Notably, since the onset of Sino-US trade tensions in 2017, entities such as the European Union, Brazil, Australia, Argentina, and Turkey have initiated anti-dumping investigations and imposed duties on Chinese goods. This anti-globalization wave intensifies the uncertainty and risks associated with China's

international trade, representing a major political threat to the development of its cross-border e-commerce sector.

4.4.2. Economic threats

The cross-border e-commerce market is witnessing a surge in product homogeneity. With rapid industry growth, numerous international companies have entered the market, leading to an influx of similar products from countries like Vietnam, especially in categories such as apparel, bags, and jewelry. This proliferation of homogeneous products is diminishing the profit margins of China's export-oriented cross-border e-commerce businesses.

4.4.3. Social threats

Consumer confidence in the success of cross-border e-commerce transactions is notably low. Perceived risks in cross-border shopping, including concerns over product quality, after-sales service, logistics, and data privacy, prompt cautious purchasing behavior, thereby impeding the development of the sector. Addressing and mitigating these perceived risks are crucial challenges for businesses aiming to foster consumer trust and engagement.

4.4.4. Technology threats

Exchange rate volatility introduces substantial financial risks for cross-border e-commerce enterprises. The tightening of US dollar liquidity, for instance, threatens the stability of non-US dollar currencies, leading to potential losses from exchange rate fluctuations during cross-border settlements. Significant annual fluctuations, sometimes reaching 20% to 30% in ASEAN currencies like the Thai Baht and Indonesian Rupiah, underscore the importance of exchange rate risk management. The ability of cross-border e-commerce to thrive and develop sustainably hinges on addressing these technical challenges related to exchange rate volatility.

5. Conclusion

This paper has systematically reviewed the strengths, weaknesses, opportunities, and threats of CBEC China industry, contextualized within the present era. A detailed exposition of these elements is encapsulated in Table 1. The study highlights the political strengths manifesting through the progressive formation of a policy and regulatory framework tailored for cross-border e-commerce. Economically, the industry benefits from robust market demand. Socially, the evolution and maturation of the transportation system for cross-border logistics stand out as a significant advantage. Technologically, the advancement in supply chain technology marks a critical strength. Conversely, the analysis identifies key weaknesses, including the restrictive impact of international laws and regulations, operational traits that hinder economies of scale, a notable scarcity of industry-specific talent, and the challenges associated with payment rejections in international settlements. Opportunities are abundant, with the "Belt and Road" initiative fostering a wealth of policy dividends conducive to the growth of cross-border e-commerce. The burgeoning digital economy presents significant economic opportunities, while the same initiative paves the way for the development of cross-border e-commerce cities within China, presenting a notable social opportunity. Technologically, the advent of new information technologies promises to enhance the efficiency of the industry. The paper also outlines substantial threats, such as the detrimental effects of anti-globalization trends, the economic peril posed by product homogenization, the social risk of diminished consumer trust in cross-border transactions, and the technological financial hazards introduced by exchange rate volatility. In summary, while CBEC China sector is positioned to

capitalize on a range of strategic advantages and emerging opportunities, it must concurrently navigate through an array of challenges and threats to sustain and enhance its trajectory of growth.

Table 1: SWOT-PEST Analysis Matrix Normal Form

SWOT	PEST	Content
Advantage	Politics	The policy system and regulatory system adapted to cross-border e-commerce have been gradually established.
	Economy	There is a strong market demand for cross-border e-commerce.
	Society	The transportation system of cross-border logistics has gradually developed and matured.
	Technology	The development of supply chain technology.
Weakness	Politics	The influence and limitation of laws and regulations in various countries.
	Economy	Has a lot of transportation that is not conducive to scale economy.
	Society	Lack of industry talents.
	Technology	Incorrect refusal of payment in international settlement.
Opportunities	Politics	The "Belt and Road" initiative has generated a large number of policy dividends for the development of cross-border e-commerce in China.
	Economy	The rapid development of the digital economy.
	Society	The "Belt and Road" initiative can help many regions in China develop into cross-border e-commerce cities.
	Technology	The New Generation of Information Technology Improves the Efficiency of CBEC China Industry.
Threats	Politics	The Impact of Anti-globalization Trend on CBEC China.
	Economy	Serious homogeneity of international products
	Society	Consumers have low confidence in the success of cross-border e-commerce transactions.
	Technology	Exchange rate fluctuations increase the financial risks of cross-border e-commerce enterprises.

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