

China's E-Commerce: Prospects and Challenges for Sierra Leone Gender Perspective

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Abstract

This research employs a gender perspective into e-commerce between Sierra Leone and China, by analyzing the prospects and challenges of e-commerce on women owned SMEs. Electronic commerce (E-commerce) is critical to Sierra Leonean women SME's and career development. Since China and Sierra Leone established diplomatic relations over half a century ago, the trade and commerce has grown stronger and stronger with China been the largest trading partner to Sierra Leone. Based on the quasi-natural experiment of China E-Commerce Demonstration Country Program, the researcher used a mix of quantitative and qualitative research methodologies to collate data of a survey from E-commerce seminar organized by the Free trade department of Zhejiang Province in Hangzhou, China in October 2023. Key findings indicate that E-commerce in China is thriving since the early 2000s and it is expected to triple by 2036. Sierra Leone stands to benefit more from this if the country could invest in women SMEs on e-commerce. Women's participation in e-commerce between China and Sierra Leone if harnessed could change their gendered roles and the patriarchal norms in the country. The findings further revealed that there are prospects for e-banking, online shopping, e-government, tele-medicines. Some of the challenges identified are social cultural privacy, lack of education and awareness among women, the language barrier, the exchange rate of the Leone to the US dollar then to the Chinese Yuan and the weak ICT infrastructure in Sierra Leone are some of the challenges women face. Women in SMEs E-commerce are facing these challenges because of gender stereotypes and the patriarchal nature of the Sierra Leonean society in particular.

Keywords

E-Commerce, Gender, Women SMEs, ICT

1. Introduction

The term Cross-border electronic commerce (e-commerce) refers to a kind of international commercial activity in which transaction subjects belonging to different customs borders reach transactions through e-commerce platforms, carry out electronic payment and settlement, and deliver goods and complete transactions through cross-border logistics. This has been used to mean the act of buying and selling of goods and services, and accepting payment transactions electronically by both men and women in Sierra Leone from China which is the focus of this study. They do normally through the internet and other forms and/or platforms of payment which include, but not limited to, credit or debit card, Automated Teller Machines (ATM), orange/Afri-money and other electronic check processing. This type of business model or online retail is basically done through digital stores or websites such as Alibaba, (Founded in 1999 with 18 people led by Jack Ma. One of the **largest online and mobile commerce companies** in the world with more than **10 million** small businesses are currently active on the Group's platforms, Employees: 255,800 (as of April 2022)) Amazon, EBay, Jack Ma, Taobao, TMALL etc. In Sierra Leone, such business transaction is done via different digital platforms as stated inter alia including social media platforms such as Facebook, Whatsapp, orange money, Afrimoney, We-chat, e-banking, and it has been divided into the following six models:

- 1) Business-to-Business (B2B)
- 2) Business-to-Consumers (B2C)
- 3) Consumer-to-Consumer (C2C)
- 4) Consumer-to-Business (C2B)
- 5) Business-to Administration (B2A)
- 6) Consumer-to-Administration (C2A)

This form of online business has great potential to improve on Sierra Leonean women businesses and promote growth and development in the country battered economy especially so with China which is the biggest trading partner to Sierra Leone where a lot of women are engaged in cross border e-commerce trade. The focus of this study is the gendered implication of E-commerce between Sierra Leone and China. This study will therefore proffer recommendations to the government, the Chinese community in Sierra Leone, business women and men the gender implication of e-commerce in Sierra Leonean economy, the study focus is how to proffer solution to policy makers to overcome gender inequality in e-commerce that will contribute to sustainable growth and development and strengthen the bilateral ties between the two countries, e-commerce also includes cross-border electronic commerce and delivered goods and services, this study will also look at the readiness of Sierra Leone for e-commerce if the share of Sierra Leone trade is to increase as envisaged by the 2030 agenda for sustainable development the government needs to take action to strengthen the capacity of women in the e-commerce, with the experience from the Ebola (2014-2015) and the COVID-19 pandemics have made this need even more urgent. The economic commission for

Africa, through its African Information Society Initiatives (AISI), has identified e-commerce as one of the four key areas in African to exploit ICT's to best advance societal and women's economic development. Sierra Leone even though endowed with a lot of natural resources, has a relatively impoverished women compared to men, many of whom live in rural areas where the benefit of e-commerce has not been felt. The sparse nature of ICT infrastructural development in Sierra Leone has resulted to major difference in the overall economies in the level of the women that are able to use the ICT infrastructure to boost their e-commerce activities compared to men unlike China where there are improved ICT infrastructures and e-commerce users.

1.1. Background to China's E-Commerce

China is the world's leader in e-commerce and is expected to grow even further. China entered e-business in 1996, established China Electronic Commerce Association (CECA) in 2000 and at that time accounted for only 5.2 percent of the current e-commerce platforms (Liu, 2020). By 2007, 22.1 percent of online users had been using online shopping sites, strongly due to the emerging Alibaba and Taobao, a C2C platform of Alibaba, which was established in 2003. In 2004, Alibaba launched Alipay to gain trust and promote online purchasing and payments. By that time e-commerce in China had three main challenges some of which were lack of Internet users, logistics and distribution, distrust in the online payment system, were now a thing of the past (de Leeuw, 2017). In terms of the forecast for the next decade, China is expected to grow due to the increase in Internet and mobile penetration rate, migration of the rural population to urban areas, more extensive coverage of rural areas with the Internet, combining online and offline shopping (O2O—online to offline, order, get info online, pick up in stores), volume growth of more expensive product categories (high-end and luxury products), changing demographics, and gaining wealth of millennial (de Leeuw, 2017).

According to a McKinsey report, in 2016, China accounted for more than 40 percent of the value of worldwide transactions in e-commerce. The value of China's e-commerce transactions was estimated to be larger than that of France, Germany, Japan, the United Kingdom, and the United States combined. Annual e-commerce trade volume in China grew from RMB 930 billion in 2004 to RMB 31,630 billion in 2018. Online purchases have become part of daily life for many Chinese households. Despite the apparent scale of e-commerce development, the growth of e-commerce has been unevenly distributed among provinces and between urban and rural areas. In Shanghai 49 percent and in Beijing 44 percent of total retail sales of consumer goods were purchased online in 2017, but the share was much lower (less than 2 percent) in seven inland provinces. Ministry of Commerce data indicate that nearly three-quarters of online stores and Internet users were concentrated in urban areas. In 2018, urban Internet users accounted for about 73 percent of the national total (829 million), much higher than their share of the total population (60 percent).

With the strong urban concentration so far, the potential for continued growth and expansion of e-commerce remains strong as penetration into the rural areas continues. Alibaba and Taobao Villages have emerged and expanded rapidly—from 20 in 2013 to 3,202 in 2018—offering useful examples of e-commerce development in rural China. As the numbers of these rural villages expand, clusters of them come to form Taobao Towns. The number of these towns grew from 19 in 2014 to 363 in 2018. While the majority of Taobao Villages and Taobao Towns are concentrated in the coastal region, particularly in Guangdong, Jiangsu, Zhejiang provinces, they also have spread to inland areas. The rapid expansion and prosperity of Taobao Villages and Taobao Towns shows that e-commerce is not only a phenomenon of urban areas in high-income countries; with the right conditions, it can flourish in rural areas in developing countries. E-commerce experience in China offers many examples of ways in which such business can support existing economic activities and develop new ones, create employment, and improve household welfare in Sierra Leone. Case studies by Ali Research show the prosperity of Taobao Villages and that people gain wealth and have better lives when they participate in e-commerce. In Shuyang and Suining, Jiangsu province, many young and talented people, including women, have returned, bringing back with them the skills and entrepreneurial spirit needed to develop e-commerce businesses and earn incomes similar to or higher than they did in the cities, while enjoying family life with their elders and children. Many have become leaders of e-commerce in their home villages and are role models for fellow villagers. In Heze, Shandong province, people gained wealth by creating and developing niche products and whole new industries—in this case, special clothing, such as performance dresses for holiday occasions—and sell large volumes through online platforms serving the domestic and international markets. In Mengjin, Henan province, people are enriched by access to new markets through online platforms for traditional cultural products, such as peony painting and Tang tri-color ceramics. Many young people have started to (re)learn traditional skills that will sustain the local cultural heritage. In Xifeng, Guizhou province, households receive a higher farm gate price for kiwis and therefore have an incentive to increase production through online sales to domestic as well as European markets. In Huimin, Shandong province, building on traditional net production, not only developing large-scale automated production of nets for construction and agriculture usage, but also innovating to create customized products with higher value added, such as string lamps and climbing facilities for playgrounds.

In Yiwu, Zhejiang province, households developed e-commerce building on the advantage of proximity to hardware industrial park with support from the government, including subsidized office space rental and targeted support to attract migrants to return to develop e-commerce.

The regional distribution of online purchases was in line with population distribution: the central and eastern regions account for 47 percent of online purchases in poverty-stricken counties (similar to their population share). Some

poverty stricken counties experienced a decline in e-commerce activities, especially online sales. The reasons e-commerce has grown faster in some poverty-stricken areas than in others are unclear and merit further research

Since the end of the COVID-19 pandemic more measures have been put in place to boost development of e-commerce, which plays a vital role in driving growth of the real economy, promoting trade and boosting capital flows. Nurturing internationally competitive e-commerce industry clusters and leading enterprises has been emphasized, which will definitely help empower growth of the real economy.

The ministry of commerce has been working to promote the launch of favorable policies that facilitate trade reform and innovative development, strengthen digital trade platform construction, and help foreign trade companies in Sierra Leone with their digital transformation and upgrade. It will also prioritize boosting consumption among all work, A lot of efforts are made to guide e-commerce platforms to deeply integrate with the real economy, encourage e-commerce enterprises to extend their presence to rural areas, enhance logistics efficiency, reduce logistics service costs and promote sales of rural specialty products.

China is actively advancing bilateral e-commerce cooperation with countries and regions involved in the **Belt and Road Initiative** including Sierra Leone. The Ministry of Commerce has also established new national e-commerce demonstration bases, including the Huawei E-commerce Logistics Park in Hubei province and the Chongqing Road Logistics Base.

In 2022, China's digital economy surpassed 50 trillion Yuan (\$6.89 trillion) for the first time, accounting for 41.5 percent of the country's GDP. E-commerce constitutes the largest and most extensive component within the digital economy.¹

In recent years, China's e-commerce sector has continuously innovated and grown in scale and quality, which supports the employment of nearly 70 million people. China has maintained its position as the world's largest online retail market for 10 consecutive years, and its role and significance in the overall global digital development landscape have become increasingly prominent. E-commerce, through digital technology, optimized international transactions and production processes, reduced transaction and production costs, enhanced supply and demand matching, and efficiently allocated various cross-border resources. It has played a crucial role in facilitating foreign trade and two-way flows of cross-border capital for China. E-commerce drives the substantial growth of the real economy, playing a crucial role in the overall development of China's industries. With a diverse manufacturing sector and extensive industrial chains, China hosts a large number of small and medium-sized enterprises (SMEs). Digital platforms help innovate their trade models, with online and offline segments complementing each other.

As digital technology increasingly integrates into all aspects of economic and social development, digitalization has opened up a new, broader, deeper and more

¹E-commerce development experience from China, World bank group, Alibaba group 2019.

potential development prospect for businesses with China and Sierra Leone. The convergence of digital and real economies has become an important engine that drives stable growth and high-quality development.

1.2. China's Cross Border E-Commerce

In 2023, China experienced a significant 15.6 percent surge in cross-border e-commerce (CBEC) import-export volumes, solidifying its position as a global leader in e-commerce. This growth was largely attributed to the Chinese government initiatives aimed at fostering a favorable environment for CBEC, including the optimization of comprehensive pilot zones, and the advancement of the “*Silk Road e-commerce under the Belt and Road Initiative*.”

China's Cross Border E-commerce (CBEC) import and export volume surged to RMB 2.38 trillion (US\$331 billion), marking a significant 15.6 percent increase year-on-year. This growth rate exceeded the previous year's one, indicating the ongoing momentum in China's CBEC landscape.²

As illustrated in **Figure 1**, China's CBEC import and export volumes have maintained a consistent upward trajectory over the years, this is mainly because of the ongoing development of globalization and new technologies, such as AI. Despite fluctuation registered in the growth rate for both imports and exports, the overall performance in recent years has been steady and upward with exports consistently outpacing imports.³ The **export** segment experienced a particularly strong growth in 2023 with a year-on-year surge of 19.6 percent, surpassing the 2022 growth rate of **10.1 percent**. This underscores the enduring demand for Chinese products not just in Sierra Leone but the in international markets.⁴

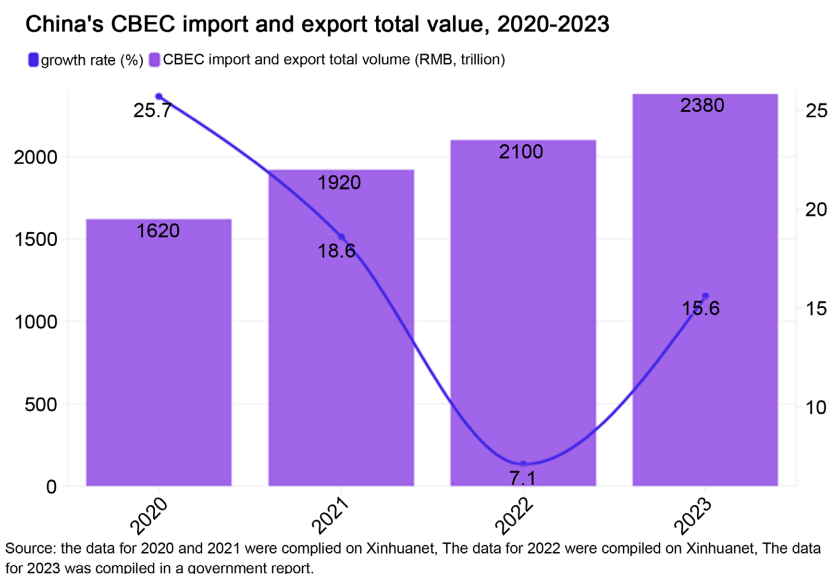


Figure 1. China's CBEC import and export total value between 2020 and 2023.

²2019 International Bank for Reconstruction and Development/The World Bank and Alibaba Group.

³China briefing 2023.

⁴China briefing 2023.

The expansion of this segment is mirrored by the growing engagement of consumers, which reached 163 million in 2023. This annual increase is largely attributed to CBEC's ability to easily meet consumers' diverse and personal needs. Although the growth rate in imports trails that of exports, it nonetheless signifies a notable recovery in the influx of foreign goods into the Chinese market through CBEC channels.

This data suggests a new deep and long-standing period of development for the CBEC sector, propelled by a growing number of companies that get attracted by this sector. As a matter of fact, as of July 2023, more than 100,000 market entities got engaged in CBEC activities, underscoring the sector's pivotal role in China's foreign trade. With the increased number of players entering the market, however, competition among them has become more intense⁵. This trend has prompted companies to increasingly focus on foreign markets to seize larger growth opportunities.

China's e-commerce initiatives like **Alibaba's "digital trade service base" in Shanghai**, aimed at bolstering local merchants venturing into overseas markets, exemplify this strategic shift. Following this initiative, Alibaba's international operations recorded a remarkable 53 percent revenue growth, reflecting the robust expansion of the overseas market. This trend is not exclusive to Alibaba but encompasses many other e-commerce giants, who are opening up new opportunities for the development of CBEC while also becoming a new channel for many small and medium-sized enterprises (SMEs) to expedite their international expansion.

1.3. Policies Contributing to China's Cross-Border E-Commerce Sector Growth

The rapid growth of China's CBEC sector in 2023 can be largely attributed to supportive Chinese government policies aimed at facilitating both import and export activities. Some of which are:

1) Preferential tax treatments and minimal administrative requirements: China has been offering preferential tax treatment and easing administrative requirements to support the development of CBEC. For products sold to Chinese consumers through cross-border trade, selling directly to Chinese consumers via cross-border trade comes with the advantage of minimal administrative requirements. In addition to not requiring a legal entity in China, the customs clearance and the labeling requirements might be less stringent compared to general trade, subject to certain qualifications.

2) Timely policy adjustments: Chinese consumers, particularly for products in categories like beauty, fragrance, and nutrition, China adjusted and optimized the list of **imported retail goods for cross-border e-commerce** in 2022 by adding a total of 29 new product categories. This regulatory adjustment was designed to streamline the import processes, ensuring that consumers have access to a wider range of high-quality products from overseas. Dedicated platforms such as **Tmall**

⁵South China morning post.

and **JD.com** are contributing to the fostering of a conducive CBEC environment for international brands by actively implementing policies aimed at easing their market entrance. These initiatives include enabling official flagship stores, empowering brands to establish a direct presence and sell directly to Chinese consumers, and helping with setting up global payment accounts for seamless international transactions.

3) The “Silk Road e-commerce” and Belt and Road economic and trade cooperation: In order to ensure the steady and sustainable growth of CBEC exports, the relevant departments also encouraged Chinese companies to actively participate in the “**Silk Road e-commerce**”, an international platform for economic cooperation under the Belt and Road Initiative (BRI). This project actively promotes the expansion of bilateral cooperation between China, Sierra Leone and countries along the BRI route. By fostering collaboration with 30 countries by October 2023, China not only expanded market access but also catalyzed growth in industries like logistics and finance.

4) Comprehensive pilot zones: Comprehensive pilot zones were set up at the same time, the continued development of integrated **pilot zones** for CBEC has also provided an objective contribution to the growth of this sector. The comprehensive development of these pilot zones has proven to be instrumental in driving industry expansion, amplifying CBEC transaction volume, and streamlining enterprise registration procedures. By optimizing key components such as payment systems, customs clearance procedures, logistics infrastructure, and warehousing facilities, these zones have effectively simplified transaction processes and minimized associated costs. The Chinese government has also been encouraging a further upgrade of this zone into a model that integrates CBEC pilot zones and industrial belts to facilitate business-to-business (B2B) exports.

1.4. China’s E-Commerce 2024 Outlook

In the outlook for 2024, several factors, such as the ongoing global unrest like the Ukraine-Russia war, the war in Gaza and the **Red Sea Crisis**, may potentially hinder the growth rate of CBEC in China by impacting global shipping and e-commerce landscapes, thus affecting consumer confidence.

Despite this, the Chinese government expressed commitment to advance the improvement and innovation of comprehensive pilot zones for CBEC underscoring its dedication to fostering an environment conducive to the growth of this sector. Furthermore, additional efforts will be placed in tackling regulatory and standardization issues, while also promoting a further optimization of transportation and delivery systems.

Finally, China’s well-known focus on innovation is poised to exert a significant influence also on the continuous development of CBEC, further solidifying its position as a cornerstone of China’s foreign trade strategy. Due to the convergence of these factors, it can be expected for CBEC to continue growing and innovating in the next years, further strengthening China’s position as a global leader in

CBEC and underscoring its increasing reliance on this form of foreign trade.⁶

The COVID-19 pandemic has further accelerated the e-commerce activities in China, as wary consumers are increasingly using online channel for purchases to avoid getting exposed to disease vectors, a trend that continues beyond pandemic.

The growth in the e-commerce market is also supported by the improving e-commerce activities in rural areas. According to the China's Ministry of Commerce, online retail sales in rural village communities increased by 35.3% year-on-years in Q1 2021.

Online shopping events such as Singles' Day (or Double 11) also contribute considerably to the overall online sales. Chinese e-commerce giants including Alibaba and JD.com collectively registered a massive sale of \$139 billion during Singles' Day event in 2021, registering a jump of 8% and 28%, respectively, over the previous year (Figure 2).

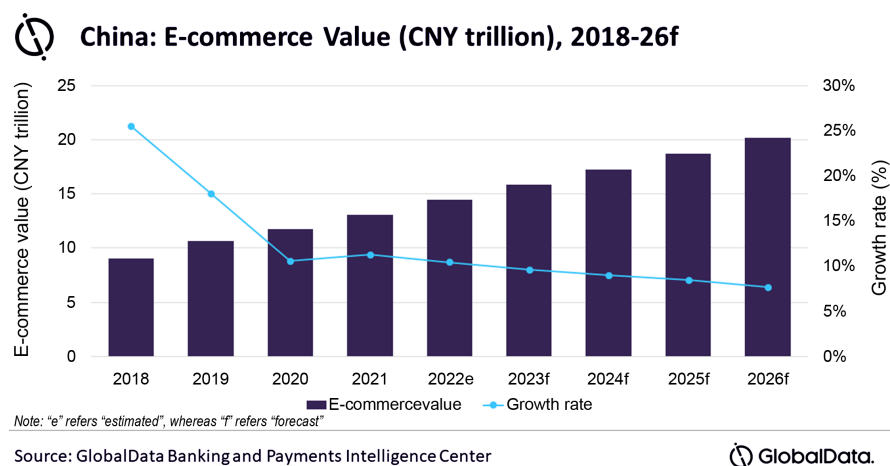


Figure 2. China's e-commerce value forecast 2018-2026 and beyond.

1.5. China's Rural E-Commerce Development and Digital Transformation of the Agricultural Industry Chain

The Internet has changed the information asymmetry between rural areas and the external world. Product circulation, including agricultural product circulation, is primarily a matter of demand. If people don't know where the demand is, even the best product won't be sold. The interconnection of the Internet connects closed, backward, remote and limited demand rural areas with China and the world. The mutually beneficial effect of the Internet has enabled farmers to have targeted production and operation, increased income, and added new economic vitality. For rural areas, especially those at the forest areas, islands, grasslands, Plateau Mountains, deserts and oases, a mechanism of interconnection and mutual benefit can be used to seek opportunities for closed resources and bring vitality to closed rural areas. The Chinese form of Village in Flows in the rural areas virtual agglomeration brings a large amount of product output, represented by

⁶China briefing 2023.

Taobao Village, WeChat Business Village, and E-commerce Village. The number of rural mobile internet users has reached 348 million. In terms of the usage rate of mobile applications, social networks, financial management, video live, online shopping and tourism are the most widely used apps among rural users, with more than 250 million rural users.

1.6. China's Live Streaming and E-Commerce

Live streaming is the integration of live video streaming with online shopping. This e-commerce trend is being driven most by Asian markets, particularly China, where live streaming first took off in 2016.

Since then, live stream has skyrocketed in terms of online revenue: a development fueled by the COVID-19 pandemic, when China's zero-COVID policy forced consumers to stay at home.

But recent reports question the viability of the live commerce trend. Where China was the perfect example of a market where live commerce was thriving, recent developments point to an oversaturation of the market. Live streaming combines live videos streaming with online shopping by allowing viewers to watch and interact with the sellers in real-time while making purchase. A lot of benefits are associated with live-streaming there is real time interaction between buyers and sellers, there is immediate feedback, a more engaging shopping experience and the ability to see products demonstrated live just like the **bricks and mortar**. The live stream market is growing steadily in China since 2021⁷. Live-stream in China is popular due to the widespread use of smart phones, convenient online payment methods, the influence of social media and the engaging format that combines entertainment with shopping. Viewers can watch streams and ask questions and make purchases in real-time during the broadcast. In other to sell on live stream choose a suitable platform, set up a good quality live stream, and engage activity with your audience while showcasing your products. Offers exclusive deals and use viewers feed back to improve future streams.

As illustrated in **Figure 3**; a year after the widespread adoption of live stream, in 2017. Live streaming transactions skyrocketed during the pandemic. This led to a GMV of US\$186.3 billion in 2020, doubling again to US\$366 billion in 2021. The latest available data shows a GMV of US\$520.5 billion in 2022.⁸

The amazing success of live commerce in China, coupled with favorable external conditions, has led to the emergence of a plethora of providers and live-streaming hosts. As the prospect of making large sums of money has been high with the development of this trend, its profitability is beginning to wane.

As the live-stream market in China follows its path, the rise of new hosts and providers shows that the market is becoming more diverse and competitive. Livestream has redefined the way brands connect with their audience in China—

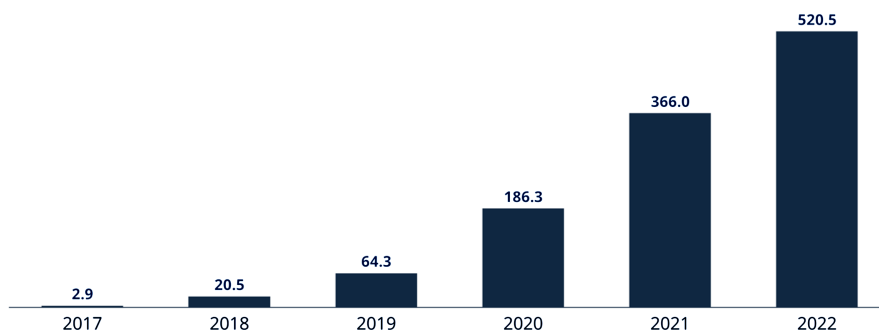
⁷Lucia Laurer|March 01, 2024, Live Commerce in China: Taobao, Top Platforms & Market Growth.

⁸<https://static.ecommercedb.com/media/2024/02/gross-merchandise-value-of-livestreaming-commerce-in-china-2017-2022-12520.png>.

and it has the potential to reshape e-commerce in other countries as well including women in Sierra Leone.

GROSS MERCHANDISE VALUE OF LIVESTREAMING COMMERCE IN CHINA, 2017-2022

in billion US\$



Sources: 100ec.cn, Statista, exchangerates.org.uk.

ECDB

Figure 3. Gross merchandise value of live-streaming in China 2017-2022.

1.7. Sierra Leone's (E-Commerce) Electronic Commerce

Electronic commerce is still at an early stage of development in Sierra Leone with a big gender gap between women and men. Nearly all transactions are carried out off line and in cash, though mobile money platforms supported by mobile phone companies are becoming more popular. However, the information communication and technology (ICT) infrastructures is generally inadequate and even the use of debit or credit cards is highly limited. ATMs have been introduced by some banks but are not widely in use countrywide. There is a growing demand for online goods but those who shop online pay a premium for DHL delivery since Sierra Leone post and telecommunication services (SALPOST) are almost dysfunctional.

Buying and selling of goods and services online is not a new form of business transaction in Sierra Leone; this has existed for decades and evolved rapidly over-time due to the development of Science and Technology, smart phones, computers, including other electronic devices -has over the years made it a lot easier to buy or sell products over the internet through digital stores-e-commerce.

Before the advent of ICT in Sierra Leone, traditional business model or brick-and-mortar is the preferred form of business transaction but there has been a rapid change in the online retail industry especially during the Ebola outbreak (2014-2015) and the global COVID-19 pandemic because of the lock-downs or stay at home measures by the government. Women as well as men find it more convenient, faster and even more reliable to shop online as opposed to face-to-face because of the global COVID-19 pandemic restrictions. Given that Sierra Leonean women in small and medium enterprises (SME) business sector always put primacy on meeting the needs of their consumers, they are either converting from

brick-and-mortar to e-commerce or operating both simultaneously because of the challenges in the ICT infrastructures in the country. This study aims at discussing e-commerce within the Sierra Leonean context, and women doing cross both e-commerce in China bringing out its prospects and challenges from a gender perspective.

Online retail in Sierra Leone is much easier today, as long as one has a smart phone, computer or any electronic device and a reliable 24/7 internet data in order to browse the internet. Likewise one can buy or transact business in China as long as you are connected on the internet. This has also helped the government of Sierra Leone to market her rich mineral resources which has attracted huge investment in the country. E-commerce has now encouraged a lot of businesses to sprung up, for instance BAAJA motorbike and tricycle Technologies from India, created for businesses within Sierra Leone to trade their products with ease based on partnership with platform owners. Now women in Sierra Leone and even beyond can make purchases for themselves to be delivered to proxies within Sierra Leone. Among many things, the platform provides a user-friendly and scam-free medium of transacting directly with businesses as well as C2C while keeping security and reliability at the heart of its operations.

1.8. Sierra Leone's E-Commerce and the Digital Finance Service (DFS)

The e-commerce and digital financial services (DFS) in Sierra Leone cover the development of a robust marketplace of digital trade and financial services as a key component of the digital economy in the country. Digital tools and marketplaces within and across sectors foster productivity, the uptake of goods and services, and diversified economic growth. Although ensuring digital-savvy users and access to connectivity facilitates the creation of digital marketplaces, digital financial services (DFS) and transactions are the ultimate endgame. In Sierra Leone DFS, financial products and services, including payments, transfers, savings, credit, insurance, securities, financial planning, and account statements delivered via digital/electronic technology such as e-money (initiated either online or on a mobile phone), payment cards and regular bank accounts. They enhance the interactions between businesses and users by creating new digital channels, while reducing transaction and commercial costs. This ultimately generates more access to financial services but without specific focus on women (i.e., financial inclusion). In turn, wider financial inclusion makes the market attractive for the sale of traditional and digital goods and services online i.e. e-commerce. Its development lowers the market's asymmetry of information, which increases consumption, improves efficiency through ICT-backed DFS, financial products and services, including payments, transfers, savings, credit, insurance, securities, financial planning, and account statements delivered via digital/electronic technology such as e-money (initiated either online or on a mobile phone), payment cards and regular bank accounts.

Unlocking the e-commerce and digital financial services will require development of a robust mechanisms for data protection, cross border data flows, and data localization; online consumer protection; and electronic signatures and electronic authentication; electronic payments; and provisions to address the digital DFS can be seen as the bedrock for digital transactions and e-commerce as a catalyst for SMEs' competitiveness and job creation. In Sierra Leone, these sub-sectors have different levels of maturity and face different situations. Financial inclusion is growing globally, and Sierra Leone is no exception. After lagging for some years, the country started moving quickly towards digital financial products, which was clearly shown during the COVID-19 pandemic. The number of registered DFS accounts reached 2.2 million in December 2020, up from 1.4 million in December 2019, with nearly 20% of the population having access to formal financial services⁹. As of 2020, 10 commercial banks, two mobile network operations (MNOs), and one Microfinance Institution¹⁰ (MFI) had DFS on their portfolio of services. The banking sector acknowledges the importance of digitalization because **brick and mortar** channels are too expensive for expansion outside the main cities¹¹. Digital channels stand out as the best way to address the unbanked population (80%). The main driver of financial inclusion has been mobile money (m-money) offered by MNOs, whose agents account for the bulk of service access points. Cognizant of this growth and the intuitive tradeoff between higher regulations and increased financial inclusion, the Bank of Sierra Leone (BSL) as the regulator in the financial sector, launched the first mobile financial services guidelines in 2015 with a focus on MNOs' m-money. However, there is still the need to broaden the scope to provide regulations for electronic money services in general (e-money).

Due to the lack of platform for interoperability¹², most banks have developed bilateral agreements with MNOs for account-to-wallet and wallet-to-account transactions. These Application Programming Interfaces (APIs) implemented by providers aim to deepen their value proposition for bill payment services, bulk payments, digital loans, and more. In the banking sector, the Automated Clearing House (ACH) and the Real Time Gross Settlement (RTGS) systems have been in use since 2013. The national switch, which was operationalized in early 2022¹³, is a critical component of the payments system as it complements the ACH, RTGS used by banks, and the APIs between them and MNOs for m-money (banks already engaged in bilateral agreements with MNOs would follow a framework). More recently, from January to June 2020, BSL facilitated agency banking guidelines and tiered know-your customer (KYC) requirements with increased flexibility for registration requirements

⁹Patricia Laverley, Deputy Minister of Finance - 14 Aug 2019.

¹⁰There are over 50 MFIs in the country. 5 of them are deposit-taking, out of which 1 already has a DFS solution and 2 are currently designing one and should launch them by 2022.

¹¹One stakeholder mentioned that the cost of setting one branch averages USD 1 million.

¹²This platform is included in the World Bank funded Sierra Leone Financial Inclusion Project starting in 2019 but is still to be implemented.

¹³Due to the COVID-19 pandemic the supply chain was affected which resulted in delays in the project implementation timeline.

(mainly for tier I and II, i.e., low-value accounts) with the intention to facilitate secure transactions¹⁴ and access to financial services. Despite the efforts to strengthen and diversify the cashless use cases, around 77% of the DFS transactions are made by airtime top-ups and CICO (cash in, cash out), thus showing a limited uptake of more sophisticated digital services that could extend the value in the ecosystem. There are use cases believed to have great potential for digitalization such as international remittances, which account for an estimated 5% of transaction value but less than 0.1% of transaction volumes¹⁵. However, generally the financial sector is perceived as “alien” for most of the population who believe such services are only for the richest individuals and are settled to the ubiquity of cash in the economy.

The NSFI translated to support to the Digital Financial Services Working Group created in 2016 and was operationalized by the National Payment Council (NPC) for enhanced decision making between public and private actors. Within the framework of the NSFI, in 2020 BSL developed guidelines for financial consumer protection to apply to all regulated financial institutions. The framework was reviewed later to address gaps in sections such as data protection and privacy which are key in DFS. The finalized financial consumer protection guidelines were launched in 2022. However, the value of these guidelines should be measured by the extent to which users particularly women are aware of consumer protection in the digital era for which more work is required¹⁶. However, despite the efforts achieved to date, the NSFI has already expired and ought to be revamped. Considering lessons learned, a new NSFI for a future period should¹⁷: (a) Align vision with actual capacity of BSL and ensure feasibility, (b) Enhance the monitoring and evaluation framework and data collection, (c) Implement risk management to mitigate negative external factors (i.e., pandemic), (d) Prioritize the financial inclusion of women, youth, and people with disabilities, (e) Include collaboration with MFIs, national telecommunication authority (NaTCA), banking associations, and apex institutions, (f) Periodically have all stakeholders at all levels review NSFI. Apart from developing new regulations (i.e., e-money guidelines), amending and updating existing ones (i.e., the Financial Services Act of 2021), and further driving government payments digitalization in collaboration with ministry of finance (MoF) and national revenue authority (NRA), the new National Strategy for Financial Inclusion (NSFI) should support the DFS women’s SMEs Working Group as the main driver of financial inclusion. Despite all of these development however, e-commerce is conversely still at a very early stage of development in Sierra Leone with only 1% of the population shopping online¹⁸. The

¹⁴MIC developed an E-transaction legislation in 2019 given legal recognition to electronic documentations, transactions and recognizes electronic signatures to be permissible in court.

¹⁵Source: State of the Digital Financial Services Market in Sierra Leone (UNCDF, BoSL, 2021).

¹⁶Consumer protection section has been created in the BoSL to attend consumer complaints, however further feedback and awareness mechanisms are required.

¹⁷<https://www.uncdf.org/article/7231/sierra-leones-journey-towards-digital-financial-inclusion-part-2>.

¹⁸Only 16% of the adult population that uses the internet is Sierra Leone shops online according to the B2C E-commerce index (UNCTAD, 2019) which is 1% of the population.

service sector, which is predominantly informal, has been recently hampered by the supply chain disruption¹⁹ with significant shortages on containers. The cash intensity of the economy is also detrimental for e-commerce uptake, as merchants prefer being paid in cash, and users are unaware and have distrust in the benefits of the digital channel. Younger segments of the population are more at ease making payments online, but their purchasing power is limited. For last-mile logistics, the underdeveloped addressing system limits parcel delivery and ordering internationally is particularly challenging. Notably, the Freetown City Council in consultation with the Ministry of Trade and Industry (MTI) is trying to renumber addresses leveraging past iterations on waste management. Here, ministry departments and agencies (MDAs) with similar objectives such as NCRA (residence registry) and the Sierra Leone Post and Telecommunication Services (SALPOST) (parcel delivery) are not yet engaged in this effort. When it comes to international supply chains, the government of Sierra Leone (GoSL) ratified the African Continental Free Trade Agreement (AfCFTA) in 2018 which is also expected to drive the growth of cross border electronic trade. Phase III of the negotiations, which started in February 2020, aims at harmonizing regional positions and regulations on e-commerce²⁰. MTI promotes the competitiveness and development of businesses which foster the growth of ecommerce. Most of its current activities are focused on supporting industrialization processes across sectors (i.e., agro-processing initiatives or minerals beneficiation). Within the framework of its National Trade Strategy 2020 and continuous support from the World Bank, MTI is in the midst of implementing projects with other MDAs (notably the Economic Diversification and Agro-Processing Competitiveness Projects²¹). Nevertheless, when it comes to e-commerce the pipeline has been limited due in part to insufficient knowledge on the status and needs of the subsector.

E-commerce is growing in poverty-stricken Sierra Leone though still at a level lagging behind other counties in the sub-region.

2. Approach and Research Methodology

The study used a mix of both quantitative and qualitative research paradigms to provide useful insights into the gender dynamics of e-commerce between China and Sierra Leone. The researcher uses a feminist but more of a gender approach in the design of the study and the collection and analysis of the data. The gender dynamics takes a holistic approach in looking at the gendered impact of SME in e-commerce cross border trade between the two countries. In that regards, the researcher used primary and secondary data collection techniques; the primary data was collected through direct observation, and face-to-face interviews during a three weeks seminar from October to November 2023 on E-commerce for

¹⁹<https://www.cnn.com/2021/10/18/supply-chain-chaos-is-hitting-global-growth-and-could-get-worse.html>.

²⁰Report on E-commerce in preferential trade agreements: Implications for African firms and the AfCFTA by Karishma Banga, Mohamed Gharib, Max Mendez-Parra and Jamie Macleod, February 2021.

²¹<https://projects.worldbank.org/en/projects-operations/project-detail/P164212>.

developing countries organized by the free trade development board of Hangzhou city Zhenjiang province, sponsored by the ministry of commerce of the People's Republic of China. The primary data was collected from lectures delivered by professors and associate professors during the seminar presentations, the researcher also visited a lot of factories and industries in towns and cities that deal with e-commerce and cross border trade, among the towns visited are Yiwu, Guangzhou city Guangdong province, Putian city Fujian province, Shanghai city and other institutions and/or factories dealing with e-commerce. The researcher did qualitative analysis based on 25 interviews conducted on key informant interviews (KII) and in-depth interviews and through participant observations during field visits to the factories and manufacturing companies in the towns and cities listed above in Zhejiang province, the researcher also interviewed the factory owners dealing with e-commerce, the researcher visited bank of China, Agricultural bank of China, Industrial and construction bank of China, China Ever bright Bank, China Postal services, in Hangzhou the banks are also crucial in e-commerce and money transfer hence some of the officials were interviewed, women as well as men who own small and medium scale enterprises (SMSE) in Freetown, interviews were also conducted with women who usually travel to China to do business. Secondary data was collected through internet, journal articles on e-commerce, newspapers articles and text books on e-commerce, and conference papers. The researcher during the primary data collection process directed the interviews towards understanding the prospects and challenges of e-commerce on women SME on CBEC between China and Sierra Leone. Questions about the ownership and management and more so the operation of online Alibaba, Taobao stores and the gender dynamics in running such businesses, with special attention on women's roles in carrying out their duties as wives, mothers and female headed households (FHH) who are supposed to perform their traditional gender roles as ascribed by the society more so for women in Sierra Leone a highly patriarchal society. Responses were also sought from both men and women in order to ascertain the gendered understanding and interpretations of women's businesses between the two countries e-commerce development.

3. Results and Discussions

Since Sierra Leone and China has very good bilateral ties e-commerce is a very good opportunity for the two sister nations to strengthen their trade relations looking at the Chinese mining companies operating in the country, the construction companies, and other businesses in Sierra Leone e-commerce has huge prospects not just for women but for men as well.

Findings from the study indicates that e-commerce presents a good opportunity for women's economic empowerment in Sierra Leone which can have a positive impact on women's livelihood by supporting SMEs growth and diversifications particularly so when the two countries suffered during the COVID-19 pandemic.

Women, however, do not constitute a homogenous group. Not just a divide

between the women of China and those in Sierra Leone, individual women living in the same country have varying skills, levels of education, entrepreneur capacity, location and access to productive and business opportunity

E-commerce can help small businesses in Sierra Leone owned by women reduce the initial investment needed to begin operations. It can also help increase customer numbers by making it possible to reach distance markets in other parts of the country. E-commerce platforms from China can help provide an ecosystem of services, including marketing tools, payment services and logistics. This can lower barriers to entry, especially for companies and other investment partners that may want to do business in Sierra Leone, and assist in overcoming the challenges posed by last-mile delivery. Further, online trade can provide more time flexibility compared to offline trade, which is particularly valuable for women in Sierra Leone since it allows one to combine paid work with household chores. As women-led enterprises on average have limited capital, e-commerce presents an opportunity to enter markets and high value sectors that are perceived to have higher entry costs.

E-commerce can foster the service economy, in which many women are employed, and can improve knowledge, skills and access to information about entrepreneurial opportunities. Overall, digital solutions that remove the need for face-to-face interactions for a transaction to take place can help women overcome mobility constraints and discrimination, and even reduce exposure to sexual and gender based violence (SGBV) according to (World Trade Organisation (WTO) and [OECD, 2017](#); world bank and [WTO, 2020](#)).

For Ease of transaction, the establishment of the Confucius institute at Fourah Bay College/University of Sierra Leone (FBC/USL) for Sierra Leoneans to learn Chinese language and the Chinese culture will help Sierra Leoneans who may want to do business in China since the language is a barrier for E-commerce and vice versa for the Chinese who may want to travel to Sierra Leone to do business the Sierra Leoneans who have studied in China and fluent in Chinese language can help facilitate business transactions.

Sierra Leone offers opportunities for e-commerce and other business opportunity. The country is endowed with rich mineral resources, marine resources and arable agricultural land, the country has the most beautiful beaches and natural environment offering touristic prospects. Agriculture, mining, fishing and tourism are the mainstay of the economy where women perform 70-80% percent of the agriculture/farm work and in artisanal mining. Because of her rich mineral resources mining of minerals, especially iron ore, diamonds, gold, rutile, illuminate, and bauxite are the main sources of foreign currency in Sierra Leone, with limited manufacturing capacity the country relied on China as her main trading partners for it domestic E-commerce. In the agricultural sector cacao, coffee, timber, rubber, palm kernel oil, and kola nut are the main exports.

In 2022, Sierra Leone made significant reforms by setting up the National Investment Board (NIB) a one-stop-shop for the registration of foreign businesses

and ease of doing business in the country.

In 2020, the World Bank ranked the country 58 out of 190 countries with a 91 percent score for easing the process of starting a business, one of ten indicators used in evaluating the business climate. The government also implemented the UNCTAD ASYCUDA World System, an online system that enhances trading across borders this has created an enabling environment for e-commerce between the sister countries.

Sierra Leone provides access to a market of more than 50 million people via its membership in the Mano River Union basin with Côte d'Ivoire, Guinea, and Liberia, and a market of over 400 million people through its membership to the Economic Community of West African States (ECOWAS). In 2018, Sierra Leone also joined the African Continental Free Trade Agreement which brings together fifty-four African countries with a combined population of more than one billion in a single continental market for goods and services.

Sierra Leone has a very conducive environment for foreign investors to engage in agriculture, agribusiness, fisheries, and tourism, and can undertake ventures in infrastructure like in energy (including renewable energy), manufacturing, construction, communication, and transportation, and in other sectors like education, finance, health and natural resources. The government seeks investment in all these sectors and engagement will potentially ignite economic growth and development. The GoSL wants economic growth and development to be led by the private sector with the ultimate goal of women's empowerment in the SMEs; this can be achieved easily through e-commerce.

Findings of this research further indicates that E-commerce in Sierra Leone comes with tremendous benefits for women both sellers and consumers. These benefits are seemingly endless and cannot be over emphasized with China the biggest trading partner. Some of these includes but not limited to:

Constant availability: Unlike brick-and-mortar which operates on fixed hours and days, e-commerce operates all round the clock (24/7) which makes much easier to access goods and services at any time from any part of Sierra Leone and cross border. This provides a window of opportunity for business owners to meet the ever-growing needs of consumers.

Easy-to-reach: Aside from availability, e-commerce is faster and it gives convenience to women SMEs. With the availability of ICT and electricity with the click of a mouse one can shop anything and transact any amount with ease, devoid of long queues.

Cheap-to-operate: E-commerce comes with little or no overhead/running costs for online women SMEs or business owners, especially those who primarily use orange money, Afrimoney the main local money transfer, and other digital platforms. This simply means that running an online store, a woman with SME does not necessarily have to pay utility bills, rent or even pay employees, unlike brick and mortal businesses. This is even more cost effective because the only thing women in SME require at the very least is a phone, mobile data and an

account or page as the case may be. Since China has pledged support to Sierra Leone on agriculture, infrastructure and human capital development, and for stronger diplomatic, bilateral mutual trust, win-win cooperation and coordination on international relations. This is an opportunity of e-commerce for Sierra Leonean women and female students who may want to go and study ICT programs and later return to help bolster the sector. The sister countries have also signed a bilateral cooperation agreement covering joint building of **the Belt and Road**, agriculture, economic development and implementation of the China-proposed Global Development Initiative in 2023. China firmly supports the people of Sierra Leone in following a development path that suits their national conditions, and is willing to strengthen governance exchanges with Sierra Leone; this will encourage more Chinese businesses to invest in Sierra Leone. According to the General Administration of Customs, trade between the two nations grew 23.9 percent year-on-year to \$1.63 billion in 2023. China mainly exports electromechanical products and metal products to Sierra Leone, and it imports wood as well as mineral products. Sierra Leone adheres to the one-China policy since the establishment of diplomatic relations over half a century ago, firmly supports China in maintaining its sovereignty and territorial integrity, and supports China in safeguarding its core interests. Sierra Leone should be able to learn from China's experience, strengthen bilateral cooperation in building the Belt and Road, and explore new areas of cooperation in ICT infrastructure construction, trade, security, education and public services. With all of these, there is huge potential for China and Sierra Leone, a country rich in mineral resources, to boost their bilateral cooperation. For Sierra Leone, strengthened cooperation with China can help the government contain rising inflation rates and create more jobs through e-commerce. Sierra Leone is a highly patriarchal society with wide gender gap in all spheres of life and in the economy and digital gender divides lead to women SME facing compounding challenges when seeking to leverage the potential benefits of e-commerce from China. Sierra Leonean women owned SME often experience limited access to credit and other productive resources, and greater barriers to entry into high level value-added e-commerce sectors, with such challenges this can result in more women-owned SMEs be represented in high volume but low value-added activities with limited capabilities to leverage e-commerce. Other wide range challenge (s) women SME faced is limited business networks, lower levels of entrepreneur skills, negative gender stereotypes and the triple role (reproduction, production and community role) of women render then time poverty resultantly these limit women's participation in e-commerce in Sierra Leone.

A noteworthy challenge woman SMEs in Sierra Leone face in offline trade is lack of information on a number of issues, for instance market access and market entry requirements, customs and exit procedures, clearing and forwarding (shipping) costs, credible data and market information about China goods and markets and trade zones, for instance Guangzhou is one of the known trade zone for women doing business in China, now Yiwu is another trade zone where most

women and other foreign nationals are not familiar with.

The most visible challenge for women in the e-commerce includes their lower rates of technological background and awareness, their lack of skills and knowledge about e-commerce, and their marginal role in decision-making not just within the technology industry but in all spheres of life in the country. Over time women and girls comparatively limited participation in the science discipline, technology, engineering, and mathematics (STEM) right from primary, Junior School, senior school up to university has greater repercussions on their familiarity with digital technologies and their capability to engage on e-commerce and SMEs development. Sierra Leone compared to China lacks the ICT infrastructure necessary to support effective e-commerce business activities. Since there is low quality and limited infrastructure in the country this has pose major challenges for women to invest in e-commerce, domestic travel, inland transport, and normal operations throughout the country continue to hinder e-commerce businesses between the two countries. The New direction government is making efforts to construct major roads leading to district headquarter towns and rehabilitate feeder roads linking agricultural suppliers with urban markets but this has not yielded the desired result and favourable environment for women as well as men in E-commerce. The customs clearance procedure was simplified to reduce clearance time and the major seaport extended to accommodate more shipping vessels from China. Yet, the government needs to continue to construct other infrastructure including, roads that lead to other parts of the country, seaports, airports, public utilities, and telecommunications infrastructure nationwide.

Investments outside of the capital city require special attention to local community needs, particularly land issues that are subject to the influence and authority of traditional leaders. While these issues do not necessarily reflect any discriminatory treatment of Chinese interests, they do underscore the challenges facing all foreign firms operating in Sierra Leone. As the government continues to inform the Chinese and other foreign investors that the country is open to foreign investment, it has focused on removing constraints on trade and improving the investment environment.

Women in SMEs in Sierra Leone cannot easily afford ICT that will enhance their e-commerce.

Language barrier and cultural issues; the Chinese characters/words written on the cartoons or items of most of the finished products cannot be read easily this has posed challenges aside the tone language. In Sierra Leone, shopping is considered as a social activity and direct face-to-face contacts with women in SME is a significant part of the whole shopping experience. Cultural barriers may also exist to discourage the approval of e-commerce as a means of doing business with the Chinese. In Sierra Leone women bargain and have fun with their families especially during festive seasons while shopping, so it is challenging for people to shop online without having all these experiences.

Bank transaction for foreigners/Money transfer there is a huge challenge in

transferring money to China from Sierra Leone and how to access that money in China a lot of bureaucracies for Sierra Leoneans more so for women.

Fake goods there is lack of trust in the products and the services sold online, delivery systems, online payments and other online services remains an important challenge to the development of e-commerce.

Cost of shipping a container from China, limited capital and illiteracy among Sierra Leonean women limit their participation in e-commerce, a large percentage live below the poverty line as a result buying data or paying for internet subscription required for online business transaction is not easily affordable by most women in Sierra Leone.

The legal environment there should be a conducive legal environment for women in the SMEs that protect their e-commerce activities devoid of sexual and gender based violence.

Business registration the newly established NIB (national investments board) should facilitate the registration of women lead e-commerce SMEs through a one-shop-stop with little barriers

Despite its huge benefits, there is no denying that e-commerce has a number of challenges in Sierra Leone which has slowed down business in the country especially for women in cross border trade. Some of these challenges range from poor internet connectivity, security issues, ICT infrastructure.

Internet accessibility: Internet accessibility, the take-off-board which allows consumers to surf the web is very expensive and it is one of the main challenges that continues to impede e-commerce in Sierra Leone although there are other platforms where women can access to do e-commerce.

Poor Connectivity: poor internet connectivity issues also impede the viability of e-commerce in Sierra Leone. More often than not, internet buffering frustrates consumers as well as retailers and therefore making it very difficult sometimes for e-commerce to thrive smoothly between China and Sierra Leone.

Security Issues: Internet fraud is a constant unfortunate occurrence that hugely affects the viability of e-commerce in Sierra Leone. From online stores which either do not exist in actuality, to those which post up false specifications of products, a good number of consumers who are not internet/tech savvy continue to be scammed by criminals on some of the e-commerce platforms women are mostly victims of such circumstances.

A digitally driven economy in Sierra Leone with enhanced financial inclusion, digital trade, and agriculture with a gender perspective faces a lot of challenges that hinder its business in the;

- Lack of a national switch for interoperability between the banks and the MNOs limits the potential of payment ecosystem. Relying solely on bilateral integration does not allow for improved competition and efficiency.
- Lack of an extensive national ID systems for DFS on-boarding even limiting the bankable population
- Lack of land registration hinders customer tracing for banking processes and calculating collateral

- Minimal penetration of e-commerce which is further limited by an inadequate system for logistics and parcel delivery, limited e-business skills amongst women in SMEs and a lack of a system to monitor electronics user awareness, understanding, and service adaptation in the digital economy. Sierra Leone is a cash-based society where customers don't have enough confidence in digital money; women merchants on the other hand are sometimes reluctant to accept digital payment.

4. Conclusion

The Rapid digital growth and e-commerce going on between China and Sierra Leone has the potential to close the gender gap in terms of SME, the growth of e-commerce has a huge transformative impact of women especially women who are engaged in SMEs in Sierra Leone as in the case of China. This research paper focused on the prospects and challenges that e-commerce presents to women-owned SMEs especially looking at China and Sierra Leone the biggest trading partners on how to leverage e-commerce business growth and the economic empowerment. E-commerce can be a strong and effective means for women's economic empowerment, and change women's lives and livelihoods in Sierra Leone. There is a strong correlation between digital platforms and improvement in market access. China's e-commerce provides an ecosystem of service on marketing tools, payment capabilities and logistics service like the postal service, this will decrease women's effort required to do businesses. However, on the contrary, Sierra Leone's ICT and the digital platforms are very much challenging for women in SMEs, this has ripple effects on the economy of the country.

5. Recommendations

Rejuvenate the postal services nationwide resultantly, this reducing barriers to entry especially women SMEs. This has a lot of time merits for women who are mobility constrained. Sierra Leonean women-owned SMEs face compounded gender gaps and digital divides regarding internet access. With regards internet access and use consequently by looking at the outcome of e-commerce business. This research indicates that there is an unequal share of digital opportunities between China and Sierra Leone and especially within the latter grouping, between women and men. The gender digital divides have compounded gender inequalities in the Sierra Leone economy. Gender stereotype, gender gaps and unequal power relation continue to reinforce the digital divides and more so with a feedback loop digital divides has amplified the gender gaps in Sierra Leone unlike China. A digital ecosystem that provides opportunities for all that will lead to a win-win situation between the two countries cannot be achieved easily without tackling gender discrimination and the traditional and cultural barriers women face as economic actors.

This research paper listed some areas where interventions by the government of the People's Republic of China and the Sierra Leone government and investors

could contribute enhancing women's participation in e-commerce for a win-win situation.

Focus on gender sensitive digitalization programmes Sierra Leone should focus on a nationwide digitalization and e-commerce programmes just like China; this can play a catalytic role in the attainment of women's empowerment. Sierra Leone lacks a comprehensive national digitalisation programmes. Even though China has developed e-commerce platforms but gender considerations have rarely been mainstreamed. In Sierra Leone because of the patriarchal nature of the society and gender blindness in digital programmes may amplify gender digital inequalities. However, this can be ameliorated by introducing ICT programmes in schools curricula and the different needs of Chinese companies in Sierra Leone of diverse sizes and capacities and the factors that hinder women and girls in adopting to digitalization.

The ministry of trade and Industry needs to conduct a research to assess the extent women SMEs are benefiting from e-commerce, the needs and the challenges they face and the potential measures to mitigate these challenges.

By enhancing women's active participation and in policy formulation and implementation of digital programmes, through women SMEs, women's organizations, and male gender activist are a key step to consider. Feminist and gender assessment of digital programmes should be considered this could be done during signing of trade agreements between the People's Republic of China and Sierra Leone to evaluate the potential impact on women.

Availability, accessibility and affordability of internet services: Women are the poorest of the poor on average in Sierra Leone; they cannot afford the cost of digital devices and internet subscription this is an obstacle to their online business activities. Lack of relevant information, women are not familiar language used; internet is not readily available in Sierra Leone. By lowering the cost of internet data subscription, internet services in the local languages and by extending mobile coverage to rural areas in Sierra Leone will encourage women's regular engagement with the productive time use.

The government of Sierra Leone should put appropriate legal framework for the registration of businesses now that the government has set up the National Investments Board (NIB) this help facilitate the registration with one-stop-shop by encouraging women SMEs, build trust and reduce the barriers at the customs borders.

Conduct a research on sex-disaggregated data on e-commerce: Research and empirical data is the basis for sound policy formulation and sex-disaggregated data is necessary for designing policies that benefit women, the ministry of trade and industry should collect gender statistics data that can benefit the two countries.

Gender and the digitalization in trade processes: Since cross-border e-commerce is a facet of international trade which is now an important component of trade policy, Sierra Leone and China could incorporate gender consideration in e-commerce discussion in most of the trade agreement they sign, they should

share experiences and best practice, programme, and policies encouraging women's participation in e-commerce.

Enhanced Capacities through training in digital and business development skills: The two governments could join forces with the private and development partners to pursue interventions aimed at providing women SMEs training packages and skills that will enable them to trade online in a safer and beneficial manner devoid of SGBV.

E-commerce and the social media: Since the social media is widely used nowadays, the platforms for business is easier to enter women-owned SMEs. The two governments should assess the benefits by looking at the risk of the platforms set up to manage social contracts for business purposes, and research on whether such use benefit or hamper business formalization, including women-led SMEs.

Public private partnerships: For BSL, responsive policy, regulation, coordinated action, and data and measurement need to be considered in the new plan as cross-cutting key drivers instead of thematic areas given their importance and considering the lessons learned. DFS, Financial Literacy, and notably client centric products and services will be further highlighted as intervention areas, as BSL pursues higher customization of DFS to enhance uptake by for Develop and implement new legislation for m-payment, e-remittances, and transfers integration between China and Sierra Leone and other cross border trades. Develop a policy and regulation for digital and financial inclusion Encourage the market entry of innovative, technology-driven from China, value added service providers and other ICT DFS innovators, create building blocks for the development of e-commerce by conducting an e-commerce readiness research assessment to allow for the development of an e-commerce policy and legislation. Design and implement a country wide digital addressing system relating for parcel delivery. Remove and legal and technical barriers to e-commerce, especially cross-border digital trades and develop common rules for consumer protection between the two countries. Set up a trade statistics portal and opportunity identification with adequate infrastructure and women in SMEs capacity building to monitor data on e-commerce.

Mainstream gender into the ICT content across educational institutions nationwide.

Since China and Sierra Leone have strong bilateral and diplomatic ties, the Chinese e-commerce businesses in Sierra Leone should be positioned to reverse the trend of gender inequality in the sector by setting women SMEs up for success in e-commerce by targeting women-owned SMEs for training by increasing women's participation in high-value segments such as electronics, STEM courses for female students at higher institutions, and by closing the gender gaps in financing and start-up capital for women.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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