



Research article

Unleashing global opportunities: Exploring the digitalization journey of small and medium-sized enterprises in China and Sri Lanka's thriving E-commerce landscapes

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ARTICLE INFO

Keywords:

Small and medium-sized enterprises (SMEs):

E02

G30

Internationalization: F10

M16

E-commerce platforms: L86

O32

Qualitative research: C83

I31

Digitalization: O33

O34

ABSTRACT

This study compares hindering and fostering factors for SMEs in China and Sri Lanka in their internationalization efforts through e-commerce. The study uses qualitative research methods to examine how SMEs in both countries utilize e-commerce platforms for global expansion. Narrative and thematic analysis techniques focus on manufacturing sector SMEs actively engaged in global expansion through e-commerce. Purposive sampling is used to select participants. The findings reveal shared patterns and distinctive characteristics in the digital transformation of SMEs. Chinese SMEs benefit from product popularity and advanced technologies, while Sri Lankan SMEs face challenges accessing financial resources and advanced technologies. Perspectives on innovation and regulatory/cross-cultural considerations vary. Supportive government policies and infrastructure are crucial for SME internationalization. The research provides insights for policymakers, researchers, and practitioners to enhance SME development and promote cross-national collaborations in the digital era.

1. Introduction

The digital revolution has transformed the global economy, reshaping how we produce and consume goods. This transformation is particularly evident in e-commerce, a crucial digital application that has revolutionized Small and Medium-sized Enterprises (SMEs) in many countries, including China and Sri Lanka [1]. However, the degree to which SMEs can capitalize on these opportunities varies significantly between countries due to differing access levels to financial resources, technological advancements, and supportive infrastructure. Although the digital revolution offers job opportunities and economic growth, it may widen the gap between those with access to digital resources and those without, leading to greater economic inequality [2].

E-commerce helps SMEs connect with buyers and sellers, reduce costs, and create specialized markets catering to specific consumer needs [3]. Integrating e-commerce offers significant growth potential for SMEs by enabling them to expand their reach, become more competitive, and contribute to overall economic progress [3]. SMEs are valuable contributors to the overall economy because of their agility, flexibility, and ability to adapt quickly to market changes. They can leverage globalization and technological advancements to access international markets through e-commerce platforms, digital marketing, and online tools [4,5]. Government support and initiatives can help SMEs integrate and leverage emerging technologies such as artificial intelligence, automation, data analytics, and cloud computing to enhance their productivity, efficiency, and competitiveness on a global scale [6].

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Policy and regulatory barriers must be addressed to create a conducive environment for SMEs to thrive internationally by streamlining regulations, reducing bureaucratic hurdles, simplifying trade procedures, and implementing fair competition policies [5, 6]. Sustainability and responsible business practices are becoming increasingly important in the global marketplace. Using e-commerce, SMEs can integrate environmentally friendly practices, social responsibility initiatives, and ethical business conduct into their operations to enhance their reputation and attract ecologically and socially conscious consumers, contributing to long-term success [1, 7]. For a country's economy to expand, international trade is the primary means, and nowadays, going global has become a crucial element of any contemporary business's strategy for progress and advancement. SMEs primarily achieve this by exporting their goods [3,8]. Exportation benefits not only individual businesses but also the country's overall economy.

The impact of digitalization on small and medium-sized enterprises (SMEs) has become a popular research topic in recent years. Many studies have explored how e-commerce and technology have transformed businesses, particularly in countries like China with robust digital ecosystems [1,3]. These studies have emphasized the importance of e-commerce platforms for international expansion, economic growth, and market competitiveness. However, most research has focused on well-established digital economies, leaving a gap in understanding how SMEs in emerging digital markets such as Sri Lanka navigate the challenges and opportunities presented by digitalization.

In this dynamic landscape, the challenges and opportunities for SMEs are constantly evolving [5]. Therefore, our study seeks to provide a comprehensive analysis of the digitalization journey of SMEs in China and Sri Lanka, focusing on their use of e-commerce platforms for global expansion. Moreover, we aim to identify the specific strategies SMEs employ in these countries, shedding light on the characteristics of their international expansion efforts. Through this exploration, we aspire to contribute to understanding SME digitalization and provide practical insights for businesses, policymakers, and researchers. By delving into the experiences of SMEs in two distinct economic landscapes, we hope to offer insights that transcend geographical boundaries. Through this comparative lens, our study aims to enrich the existing discourse on the digitalization of SMEs in emerging markets, offering valuable implications for the future development of businesses and economies.

Despite the wealth of knowledge on digitalization in SMEs, a substantial research gap remains regarding the characteristics and challenges SMEs face in emerging digital economies like Sri Lanka. This study seeks to bridge this gap by conducting a comparative analysis of SMEs in China and Sri Lanka, shedding light on the distinct challenges, strategies, and outcomes in their digitalization efforts. By exploring the less-explored landscape of SMEs in Sri Lanka, the research aims to provide a more comprehensive understanding of the global variations in SME digitalization. Further, despite the well-known challenges Sri Lankan SMEs face, this study aims to offer actionable strategies and recommendations to help these businesses advance despite these limitations.

The success of China's economy is notably linked to its thriving SME sector, characterized by 97 million enterprises, many of which have excelled in international expansion through e-commerce platforms [9]. In contrast, with limited international market engagement, Sri Lanka's SME sector needs to be more developed. Despite their significant contribution to the country's economy, SMEs in Sri Lanka exhibit low participation in international business. On this facet, internationalization could bring substantial benefits, as evidenced by relevant studies [10]. This study delves into the dynamics of SMEs in China and Sri Lanka, exploring their digitalization journeys, internationalization strategies, and the factors influencing their global expansion efforts.

2. Brief literature review

As we explore the literature, we discover how Small and Medium-sized Enterprises (SMEs) in China and Sri Lanka are maneuvering through the digital landscape. Extensive research underscores the importance of digital ecosystems in facilitating SME growth. For instance, integrating Customer Relationship Management (CRM) systems has been shown to significantly improve customer satisfaction and operational efficiency [11,12]. The potential benefits of this paradigm shift for SMEs are diverse, spanning improved operational efficiency, heightened competitiveness, and extended market reach [12,13]. Small and medium-sized enterprises in emerging economies such as China, Vietnam, India, and Sri Lanka utilize digital technologies like cloud computing and e-commerce platforms to streamline operations and reach a broader customer base. Adopting digital technologies has been associated with heightened productivity, and fortified innovation capabilities [11,12]. For example, CRM tools monitor social media for brand mentions, allowing companies to engage proactively. Responding promptly to customer inquiries or complaints enhances satisfaction.

Studies on SME digitalization have demonstrated the intertwined nature of internal organizational capabilities and external support mechanisms in driving successful digital transformation within SMEs [14,15]. Factors such as leadership, digital skills, government policies, and industry partnerships play a complex yet integral role in navigating the digitalization process within SMEs [14]. Theories offer valuable insights into how SMEs function within a broader digital landscape. Digital Ecosystem Theory offers valuable insights into how SMEs interact within a broader digital ecosystem. The theory's emphasis on interdependencies among different actors and resources underscores the comprehensive nature of the study, which aims to understand the success of SMEs' digital transformation [16,17]. The relationship between digital technologies and internationalization unfolds a narrative suggesting that leveraging digital tools can facilitate SMEs' international expansion, offering access to a broader customer base while adapting to diverse market conditions [18,19]. When SMEs use digital technologies to internationalize, they must consider challenges such as navigating varied regulatory environments and managing cross-cultural communication [19]. Studies highlight the importance of innovative business models in improving SMEs' performance during digital transformation. They suggest that reimagining strategies, such as adopting a platform-based model or providing digital services, can lead to successful digitalization [18,20]. Drawing inspiration from Rogers' Diffusion of Innovation Theory (2003), this study aims to unravel the complexities and characteristics of SMEs in China and Sri Lanka as they navigate and embrace digitalization [21]. The theory provides a framework for understanding the critical attributes influencing the adoption of innovative technologies, including relative advantage, compatibility, complexity, trialability,

and observability [21]. According to this theory, the adoption of digital technologies follows a predictable pattern, starting with innovators and early adopters, followed by the early majority, late majority, and laggards. Resource-Based View (RBV) Theory further complements our analysis by emphasizing the importance of internal resources and capabilities in achieving a competitive advantage [22]. SMEs' ability to leverage advanced technologies and innovate continuously can be seen as valuable, rare, inimitable, and non-substitutable (VRIN) resources that enhance their competitive position. Institutional Theory sheds light on the regulatory and cultural contexts influencing SMEs' digitalization [23,24]. This theory posits that organizations are influenced by the institutional environment, including formal regulations and informal cultural norms. The stringent regulatory frameworks in countries and supportive policies can be understood through this lens, highlighting the need for institutional factors to facilitate SME digitalization.

Studies exploring factors influencing SME digitalization, its impact on performance, and challenges identify key drivers like market pressure and technological readiness [5,24]. Positive outcomes include increased market share and profitability. However, challenges such as cybersecurity risks and a shortage of digital skills underscore the multifaceted nature of the digitalization journey [23,25]. This study is inspired by the complex dynamics of SME digitalization discussed in the literature. It aims to explore the different digitalization paths of Small and Medium-sized Enterprises (SMEs) in China and Sri Lanka. By doing so, the study seeks to provide fresh insights and enhance our understanding of the digital transformation landscape within various contexts.

3. The research problem and objectives

The research examines the factors driving the international expansion of SMEs in Sri Lanka and China, with a specific focus on their manufacturing industries. China's well-developed supply chain, infrastructure, and manufacturing capabilities have established it as a global manufacturing hub. On the other hand, Sri Lanka has attracted foreign investment in sectors such as apparel and textiles, rubber-based products, processed foods, and electronics, leveraging its skilled workforce and strategic location. By comparing SME internationalization in these two countries, the study aims to gain insights into technology adaptation, strategies, market penetration, challenges, and government support [26,27].

This study addresses a critical research question: 'How do small and medium-sized manufacturing businesses in China and Sri Lanka pursue international expansion strategies using e-commerce platforms?' This inquiry is positioned to uncover the specific strategies these businesses employ, delve into the challenges they encounter, and scrutinize the role of government support in facilitating their internationalization efforts. The outcomes of this investigation are poised to extend beyond immediate applications, serving as a valuable foundation for future research endeavors by students, academics, and practitioners. Beyond the scope of China and Sri Lanka, these results can serve as a benchmark for researchers in diverse countries to corroborate and build upon. The research offers valuable insights to policymakers, managers, practitioners, and SME owners about the dynamics of SME internationalization and the factors influencing decisions related to global expansion.

The study focuses on various facets, including the impact of digitalization on SMEs in both countries, aiming to unveil similarities and differences in their experiences. Additionally, the research explores the role of technological advancements in shaping SME strategies, delves into the challenges and opportunities associated with global expansion through e-commerce, and scrutinizes the influence of cultural, regulatory, and government support factors on SMEs' digitalization journeys.

4. Research design and methodology

The study uses qualitative ethnographic research methodology to explore the globalization strategies of small and medium-sized enterprises (SMEs) in China and Sri Lanka. This approach allows for an in-depth exploration of the participants' lived experiences, behaviors, and cultural dynamics, providing rich, contextual insights that quantitative methods alone may not capture. The choice of purposive sampling ensures that the selected participants represent the key characteristics relevant to the research goals. In qualitative ethnography, the problem statement guides the researcher in understanding the participants' lived experiences, behaviors, and cultural dynamics. It helps frame research questions and objectives, ensuring that the study's findings contribute to existing literature, theory, and understanding in the field [28]. This methodological focus ensures that our findings are descriptive and prescriptive, offering valuable guidance for SMEs in resource-constrained environments.

Comparative qualitative research can be conducted using different approaches, such as case studies, ethnography, grounded theory, or phenomenology, depending on the research question and objectives [23]. We have opted for a comparative ethnographic approach in our research design, which enables us to deeply understand and compare the characteristics of China and Sri Lanka. Ethnography is well-suited for exploring SMEs' lived experiences, behaviors, and cultural dynamics in different contexts, allowing for a comprehensive examination of their strategies, challenges, and the role of government support in their internationalization efforts [29]. This analysis reveals patterns, similarities, and differences, comprehensively understanding SMEs' strategies in China and Sri Lanka.

Comparative studies involve examining and analyzing similarities and differences between two or more entities, such as individuals, groups, organizations, economies, or cultures. Economic comparisons often involve using quantitative modeling and techniques [22]. Quantitative methods are commonly used to analyze and compare economic variables, while qualitative methods are crucial for understanding economic behavior [30]. Factors such as motivations, decision-making processes, and contextual factors can influence economic behavior, and qualitative research can provide valuable insights into these factors [23,24]. In this study, we used qualitative methods to gain a more complete understanding of economic phenomena and to facilitate more robust comparisons. This approach is further enriched by incorporating several management theories, enhancing the theoretical framework of our study.

Rogers' Diffusion of Innovation Theory (2003) is a theoretical and practical tool used in our study [21]. It guides exploring how

SMEs in China and Sri Lanka adopt e-commerce, helping us understand their awareness, attitudes, decision-making process, implementation, and benefits confirmation. This Theory's relevance and applicability are crucial to examining e-commerce adoption among SMEs in the two countries. Ecosystem Theory is crucial in researching how SMEs interact within digital ecosystems. It emphasizes interdependencies and a comprehensive understanding of SMEs' digital transformation success [17].

The Resource-Based View (RBV) Theory emphasizes the importance of internal resources and capabilities in achieving a competitive advantage. Our study applies this theory to understand how SMEs leverage advanced technologies and continuously innovate, enhancing their competitive position [22]. Institutional Theory sheds light on the regulatory and cultural contexts influencing SMEs' digitalization. This Theory posits that organizations are influenced by the institutional environment, including formal regulations and informal cultural norms [23]. In our study, we used this Theory to understand the stringent regulatory frameworks in China and the lack of supportive policies in Sri Lanka, which can be understood through this lens.

By integrating these theories, our study provides a comprehensive framework for understanding the digitalization journeys of SMEs in China and Sri Lanka. Through this theoretical lens, the research aims to contribute valuable insights into the digital transformation landscape within diverse contexts. Specifically, the study offers unique insights into the comparative impact of cultural, regulatory, and economic factors on the digitalization strategies of SMEs in China and Sri Lanka, which has yet to be extensively explored in previous research. This perspective adds value to understanding e-commerce adoption and digital transformation in emerging markets [31,32].

4.1. Sampling technique and selection

The researchers used Purposive sampling to select participants with specific characteristics relevant to the research goals [25,29]. The focus was on small and medium-sized manufacturing enterprises engaged in global expansion through e-commerce platforms. The diverse participants from China and Sri Lanka provided unique perspectives on their business operations and digitalization journey. This approach aimed to provide valuable insights into the impact of SMEs on the economy and the role of technology, e-commerce practices, and market dynamics in their growth and success. Table 1 provides a comprehensive overview of the various profiles of the participants. Purposive sampling enables us to focus on businesses most pertinent to the research questions and provide significant insights into the investigated phenomenon [33]. This diversity allows for a comprehensive understanding of the digitalization journey of SMEs in China and Sri Lanka's thriving e-commerce landscapes.

The diverse sample ensures that research findings are credible and applicable to discussions and practices related to exploring the digitalization journey of small and medium-sized enterprises in China and Sri Lanka's thriving e-commerce landscapes [31,33].

4.2. The interview process

A detailed protocol for data collection was developed, outlining specific interview procedures and ensuring consistency across different contexts. This protocol was pilot-tested to refine the interview questions and ensure they effectively captured the research objectives. The relationship between study participants, including the characteristics of the interviewer and interviewee, is crucial for the validity of qualitative interviews and greatly influences the reliability of research findings [34]. The researcher carefully prepared the interview process after recognizing and comprehending the dynamics and intricacies of this connection. This study's interview procedure began with an introduction soliciting background information from participants. To ensure the reliability of the procedure, the researchers start by clearly defining the objectives and questions of the research [34]. Before conducting interviews, it is essential to obtain participants' informed consent, explain the purpose of recording, ensure confidentiality, address concerns, and emphasize their rights to withdraw consent.

In addition to recording the interview, take additional notes and can provide context and assist in data analysis. These notes can capture nonverbal signals, observations, and other pertinent information that the audio recording may not have captured [23]. The

Table 1
Profiles of participants.

Participant	Country	E-commerce Platform	Gender	Years of Experience	Business
CHPT 1	China	Taobao	Female	5	A manufacturing company specializing in producing trendy consumer electronics.
CHPT 2	China	Alibaba	Male	8	Involved in the electronics manufacturing industry.
CHPT 3	China	Tmall Global	Female	3	Focuses on producing and selling indigenous cosmetics to foreign consumers.
CHPT 4	China	JD.com	Male	6	Specializes in manufacturing and selling furniture products.
CHPT 5	China	Pinduoduo	Female	4	Focuses on producing and selling health and wellness products.
CHPT 6	China	Global Sources	Male	2	Producing and supplying automotive parts to global buyers.
SLPT 7	Sri Lanka	Etsy	Female	5	Produces and sells organic skincare products.
SLPT 8	Sri Lanka	Alibaba	Male	7	Specializes in producing and exporting agricultural produce.
SLPT 9	Sri Lanka	eBay	Female	3	Focuses on producing and selling home decor and handicraft products.
SLPT 10	Sri Lanka	Amazon	Male	6	Specializes in exporting high-quality tea.
SLPT 11	Sri Lanka	Shopify	Female	4	Focuses on producing and selling fashion accessories.
SLPT 12	Sri Lanka	Daraz	Male	2	It specializes in producing and selling healthy food products.

researchers respected participants' rights by ensuring their well-being and safety and maintaining the privacy and confidentiality of their business strategies and data throughout the data collection process [23,29,35]. The interview addressed SME e-commerce technological adoption, strategies, challenges, market-specific adaptations, obstacles, support, resources, competitive advantage, and plans. The interview guide in Figure One aided the process and facilitated participants' sharing of insights (see Fig. 1).

From April to May 2023, the Authors conducted field visits in China and Sri Lanka to gather information. During these visits, several interviews were conducted with key stakeholders in the SME sector, including business owners, managers, government officials, and industry experts. Each interview session lasted approximately one to one and a half hours, allowing for in-depth discussions and insights into the digitalization journey of SMEs in both countries. The interviews were semi-structured, allowing for flexibility while ensuring all relevant topics were covered. Detailed notes were taken during each interview to capture key points and insights shared by the participants. Additionally, audio recordings were made with the participants' consent to ensure data transcription and analysis accuracy.

4.3. Data analysis and validity

Thematic analysis is a widely used method for analyzing data in ethnographic research [36]. This involves identifying patterns or themes within qualitative data, which helps researchers gain a deeper understanding of the significance of these patterns. The data analysis process followed Braun and Clarke's six-phase thematic analysis framework, which includes familiarizing with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the final report. This structured approach ensures a thorough and systematic analysis [37]. This approach helps identify recurring behavior patterns, cultural practices, or experiences within a specific cultural or social group [36,38]. By uncovering underlying themes that emerge from the data, researchers can gain insights into the beliefs, values, and social dynamics of the group under study. Using thematic analysis in an ethnographic study depends on various factors, such as the research question, the nature of the data collected, and the theoretical framework guiding the study [36,39].

Moreover, the researchers combine Narrative analysis techniques with thematic analysis to achieve a deeper comprehension of the data [40]. The narrative analysis investigates the narratives' structure, themes, and meanings, casting light on the group's collective identity and cultural values. These two methods complement each other and provide different perspectives on the data, allowing for a richer and more comprehensive analysis [36,40]. When narrative and thematic analysis are combined, the trustworthiness and validity of the data analysis process can be strengthened. This approach enhances the credibility and validity of the findings within the qualitative paradigm, making the analysis process more robust.

Researchers can manage and analyze qualitative data, such as thematic analysis, efficiently using software programs in a structured and organized manner. The selection of software may vary depending on the researcher's preferences [41]. NVivo is a well-known program for qualitative data analysis that offers features for organizing, categorizing, and analyzing data. The analysis process in NVivo 12 included data familiarization, framework creation, pattern identification, framework refinement, coder agreement, evidence provision, bias acknowledgment, participant validation, cross-checking with other data sources, record-keeping, and ethical approval [40,42]. This facilitated systematic coding and pattern identification, ensuring a transparent and replicable analytic process. Inter-coder reliability was assessed to ensure consistency in coding across the research team. Discrepancies were discussed and

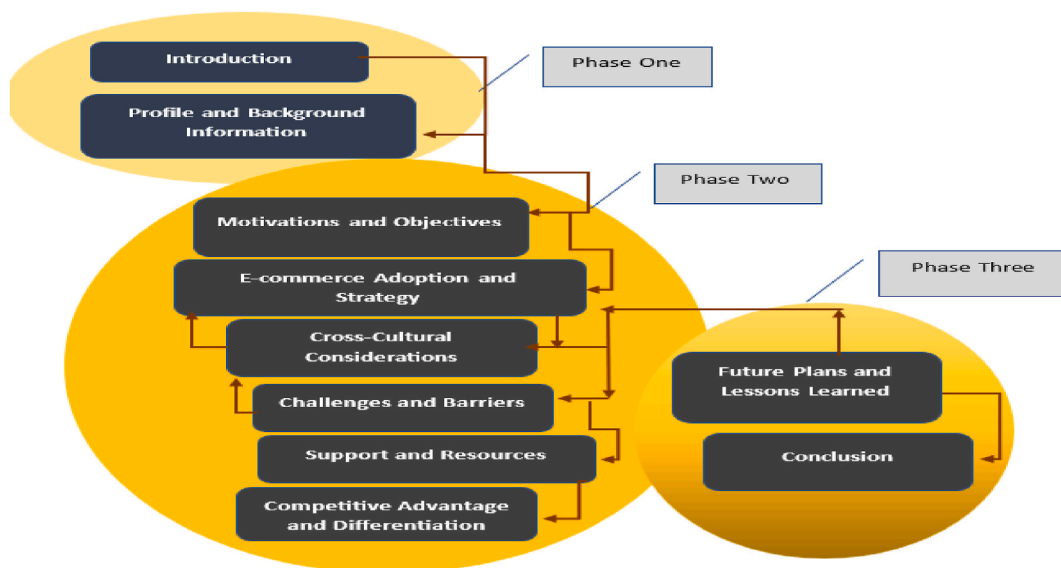


Fig. 1. The structure for conducting interviews regarding the internationalization of SMEs utilizing e-commerce platforms. Source: Authors Compiled

resolved through consensus, contributing to the reliability of the thematic analysis. The researchers followed these steps to produce reliable and comprehensive results that accurately reflected the participants' experiences. This rich qualitative data provides depth and context that are often missing in quantitative studies, allowing for a more comprehensive understanding of the phenomena under investigation.

We ensured the credibility and dependability of the findings by cross-verifying data from multiple sources, including interviews, field observations, and document analysis. This comprehensive approach helps mitigate potential biases and enhances the validity of the results.

5. Results

The researchers employed narrative and thematic approaches to analyze the responses of Chinese and Sri Lankan businesspeople regarding their experiences and challenges in global expansion through e-commerce platforms. The analysis aimed to capture the essence of their digitalization journey and provide valuable insights. The researchers carefully examined transcripts, field notes, and interview recordings to identify recurring themes and patterns in the dataset (23, 25, 31).

5.1. Theme 1: intense competition and challenges in the E-commerce market: Chinese vs. Sri Lankan entrepreneurs

Through the analysis, several prominent themes emerged, highlighting similarities and differences between the Chinese and Sri Lankan participants' experiences. The first theme that emerged was the intense competition in the e-commerce market, which the Chinese entrepreneurs emphasized.

"The e-commerce market in China is incredibly competitive, with major players like Alibaba and JD.com dominating the industry. Standing out among numerous competitors and gaining market share requires us to constantly innovate, provide unique value propositions, and deliver exceptional customer experiences."

CHPT 4

They highlighted the need for constant innovation, unique value propositions, and exceptional customer experiences to stand out in a highly competitive environment. In contrast, the Sri Lankan entrepreneurs discussed limited resource access and the challenge of competing with more prominent international players in the global e-commerce landscape.

"One of the main challenges I face is the limited access to financial resources and advanced technologies. E-commerce requires investments in platforms, logistics, and marketing, which can be daunting for small businesses like mine."

SLPT 8

"As a small entrepreneur in Sri Lanka, facing the harsh reality of limited access to financial resources and advanced technologies is disheartening. The world of e-commerce demands substantial investments in various areas, such as developing robust platforms, establishing efficient logistics networks, and implementing effective marketing strategies. It's a daunting task, and the odds are stacked against us."

SLPT 7

"Running an e-commerce business can be quite a challenge for small businesses like mine. The investment in platforms, logistics, and marketing can be overwhelming."

SLPT 9

Sri Lankan participants highlighted the significant challenges posed by infrastructure and financial barriers to business operations and expansion. More financial resources are needed to ensure necessary investments in platforms, marketing, and logistics.

5.2. Theme 2: technological advancement and its impact on E-commerce strategies

The second theme that emerged was the utilization of advanced technologies. Chinese entrepreneurs emphasized leveraging technologies such as artificial intelligence and big data analytics to gain insights into consumer behavior, personalize marketing strategies, and optimize operations.

"China's advanced technologies, such as artificial intelligence and big data analytics, have transformed the e-commerce landscape. We utilize these technologies to gain insights into consumer behavior, personalize our marketing strategies, and optimize our operations. Mobile payment systems have also made transactions seamless and convenient for our customers."

CHPT 6

Using advanced technologies has been pivotal in our e-commerce journey as small entrepreneurs in China. We recognize the transformative power of artificial intelligence and big data analytics, which have revolutionized how we understand consumer behavior, personalize our marketing strategies, and optimize our operations."

CHPT 3

This advantage in technological adoption provided them with a competitive edge.

"Lack of sufficient infrastructure, such as reliable internet connectivity and modern payment gateways, also adds to the challenges."

SLPT 10

In contrast, the Sri Lankan entrepreneurs highlighted the challenge of limited access to financial resources and advanced technologies, which hindered their ability to fully leverage e-commerce platforms.

5.3. Theme 3: hindering and fostering factors of expanding into international markets

The third theme centered around the opportunities and challenges of expanding into international markets. Chinese entrepreneurs viewed cross-border e-commerce as an exciting opportunity to tap into foreign consumer bases and establish their brand presence internationally.

"One of the exciting opportunities for Chinese businesses is the ability to expand globally through e-commerce platforms. We can tap into the large consumer base in foreign markets, especially with the growing popularity of Chinese products."

CHPT 1

"Cross-border e-commerce allows us to reach customers worldwide and establish our brand presence internationally."

CHPT 5

They emphasized the growing popularity of Chinese products and the potential to reach customers worldwide. On the other hand, Sri Lankan entrepreneurs highlighted the limited market size in Sri Lanka and the need to explore international markets through e-commerce platforms.

"The domestic market in Sri Lanka is relatively small, and with globalization, it has become crucial for businesses to explore international markets through e-commerce platforms."

SLPT 12

"To succeed in the face of competition from larger international players, it is important to differentiate ourselves by offering unique products or services, providing excellent customer service, and building a strong brand reputation. However, this is challenging."

SLPT 11

The increasing popularity of Chinese products creates a higher demand in global markets [43]. Small businesses can capitalize on this trend by offering Chinese products that are sought after by international consumers. This demand can translate into increased sales and market opportunities for small businesses.

"As the popularity of Chinese goods grows worldwide, it gives small businesses like ours access to new markets and ways to sell what we produce."

CHPT 6

"My main goal is to meet our customers' needs and focus on making products that meet their specific wants and tastes, when buyers tell us what they need or like, we make changes to our products to ensure their satisfaction."

SLPT 10

"We are always trying to improve the quality of our goods and make other changes. Our business is highly competitive, and we know we need to stay ahead by actively seeking new ideas."

CHPT 2

This highlighted diverse perspectives among participants regarding their approach to meeting customer needs and driving product improvements. The Sri Lankan participant prioritized customer-centricity, tailoring products to specific customer wants and relying on feedback for enhancements. In contrast, the Chinese participant emphasized continuous improvement, actively seeking innovative ideas to stay competitive.

5.4. Theme 4: navigating regulatory and legal landscapes

The fourth theme that emerged was the consideration of regulatory and legal factors. Chinese entrepreneurs highlighted the importance of understanding and complying with international regulations, including customs procedures, tax policies, and intellectual property rights protection in each target market.

"When expanding globally, it is crucial to understand and comply with international regulations. We must navigate customs procedures, tax policies, and intellectual property rights protection in each target market."

CHPT 4

Sri Lankan entrepreneurs echoed this concern, emphasizing the need for thorough research and adaptation to different legal frameworks.

"To operate effectively, our businesses require a stable and transparent legal environment that promotes fair competition, reduces uncertainty, and provides predictability for our operations."

SLPT 7

Sri Lankan businesspeople highlight their challenges with the legal and regulatory environment, including inconsistencies, favoritism, and ad hoc policy changes. The complexities of the legal and tax frameworks add further difficulty to navigating and ensuring compliance for businesses in Sri Lanka.

5.5. Theme 5: cross-cultural considerations

The fifth theme that emerged was the influence of cross-cultural factors. This theme encompasses the recognition by both Chinese and Sri Lankan entrepreneurs of the significance of cultural factors in their global expansion efforts.

"Expanding into foreign markets challenges understanding and adapting to different cultural preferences. We recognize the importance of localization in resonating with international consumers. Tailoring our marketing strategies, product offerings, and customer experiences to suit specific cultural contexts is essential for success in global expansion."

CHPT 3

"Expanding into foreign markets can be challenging. It can be challenging to understand and adapt to different cultural preferences. As entrepreneurs from Sri Lanka, we need to understand the significance of localization in connecting with international consumers."

SLPT 9

Chinese entrepreneurs emphasize localization for international consumers' diverse cultural preferences, while Sri Lankan entrepreneurs face challenges in understanding and adapting to foreign cultural contexts. Cultural sensitivity and adaptation are crucial for global business success, influencing consumer behavior and market dynamics.

5.6. Theme 6: E-commerce knowledge and skills

China and Sri Lankan SME awareness and perceptions were similar in terms of e-commerce knowledge, digital marketing, and worldwide market trends, which participants stressed.

"In this type of business, we need to know about e-commerce, digital marketing, and global market trends. We must also keep our information up-to-date on new trends and technologies."

CHPT 6

"To work in this field, you must know about e-commerce, digital marketing, and foreign trade trends. The information we give must also consider recent important changes in areas like technology."

SLPT 8

E-commerce platforms, digital marketing methods, and worldwide marketplaces are complex. Thus, they realized the need for education and capacity-building. The ever-changing global e-commerce landscape requires continual learning and skill improvement. The narratives stressed the significance of training programs, workshops, and resources to help entrepreneurs exploit e-commerce and expand international business.

5.7. Theme 7: government support and policies

The sixth theme that emerged was the role of government support and policies. Chinese entrepreneurs acknowledged the supportive role of the Chinese government in promoting e-commerce and international expansion through various policies, incentives, and initiatives.

"I must admit that the Chinese government supports promoting e-commerce and international expansion. Various policies, incentives, and initiatives are aimed at assisting businesses in our globalization efforts by the Chinese central government and the provincial government. These include financing support, trade facilitation measures, and initiatives to enhance cross-border e-commerce capabilities, greatly benefiting companies like ours."

CHPT 2

During the COVID-19 pandemic, the Chinese government organized online trading platforms to support small-scale e-commerce businesses. During difficult times, these initiatives played a crucial role in sustaining and promoting the development of e-commerce businesses. The participants from China highlighted this.

"Even though the pandemic complicated things, online trade fairs like the Canton Fair kept doing well by moving to virtual venues. This new way of doing things lets us, as online sellers, take part in these trade shows from afar and meet a lot of possible clients."

CHPT 1

The thematic analysis revealed a unanimous acknowledgment among the Chinese entrepreneurs regarding the instrumental role played by the Chinese government in promoting e-commerce growth and facilitating international expansion. The entrepreneurs expressed deep admiration for the comprehensive support provided by the government through a range of policies, incentives, and initiatives.

"The Sri Lankan government should prioritize initiatives that focus on capacity-building to educate and empower entrepreneurs about the possibilities of e-commerce, digital marketing tactics, and global market trends. Doing so will enable us to compete effectively with international businesses."

SLPT 11

"My experience is that Connectivity and internet access remain a significant challenge, particularly in rural areas. Collaborative efforts between the government, private sector, and industry associations can help address our challenges."

SLPT 8

Sri Lankan entrepreneurs highlighted the need for more favorable policies and financial incentives to encourage SMEs in their internationalization efforts. They expressed a strong need for more favorable policies and comprehensive government support to facilitate SMEs' internationalization efforts. They emphasized the importance of targeted interventions, such as capacity-building programs, financial incentives, and regulatory frameworks that foster a conducive business environment for SMEs.

5.8. The thematic analysis

The theme analysis provided valuable insights into the distinct perspectives and challenges faced by entrepreneurs in Sri Lanka and China. This sheds light on factors influencing the entrepreneurial landscape in both countries. Table 2 summarizes the analysis results, highlighting key areas requiring attention and support for promoting e-commerce growth and success.

Participants from China and Sri Lanka shared their experiences, highlighting challenges, opportunities, motivations, and goals in global expansion through e-commerce platforms. The analysis emphasized the importance of advanced technology and intense competition in the e-commerce market. Differing opinions on innovation were observed. Participants faced obstacles such as resource limitations and infrastructure challenges in Sri Lanka, while government support and technological advantages were noted in China.

The analysis emphasized the importance of advanced technology and intense competition in the e-commerce market. Differing opinions on innovation were observed. Participants faced obstacles such as resource limitations and infrastructure challenges in Sri Lanka, while government support and technological advantages were noted in China. Cultural adaptation, regulatory compliance, and legal frameworks were emphasized for successful entry into foreign markets. The analysis revealed both shared and unique narratives,

Table 2

Thematic comparisons between China and Sri Lanka.

Perception	Positive/Negative Factor	Frequency Between Entrepreneurs	
		Sri Lankan	Chinese
Access to resources:	Financial constraints and funding	8	4
	Access to advanced technologies	4	9
	Infrastructure availability (internet connectivity, payment gateways)	4	12
Market size and competition:	Domestic market	3	7
	Competition from larger international players	8	10
	Differentiation and brand building	5	8
	Innovation	3	11
Lack of awareness and expertise:	Knowledge about e-commerce practices	5	8
	Education and capacity-building initiatives	6	8
	Digital marketing and international market trends	5	8
Expanding into international markets:	Competition from larger international players	7	6
	Need for differentiation and brand building	4	8
	Growing popularity of Chinese/Sri Lankan products	2	8
	Cross-border e-commerce opportunities	3	8
Government support and policies:	Role of government in promoting e-commerce	5	8
	Policies and financial incentives	6	7
	Collaborative efforts for growth and support		
Cross-cultural challenges and localization:	Cultural differences and preferences	5	9
	Adapting to specific cultural contexts	6	5
	Localization of marketing strategies and product offerings	6	9
Regulatory and legal considerations:	Understanding and complying with international regulations	8	7
	Customs procedures and tax policies	8	5
	Intellectual property rights protection	2	7

providing insights into the complexities of global expansion through e-commerce in different contexts.

6. Discussion

This study uses a thematic and narrative approach to better understand the experiences and perspectives of the participants during their digitalization journeys. Doing so provides a more comprehensive and nuanced analysis of their stories [40,44]. The present study delved into the digitalization journey of Small and Medium-sized Enterprises (SMEs) in China and Sri Lanka, focusing on their global expansion through e-commerce platforms. Through the analysis, valuable insights were obtained regarding the motivations, objectives, challenges, and opportunities encountered by these businesses. Extensive research has unequivocally demonstrated the substantial potential of e-commerce and a robust digital market presence in driving the international sales expansion of SMEs [11,15,45]. The findings of the present investigation reaffirmed and underscored the significance of the point above. Hence, it is paramount to prioritize extensive research and development initiatives and formulate supportive policies that encourage and bolster e-commerce and its associated services. Such proactive measures are indispensable to facilitate a seamless and supportive ecosystem that nurtures existing e-commerce enthusiasts and invigorates and motivates those who may need to catch up.

One prominent theme from the analysis was the growing popularity of Chinese products in the international market [43,46]. Chinese entrepreneurs emphasized the advantage of this trend, recognizing the increased demand for Chinese products worldwide. This popularity creates several benefits for small businesses, including enhanced market demand, a competitive edge in certain industries, increased brand recognition, access to global distribution channels, export opportunities, and the cultural influence of Chinese aesthetics and traditions [47]. Leveraging the popularity of Chinese products enables small businesses to tap into international markets, expand their reach, and capitalize on the positive perception associated with these products. The Sri Lankan e-commerce industry, however, needs this competitive advantage; other academics have identified this issue, and must be addressed immediately [48,49].

Another significant theme from the analysis was the utilization of advanced technologies. Chinese entrepreneurs highlighted their ability to leverage advanced technologies such as artificial intelligence and big data analytics to gain insights into consumer behavior, personalize marketing strategies, and optimize operations [11]. This technological advantage gave them an edge in the highly competitive e-commerce landscape. In contrast, Sri Lankan entrepreneurs identified the limited access to financial resources and advanced technologies as a challenge, hindering their ability to fully leverage e-commerce platforms [50]. This disparity underscores the importance of addressing the digital divide and supporting SMEs in Sri Lanka to enhance their technological capabilities [51]. SMEs' adoption of digital technologies can be better understood through Rogers' Diffusion of Innovation Theory, which explains that digital innovations follow a pattern that starts with innovators and early adopters, followed by the early majority, late majority, and laggards [21,52]. Our analysis shows that Chinese SMEs are more likely to be early adopters of advanced technologies like AI and big data analytics, giving them a competitive edge. In contrast, Sri Lankan SMEs, facing financial and technological constraints, are more likely to fall into the late majority or laggard category. This underscores the urgent need for targeted interventions to accelerate the diffusion process in Sri Lanka.

Regarding inventiveness, Chinese and Sri Lankan traders have vastly distinct perspectives. Cultural factors, market conditions, and competitive landscapes contribute to the differences in perspectives between Chinese and Sri Lankan sellers. Sri Lankan entrepreneurs may have limited resources and infrastructure, making it challenging to keep up with innovations compared to their Chinese counterparts. The Sri Lankan participant prioritized meeting specific customer wants and tastes, while the Chinese participant emphasized seeking new ideas and continuous improvement [53]. Providing Sri Lankan business owners with the tools and encouragement they need to be innovative is crucial if the country is to maintain its global competitiveness and keep up with shifting customer preferences. The study emphasizes the crucial role of cultural factors in influencing digitalization strategies. For instance, Chinese small and medium-sized enterprises (SMEs) are more inclined toward risk-taking and innovation adoption than their Sri Lankan counterparts, who may prioritize stable, incremental changes. These cultural differences highlight the necessity of tailored strategies for successful digital transformation.

Regulatory and legal considerations emerged as another key theme in the analysis. Chinese entrepreneurs emphasized the importance of understanding and complying with international regulations, customs procedures, tax policies, and intellectual property rights protection in each target market. Similarly, Sri Lankan entrepreneurs recognized the need for thorough research and adaptation to different legal frameworks. As scholars have emphasized, SMEs need to tackle regulatory and legal challenges to ensure seamless operations, comply with local laws, and achieve successful international expansion [54]. This idea aligns with Institutional Theory, which suggests that organizations are affected by the institutional environment, including formal regulations and informal cultural norms [17,23]. The strict regulatory frameworks in China and the absence of supportive policies in Sri Lanka emphasize the necessity for institutional reforms to enable the digitalization of small and medium-sized enterprises. This understanding emphasizes the necessity of institutional reforms to facilitate SME digitalization in countries seeking to take advantage of modern digitalization in approaching cross-border e-commerce.

The analysis further revealed the influence of cross-cultural factors on global expansion through e-commerce. Chinese entrepreneurs recognized localization's significance in resonating with international consumers, tailoring their marketing strategies, product offerings, and customer experiences to suit specific cultural contexts. Sri Lankan entrepreneurs also acknowledged the challenge of understanding and adapting to different cultural preferences in foreign markets [55]. This underscores the necessity of cultural intelligence and personalized approaches to successfully navigate international markets and meet the needs of diverse consumers.

The role of government support and policies emerged as a vital theme in the analysis. Chinese entrepreneurs acknowledged the supportive role of the Chinese government in promoting e-commerce and international expansion through various policies, incentives,

and initiatives. In contrast, Sri Lankan entrepreneurs emphasized the need for more favorable policies, capacity-building initiatives, and financial incentives to encourage SMEs in their internationalization efforts [4,56]. This underlines the importance of collaborative efforts between the government, private sector, and industry associations to create an enabling environment for SMEs and foster e-commerce growth. The differences in digitalization strategies between Chinese and Sri Lankan SMEs can be attributed to varying levels of governmental support, infrastructure development, and access to technology. Chinese SMEs benefit from extensive government initiatives promoting digital entrepreneurship, whereas Sri Lankan SMEs often rely on private-sector partnerships to overcome infrastructural limitations.

The analysis uncovers several practical adaptive strategies that Sri Lankan SMEs can readily employ to thrive despite limited government support. These strategies, such as leveraging digital marketing for international reach, forming strategic partnerships for supply chain efficiency, and adopting cost-effective technological solutions for operational efficiency, are within reach. By focusing on these areas, Sri Lankan SMEs can confidently navigate the constraints of inadequate infrastructure and financial support.

The research has uncovered several policies impacting SMEs in China and Sri Lanka. China's complex and stringent regulatory frameworks, particularly those related to international trade, pose substantial challenges. These regulations are barriers to market entry and increase operational costs for SMEs aspiring to expand globally. Moreover, Chinese SMEs need to grapple with extensive compliance requirements, which can potentially stifle innovation and agility. In Sri Lanka, a lack of supportive government policies, insufficient financial incentives, and limited access to advanced technologies hinder SMEs' digitalization efforts. Bureaucratic hurdles and inadequate infrastructure support further exacerbate Sri Lankan SMEs' difficulties in leveraging e-commerce for global expansion.

The policies that must be implemented in each country are different due to their distinct economic landscapes and stages of digital development. In China, policies should simplify regulatory processes, enhance transparency, and provide targeted support for international compliance. These measures would reduce operational burdens and promote smoother global integration for Chinese SMEs. In contrast, Sri Lanka requires policies that build foundational support for digitalization and e-commerce. This includes increasing financial incentives, investing in advanced technological infrastructure, and streamlining bureaucratic procedures. Additionally, capacity-building programs to enhance digital skills among SMEs are crucial for fostering innovation and competitiveness.

Understanding these highlighted differences is not just important; it is crucial for researchers and policymakers. While both countries share the goal of supporting SME growth, their strategies must be tailored to address specific challenges at different stages of development. China's policies should evolve towards enhancing global competitiveness, whereas Sri Lanka needs foundational policies that establish a robust digital ecosystem to enable future growth. This challenge of tailoring policies to unique needs should motivate us to develop effective strategies.

The study draws on several management theories to bolster its theoretical foundation, particularly in explaining the digitization path for SMEs. The ecosystem theory provides a valuable lens to understand how SMEs interact within a broader digital ecosystem, including customers, suppliers, government agencies, and technology providers. This theory suggests that the success of SMEs' digital transformation depends on the health and support of the entire ecosystem. Our findings, which highlight the importance of advanced technologies and financial resources, align with the ecosystem theory's emphasis on the interdependencies among different actors and resources, providing empirical support for this theory.

The resource-Based View (RBV) Theory further enriches our analysis by accentuating the role of internal resources and capabilities in attaining competitive advantage [22]. The ability of Chinese SMEs to harness advanced technologies and foster continuous innovation can be viewed as valuable, rare, inimitable, and non-substitutable (VRIN) resources that bolster their competitive stance [23, 24]. Conversely, the resource constraints of Sri Lankan SMEs underscore the need for policies that augment their access to crucial resources and capabilities, thereby highlighting the unique value of the RBV Theory in our research.

Several detailed, actionable recommendations are proposed to help SMEs in Sri Lanka and China overcome the challenges identified in this study. SMEs should invest in digital marketing and e-commerce to expand their global market reach, utilizing social media platforms and e-commerce websites to enhance visibility and sales significantly. Forming strategic partnerships with other local or international firms can help overcome logistical and financial hurdles by sharing resources and knowledge. Adopting affordable technologies such as cloud computing and mobile applications can streamline operations and reduce costs. Additionally, investing in training and capacity-building initiatives to enhance digital literacy and management skills is critical for navigating the complexities of global markets. These strategies collectively provide a roadmap for SMEs to thrive in the evolving digital landscape.

The findings comprehensively understand shared and unique narratives, addressing motivations, challenges, and opportunities for SMEs in China and Sri Lanka. Key themes include the popularity of Chinese products, technology use, international expansion, regulatory considerations, cross-cultural factors, and government support. These insights support the digital transformation and global development of SMEs in both countries.

7. Conclusion and future directions

This research delves into the unique digitalization journey of SMEs in China and Sri Lanka within the e-commerce landscape. By adopting a comparative approach, this study elucidates the challenges SMEs face in different geopolitical contexts and offers actionable insights for policymakers and business leaders aiming to foster SME growth through digitalization.

Through qualitative analysis, distinct themes emerge, illuminating the motivations, challenges, and opportunities these SMEs encounter as they venture into the global market using e-commerce platforms. The study identifies crucial themes such as innovation, customer experience, and understanding regulatory frameworks in target markets. Chinese entrepreneurs perceive cross-border e-commerce as a beacon of hope, harnessing cutting-edge technologies and reaping the benefits of supportive government policies. In contrast, Sri Lankan entrepreneurs need more government support, including financial aid, logistics networks, and investment in e-

commerce infrastructure. Capacity-building programs are a necessity for enhancing digital skills. Empowering Sri Lankan entrepreneurs to connect with global counterparts through e-commerce can propel economic growth. These insights are instrumental in decision-making to foster SME growth and success in e-commerce.

While this study offers valuable insights, it is crucial to recognize its limitations. The research was confined to a specific timeframe and relied on self-reported data, potentially constraining its applicability. Moreover, the study predominantly focused on the perspectives of entrepreneurs and business owners, overlooking other key stakeholders. Future research must adopt a multi-stakeholder approach to gain a comprehensive understanding of the digitalization process. By addressing these limitations, the robustness and applicability of future research in this field can be significantly enhanced.

Future research should investigate the effectiveness of specific strategies and interventions, such as government policies and capacity-building programs, in bolstering SMEs' digitalization efforts. Incorporating longitudinal studies and a mix of data collection methods can overcome current constraints and provide a more comprehensive understanding of the digitalization process. Moreover, as technology advances, future research can explore the impact of emerging technologies on the digitalization journey of SMEs. Understanding the potential benefits and challenges of these technologies can guide businesses in making informed decisions and adapting to the evolving digital landscape, fostering a sense of optimism for the future of SME digitalization. Creating an enabling environment through supportive policies, advanced technological infrastructure, and enhanced digital skills is not just important; SMEs must thrive in the global e-commerce arena. By addressing these areas, policymakers and stakeholders can ensure that SMEs in both countries can harness the full potential of digitalization for sustained economic growth and international competitiveness. This urgency to support SMEs is underscored by their potential to drive economic growth and enhance international competitiveness, making it a shared responsibility for all stakeholders. By addressing both the opportunities and barriers to digitalization, this research provides an understanding of how SMEs can navigate the complex landscape of global e-commerce, thereby contributing to the broader discourse on international business and the digital economy. Future research could build on these findings by exploring the longitudinal impact of digitalization on SME performance and by examining the role of emerging technologies, such as artificial intelligence and blockchain, in furthering SME internationalization.

Data availability statement

The dataset for the study "Cross-Cultural Perspectives on Internationalization: A Comparative Study of Chinese and Sri Lankan Entrepreneurs" by Kumarasinghe and Huang (2024) is available on Mendeley Data (\DOI: 10.17632/vzd53nny6m.1).

CRediT authorship contribution statement

Qiubo Huang: Writing – review & editing, Methodology, Funding acquisition, Data curation, Conceptualization. **P.J. Kumarasinghe:** Writing – original draft, Validation, Methodology, Investigation, Formal analysis, Data curation.

Declaration of competing interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: Qiubo Huang reports financial support was provided by Soft Science Research Program of the Zhejiang Province Department of Science and Technology under Grant numbers 2021C35025 and 2021C35006.

Acknowledgment

This work was partly supported by an academic funding project for the Soft Science Research Program of the Zhejiang Province Department of Science and Technology, Grant numbers 2021C35025 and 2021C35006.

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