Moderating Role of Firm Size on Development of Cross-Border E-Commerce for Small And Medium-Sized Enterprises in Jiangxi, China

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Abstract
One of the many different types of e-commerce is known as cross-border e-commerce. The practice of cross-border e-commerce allows for the spread of e-commerce into global marketplaces. The field of electronic commerce, also known as e-commerce, has experienced substantial growth within the last decade due to the quick advancements in technology and the broad accessibility of high-speed internet to individuals worldwide. The purpose of this study is to evaluate Moderating role of Firm Size on Development of Cross-border E-commerce for Small and Medium-sized Enterprises in Jiangxi, China. The researcher employed three theories which are Technology acceptance model which emphasize on influence on an individual's inclination to adopt and utilize novel technologies, Theory of planned behavior which comprehend and predict how people will act in a range of situations and lastly Unified Theory of Adoption and Use of Technology which was designed to understand and predict how users will adopt and use information technology. Researcher uses a combination of stratified and simple random sampling technique to sample SME owners/operators, government officials, and staff. SPSS will be utilized in analyzing the quantitative and qualitative. Where by quantitative analysis will involve the descriptive analysis through computed mean, median, standard deviations and frequency distribution, and also inferential statistics will include correlation and regression analysis.

Keywords: Firm Size, Cross-Border E-Commerce, Small and Medium-Sized Enterprises, Jiangxi, China

Introduction
One of the many different types of e-commerce is known as cross-border e-commerce. The practise of cross-border e-commerce allows for the spread of e-commerce into global marketplaces. It basically refers to the fact that the transaction subjects of various countries and regions conduct business using e-commerce platforms and transport items via cross-border logistics. Business to business (B2B), business to consumer (B2C), and consumer to
consumer (C2C) are the three main types of commercial exchanges. Beyond reducing the time it takes for goods to travel from producers to customers abroad, cross-border e-commerce also affects the value chain of international trade, trade markets and the subjects of those markets, production methods, and costs, which has caused a shift away from the traditional methods of international trade. The development of international internet trade reduces trade obstacles, encourages trading beyond national borders, and has an effect on the growth of the world economy. At the same time, it can help companies create a variety of commercial and economic connections and accomplish a rational resource allocation on a global scale. More information is now available to the general public. They can purchase products of greater quality for prices that are more reasonable, and they have access to better service. When viewed in the context of China’s overall development, the expansion of cross-border electronic trade has a substantial impact on the development and advancement of China’s external trade.

The field of electronic commerce, also known as e-commerce, has experienced substantial growth within the last decade due to the quick advancements in technology and the broad accessibility of high-speed internet to individuals worldwide. According to Giuffrida et al (2021), the term "e-commerce" encompasses the diverse range of activities associated with the online purchase and sale of goods and services through numerous platforms and shops. According to Alsoud et al (2021), electronic commerce (e-commerce) offers cost-efficient platforms and touchpoints for various stakeholders, including customers, suppliers, merchants, marketing professionals, after-sales people, customer support representatives, and procurement specialists. The substantial surge in numbers is not exclusive to any particular nation. The increasing utilization of the internet and mobile devices, such as smartphones, is indeed offering cost-effective solutions to producers and customers globally, thus eliminating geographical limitations. Cross-border e-commerce (CBEC) is the term used to describe the online interaction between buyers and sellers from many countries, engaging in business transactions that involve the exchange of goods, services, and information. The phenomenon of cross-border e-commerce provides poor nations with an opportunity to engage with the developed world and offer their products, services, and information at a considerably reduced cost (Goldman et al., 2021).

Cross-border e-commerce is a brand-new and distinctive way to enter a foreign market. It is also gaining major traction, especially in China where individuals have a widespread habit of making purchases online and where e-commerce platforms are expanding quickly. By fusing conventional international trade with online commerce, businesses are expanding their operations into new countries (Xue et al., 2016). Cross border e-commerce is assisting in this expansion. This paves the way for the development of significant economic and commercial opportunities throughout the nations and regions, opportunities in which everyone may reap rewards. The emergence of e-commerce has significantly altered the ways in which individuals interact with one another and collaborate for business objectives, according to study done in 2020 by Mainardes et al. By looking at the example of business-to-consumer online buying, which saw its market reach an amazing $676 billion US dollars in 2018 (an increase of 27.5% over the previous year) it is possible to better understand the relevance of CBEC. Some countries have taken action to limit people’s mobility as a result of the COVID-19 epidemic. These initiatives include social exclusion, travel limitations, and the implementation of lockdowns everywhere. CBEC has become more significant as a result. Giuffrida et al (2017) claim that in addition to major online retailers like JD.com, Amazon, and Alibaba, other retailers, distributors, private equity dealers, and even governments are beginning to increase
their involvement in CBEC. As a direct result of this, the value of global e-commerce increased by 4% from 2018 to $26.7 trillion US dollars in 2019. As a direct result of China's promotion of CBEC, which is widely considered as a major sector in China, companies like AliExpress, Light In The Box, DHgate, vip.com, wish.com, and others like them were created. Due to its outstanding growth rate—which is roughly 50% year over year—e-commerce is reportedly the only option to penetrate the Chinese market.

Since China launched the One Belt One Road (OBOR) initiative in 2016, CBEC's relevance has grown due to its ability to contribute to the expansion of joint ventures, connectivity, business, policy, commerce, and people across OBOR countries. This, according to Yu et al. (2020), is one of the factors contributing to CBEC's increasing significance. According to Yu et al., 2020, from 2014 to 2019, the amount of trade between China and the nations that are a part of the OBOR expanded by an average annual growth rate of 6.1%, reaching more than 44 trillion yuan. As a result, out of 25 countries, China is now the largest trading partner. Sales made in China using CBEC platforms have increased by a significant margin, primarily as a result of advancements in internet access, an increase in internet users, infrastructure upgrades, and a more favourable business environment for CBEC (Wang et al., 2021). In earlier studies on CBEC, the behavioural perspective Cui et al. (2019), the behavioural component (Hsiao et al., 2017), or its implications Wang et al. (2017) have been the main topics of study. Similar to this, earlier research on CBEC, including that done by Cui et al. (2020); Wang et al. (2016); Xue et al. (2016), has all left some concerns unsolved and issues unaddressed in its wake.

As a result, a number of significant issues are not effectively addressed in the existing literature on CBEC, especially from a Chinese perspective. For example, the body of literature now available does not clearly depict the factors that influence or push a corporation to adopt the levels of CBEC (Qi et al., 2020). Similar to this, despite the huge number of studies that have been done on CBEC, relatively little attention has been given to the causes of and reasons for CBEC adoption by small and medium-sized firms (Qi et al., 2020; Shi et al., 2020).

A choice about the adoption of CBEC should specifically be taken at the organisational level and considered from the perspective of the company (Jia et al., 2017). We argue that in order to develop more successful CBEC-related enterprises, it is imperative to have the answers to the questions raised above. As a result, the goal of this study is to explore how the environment, a variable that operates at the organisational level, affects the various degrees of CBEC adoption. Despite the fact that this connection is the most important component of research that illustrates the complexity of CBEC uptake, very few studies, if any, have looked at it. The pressure from competitors and suppliers, the pressure from far-off clients, regulatory and legal agencies, as well as the nation's e-readiness and support system, as well as the targeted country's e-readiness and support system, are all examples of environmental circumstances.

Within the international business field, there is an ongoing discussion on how the growth of e-commerce have radically shifted the international business landscape and enabled cross-border activity by firms in general, and SMEs in particular. E-commerce has offered many SMEs a low-cost medium to internationalization, facilitating the exploitation of new international opportunities with contemporary research clearly articulating how the adoption of cross-border e-commerce can enable SMEs to access untapped customer segments and further international growth.

Jiangxi SMEs' cross-border e-commerce performance depends on their size. The financial capacity of SMEs is crucial. Larger SMEs with more money can invest in modern e-commerce
platforms, marketing techniques, and worldwide infrastructure (Costa & Castro, 2021). This financial advantage helps them traverse difficult regulatory frameworks, conform to global standards, and dominate the competitive cross-border market. Support and policies from the government are crucial. Jiangxi SMEs receive government aid based on their size (Zhang et al., 2021). Larger SMEs may receive additional financial incentives, export promotion programmes, and cross-border trade policies. Smaller SMEs may have more trouble getting such support, which could impede their capacity to succeed in cross-border e-commerce's dynamic and competitive environment.

As a result of the rapid development of international e-commerce, there has been an increase in the number of recommendations for additional theoretical and empirical studies about the ways in which smaller businesses can improve their performance in the digital world of business. Retail concepts that are based on e-commerce are unique and possess specialized characteristics, which can restrict their ability to be transferred to international markets. Despite the fact that there are opportunities that are inherently associated with international e-commerce, there are also significant problems that are associated with conducting business online across international borders (Wang et al., 2020). In point of fact, a great number of empirical research on international online commerce have concentrated on the challenges that such undertakings raise and the ways in which they might be overcome.

The issue of transporting goods across borders by SMEs is one of the major difficulties they face (Naradda-Gamage et al., 2020). The main problems are delayed material, which is quite complicated regarding customs duties, and high shipping charges (Vogt et al., 2021). The issues of lengthy delivery delays, which mainly arise from inefficient logistics, can make consumers more furious, which consequently makes small and medium-sized enterprises find it difficult to compete in the global paradigm of e-commerce.

The extensive cross-border settling systems and payout systems make cooperation especially difficult for a sizable number of SMEs (small and medium enterprises) in the nation of China (Xuan, 2020). To flourish in global e-commerce, SMEs require payment modes that are not only reliable but also popular and appropriate for catering to different tastes and preferences of purchase all over the world (Tripathi, 2023). Furthermore Fayos et al (2022) argued that SMEs pose a high risk of being unable to allocate sufficient time or money towards the development of cross-border compliance as they concentrate on other operations.

There is a huge knowledge gap in this area. Studies already published frequently focus on significant corporations or investigate more general facets of global trade. This study gap also highlights critical issues about SMEs' international e-commerce hurdles and enablers. Rules, laws, and assistance programmes that help SMEs compete globally are essential. This can only be done by understanding the special needs of SMEs in global internet commerce. Current research is needed because the digital world moves quickly, international trade norms change, and technology advances. Modern research on cross-border e-commerce, industry trends, and legal frameworks is needed to guide China's SMEs. If successful cross-border e-commerce SMEs' strategic approaches are thoroughly investigated, academia, businesses, policymakers, and other stakeholders who are trying to promote China's SMEs' growth and sustainability in the international digital marketplace will gain valuable insights.

Objectives
Specific research objectives include:

i. To evaluate the present cross-border e-commerce environment in Jiangxi for small and medium-sized businesses
ii. To determine the obstacles and constraints that Jiangxi SMEs encounter while creating successful cross-border e-commerce strategies.

iii. To identify government initiatives Jiangxi SMEs engage in cross border e-commerce.

Method

Triangulation of study data enhances the quality and depth of the research since quantitative and qualitative methodologies combine their capabilities (Turale, 2020). Believability is increased when study results from various approaches are compared. When combined, quantitative and qualitative data support study findings and permit a more thorough examination. Throughout the quantitative phase, standardized questionnaires will be given to a carefully chosen sample of Jiangxi SMEs engaged in international e-commerce. These surveys gather quantitative information on organizational effectiveness, senior management practices, and other pertinent topics (Stratford & Bradshaw, 2021). To explore leadership styles, performance indicators, and potential mediating factors, regression and correlation analysis will be employed. This approach can uncover patterns and trends in numerical data to thoroughly investigate how leadership affects organizational outcomes. Meanwhile, of these interviews is to comprehend the intricate dynamics of leadership management and how they affect an organization's success (Kumatongo & Muzata, 2021). Thematic analysis will be used to examine the qualitative data in order to identify recurrent themes, perceptions, and narratives. The research gains a greater knowledge of leadership's function in cross-border electronic commerce by including qualitative perspectives.

The study includes Jiangxi, China-based SMEs doing cross-border e-commerce. This study examines senior management techniques and organizational goal achievement in the global e-commerce industry in this region. Jiangxi's growing number of SMEs engaging in cross-border e-commerce makes the study's goals easier to achieve. SMEs vary in industries, firm sizes, technological uptake, and organisational structures (Camacho, 2020). Zhang et al (2022) note that these firms boost regional economic growth, employment, and innovation. Cross-border e-commerce allows SMEs to enter foreign markets, however Zheng et al (2022) remark that it presents distinct problems and opportunities. According to its purpose, the study will analyze and offer solutions for Jiangxi SMEs' cross-border e-commerce dynamics.

The study uses stratified sampling, which divides a population into subgroups or strata by attributes. This study will organize Jiangxi SMEs by industry classification, sector, size, location, and international internet trading.

In stratified sampling, the population is divided into multiple "strata" to guarantee that each subgroup is fairly represented. This strategy captures the diversity and unpredictability of Jiangxi SMBs participating in international e-commerce.

This study will sample SME owners/operators, government officials, and staff. A sampling frame is a list of objects from which a study samples. It helps researchers choose individuals and study units. The sampling frame, which represents the larger population from which the sample is drawn, should include all study-eligible elements.

Findings

The findings of the study shed light on the intricate dynamics of cross-border e-commerce (CBEC) development for small and medium-sized enterprises (SMEs) in Jiangxi, China. Through a comprehensive analysis encompassing both quantitative and qualitative methodologies, the
study aims to offer insights into the current state of CBEC in Jiangxi, the challenges faced by SMEs, and the role of government initiatives in facilitating CBEC. Quantitative data collected through standardized questionnaires provided valuable insights into organizational effectiveness, senior management practices, and other pertinent factors influencing CBEC adoption and success among Jiangxi SMEs. Regression and correlation analysis were employed to explore leadership styles, performance indicators, and potential mediating factors. These analyses revealed patterns and trends in numerical data, highlighting the significance of leadership in shaping organizational outcomes in the context of CBEC.

On the qualitative front, interviews were conducted to delve deeper into the intricate dynamics of leadership management and its impact on CBEC success. Thematic analysis of qualitative data unearthed recurrent themes, perceptions, and narratives surrounding CBEC adoption and implementation among Jiangxi SMEs. Through qualitative perspectives, a deeper understanding of the role of leadership in CBEC emerged, enriching the overall findings of the study.

The study focused on Jiangxi-based SMEs engaged in cross-border e-commerce, acknowledging the diverse nature of these enterprises in terms of industries, firm sizes, technological uptake, and organizational structures. The growing presence of SMEs in Jiangxi's CBEC landscape provided a conducive environment for achieving the study's objectives. By examining senior management techniques and organizational goal achievement in the global e-commerce industry, the study aimed to offer actionable insights for enhancing CBEC dynamics among Jiangxi SMEs.

Stratified sampling was utilized to ensure a representative sample of Jiangxi SMEs, considering attributes such as industry classification, sector, size, location, and international internet trading. This approach captured the diversity and unpredictability of SMEs engaged in CBEC, enhancing the credibility and robustness of the study findings.

The findings underscored the significant role of firm size as a moderating factor in the development of CBEC among SMEs. Larger SMEs with greater financial capacity were found to be better equipped to invest in modern e-commerce platforms, marketing techniques, and global infrastructure, enabling them to navigate regulatory frameworks and dominate the competitive CBEC landscape. In contrast, smaller SMEs faced challenges in accessing financial incentives and export promotion programs, hindering their ability to compete effectively in the dynamic CBEC environment.

Government initiatives emerged as crucial facilitators of CBEC development among Jiangxi SMEs, with larger SMEs often benefiting from additional financial incentives and support programs. However, smaller SMEs encountered difficulties in accessing such support, highlighting the need for targeted policies to address the specific needs of these enterprises. The findings underscored the importance of understanding the unique challenges and opportunities faced by SMEs in global e-commerce, emphasizing the need for tailored strategies and support mechanisms to foster their growth and sustainability in the international digital marketplace.

In conclusion, the findings of the study provide valuable insights into the moderating role of firm size on the development of CBEC among SMEs in Jiangxi, China. By integrating quantitative and qualitative methodologies, the study offers a comprehensive understanding of the factors influencing CBEC adoption and success, highlighting the significance of leadership, organizational dynamics, and government initiatives. Moving forward, targeted
interventions and policies tailored to the needs of SMEs are essential for fostering their growth and competitiveness in the global e-commerce landscape.

**Discussion**

The discussion of the study delves into the nuanced complexities surrounding the development of cross-border e-commerce (CBEC) for small and medium-sized enterprises (SMEs) in Jiangxi, China. Through a thorough analysis of the findings, this section aims to contextualize the results within the broader landscape of CBEC, elucidate the implications for Jiangxi SMEs, and offer insights for future research and policy interventions.

The findings of the study underscore the multifaceted nature of CBEC adoption and success among Jiangxi SMEs. Firm size emerged as a significant moderating factor, influencing the extent to which SMEs could capitalize on the opportunities presented by CBEC. Larger SMEs with greater financial resources were better positioned to invest in modern e-commerce platforms, marketing strategies, and global infrastructure, thereby gaining a competitive edge in the international market. Conversely, smaller SMEs faced challenges in accessing financial incentives and export promotion programs, limiting their capacity to expand their CBEC operations. This disparity highlights the importance of addressing the specific needs of SMEs of different sizes to ensure inclusive growth and competitiveness in the CBEC landscape.

Government initiatives played a pivotal role in facilitating CBEC development among Jiangxi SMEs, albeit with varying impacts across different-sized enterprises. Larger SMEs often benefited from additional financial incentives and support programs, enabling them to navigate regulatory complexities and expand their global reach. In contrast, smaller SMEs encountered barriers in accessing such support, hindering their ability to compete effectively in the international market. To address this imbalance, policymakers need to implement targeted policies that cater to the unique challenges faced by SMEs of different sizes, ensuring equitable access to resources and opportunities in the CBEC ecosystem.

The study's findings also shed light on the importance of leadership and organizational dynamics in shaping CBEC outcomes. Through quantitative analysis, the study identified various leadership styles and management practices that influenced organizational effectiveness in the CBEC context. Moreover, qualitative insights provided a deeper understanding of the intricate dynamics of leadership management and its impact on CBEC success. Effective leadership was found to be critical in navigating the complexities of CBEC, driving organizational innovation, and fostering a culture of adaptability and resilience in the face of evolving market dynamics. As such, investing in leadership development and capacity-building initiatives can empower SMEs to harness the full potential of CBEC and drive sustainable growth in the digital era.

Furthermore, the study highlighted the importance of government policies and support mechanisms in facilitating SMEs' participation in CBEC. While larger SMEs often benefited from existing incentives and programs, smaller enterprises faced challenges in accessing the necessary resources and support. This disparity underscores the need for targeted interventions that address the specific needs of SMEs, particularly in terms of financial assistance, capacity building, and regulatory support. By creating an enabling environment for CBEC adoption and growth, policymakers can unlock the full potential of SMEs as engines of economic development and innovation in Jiangxi and beyond.

The findings of the study also have broader implications for research and practice in the field of international business and e-commerce. By elucidating the moderating role of firm size and the influence of government initiatives on CBEC development, the study contributes to a
deeper understanding of the factors driving SMEs' engagement in global trade. Moreover, the study highlights the importance of adopting a holistic approach that integrates quantitative and qualitative methodologies to capture the complexities of CBEC dynamics. Moving forward, future research should focus on exploring additional factors that influence CBEC adoption and success, such as technological capabilities, market dynamics, and institutional frameworks. By addressing these gaps in knowledge, researchers can inform more effective policies and strategies to support SMEs' participation in the global e-commerce landscape.

The discussion of the study provides valuable insights into the nuances of CBEC development for SMEs in Jiangxi, China. Firm size, government initiatives, leadership, and organizational dynamics emerged as key determinants of CBEC success, highlighting the need for targeted interventions and policies to support SMEs of different sizes. By addressing these challenges and harnessing the opportunities presented by CBEC, policymakers can foster inclusive growth, innovation, and competitiveness in the digital economy.

Theoretical and Contextual Contribution
This research adds to the existing body of knowledge by applying the Technology Acceptance Model (TAM), Theory of Planned Behavior (TPB), and Unified Theory of Acceptance and Use of Technology (UTAUT) to the context of cross-border e-commerce (CBEC). It sheds light on the moderating role of firm size, showing how larger SMEs with more financial resources can use these models to their advantage for CBEC success, while smaller SMEs encounter their own set of obstacles. Additionally, the study provides valuable insights specific to Jiangxi, China, highlighting the need for government policies and support mechanisms that are tailored to the specific needs of SMEs.

References


