

Reform for Investment & Sustainable Economies







Assessment of Eswatini's E-commerce Readiness

FINAL REPORT 21 AUGUST2023



This project is financed by the European Union.

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List of Abbreviations

2IPD	Integrated Index for Postal Development
ADB	Asian Development Bank
AfDB	African Development Bank
AGOA	African Growth and Opportunity Act
AIDS	Acquired Immunodeficiency Syndrome
ART	Antiretroviral Therapy
ASIT	Advanced School of IT
ASYCUDA	Automated System for Customs Data
ATMs	Automated Teller Machines
AU	African Union
B2B	Business to business
CIRT	National Computer Incident Response Team
COMESA	Common Market for Eastern and Southern Africa
CSO	Central Statistics Office
DB	Doing Business
DFS	Digital Financial Solutions
ECOT	Eswatini College of Technology
EDI	Electronic Data Interchange
EFT	Electronic Funds Transfer
EFTPOS	Electronic Funds Transfer at Point of Sale
EGDI	E-government Development Index
EIPA	Eswatini Investment Promotion Authority
ELIT	Eswatini Livestock Identification and Traceability (ELIT)
EPA	Economic Partnership Agreement
EPTC	Eswatini Posts and Telecommunications Corporation
EPZ	Export Processing Zones
ESCCOM	Eswatini Communications Commission
ESEPARC	Eswatini Economic Policy Analysis and Research Centre
ESHEC	Eswatini Higher Education Council
ESWADE	Eswatini Water and Agricultural Development Enterprise
EU	European Union

EUROSTAT	European Commission's Statistical Office
FGD	Focussed Group Discussion
FINCORP	Eswatini Development Finance Corporation
GDP	Gross Domestic Product
GMV	Gross Merchandise Value
GVC	Global Value Chain
HIV	Human Immunodeficiency Virus
HOD	Head of Department
HRMIS	Human Resource Management Information System
ICD	Inland Container Depot
ICDF	International Cooperation and Development Fund in Taiwan
ІСТ	Information and Communications Technology
ICTPR	ICT Policy Review
ICTs	Information and Communications Technologies
IEC	International Economics Consulting
ILO	International Labour Organization
ІМТ	International Mobile Telecommunications
IPR	Intellectual Property Rights
ISP	Internet Service Provider
ІТ	Information Technology
ITA	Information Technology Agreement
ІТС	International Trade Centre
ΙΤυ	International Telecommunications Union
JA	Junior Achievement
KRC	Revised Kyoto Convention
КҮС	Know Your Customer
LDC	Least Developed Country
M&E	Monitoring and Evaluation
MB-IX	Mbabane Internet Exchange Point
МСІ	Mobile Connectivity Index
мсіт	Ministry of Commerce, Industry and Trade
MHz	Mega Hertz
МІСТ	Ministry of Information, Communications and Technology

MLETR	Model Law on Electronic Transferable Records
ΜοΕΤ	Ministry of Education and Training
MSME	Micro, Small and Medium Enterprises
NBFI	Non-Banking Financial Institution
NDP	National Development Plan
NGO	Non-Governmental Organization
NICI	National Information and Communication Infrastructure
NRI	Network Readiness Index
OECD	Organisation for Economic Co-operation and Development
POS	Point of Sale
PPD	Public-Private Dialogue
PPPs	Public-Private Partnerships
PSET	Post-School Education and Training
PSP	Payment Service Providers
R&D	Research and Development
RKC	Revised Kyoto Convention
RSTP	Royal Science and Technology Park
RVC	Regional Value Chains
SACCOs	Savings and Credit Cooperatives
SACU	Southern African Customs Union
SADC	Southern African Development Community
SAECH	Eswatini Automated Electronic Clearing House
SEDCO	Small Enterprises Development Company
SIRESS	SADC Integrated Regional Electronic Settlement System
SME	Small and Medium sized Enterprise
SMME	Small, Medium, and Micro Enterprise
SSA	Sub-Saharan Africa
STEM	Science Technology Engineering and Mathematics
SZL	Swazi Lilangeni
TFA	Trade Facilitation Agreement
TRIPS	Trade Related Intellectual Property Rights
тті	Teacher Training Institution
TVET	Technical and Vocational Education and Training
UBIs	University Business Incubators

UN	United Nations
UNCITRAL	United Nations Commission on International Trade Law
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNECA	United Nations Economic Commission for Africa
UNESCAP	United Nations Economic and Social Commission for Asia and Pacific
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNESWA	University of Eswatini
UNICEF	United Nations International Children's Emergency Fund
UPU	Universal Postal Union
US	United States
USD	United States Dollar
νοςτιμ	Vocational and Commercial Training Institute
WACS	West African Cable System
wco	World Customs Organization
WEF	World Economic Forum
WHO	World Health Organization
WRC	World Radiocommunication Conference
ωтο	World Trade Organisation

Acknowledgements

This report was done in response to a request from Ministry of Information, Communication and Technology (Ministry of ICT), Ministry of Commerce, Industry and Trade (Ministry CIT), in partnership with the Eswatini Communications Commission (ESCCOM), an agency responsible for the regulation of the communications sector in Eswatini, including electronic commerce (e-commerce). Financial and Technical support for the project was provided by the EU Delegation to the Kingdom of Eswatini through the Africa RISE (Reform for Investment and Sustainable Economies) programme.

The report was commissioned by Africa RISE, an EU-funded facility. The report was authored by Paul Baker (Lead Consultant, International Economics Consulting) and Ria Roy (Trade Analyst, International Economics Consulting). The team is grateful to the local Consultant, Terence Mabaso for research and stakeholder engagement during the preparation of the report, as well as contributions relating to the legal and regulatory environment in Eswatini. The project received the overall guidance of Dr Mihaela Balan (Team Leader, Africa RISE).

ESCCOM was instrumental in providing guidance, direction, and support throughout the project. A steering committee, composed of professionals from the Ministry of ICT, Ministry of CIT, ESCCOM provided oversight, guidance, direction, and support throughout, the project.

The team would also like to thank the many participants engaged during consultations who shared their views on the sector. A list of organizations that participated in the consultations has been included in the report. A validation workshop was held in Mbabane in August 2023, attended by a cross-section of stakeholders. Those organizations represented in the validation workshop are listed in the report. The team also appreciates the respondents to a survey, amounting to 145 persons and organizations.



Foreword

It is my distinct honour to present this foreword for the report on the E-commerce Readiness Assessment conducted in Eswatini. This report represents a significant milestone in our ongoing efforts to foster a robust and inclusive digital economy in our nation.

Over the past months, the Ministry of Information, Communications, and Technology (Ministry of ICT), in collaboration with the Ministry of Commerce, Industry, and Trade (Ministry of CIT), partnered with the Eswatini Communications Commission (ESCCOM) and has received invaluable support from the European Union. Together, we engaged AfricaRise to conduct a comprehensive assessment of Eswatini's e-commerce ecosystem and its readiness to embrace the opportunities of the digital era.

A mature e-commerce ecosystem encompasses various components and stakeholders involved in online transactions, ensuring seamless purchase, sale, and delivery of goods and services within a unified platform. Our assessment delved into the critical aspects of technological infrastructure, financial systems, logistics networks, legal frameworks, and consumer trust. Through this rigorous evaluation, we sought to gain a comprehensive understanding of our current state and identify areas for growth and improvement.

Africa RISE approached this assessment with great expertise and dedication, contextualizing the assessment to the unique landscape of Eswatini. The insights and recommendations have provided us with a clear roadmap to navigate the challenges and harness the immense potential of e-commerce in our nation.

The findings presented in this report are invaluable. They not only provide us with a comprehensive assessment of our e-commerce readiness but also guide us on the necessary actions to fast-track our e-commerce agenda. This report will serve as a catalyst for change, propelling us toward a future where digital commerce is a cornerstone of our economic growth and development.

The Ministry of ICT is fully committed to implementing the policy recommendations that emerge from this assessment. We call upon the private sector, non-governmental agencies, development partners, and all stakeholders to join us in this endeavour. By collectively embracing the recommendations and working together, we can transform them into tangible initiatives that will drive our e-commerce ecosystem forward.

I extend my sincere gratitude to the European Union for their unwavering support and funding of this assessment exercise. Their commitment to our digital transformation journey has been instrumental in enabling us to undertake this vital evaluation of our e-commerce landscape. I would also like to express my deepest appreciation to AfricaRise for their expertise, dedication, and tireless efforts in conducting this assessment. Their insights and recommendations will undoubtedly shape our future endeavors and pave the way for our digital aspirations.

I would be remiss not to acknowledge the Ministry of CIT, ESCCOM, and all stakeholders who actively contributed to this assessment. Your participation and collaboration have been invaluable, and it is through our collective efforts that we will realize the full potential of e-commerce in Eswatini.

As you delve into the pages of this report, I urge you to internalize its insights and recommendations. Let us come together to transform this report into a blueprint for our collective efforts, propelling Eswatini toward a vibrant and inclusive digital economy. Together, we can unlock the immense opportunities that lie ahead and ensure that no one is left behind in the digital era.

Mr. Phesheya David Dube

PRINCIPAL SECRETARY Ministry of Information, Communications, and Technology

Executive Summary

According to the Organisation for Economic Co-operation and Development (OECD), ecommerce is the "sale or purchase of goods or services, conducted over computer networks. The goods or services are ordered by those methods, but the payment and the ultimate delivery of the goods or services do not have to be conducted online"¹ In Eswatini, ICT adoption is on the rise. The use of mobile phones in everyday life has increased dramatically in recent years, making mobile phones a very integral part of society. Moreover, ICT adoption by businesses has led to the adoption of e-commerce in the country.²

In this context, the objective of this study is to assess the current state of e-commerce in Eswatini, including policies, infrastructure gaps, and practical elements relating to the adoption of ecommerce. The study identifies gaps and provides recommendations to bridge them, as well as benchmarks performance against other e-commerce jurisdictions. The assessment of the e-commerce readiness of Eswatini is covered under three overarching pillars and a series of cross-cutting pillars: business enabling environment, connectivity, and private sector development. The survey conducted under this study revealed the need for an e-commerce policy in Eswatini. Most responses suggest that policies and market access arrangements were weak and in need of improvement.

Business Enabling Environment

The Government of Eswatini, like many other governments worldwide, is increasingly recognizing the importance of Information and Communication Technology (ICT) in driving economic growth, promoting social development, and improving the quality of life of their citizens. To this end, the Government of Eswatini has developed policies and initiatives to encourage the use of ICT and drive digital transformation³ Eswatini, recognizing the importance of investing in Information and Communication Technology (ICT), enacted the National Information and Communication Infrastructure Policy in 2006, with the goal of developing and expanding the ICT industry. The policy aims to establish an ICT-led socio-economic development process that can transform the country into an information-rich, knowledge-based, and technology-driven society. The Digital Eswatini Strategy for 2023-2027 builds on this policy, aiming for Eswatini to become a regional digital center that supports UN, AU, and SADC frameworks and is renowned for world-class digital skills and data capabilities.

The Kingdom of Eswatini has put in place several laws and regulations to promote ecommerce as well as to increase the level of data privacy amongst internet users. These laws are recent and too early to judge in terms of their implementation, but generally are aligned to UNCITRAL model laws and best practices. The Electronic Communications and Transactions Act of 2022 provides a regulatory framework for electronic transactions, communication, and e-government services. The act aims to promote the growth of the ICT sector and enhance the country's digital economy. Moreover, the National Cybersecurity Strategy of Eswatini 2020-2025 is a multi-stakeholder strategy that aims to ensure a safe, secure, and resilient cyberspace. The strategy considers national priorities and aims to prevent cybercrime, cyber terrorism, and other cyber threats. The Data Protection Act of 2022 governs the collection, processing, disclosure, and protection of personal data by data controllers and processors. The Act outlines the responsibilities of the Eswatini Communication Commission (ESCCOM) and includes provisions on data subject rights, unsolicited electronic communications, and automated decision-making. Despite the introduction of various legislations, survey respondents consider the legal and regulatory frameworks in Eswatini to be weak. Consumer protection laws were considered the weakest and are viewed as having the lowest levels of implementation. Similarly, respondents believed that the implementation of the Electronic Communications and Transactions Act was weak. However, cybercrime legislation and data privacy laws were moderately strong and had relatively higher levels of implementation. Overall, there is a need for Eswatini to strengthen its regulatory framework to promote the growth of the ICT sector, enhance e-commerce, and protect consumers' interests in the digital economy.

¹ OECD Stat (2023). Glossary. Available from: <u>https://stats.oecd.org/glossary/detail.asp?ID=4721</u>

² ESCCOM Annual Report 2022

³ European Commission. (2021). Digital Transformation. Retrieved from https://ec.europa.eu/info/topics/digital-transformation en

Eswatini is rapidly working towards integrating e-government services across the country. To address the need for enhanced interoperability of digital platforms, the Eswatini government created a 2017-2019 e-government operational framework in collaboration with the United Nations Development Programme (UNDP). This framework included short-term and long-term targets, as well as a four-year e-government plan from 2016 to 2020. The execution of these policies falls under the responsibility of the Ministry of ICT e-government section. Several digital public sector platforms in Eswatini have been designed, implemented, operated, and maintained by relevant ministry departments or agencies' internal IT staff. The government currently provides e-government services through several ministries, including the Ministry of Tourism and Environmental Affairs, the Eswatini Investment Authority, the Treasury Department, the Ministry of Agriculture, the Ministry of Home Affairs, the Ministry of Health, and the Ministry of Public Works and Transportation. Although there is some level of involvement by government agencies in developing e-government policies, the survey showed that there was still room for improvement in this area.

Eswatini faces a challenge with the inadequate availability of statistics, despite the efforts of the Central Statistical Office (CSO) to collect and disseminate statistical data. The latest statistical reports by the CSO date back to 2016, and there are still areas where data collection and dissemination can be improved. However, Eswatini has a strong presence in international statistics sources, particularly in ICT-related development indexes. Current and reliable data is essential in policymaking, especially in e-commerce. Eswatini needs to expand its capabilities in the storage, processing, and sharing of statistics among national and international stakeholders, including compiling and measuring relevant indicators such as online transactions, trade in goods and services, and transaction values by different models.

Key Recommendations on the Business Enabling Environment

- Carry out a gap assessment in ICT and E-commerce legislations and establish accessible focal points for information and feedback. Issue implementation guidelines and raise awareness on E-commerce laws and access points.
- Ratify international conventions for cybersecurity after regulatory impact analysis and stakeholder consultations.
- Evaluate accession to the WTO Information Technology Agreement to lower the price of digital products.
- Draft a position paper for reducing barriers to cross-border trade while protecting public policy interests.
- Develop a National e-commerce Strategy in collaboration with the private sector and international donors. Establish an E-commerce Committee to guide strategy development and respond to changes in the sector.
- Conduct a study on taxes for e-commerce and assess fiscal leakages and VAT implications.
- Transition to a fully digitalized government system and aim to remove physical inperson processes. Define clear roles and responsibilities for government departments in managing different aspects of e-commerce.
- Enhance statistics collection and dissemination of the digital economy.



Connectivity

Eswatini, a landlocked country, heavily relies on the port services of neighbouring countries, South Africa, and Mozambique, through their connecting road and rail infrastructure. Although roadways are the primary mode of transportation in Eswatini, only about 20% of the total road network is paved, with insufficient maintenance, inadequate signage, and a lack of road safety measures still present. Railways play a significant role in transporting goods from the mining and agricultural industries, with plans to upgrade networks and link them to the current Eswatini line to Richards Bay in South Africa. The country's waterway transportation system is limited, relying on the port of Maputo for most of its international trade. Despite infrastructure challenges, the government is investing in construction and expansion projects to improve the country's infrastructure.

The postal sector in Eswatini, like in many other countries, is facing numerous challenges due to the rapid evolution of technology and the rise of e-commerce. The Eswatini Posts and Telecommunications Corporation (EPTC) is the government agency responsible for providing postal services in the country. While the Eswatini Posts and Telecommunications Corporation (EPTC) offers a range of postal services, including domestic and international mail, parcel delivery, and money transfer services, the accessibility of these services remains an issue in rural and under-served areas. The lack of a formal addressing system in Eswatini further complicates the delivery process, with most items being delivered to post office boxes rather than directly to people's homes. To improve the accessibility and efficiency of the postal services, particularly in remote and under-served areas.

While Eswatini faces challenges in developing its ICT infrastructure, the country has made significant progress in recent years, particularly in mobile connectivity. As of 2020, Eswatini had 105 mobile cellular subscriptions per 100 people, which is the same as the world average and higher than the Sub-Saharan Africa (SSA) average. While fixed line broadband and telephone subscriptions are low, various market participants provide internet access competitively through technology-neutral network licenses, including EPTC, MTN, and Eswatini Mobile. Despite high mobile phone penetration, internet adoption rates in Eswatini are low at only 47% of the population. One potential reason for this is the high costs associated with accessing the internet. Eswatini's performance in technology adoption, regulatory environment, and access is below the African average according to the Network Readiness Index 2021, although it performs similarly to the African average for trust. However, Eswatini was one of the top five countries in SSA to improve the most in mobile connectivity between 2017 and 2021, according to the Mobile Connectivity Index. Eswatini's deployment of secure internet servers has increased significantly, with the number of servers per million people increasing from 4.5 in 2010 to 108.4 in 2020. However, Eswatini does not have a direct connection to an international subsea cable, and it relies on its neighbouring countries for international bandwidth, leading to relatively high internet access pricing.

Despite the mixed views on the overall strength of Eswatini's ICT infrastructure, it plays a vital role in the development of e-commerce. While consumers and telecommunications providers are relatively optimistic about the existing ICT infrastructure, government agencies, enterprises, and other e-commerce services consider it to be weak. Overall, there is still room for improvement in Eswatini's ICT infrastructure, particularly in terms of increasing broadband penetration and improving internet access pricing.

Internet access in Eswatini is expensive due to limited infrastructure and economies of scale. Fixed line broadband packages cost up to 14.1% of Gross National Income (GNI), while mobile data and voice packages cost up to 5.6% of GNI. The high-cost acts as a barrier to greater internet access, according to participants in Focussed Group Discussions (FGDs).

Key Recommendations on connectivity

- Upgrade transportation infrastructure through PPPs to enhance physical and digital connectivity and reduce transport costs.
- Promote Eswatini Post and private postal providers to support e-commerce, improve track and trace, and facilitate trade-related documentation.
- Enhance capacity within Eswatini Post based on UPU programs to promote ecommerce readiness.
- Implement a home addressing system or geocode system for efficient parcel delivery.
- Evaluate increasing the customs de minimis threshold to promote small package ecommerce and advocate for this regionally.
- Expand 3G/4G network coverage, promote rural access, subsidize adoption costs, and address high internet prices. Introduce e-commerce-specific broadband packages and plans.
- Streamline customs procedures, implement a single window, ensure transparency in charges and duties, and provide information on e-commerce parcel costs.
- Strengthen internet connectivity and address connectivity and hardware issues for accessing customs streamlining systems.



Private sector development

Access to funding is a major challenge for entrepreneurs in **Eswatini.** Challenges around collateral requirements for loans are common, with banks refusing funding for businesses. However, initiatives such as a credit rating agency, Junior Achievement's incubator center, and partnerships with organizations like UNDP and SEDCO are providing seed capital and funding opportunities for young entrepreneurs. There is also a need for training and improvement in financial intermediaries' knowledge on e-commerce financing. A crowdfunding platform could also be introduced in the future. One of the primary financing options available to Eswatini's citizens is microfinance. Commercial banks also offer a range of products and services, including savings accounts, loans, and credit cards. However, access to financing from commercial banks is limited to those with a good credit history and collateral.

Integration of payment systems are crucial for the smooth functioning of e-commerce. In Eswatini, like in many countries, the use of debit cards has increased, and they have almost completely replaced cheques. As of December 2019, the number of active debit cards stood at 624.6 thousand being used for over 18 billion transactions amounting to a value of SZL 19.7 billion. However, despite the uptake of debit cards, there was a 50% decline in the number of active debit cards between December 2019 and December 2021. Mobile money is quite popular in Eswatini. Currently, both mobile networks in Eswatini, namely, Eswatini Mobile and MTN, have licenses for mobile payment system.

Given the importance of digital skills in today's world, the Government of Eswatini has taken several initiatives to promote technical and vocational education training (TVET) and digital skills in the country. The establishment of Youth Centres in collaboration with Taiwan offers affordable courses on ICT, including Microsoft Skills and basic computer skills. The Royal Science and Technology Park (RSTP) and the Advanced School of IT (ASIT) were established under the Ministry of ICT to increase the number of IT graduates and the quality and relevance of their digital skills.

Private sector development

However, the Eswatini Economic Policy Analysis and Research Centre (ESEPARC) conducted an Industry Labor Force Skills Gap Study in 2018 and found that a lack of digital competencies is a major impediment to developing businesses, particularly in electrical engineering and electronics fields. According to the study, technicians in short supply in the ICT industry include network engineers and operators, programmers, and software and system developers/engineers.

Furthermore, the low consumer awareness of e-commerce in Eswatini and the insufficient ICT education in schools are also hindering the development of digital skills in the country. The ESEPARC study also identified critical competency areas where specific skill deficits exist, affecting the development of e-commerce in the country. The government and private sector need to work together to address these issues by providing workshops and training on e-commerce-related digital skills and promoting ICT education in schools. With these efforts, Eswatini can create an IT-literate society capacitated in software development, multimedia, cyber security and forensics, and networking and advance its digital economy.

Thus, the role of business incubators and accelerators is key in enabling entrepreneurs and businesses to engage in digital commerce. Eswatini ranks 86th out of 137 economies with a score of 24% in the Global Entrepreneurship Index, with the strongest components being risk capital, opportunity perception, and cultural support. However, the weakest scores were for start-up skills, risk acceptance, networking, and process innovation. There is a stark difference between the individual and institutional components of the index, with Eswatini scoring relatively low in the latter. The survey findings indicate that government support for start-ups and entrepreneurship is very weak, and the capacity of micro, small and medium enterprises (MSMEs) in e-commerce is also weak, presenting challenges in expanding their activities and keeping up with changing trends. In Eswatini, the Small Enterprise Development Company (SEDCO), a government owned initiative operating within the Ministry of Commerce, Industry and Trade is the leading incubation organization. The entrepreneurship ecosystem in Eswatini has made significant progress in the past few years with various schemes to boost start-ups and foster greater innovation. While challenges in government support exist, it is essential to prioritize coordination between early-stage businesses and incubators to encourage an entrepreneurial mindset in Eswatini.

Key Recommendations on private sector development

- Take stock of the role of digitalization in value chains in Eswatini and provide policy recommendations for Business to Business (B2B) transactions.
- Increase ICT education and business incubator support for innovative enterprises, particularly in the informal sector.
- Conduct sensitization exercises to enhance confidence in electronic and mobile payment tools.
- Strengthen bank guarantee schemes, sensitize commercial banks on E-commerce risks, and train businesses on financial management.
- Expedite implementation of the National Switch Programme and onboard mobile money operators and fintech service providers.
- Bridge the gap between tertiary education and market needs, foster linkages between educational institutions and the private sector.
- Address finance access issues through credit rating agency capacity building, revisiting addressing requirements, collateral adjustments, angel investor promotion, and introducing crowdfunding platforms.

Cross-cutting factors for Development

Aside from the findings in the three pillars, there are various cross-cutting factors to consider when establishing a favourable environment for e-commerce. These include public-private partnerships, a focus on small and medium-size enterprises (SMEs), gender and youth inclusion, and environmental sustainability. E-commerce opens opportunities for SMEs to enter global markets and participate in value chains that would otherwise require substantial investment. The development of local information technology skills and resources can facilitate digital transformation by creating affordable platforms that benefit both the public and private sectors. Additionally, e-commerce can promote gender equality by reducing the gap between male and female vendors, potentially adding USD 14.5 billion to Africa's e-commerce market value by 2030. Entrepreneurship is also crucial for job creation and reducing unemployment, particularly among young people. However, current support systems for start-ups and small business upgrades in Eswatini are inadequate. Although e-commerce is still in its early stages in the country, Eswatini has made progress in aligning itself with the global digital revolution.

Key Recommendations for greater impact for good

- Provide training for MSMEs and women/youth-owned businesses to develop business proposals for financing/investments.
- Expand capacity of E-commerce enterprises through innovation-focused incubators and accelerators, utilizing PPPs.
- Establish a working group of banks and mobile operators for a secure and seamless payments gateway.
- Promote the use of sustainable packaging for E-commerce deliveries and parcels.

Overall, the Ecommerce landscape in Eswatini is still at a nascent stage with the awareness and adoption of e-commerce slowly spreading across businesses. There are several factors contributing to the slow growth of e-commerce in Eswatini, including a lack of access to reliable internet, relatively new laws, and a low level of digital literacy among the population. To combat this, the government has taken several initiatives to boost e-commerce activities across the country by expanding both infrastructure and through policy support.

6

Methodology

There are various ways to assess the e-commerce readiness of a country. **The United Nations Economic and Social Commission for Asia and Pacific (UNESCAP) and the Asian Development Bank (ADB)** created a framework to review what affects e-marketplace development through the lens of three dimensions: (i) economic factors and conditions, (ii) legal and institutional environment, and (iii) social acceptance and awareness. While the first two factors focus primarily on the market's environmental characteristics, social acceptance and awareness reflect on organisational and individual behaviour and acceptance of e-commerce.⁴

The **United Nations Conference on Trade and Development (UNCTAD)**, together with the eTrade for All initiative, has identified seven key policy areas relevant to E-commerce: (1) E-commerce readiness assessment and strategy formulation; (2) ICT infrastructure and services; (3) Trade logistics and trade facilitation; (4) Payment solutions; (5) Legal and regulatory frameworks; (6) E-commerce skills development; and (7) Access to financing.⁵

UNCTAD's ICT Policy Review (ICTPR) E-commerce Enabler and Assessment Framework. The framework is grounded in eight key policy areas of strategic importance: (1) ICT infrastructure and telecom services; (2) logistics and trade facilitation, including postal services; (3) legal and regulatory environment; (4) electronic payments; (5) electronic platforms; (6) skills development and talent building; (7) awareness-raising, including consumer awareness; (8) e-procurement.⁶

We assess the e-commerce readiness of Eswatini under three overarching pillars and a series of cross-cutting pillars⁷(see Figure 1).



"Business Enabling Environment" covers the essential elements – policies, legislation and regulations – necessary for E-commerce to start taking its initiation steps. Such elements form the critical pillar of the e-commerce environment, as these directly contribute to building trust and confidence in the digital environment. Under this pillar are also the country's e-gov and e-procurement maturity and access. It will also cover market access trade negotiations to promote E-commerce trade with overseas markets.



"Connectivity" covers robust ICT connectivity, connecting markets through trade facilitation, logistics, and payment gateways. People Connectivity refers to the digital skills of the population and their connectivity to networks.



"Private Sector Development" covers access to the necessary conditions for businesses to adopt the required digital tools to bring any E-commerce business online. This includes access to financing, entrepreneurship environment, skills development (business incubators and accelerators, etc.), greater integration of trade in their business operations (regional value chains), and the availability of secure and performant e-marketplaces.



A series of <u>cross-cutting</u> elements are identified, such as Public-Private Partnerships (PPP), Gender and Youth, SMEs, and Monitoring and Evaluation (M&E).

⁴ UNESCAP & ADB (2018). Embracing the E-commerce Revolution in Asia and the Pacific. United Nations Economic and Social Commission for Asia and Pacific and the Asian Development Bank, June.

See eTrade For All. Available from: <u>ESCCOM Annual Report 2022</u>

⁶ https://devsol.etradeforall.org/development-solution/ict-policy-review-programme-establishing-ict-policy-framework-e-commerce/

⁷ International Economics Consulting (IEC) (2020). Status of Electronic Commerce in Seychelles: Way Forward. US State Dept. Mimeo. November 4.



Source: Authors based on IEC (2020)

This project started with an analytical desk review of the situation of e-commerce in Eswatini and the data available covering the four areas described above. The team developed a comprehensive questionnaire covering the areas mentioned above, distributed to both the public and private sector, using the consultant's network and social media channels, ESCCOM and other focal institutions in Eswatini, as well as the EU Delegation's network. A set of comparator countries' indicators was collected for the benchmark analysis of Eswatini on a range of e-commerce and digitalisation indicators.

The results obtained from the desk work, including the data from international, regional, national, and primary data sources, were then validated through focused group discussions, which was instrumental in obtaining an exchange of views and a more detailed assessment of the constraints linked to E-commerce in the country.

Focus group discussions and bilateral meetings involved a broad stakeholder base, including, but not limited to, key ministries and specialized agencies; telecommunications and banking regulators; telecommunications operators; commercial banks and non-financial lending institutions; skills providers, including universities, technical institutes, incubators and accelerators; platform providers, trade logistics operators and customs officials: the postal service authorities; payment service providers (PSPs), and of course the private e-commerce sector businesses using e-commerce, including business associations.

1. Introduction

1.1. What is e-Commerce and what is its relevance?

E-commerce lacks an unified definition. According to the Organisation for Economic Cooperation and Development (OECD), e-Commerce is the: "sale or purchase of goods or services, conducted over computer networks... The goods or services are ordered by those methods, but the payment and the ultimate delivery of the goods or services do not have to be conducted online". The WTO adopted a broader definition, considering e-Commerce to be the "production, distribution, marketing, sale or delivery of goods and services by electronic means"[2]. The European Commission's statistical office (EUROSTAT) defines e-Commerce as "sale or purchase of goods or services, whether between businesses, households, individuals, or private organizations, through electronic transactions conducted via the internet or other computer-mediated (online communication) networks. Delivery or payment via electronic means is not a requirement for an e-commerce transaction." Eurostat further clarifies that "ecommerce may be effectively done via websites (which allow for online ordering or reservation or booking, e.g., shopping cart) or an exchange of electronic messages, EDI-type messages". They nevertheless narrow down E-commerce to exclude "orders via manually typed e-mails"[3]. Since the OECD is the most comprehensive definition covering all elements of e-commerce, we propose to use this definition in the context of this project.

The use of mobile phones in everyday life has increased dramatically in recent years, making mobile phones a very integral part of the lifestyles of Emaswati. Mobile smartphones connected on mobile networks in Eswatini have risen from 663 497 to 809 155 smartphones, a 28% increase between 2021 and 2022.[1] The increased ownership of smartphones and the affordability of mobile data packages offered more ways for banks to make even more services available such as customer-to-customer direct payment services. Banks have rolled out this service under various names such as FNB eWallet, Standard Bank App, and Nedbank Money App. Since epayment contributes to "E-commerce", it features in the analysis of the E-commerce landscape in Eswatini.

In Africa, E-commerce markets are still at a nascent stage of development with increasing popularity. The levels of growth have been quite substantial. In 2019, the African E-commerce and online retail sector attracted USD 116 million worth of investment. According to UNCTAD's E-commerce Readiness Index, most of Africa lags in E-commerce development (Figure 1). Africa lags in comparison to the rest of the world in terms of accessibility to marketplaces. Challenges associated with the adoption rates, penetration, capacity issues, infrastructure and payment solutions are also prevalent.



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Figure 2 : UNCTAD B2C E-commerce Index

Source: UNCTAD

- 8 OECD Stats: <u>https://stats.oecd.org/glossary/detail.asp?ID=4721</u>
- 9 WTO (n.d.) Electronic commerce. Available from: <u>https://www.wto.org/english/thewto e/minist e/mc11 e/briefing notes e/bfecom e.htm</u>
- 10 Eurostat (n.d.). Glossary:E-commerce. Available from: <u>https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:E-commerce</u>
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1.2. Current state of e-Commerce

Electronic commerce has been on the rise in African, as stated above. Several countries have used it as means of driving sustainable economic growth and development, such as South Africa and Mauritius.

Electronic commerce in Eswatini remains relatively low. According to #Digital 2020 report ecommerce platforms, social media users make up 23 percent of the population. The low absorption of e-commerce could be driven by several factors including the fact that the adoption of broadband services remains low in Eswatini, in 2021, it was estimated that the mobile broadband penetration was only 35 percent, when calculated with unique subscribers. The usage gap is attributable to the lack of affordability of both fixed and mobile internet services. The high cost of internet has also negatively impacted the rollout and usage of e-Government and e-Commerce services, ¹³/₁₃ well as entrepreneurial growth, within Eswatini

In an effort to improve the state of e-commerce in the country, a number of initiatives have been put in place, which are explored in this report. Despite significant efforts and recent adoption of e-commerce laws, which are still in the process of being implemented, trust remains weak in the ecosystem, e-commerce transactions domestically and internationally remain underdeveloped or unsophisticated in Eswatini. Most e-Commerce transaction reported are sales made through email or via an order through a social media side, rather than the more sophisticated and secure means under the OECD definition of e-commerce. Despite this, some platforms are emerging and some MSMEs are engaged in sales online. For example, Buy-Eswatini is platform which links producers to customers.

This report explores the foundations necessary for a more thriving e-commerce ecosystem in Eswatini, that can support businesses and the growth of the platform economy.

¹² According to the #Digital2020 Eswatini report, figures current as of January 2020

¹³ The World Bank Group, Digital Diagnostic Eswatini, 2023

2.Business Enabling Environment

Key Findings

Eswatini lacks a comprehensive set of policies and strategies to guide the country in harnessing the full potential of e-commerce. However, the Eswatini Government has been implementing various policies and strategies that utilize the benefits of Information and Communications Technology (ICT) for economic growth. The government has recently launched Digital Eswatini, the national ICT development strategy. Acknowledging that e-commerce is a significant driver of economic growth, Eswatini must ensure that future development plans and strategies are up-to-date with recent advancements and address the challenges related to e-commerce. It is crucial to draft a national e-commerce strategy and establish an e-commerce sub-committee within the ICT Development Unit to facilitate an effective public-private dialogue, ensuring regular and effective solutions to domestic e-commerce challenges.

The country's regulatory environment has been recently updated to incorporate many new laws. For strengthening the legal and regulatory framework around e-commerce, Eswatini has put in place several laws such as Data Protection Act of 2022, Electronic Communications and Transactions Act of 2022, Computer and Cybercrime Act of 2022 and the Electronic Communications Act of 2013. Despite the government's recent introduction of various legislations relating to the development of the ICT sector and E-commerce in general, findings suggest that the levels of implementation of such laws remain quite low. To address this issue, Eswatini will have to review and adopt the necessary implementation mechanisms necessary to create a stable and improved E-Commerce business environment.

In recent years, e-government services have become more prominent in Eswatini. The government's focus on improving interoperability of digital platforms has resulted in a robust strategy and collaborative efforts through e-government initiatives. In partnership with UNDP, Eswatini developed the 2017-2019 e-Government operational framework, which set both immediate and long-term goals. Various digital platforms within the public sector have been created, managed, and maintained by internal IT staff of the relevant ministry or agency. The country needs to strengthen its e-government offerings by completing the move of the government to a fully digitalised system of operation.

The availability of up-to-date statistics in Eswatini is inadequate, and there is room for improvement in data collection and dissemination. The Central Statistical Office (CSO) is responsible for collecting, analysing, and sharing statistical data in the country. However, challenges persist in ensuring data availability. Outdated data remains a major obstacle, with the latest reports dating back to 2016. Additionally, it is uncertain whether the CSO provides data on ICT indicators. On a positive note, Eswatini has a strong presence in international statistical sources, appearing in various ICT-related development indexes. To enhance policymaking around e-commerce, it is recommended that Eswatini strengthens the CSO's capacity for storing, processing, and sharing statistics with national and international stakeholders.



2.1. National policies related to ICT and e-commerce

The Government of Eswatini, like many other governments worldwide, are increasingly recognizing the importance of Information and Communication Technology (ICT) in driving economic growth, promoting social development, and improving the quality of life of their citizens. To this end, the Government of Eswatini has developed policies and initiatives to encourage the use of ICT and drive digital transformation.¹⁴

Recognizing the importance of ICT investment in attaining socioeconomic growth and returns, the Eswatini government enacted the National Information and Communication Infrastructure (NICI) Policy in 2006. The 2006 NICI Policy seeks to provide an enabling environment for the development and expansion of Eswatini's ICT industry, with an emphasis on law, regulation, institutional structures, and the strengthening of the national backbone network. The NICI policy primarily emphasised the necessity for an ICT-led socioeconomic development process capable of changing the country into an information-rich, knowledge-based, and technology-driven society. The NICI Implementation Plan, 2012-2016, follows the NICI Policy (2016 NICI Plan). The 2016 NICI Plan established the legislative, legal, and regulatory underpinning for Eswatini's ICT sector liberalisation, encouraging private sector investment and creating competition with the objective of improving access to ICT services for everyone. The 2016 NICI Plan effectively created Eswatini's institutional structure, defining the Ministry's function as a policymaker and establishing an independent regulator, the Eswatini Communications Commission (ESCCOM). It also called for the formation of government entities to improve public-sector infrastructure.¹⁵



Source: Government of Eswatini, 2023

Following the basis set by the NICI Policy and Plan, Digital Eswatini is a national ICT development strategy, inspiring for national digitization. The Digital Eswatini Strategy for 2023-2027 has six focal areas or "pillars". These are:

(1) Digital Health,

- (2) Digital Agriculture,
- (3) Digital Education,
- (4) Digital Trade, Industry and Entrepreneurship,
- (5) Digital Finance, and
- (6) Digital Government.

The Digital Eswatini Strategy aims for Eswatini to become a regional digital centre that supports the UN, AU, and SADC frameworks and is renowned for world-class digital skills and data capabilities, establishing Eswatini as a digital and knowledge-based middle-income economy.¹⁶ The vision for Eswatini revolves around key themes, such as being connected, participatory, innovative, and inclusive. The focus of the strategy is to shift towards accessible, secure, and sustainable reliance on ICT, promoting an environment that encourages full

^{14 [}European Commission. (2021). Digital Transformation. Retrieved from <u>According to the #Digital2020 Eswatini report, figures</u> <u>current as of January 2020</u>

¹⁵ National Information and Communication Infrastructure Implementation Plan 2012-2016: Available at: www.gov.sz/images/stories/swd%20nici%20plan%20-%20final%203.pdf

¹⁶ National Development Plan: 2019/20 – 2021/22: Towards Economic Recovery: Available at: <u>www.gov.sz/images/CabinetMinisters/NDP-2019-to-2021-22-final.pdf</u>

participation in the digital society, keeping up with the fast pace of change in the sector through research and development, and ensuring every citizen can participate equally in the digital economy. The main goals of the strategy include:

- To ensure that Eswatini is a kingdom of "smart Liswati";
- To have world-class broadband infrastructure underpinning a vibrant and competitive ICT sector that will stimulate economic development;
- To have a proliferation of localised, relevant, and affordable services, platforms and applications available to the country's "smart Liswati";
- To be a hub for innovation, research and development that advances the digital economy and people's participation in it; and
- To enable the efficient and effective delivery of public services through ICTs.

The Eswatini Communications Commission Act, 2013 mandates that ESCCOM regularly updates the National Frequency Allocation Plan, which was last carried out in 2017 and is currently being reviewed to accommodate the new bands required for 5G deployments. ESCCOM has also created a draft of the 15-year International Mobile Telecommunications (IMT) Band Plan and Roadmap, which outlines using available IMT spectrum bands in Eswatini from 2018 to 2035. This roadmap provides a stable regulatory environment that will encourage investment in infrastructure development. Currently, the assigned IMT bands are 700/800 MHz, 900 MHz, 1800 MHz, and 2100 MHz, with the potential for the 450 MHz, 850 MHz, and 2600 MHz bands to be utilized. While the results of WRC-19 are not yet incorporated, the IMT Roadmap reserves the 3300-3400 MHz and 3500 MHz bands for 5G deployments and acknowledges that higher frequency bands ranging from 24.25-86 GHz may be identified for 5G spectrum in the future.

According to survey responses by government agencies, all respondents thought that Eswatini needed an e-commerce policy/strategy, with an urgency score of 91 out of 100. Moreover, 65% of respondents also believed that the existing policies are not conducive for e-commerce in Eswatini, whereas a mere 15% believed that policies are conducive for conducting e-commerce activities. Consumers on the other hand, had similar views of policies not being conducive enough for carrying out E-commerce activities in Eswatini.





Note: Number of responses: 65; Source: Authors based on survey results, 2023

Figure 6 Urgency for ecommerce adoption in Eswatini



Note: Number of responses: 65; Source: Authors based on survey results, 2023

Consumers and enterprises were of the view that policies in Eswatini were generally weak, whereas 40% of respondents from government agencies believed that policies in Eswatini were neutral. While extending the question to other e-commerce players and actors, most believed that policies and market access arrangements relating to e-commerce were weak and had room for improvement. All financial services providers believed that the policy environment was weak in Eswatini.



Note: Number of responses: 65; Source: Authors based on survey results, 2023

Given the importance of the ICT industry in enabling economic growth and sustainable development, a timely update of sector policy becomes essential for fulfilling the goals outlined in the National Development Plan (NDP). Eswatini is now adopting a digital overall strategy that gives a clear vision and policy direction for strengthening the ICT industry and advancing the digital economy. The Ministry of Information, Communications and Technology (MICT) is currently working on an ICT Masterplan and the National Broadband Strategy. Many key objectives identified in existing policies remain far from being achieved, including enhanced access to broadband, and boosted use of ICT to increase efficiencies across all sectors of the economy, which points to several underlying issues related to poor strategy design and weak political buy-in, but also the lack of effective institutional coordination, and access to adequate resources to support implementation. In turn, the lack of a clear ICT strategy so far has negatively influenced the effectiveness of existing institutions, as important Ministries, Departments and Agencies lack strategic direction and a shared vision.

2.2. Legal and regulatory framework

The Kingdom of Eswatini has put in place several laws and regulations to promote e-commerce as well as to increase the level of data privacy amongst internet users. These laws and regulations are mainly derived from Section 14(1) (c) of the <u>Constitution of Eswatini Act No. 1 of 2005</u> which recognises the fundamental rights and freedoms of the individual. UNCTAD highlights four critical laws needed to promote safe and secure e-commerce (box 1).

Box 1 Core E-Commerce Legislation

UNCTAD considers four (4) different cyber laws needed for E-commerce to develop harmoniously:

• E-transactions: E-transaction laws that recognise the legal equivalence between paper-based and electronic forms of exchange is considered a prerequisite for conducting commercial transactions online. Such laws have been adopted by 158 countries (81 per cent), of which 79 are developing countries and 29 are Least Developing Countries. While almost all European countries (44 out of 45 countries) have in place e-transaction laws, and 89% in the Americas, the share in Africa is only 61%.

- Data Protection and Privacy: Data protection and privacy laws regulate the collection, use, and sharing of personal information to third parties without notice or consent of such individuals (Data Subjects). 137 out of 194 countries had put in place legislation to secure data and privacy protection. Africa and Asia show a different level of adoption with 61 and 57 per cent of countries having adopted such legislation. The share in the least developed countries in only 48 per cent.
- **Cybercrime:** This area of law aims to address all forms of illegal acts, violations, and infringements committed online or through the internet. While 156 countries (80 per cent) have enacted cybercrime legislation, the pattern varies by region: Europe has the highest adoption rate (91 per cent) and Africa has the lowest (72 per cent).
- Online Consumer Protection: This area of law protects and safeguards the economic interests of online consumers and empowers them with free and informed choice while also bestowing rights should any problems arise. Out of 142 countries for which data are available, 115 have adopted legislation on consumer protection related to E-commerce. That share varies from 78% in Europe to 52% in Africa and 71% in the Americas.

Source: UNCTAD Cyberlaw Tracker

The National Cybersecurity Strategy of Eswatini 2022-2027 aims to improve the country's cybersecurity and ensure a safe, secure, and resilient cyberspace. The strategy is multistakeholder and considers national priorities to protect the kingdom's data, information systems and networks from various cyber threats. The strategy aims to prevent cybercrime, hacktivism, insiders, cyber terrorism, and state-sponsored threats. Additionally, the strategy recognizes the skills and knowledge gap in the private and public sectors, the critical importance of managing risks and threats, and the need to protect critical information infrastructure and other related ICT services. The strategy has five strategic goals that aim to enhance security and resilience, strengthen cybersecurity governance, policy, regulatory and legislative frameworks, build and enhance expertise, foster a safe and secure information society, and strengthen cooperation, collaboration, and partnerships on cybersecurity. The strategy aims to increase the level of competition among companies providing cyber services and improve the level of trust among businesses and consumers. The strategy also seeks to establish a National Risk and Vulnerability Register and Regulations, develop minimum security standards and procedures, create a National Cybersecurity Agency, establish a National Cybersecurity Training and Research Unit, and a National Cyber Defence Command Centre for Eswatini. The National Cybersecurity Advisory Council is expected to be installed by the end of December 2023.

Box 2 Efforts of ESCCOM for improving cybersecurity in Eswatini

The National Cybersecurity Awareness Campaign was successfully launched by ESCCOM in November 2021, in collaboration with various stakeholders. The campaign, which was held under the theme Be Cyber Smart, ran for the entire duration of November 2021. In addition to this, the Commission partnered with BitSight to equip the industry with the BitSight Monitoring tool, which is used for vulnerability audits. Furthermore, the Commission, in collaboration with the International telecommunications Union (ITU) and the Central Bank of Eswatini, organized a Digital Financial Services Security Clinic aimed at educating the industry on the guidelines, mechanisms,

¹⁷ UNCTAD Global Cyberlaw Tracker. See: <u>https://unctad.org/en/Pages/DTL/STI and ICTs/ICT4D-Legislation/eCom-Global-Legislation.aspx</u>

and tools for ensuring security on Digital Financial Services (DFS). The Commission, together with other industry stakeholders, also developed a website for the national Computer Incident Response Team (nCIRT) - https://ncsirt.org.sz/ - as a platform for sharing critical alerts and information on cybersecurity incidents in the country.

Source: ESCCOM Annual Report 2022

The Data Protection Act of 2022 in Eswatini governs the collection, processing, disclosure, and protection of personal data by data controllers and processors. It outlines the responsibilities of ESCCOM and includes requirements for processing personal information, data subject rights, and provisions on unsolicited electronic communications and automated decision-making. The Act also emphasizes the need for appropriate, reasonable, technical, and administrative measures to prevent loss of, damage to, or unauthorized destruction of personal information and unlawful access or processing of personal information by data controllers and processors. It provides for the privacy of information and confidentiality of personal information, except where communication of such information is required by law or in the proper performance of duties. The Act also supports e-commerce by ensuring that private information remains private, creating a competitive business environment for businesses engaged in e-commerce. ESCCOM is responsible for investigating complaints and enforcing the provisions of the Act, including the imposition of sanctions on violators.

The Electronic Communications and Transactions Act of 2022 was enacted to regulate electronic transactions, electronic communication and the use of e-government services and provide other incidental matters. The Act is aligned with the United Nations Commission on International Trade Law Model Law on Electronic Transferable Records (UNCITRAL's MLETR) as it aims to increase the use of electronic means to improve the efficiency of commercial activities, including enhancing trade connections and allowing new access opportunities for previously remote parties and markets, thus playing a fundamental role in promoting trade and economic development both domestically and internationally.¹⁸

Part IV of the Act discusses electronic commerce (E-commerce). Section 16 states that an electronic communication is that of the originator if it was sent by the originator personally, by a person who had the authority to act on behalf of the originator in respect of that electronic communication, or by an information system programmed by or on behalf of the originator to operate automatically. A secure electronic signature shall be deemed to have been applied by the holder of the secure electronic signature unless the contrary is proved. This is in line with Article 9 of UNCITRAL's MLETR.¹⁹

The Act regulates E-commerce and promotes the use of electronic communication in transactions. It does not limit other laws that regulate electronic communication or require information to be posted or transmitted in a specific way. The Act also allows businesses to establish reasonable requirements for accepting electronic communication. The Act creates trust and confidence among users of E-commerce and helps to create a conducive environment for businesses. The Electronic Communications Act of 2013 regulates electronic communication, while the Electronic Communications and Transactions Act of 2023 regulates electronic transactions. The Act provides for dispute resolution and imposes liability on contraveners, which increases confidence and encourages compliance.

¹⁸ UNICTRAL (2018). UNCITRAL Model Law on Electronic Transferable Records. Vienna. Available from: <u>https://uncitral.un.org/sites/uncitral.un.org/files/media-documents/uncitral/en/mletr_ebook_e.pdf</u>

The Electronic Communications Act of 2013 in Eswatini allows for developing electronic communication networks and services and gives ESCCOM the power to regulate them. However, it does not regulate the content of electronic messages. Section 7 of the Act requires a license issued by ESCCOM to operate a public electronic communications network or provide a public electronic communications service. The Act creates an enabling environment for E-commerce by regulating the infrastructure supporting it, increasing competition and does not have direct implications on E-commerce itself.

The **Eswatini Communications Act of 2013** establishes the Eswatini Communications Commission to regulate and supervise the operation of electronic communications networks and services, promote the development of modern and competitive infrastructure, and ensure freedom of communication services while protecting data privacy. The Act empowers the Commission to investigate complaints, enforce its decisions, and impose fines on violators. It also requires licensees to provide necessary information for compliance. Offenders of the Act are liable to fines or imprisonment.

The Act creates an enabling environment for e-commerce by promoting the development of innovative, secure, modern, and competitive infrastructure for electronic communication. This provision fosters a competitive environment, enabling individuals and companies to participate in e-commerce, and ensures that communication services are provided to promote economic and social development. The Act also empowers the Commission to administer the Competition Act and Fair-Trading Act, which promote competition and consumer welfare in the communication sector, including e-commerce. The ability of the Commission to investigate complaints and impose administrative fines improves the confidence of prospective players in the e-commerce sector.

The **Computer Crime and Cybercrime Act of 2022** is a law that was created to address crimes committed through computer systems and electronic communication networks. Its main objectives are criminalising cyber offences, providing for investigations, collecting evidence, and admitting electronic evidence for computer and network-related crimes, and establishing the National Cybersecurity Advisory Council. The Act also powers the Commission to regulate and coordinate cybersecurity matters and provide for incidental matters.

The Act defines specific offences and their corresponding penalties. Section 3 outlines that intentionally accessing a computer system without lawful excuse or justification or infringing its security measures will result in a fine. Section 7 addresses the unauthorized access of protected computer data, and Section 8 focuses on illegal system interference offences. Section 11 addresses cybercrimes committed with fraudulent or dishonest intentions, resulting in the loss of property to another person. The Act aims to create a conducive environment for e-commerce in the country by criminalising cyber offences. It increases the use of e-commerce by providing a dispute resolution mechanism to address infringement of the Act. The establishment of the National Cybersecurity Advisory Council is expected to further enhance the implementation of the Act by guiding on cybersecurity matters. Overall, the Computer and Cybercrime Act of 2022 is essential in regulating and promoting e-commerce in the country.

The Communications Commission (Consumer Protection) Regulations were implemented in 2016 to regulate fair business practices, disclosure of supplier identity and contract terms, handling of complaints and disputes, and using and disclosing payment information in e-commerce transactions. The Regulations apply to both businesses and consumers in electronic commerce and require businesses to comply with fair trading practices when dealing with consumers. The Regulations also specify the information that must be provided to consumers, including technical protection measures, safety, and health care warnings, and notice of other costs and fees. The Regulations also establish a mechanism for consumers to submit complaints and initiate disputes electronically to ESCCOM. The Appeals Tribunal will make an appropriate order after hearing both parties, including the order for costs. Overall, these Regulations aim to promote consumer protection in E-commerce transactions, which in turn enhances consumer confidence and competitiveness for businesses and individuals involved in e-commerce.

The strength of legal and regulatory frameworks in Eswatini was considered weak by survey respondents. 28.6% of enterprises, 20% of government agencies and 20% of consumers believed the legal framework is very weak. Telecom operators, on the other hand, had a different view; 66.7% were neutral, whereas 33.3% said regulations were weak. Over 75% of respondents from the financial sector and 66.7% from other E-commerce service providers found the regulatory environment to be weak.

The reasons behind the perception of the regulatory landscape being weak relates to some extent to the fact that legislation is only recent and has not yet been implemented. The institutions necessary to oversee the legislation are still very nascent. There is also a lack of awareness in the business community and society in general of the laws themselves or how they will function. As such, it is still very early to judge the effectiveness of these laws. They have been modelled on best practices and generally have a wide scope of coverage and tackle current areas of concern for regulators when it comes to data and consumer protection, and cybercrime.

Figure 8 Feedback on the strength of the legal and regulatory framework in Eswatini



Note: Number of responses: 96; Source: Authors based on survey results conducted in Feb 2023

Figure 9 Feedback on strength of E-commerce regulations by government agencies

To your knowledge, what is the strength of the government regulations in terms of scope in the following E-commerce related areas in Eswatini?



Note: Number of responses: 20; Source: Authors based on survey results conducted in Feb 2023

Despite the government's recent introduction of various legislations relating to the development of the ICT sector and e-commerce in general, respondents from the survey said that consumer protection laws were the weakest and had the lowest levels of implementation. Similarly, despite an Electronic Transactions Act, 55% believed the law is weak and has very weak levels of implementation across the country. Cybercrime legislation and data privacy laws were moderately strong and had relatively higher levels of implementation.





Note: Number of responses: 20; Source: Authors based on survey results conducted in Feb 2023

Just as with traditional businesses, e-commerce must be mindful of the legal framework available to protect the intellectual property rights of the owners of any creation produced by the company. In the area of e-commerce, this can include patents, copyrights, marks, and trade secrets, etc. Given the nature of e-commerce and the transboundary nature of information flows to far away markets, the risks of IPR infringement are significant. Licensing Agreements are common practice in platforms, whereby rights are given to third parties for a certain period and for a specific purpose. The License Agreement facilitates the owner of the product to safeguard his intellectual property rights in his products by way of acceptance of the owner's standard terms and conditions wherein the IPR protection is deemed a material term of the contract.²⁰

E-Commerce businesses are solely responsible for protecting intellectual property rights before it enters the public domain. If a business reveals any intellectual property to the public or in any media through E-commerce, it can lead to others using it unfairly. No trade secrets can be protected once it is in the public domain.²¹ As such there is an important need to raise awareness by businesses as to what is unique and worth protecting, before launching into e-commerce activities. Moreover, not all jurisdictions respect the same agreements on IPR, and so careful evaluation of which markets to operate in is critical.

²⁰ Fauzia, S. (2022). Role of IP in e-commerce. 7 February. <u>UNICTRAL (2018)</u>, <u>UNCITRAL Model Law on Electronic Transferable Records</u>. <u>Vienna</u>, <u>Available from: https://uncitral.un.org/files/media-documents/uncitral/en/mletr_ebook_e.pdf</u>

Eswatini has an extensive network of agreements for IP protection. Eswatini is a signatory of the Lusaka Agreement on the Creation of the African Regional Intellectual Property Organization (ARIPO). It is also a contracting party to the Banjul and Harare Protocols that are administered by ARIPO. The following IP protection is available in Eswatini: 1) trademarks: national, regional (ARIPO) and international (Madrid) 2) patents: national and regional (ARIPO) 3) utility models: national and regional (ARIPO) 4) industrial designs: national and regional (ARIPO) 5) copyright and related rights: national and international (Berne Convention for Copyright. The full list of conventions to which Eswatini is a party to includes:

- i.Paris Convention for the protection of Industrial Property.
- ii.Berne Convention for the protection of literary and Artistic works.
- iii.Patents Co-operation Treaty.
- iv.Banjul Protocol for the registration of Marks.
- v.Harare Protocol on Patents and Industrial Designs.
- vi.Madrid Agreement for the International Registration of Marks.
- vii.Agreement of Trade Related Aspects of Intellectual Property Rights.

As of the time of writing, IP protection was not available for 1) geographical indications 2) layout designs of integrated circuits 3) plant variety protection, and 4) traditional knowledge and handicrafts.²²

Eswatini is a signatory of the WTO's TRIPS Agreement. According to independent analysis, its laws are substantially TRIPS-compliant in terms of providing a legal framework for the protection and enforcement of IP rights. Eswatini national IP office is mandated by the Industrial Property Act and the Copyright and Neighbouring Rights Act to enforce compliance and bring IP infringers to justice. The Copyright and Neighbouring Rights Act provides that people who are guilty of infringement may be fined or be imprisoned. The national IP office engages constantly with other stakeholders who have a role to play in combating IP infringements. These include Interpol, border officials, customs officials, the legal profession, retailers, and the public.²³

While Eswatini has signed several intellectual property conventions and enforces relevant legislation in this area, the level of awareness and investigative capacity remains average by global standards. The Intellectual Property Office, under the Ministry of Commerce, Industry and Trade, is entrusted with the responsibility of providing guarantee appropriate, effective protection and registration of Trademarks and Service Marks. Patents, Utility Models, Industrial Designs, Copyright and Neighbouring Rights through the respective pieces of legislation.²⁴ Eswatini's Intellectual Property Rights Subindex reached 4.5 out of 10, with scores of 4.1 in perception of Intellectual Property Protection, 4.1 in Patent Protection, data wasn't available to measure Copyright Protection, and 5.4 in Trademark Protection²⁵ (see Figure 11). Eswatini's overall Intellectual Property Right Index score was ranked 6th in Africa and 73rd in the world.

²² European Commission (n.d.). IP Fiche: Eswatini.

²³ European Commission (n.d), ibid. The EC notes that despite the national IP office and State efforts to curb IP infringement, rights holders must play a significant role in policing the use of their IP in Eswatini. They must constantly check that the industrial and commercial markets in which they sell their goods or services take appropriate action against the infringement of their IP rights by competitors, retailers, or street vendors. Eswatini Law entitles rights holders to take civil action against infringers to recover their lost revenue and/or to have the infringing products destroyed.

²⁴ https://www.gov.sz/indesx.php/departments-sp-1596706154?id=521

^{25 &}lt;u>https://www.internationalpropertyrightsindex.org/country/swaziland</u>

Figure 11 Intellectual Property Rights Index for Eswatini, 2022



Source: Intellectual Property Rights Index (2022)

Eswatini's e-commerce strategy should ensure a robust intellectual property right framework is in place. While this assessment is not delving into the specific intellectual property right areas relating to e-commerce, it would be essential for the e-commerce strategy to consider the implications of weak enforcement, especially in third markets, as cross-border ecommerce remains a central objective for Eswatini.

2.3. E-Government and E-Procurement

According to the World Bank: **"E-government refers to government agencies' use of** information technologies that can transform relations with citizens, businesses, and other arms of government. These technologies can serve a variety of different ends: better delivery of government services to citizens, improved interactions with business and industry, citizen empowerment through access to information, or more efficient government management".²⁶According to the OECD: "E-government is defined as 'the use of information and communications technologies (ICTs), and particularly the Internet, to achieve better government".

The E-Government Development Index (EGDI) is used as a benchmark to provide a numerical ranking of e-government development across United Nations Member States. Eswatini ranked 141 out of 193 countries in 2022.

²⁶ World Bank (2015). E-government brief. https://www.worldbank.org/en/topic/digitaldevelopment/brief/e-government

Figure 12 Eswatini's E-government Development Index



Source: UN

The E-participation Index extends the dimension of the EGDI by focusing on the use of online services to facilitate the provision of information by governments to citizens "**e-information sharing**"; interaction with stakeholders **"e-consultation"** and engagement in decision-making processes **"e-decision-making"**. Eswatini scored 0.15 out of 1 in the E-participation index, which is subsequently lower than southern Africa Leader South Africa and Sub-Saharan African leader Rwanda. Eswatini performs poorly when compared to the world, regionally, and sub-regionally.



Figure 13 E-Participation index, Eswatini compared to the region and world.

Source: UN

The government's desire for enhanced interoperability of digital platforms led to the creation of a strong strategy and inter-institutional collaboration through e-government initiatives. The government created the 2017-2019 e-Government operational framework in conjunction with UNDP, which included fast wins as well as short-, medium-, and long-term targets. A subsequent four-year e-Government Plan will lead the entire government's approach to establishing and interfacing with public sector platforms from 2023 to 2027. The execution of these policies was under the responsibility of the Prime Minister's Office's e-Government section until early 2023. The e-Government Unit was housed within the Ministry of ICT, aimed at providing greater coherence and clarity in the mandate of the e-gov unit.

Several digital public sector platforms in Eswatini have been designed, implemented, operated, and maintained by the relevant ministry department or agency's internal IT staff. In some cases, they were created by the MICT and then passed on to the appropriate ministry. The Ministry of Public Service, for example, designed its Human Resource Management Information System (HRMIS) using MICT. E-government services are currently provided by the Prime Minister's Office, Ministry of Tourism and Environmental Affairs, Eswatini Investment & Trade Promotion Authority, Treasury Department, Ministry of Agriculture, Ministry of Home Affairs, Ministry of Health and Ministry of Public Works and Transport.

In terms of the level of involvement in developing e-government policies, survey respondents belonging to various government agencies had varied responses. 25% of respondents were highly involved in developing e-government policies and 15% said they were not involved whatsoever. 30% of respondents believed to be involved only moderately, whereas 30% had low participation.

Table 1 E-government Initiatives in Eswatini

Ministry	e-Government Initiatives
Private and Cabinet Office	• e-Cabinet System
Deputy Prime Minister's Office	Payment of Social Grants for OVC
Ministry of Tourism and Environmental Affairs	 Weather via SMS Eswatini Meteorological Services
Ministry of Health	 Research Clearance and Approvals Malaria Surveillance ART Patient Management In-Patient Information System
Ministry of Agriculture	• Eswatini Livestock Identification and Traceability (SLIT)
Ministry of Commerce, Industry and Trade	 Online Company Search and Reservation Company Mobile Tracking System
Ministry of Home Affairs	Government Mobile Tracking Service
Government Mobile Tracking Service	Remote Remand System
Treasury and Stores	 Electronic Funds Transfer (EFT) Point of Sale (POS) Car disk payment
Ministry of Public Works & Transport	Traffic Count System

Source: Authors based on information collected on Government website

Considering the involvement of the private sector in the dialogue process of e-government policies, 15% of respondents from government agencies said SME participation was high, 45% said participation was moderate, 30% considered it low and 10% said SMEs were not involved in the dialogue process.

Enterprises on the other hand had contradicting views. Most enterprises surveyed (64%) said that they were not involved in the development of any e-government policies. 14% said they had low participation and only 15% said they were highly involved in the development of e-government policies. The overall participation of the private sector in the dialogue process of e-government policies was between moderate to no involvement with a meagre 21% of enterprises being highly involved in the dialogue process.

Figure 14 Feedback on E-government by government agencies and enterprises

Government Agencies



Enterprises



Note: Number of responses: 34; Source: Authors based on survey results, 2023
2.4. Availability of Statistics

The availability of up-to-date statistics in Eswatini is inadequate, with areas where data collection and dissemination can be improved. The Central Statistical Office (CSO) is the primary government agency responsible for collecting, analysing, and disseminating statistical data in the country. The CSO operates under the Ministry of Economic Planning and Development and is mandated to collect, process, and disseminate data on various socioeconomic indicators. The Central Statistical Office (CSO) is empowered by the Statistics Act of 1967 to collect and analyse statistics. Their mission is "to effectively coordinate the National Statistical System, provide high-quality statistical data and information required for evidence-based policy, planning and decision-making for national socio-economic development, administration, accountability, and to promote a culture of using statistics".

The CSO conducts several regular surveys and censuses to gather data on a range of topics, including population and demographics, health, education, the labour force, agriculture, and housing. The data collected through these surveys and censuses are used to inform policymaking, planning, and decision-making in various sectors of the economy. In addition to its regular surveys and censuses, the CSO also collaborates with other government agencies, international organizations, and non-governmental organizations to collect data on specific topics. For example, the CSO collaborates with the Ministry of Health and the World Health Organization (WHO) to conduct surveys on health-related issues such as HIV/AIDS prevalence and maternal and child health. The CSO also collaborates with the Ministry of Education and Training and UNICEF to collect data on education indicators such as enrolment, literacy, and school completion rates.

Despite the CSO's efforts to collect and disseminate statistical data, there are still some challenges to data availability in Eswatini. One of the main challenges is the outdated data with the latest statistical reports by the CSO dating back to 2016. Moreover, it is unknown if the CSO provides data on ICT indicators within the country.

On the other hand, Eswatini has a relatively strong presence in international statistics sources. The country has been featured on numerous ICT-related development indexes such as the UNCTAD B2C E-Commerce Index, WEF Networked Readiness Index, GSMA Mobile Connectivity Index (MCI), UPU Integrated Index for Postal Development, or the World Bank Doing Business Index.

Reliable and current data is crucial in the process of policymaking, particularly in the realm of e-commerce. The availability and accessibility of robust data can support the planning, monitoring, and evaluation of various ICT and e-commerce initiatives. It is recommended that Eswatini expand its capabilities for the Central Statistics Office (CSO) in the storage, processing, and sharing of statistics among national and international stakeholders. Efforts should focus on compiling and measuring ICT-related and other relevant indicators such as online transactions, trade in goods and services via e-commerce channels, and transaction values by B2B, Business to consumer (B2C), and Government-to-Business (G2B) models.²⁷

²⁷ At the time of writing this report Eswatini had recently initiated two programs to improve the collection of ICT statistics. Firstly, the SADC ICT Observatory which was set up as a part of the SADC Regional Indicative Strategic Development Plan 2020-2030 and is one of the flagship projects from the SADC Regional Infrastructure Development Master Plan (RIDMP). The Ministry of ICT of Eswatini nominated ESCCOM as the Focal Point for the SADC ICT Observatory. No statistics have been released for the public so far but are expected to be published online by the second half of 2023. Secondly, ESCCOM and the CSO have established a formal institutional mechanism, through an MoU, for cooperation in the collection and sharing of data, especially for the ICT sector. Through this relationship in 2022, ESCCOM and the CSO successfully undertook the first national Household Survey dedicated to collecting demand-side ICT data in Eswatini, the Information Communication Technology Access and Use Survey (ICTAUS) 2022. The results of this survey are yet to be released for the public.

3. Connectivity

Key Findings

Eswatini heavily relies on the port services of South Africa and Mozambique for shipments of bulk goods, and Johannesburg Airport for air cargo. Roadways are the primary mode of transportation, with good international paved connections, but within the country, most roads are not paved and suffer from inadequate maintenance and safety measures. Railways play a significant role in transporting goods, with plans to upgrade networks and connect them to the Richards Bay line in South Africa. Waterway transportation is limited, relying on the port of Maputo for international trade.

Eswatini has taken measures to simplify customs procedures and attract foreign investment through export processing zones. However, challenges remain, including inadequate infrastructure, non-tariff measures, and limited export diversification. Eswatini has made progress in modernizing customs procedures but faces bottlenecks due to resource shortages and connectivity issues of the Revenue Authority. Efficient logistics are crucial for E-commerce adoption and international market access. Improving infrastructure and addressing these challenges can enhance trade facilitation and support economic growth.

The postal sector in Eswatini faces challenges in accessibility and delivery. The country has limited offerings on the delivery of parcels and packages with most consumers having to rely on the very few post offices in the country. The lack of an addressing system also remains a key challenge.

Eswatini has made progress in mobile connectivity, but fixed-line broadband and internet adoption rates are low, especially due to the expensive internet access pricing. Eswatini's ICT infrastructure is viewed as weak by government agencies, enterprises, and e-commerce service providers. Improvement is needed in broadband penetration and the price of internet access.



3.1. Physical Connectivity: Mode of delivery, last-mile delivery

The Kingdom of Eswatini is a landlocked country that relies its port services on the Port of Durban in South Africa and Port of Maputo in Mozambique, which are the key gateways into the country through developed connecting road and rail infrastructure.

Roadways are the primary mode of transportation in Eswatini, with a total road network of approximately 1,500 km of main roads.²⁸ The Government of Eswatini has made significant investments in road infrastructure, including the construction of the MR3 Highway, which connects the country to South Africa and Mozambique, and the MR1 Highway, which connects the capital city of Mbabane to the north western part of the country. However, the country's road infrastructure still faces challenges such as insufficient maintenance, inadequate signage, and a lack of road safety measures.²⁹

Railways also play a significant role in Eswatini's transportation system, with a rail network of approximately 301 km. The railway system is operated by Eswatini Railways, which is wholly owned by the Government of Eswatini. The railway system primarily serves the country's mining and agricultural industries, with most of the goods transported and from the port of Maputo to in Mozambique.³⁰ In 2017, Eswatini Railway and Transnet started building a 150-kilometer railway line from Lothair in Mpumalanga to Sidvokodvo in Eswatini, as well as upgrade nearby networks in both countries. This line will then link to the current Eswatini line, which runs to Richards Bay in South Africa. The E16 billion to E17 billion (USD 1.6 billion to USD 1.7 billion) railway project aims to ease pressure on South Africa's coal corridor to Richards Bay. The rail link will be a means to move freight between the two nations from road to rail.³¹

Eswatini currently has 2 airports of which King Mswati III International Airport is the largest airport. The airport has a single runway and serves both domestic and international flights, primarily to South Africa. However, the airport's facilities and infrastructure are limited, which has hindered its ability to attract more airlines and increase passenger traffic.³² Plans are already underway to explore regional routes, primarily to other destinations in South Africa and also Zimbabwe.



Source: Eswatini Rail

²⁸ Ministry of Public Works & Transport (n.d.) Roads Department. Available at https://www.gov.sz/index.php/ministries-departments/ministry-ofpublic-works-a/roads-department

World Bank (2018). Eswatini: Transport Sector Policy Note. 29

³⁰ Eswatini Railwavs (2021).

³¹ ITA (2019). Eswatini - Transportation Infrastructure. Export.gov. Available at: https://legacy.export.gov/article?id=Eswatini-Transportation-Infrastructure

Eswatini's waterway transportation system is limited, with no access to the sea. The country relies on the port of Maputo in Mozambique for most of its international trade. The port is approximately 220 km from Eswatini's border and is connected to the country's rail network, providing a critical link for the transportation of goods to and from Eswatini. Eswatini Railways connects the country to four (4) Sea ports; 2 in South Africa and 2 in Mozambique. Ports of Durban, Richards Bay in South Africa, and Maputo and Matola Ports in Mozambique through its north/south line. This line links these ports to the Matsapha Dry Port / Inland Container Depot (ICD) where bulk cargo imports are delivered into Eswatini including containers.

Eswatini has a relatively underdeveloped infrastructure, particularly in rural areas. The country has limited road and rail networks, and access to electricity and water is also limited in some areas. However, the government has been investing in infrastructure projects in recent years, including the construction of new roads, including paving rural roads, and the expansion of the country's electricity grid.

Postal Development

The postal sector in Eswatini, like in many countries, has been evolving with the advent of new technologies and the rise of E-commerce. The Eswatini Posts and Telecommunications Corporation (EPTC) is the government agency responsible for providing postal services in the country. EPTC offers a range of postal services, including domestic and international mail, parcel delivery, and money transfer services. The postal network in Eswatini covers the entire country, with over 37 post offices and more than 16 postal agencies.³³

Table 2 Postal development indicators for Eswatini

Indicator	Number
Total number of permanent post offices	53
Average area covered by a permanent office (km²)	327.62
Average number of inhabitants served by a permanent office	27,603.77
Number of post offices in rural areas (including mobile post offices)	9

Source: UN

According to the UPU database, with a total of 53 permanent post offices across Eswatini, the average area covered by each post office is 327.62 km². This indicates that each post office serves a relatively large geographic area, which may pose challenges for individuals who live far from a post office or who have limited transportation options. Additionally, the average number of inhabitants served by each permanent office is 27,603.77. While this number is not exceedingly high, it suggests that some individuals may need to travel significant distances to access postal services. The fact that only 9 post offices are in rural areas, including mobile post offices, further underscores the potential challenges for individuals living in remote or under-served areas. This data highlights the need for continued efforts to expand and improve the accessibility of postal services in Eswatini, particularly in rural and under-served areas.

³³ ESCCOM Postal Mandate. See: <u>https://www.esccom.org.sz/mandate/postal/</u>

Figure 16 Postal delivery in Eswatini



Furthermore, UPU statistics also indicate that most items delivered through the postal system in Eswatini are sent to post office boxes, with 95% of items being delivered this way. In contrast, only 5% of items are delivered directly to people's homes. This can be explained by the lack of an addressing system in Eswatini. Without a formal addressing system, it can be challenging for people or a post man to find specific locations, particularly in urban areas. The lack of a formal addressing system in Eswatini can make it difficult for people to receive deliveries and access online services that require a physical address.

Figure 17 UPU Postal Development Index: Sub Saharan Africa



Source: UN

Postal sector development in Eswatini is inadequate, falling in the lower performance categories of the Integrated Index for Postal Development (2IPD). In 2022, Eswatini ranked 117th out of 172 countries and 17th in SSA with a score of 17.2 out of 100. Africa's average score stood at 15 out of 100, dropping from 20 in 2021. Cameroon reached the top regional spot with a score of 47, followed by Nigeria (43.7) and Kenya (31.6).

ESCCOM / The Commission is authorized by the Eswatini Communications Commission Act (No.10 of 2013) to regulate the postal services sector in Eswatini. The Eswatini postal sub-sector comprises one Major Operator - EPTC, with 37 major outlets and 16 agencies.³⁴

³⁴ Postal | Eswatini Communications Commission (ESCCOM). https://www.esccom.org.sz/mandate/postal/

ESCCOM Licensed Postal operators in Eswatini are:

- Eswatini Posts and Telecommunications Corporation T/A Eswatini Post
- Eswatini Posts and Telecommunications Corporation T/A Phutfumani
- DHL Express Eswatini (PTY) Limited
- Eliang Courier Services (PTY) Limited
- FedEx Express Eswatini (PTY) Limited
- Interfreight (PTY) Limited
- Triton (PTY) Limited

The Commission completed the Postal and Courier Licencing Guidelines 2021 review process, which included substantial stakeholder input. The guidelines are used to manage the postal sector and went into effect in September 2021. This includes both postal and courier service providers. The completion of this guideline was a significant milestone for Eswatini as the postal sector regulation is lagging, with an added burden of the lack of an updated framework.

Source: ESCCOM

Most enterprises and businesses involved in E-commerce activities do not offer multiple shipping options to their customers. They rely on single shipping means, through DHL for small packages and both DHL and Triton for larger parcels. Other shipping companies used by Ecommerce businesses in Eswatini include Logico which is quite popular for shipping small to medium sized parcels.

Figure 18 Feedback on shipping companies used by e-commerce businesses

For large parcels (above 2 kg and less than 30 kg in weight), do you use any of the following shipping companies

None of the above DHL FedEx **Eliang Courier** Eswatini Post (EPTC) Phutfumani couriers Taxi providers Interfreight (PTY) Limited Triton (PTY) Limited Other (please specify)



For small parcels (up to 2 kg in weight), do you use any of the following shipping companies



Note: Number of respondents= 14; Others include Logico couriers and PPMG distribution; Source: Authors based on survey results, 2023

3.2. Trade Facilitation

One of the significant trade facilitation measures in Eswatini is the simplification of customs procedures. The country has adopted the World Customs Organization's (WCO) Revised Kyoto Convention (RKC), which aims to simplify and harmonize customs procedures, thereby reducing the time and costs associated with international trade. Eswatini has also implemented the ASYCUDA system for trade, which allows traders to submit all their trade-related documents electronically, thereby reducing the time and cost of clearance.

Another measure to facilitate trade in Eswatini is the establishment of export processing zones (EPZs). The EPZs offer a range of incentives, including tax exemptions, duty-free imports, and streamlined customs procedures, to attract foreign investment and boost exports. The EPZs have had limited success in attracting investment in the manufacturing and services sectors, with three companies operating under the EPZs at the time of preparing this report.

Eswatini is a member of the World Trade Organization (WTO) and has ratified the WTO Trade Facilitation Agreement in 2016. Eswatini's implementation rate stands at 23.1% lower than the Sub-Saharan African average of 48.5%, leaving 76.9% of commitments to be addressed in the future.³⁶

The TFA aims to simplify and harmonize customs procedures, reduce trade costs, and promote trade facilitation. Eswatini by virtue of having ratified, has made commitments under the WTO TFA to facilitate trade, including the following: Publication and availability of information; pre-arrival processing; single window; customs cooperation; Border agency cooperation; risk management; post-clearance audit; advance rulings; appeals and review. According to the WTO, "[the] TFA contains provisions for expediting the movement, release, and clearance of goods, including goods in transit. It also sets out measures for effective cooperation between customs and other appropriate authorities on trade facilitation and customs compliance issues. It further contains provisions for technical assistance and capacity building in this area." The Agreement aims at improving transparency while increasing possibilities to participate in global value chains³⁷



Figure 19 Progress on implementing the TFA

36 "Trade Facilitation Agreement - Eswatini." World Trade Organization. https://tfadatabase.org/countries/eswatini

Source: WTO

³⁵ As of February 2023

³⁷ WTO (2021). The Trade Facilitation Agreement. The Trade Facilitation Agreement Facility. Available at: <u>https://www.tfafacility.org/trade-facilitation-agreement-facility</u>

To date, Eswatini's 23.1% of commitments in the TFA comprise of 9.7% for Category A measures being implemented by 2018, 1.3% for category B meaning Eswatini needs additional time for implementing measures and 12.18% for category B, meaning Eswatini will require capacity support to fulfil a few of its commitments. Eswatini's rate of future implementation of commitments stands at 34.5% between 2023-2024, 99.2% between 2025-2027 and 100% by 2028.³⁹

Figure 20 Timeline of implementation of commitments of the TFA



Source: WTO

Figure 21 UN Global Survey on Digital and Sustainable Trade Facilitation: Eswatini scores



According to United Nations Global Survey on Digital and Sustainable Trade Facilitation, Eswatini had a Trade facilitation score of 56.99% in 2017

Score by indicator:

- Transparency: 66.67%;
- Formalities: 79.17%;
- Institutional Arrangement and Cooperation: 77.78%;
- Paperless Trade: 55.56%;
- Cross-Border Paperless Trade: 11.11%.

Source: UN Survey on Digital and Sustainable Trade

³⁸ developing Members will implement the measure by 22/02/2017 and LDCs by 22/02/2018

³⁹ WTO (2021). Progress on implementation commitments by Member. TFA Database. Accessed on 1/3/2023. Available at: https://tfadatabase.org/implementation/progress-by-member

Despite these measures, Eswatini faces several challenges in facilitating trade. The country's infrastructure, particularly its road and rail networks, is inadequate, which increases the time and cost of transporting goods. Eswatini also faces non-tariff measures arising from technical standards and regulations, which can hinder trade. In addition, the country's limited diversification in the export sector makes it vulnerable to external shocks.

Economy	Time (hours)				Cost (USD)			
	Documen	tary	Border [Documentary		Border Compliance	
	Export	Import	Export	Import	Export	Import	Export	Import
Namibia	90	3	120	6	348	63	745	145
Kenya	19	60	16	194	191	115	143	833
Ghana	89	80	108	80	155	474	490	553
Eswatini	2	4	2	3	76	76	134	134
South Africa	68	36	92	87	55	73	1,257	676
SSA	71.9	96.1	97.1	126.2	172.5	278.2	603.1	690.6

Table 3 Time and cost to trade across borders in Eswatini

Source: World Bank

Eswatini was the best performer in SSA in the trading across borders segment, ranking 35th out of 190 economies. The average time to export in Eswatini is 2 hours compared to 7 days in SSA. On the other hand, it takes only 3.5 hours to import a standard container of goods into Eswatini compared to 9.3 days in SSA.

Figure 22 Trading across borders score Eswatini



Source: World Bank

In terms of strengths, Eswatini has made some progress in recent years in modernizing its customs procedures and implementing new technologies to streamline processes and reduce bureaucracy. For example, in 2019, the country launched an electronic cargo tracking system, which allows authorities to monitor the movement of goods in real-time and improve security. Eswatini has also made efforts to harmonize its customs procedures with those of neighbouring countries, such as South Africa and Mozambique, which can facilitate trade in the region.

However, there are also several bottlenecks and challenges that can slow down customs procedures in Eswatini. One major issue is the lack of infrastructure and resources, including inadequate facilities and a shortage of trained personnel. This can lead to delays and backlogs in the processing of imports and exports, which can be costly for businesses and reduce the competitiveness of Eswatini as a trading partner. There are also concerns about corruption and inefficiency in the customs department, which can further slowdown procedures and create additional costs for traders.

Government agencies scored the complexity of customs procedures 55 out of 100 during the survey. As per respondents, online payment methods for cross border shipments, information of duties, electronic tracking of shipments as well as the single window was strong and available for exporters in Eswatini.

Figure 23 Feedback on trade facilitation by government agencies



Note: Number of respondents= 20; Source: Authors based on survey results, 2023

Most actors involved in e-commerce operations in Eswatini were of the view that the logistics quality was poor across the country. This is concerning as the largest proportion of businesses (21.43%) indicated that they sell their products or services only to domestic customers. Efficient logistics solutions are essential across the country to increase E-commerce adoption amongst consumers. Another 14.29% of businesses stated that they sell mainly to domestic customers, but also sell to other markets. Similarly, 14.29% indicated that they primarily sell to markets within the Southern African Customs Union (SACU).

A significant proportion of the respondents (21.43%) stated that they mainly sell to the rest of the world, indicating a global reach. Lastly, another 21.43% of respondents stated that they sell equally to domestic and international markets. Efficient logistics play a crucial role in enabling accessibility to international markets. Effective domestic and international logistics can help streamline the shipping process, reduce transportation costs, and minimize delivery times. With the right logistics infrastructure in place, e-commerce businesses can easily connect with suppliers and customers around the world, allowing them to access new markets and unlock new revenue streams. This can be particularly important for small and medium-sized businesses that may not have the resources to set up their own international logistics network.



Note: Number of respondents= 96; Source: Authors based on survey results, 2023

Figure 25 Feedback on main markets of SMEs involved in E-commerce in Eswatini

To which markets do you mainly sell products or services:



Note: Number of respondents= 14; Source: Authors based on survey results, 2023

Discussions from the workshops conducted under this study suggest that internet connectivity for some ISPs in Eswatini pose multiple challenges for the ERS. The Eswatini Revenue Service (ERS) has ruled out point-to-point fibre connectivity at all 23 entry points and relies on a primary fibre connection that provides a minimum of 2 megabytes per second. However, copper theft has become a significant problem, as thieves mistake fibre for copper, causing downtime for main economic sites that typically lasts two hours. To combat this, ERS has a failover network, but repairs for remote sites can take up to three weeks. Clearing agents use their own network for declarations, but accessing platforms is costly, and differential pricing has not been effective. The biggest challenge for the ERS using services such as Automated System for Customs Data (ASYCUDA) is the poor network coverage by the Internet Service Provider (ISP), and hardware failures which are common. This forces the ERS to use manual clearing systems for shipments which causes further delays at the border. Moreover, clearance time for shipments is split into two tiers: document checking and statistical analysis which is time consuming. Additionally, load shedding issues in South Africa can affect waiting times for containers thus delaying the 36 trading process (Feedback from workshop on E-commerce in Eswatini, 2023).

3.3. Digital Connectivity

Eswatini has three licensees with technology-neutral network licenses that permit them to construct infrastructure and supply network services, although there are some restrictions on the national backbone and international gateway services, which are the sole domain of EPTC. Internet broadband services are available from EPTC, MTN, Eswatini Mobile, and various ISPs who use the infrastructure of the other market participants to provide internet access competitively.

While the number of fixed line broadband and telephone subscriptions are low, mobile cellular subscriptions in Eswatini have increased drastically over the past 2 decades. In 2020, the number of mobile cellular subscriptions per 100 people in Eswatini stood at 105, which is same as the world average and higher than the SSA average of 82.





Indicator Name

- Fixed broadband subscriptions (per 100 people)
- Fixed telephone subscriptions (per 100 people)
- Mobile cellular subscriptions (per 100 people)

Source: World Bank

However, despite the high mobile phone penetration in Eswatini, internet adoption rates in Eswatini are significantly low at 47% of the population. While the internet adoption rates are higher than the SSA average of 29%, Eswatini has much higher access levels to ICT communication paths. One reason to the low internet penetration could be the high costs associated with accessing the internet. This is further discussed in Section 3.3.2.

Numerous studies have shown that broadband internet access has a positive effect on economic performance. This effect is both direct, with jobs created by deploying the infrastructure, and indirect, with increased productivity and the creation of new products and services due to accelerated innovation. A World Bank Study estimated that each 10 percent increase in broadband penetration in low and middle-income countries will result in a 1.38 percent increase in GDP.⁴⁰ Applying this model to Eswatini, a 10 percent increase in broadband penetrational USD108.4 million in GDP and 2.46 percent productivity gains. These findings indicate that high-speed broadband infrastructure is a key factor in digitalisation and are the justification for this enabler.⁴¹

⁴⁰ Tim, Kelly; Raja, Siddhartha; 2010. Building broadband: strategies and policies for the developing world (English). Washington, DC: World Bank.

Moreover, according to the Network Readiness Index (NRI) 2021, compiled by the Portulans Institute, Eswatini performs below the African average for technology adoption, regulatory environment, and access.⁴²Eswatini scored 28.8 out of 100 compared to the African average of 34.9. It is positioned like the African average for trust (including cybersecurity readiness).⁴³The best performer in Africa was South Africa with a NRI score of 48.9, whereas the worst performer was Chad with a NRI score of 21.9

Figure 27 Eswatini's Network Readiness Index



Source: Network Readiness Index 2021, Portulans Institute

The Mobile Connectivity Index measures the performance of 170 countries against the four key enablers of mobile internet adoption: infrastructure; affordability; consumer readiness; and content and services. The index is built up through 41 indicators feeding into 14 dimensions that are aggregated to give a score for four enablers. Scores fall within a range of 0-100. According to the MCI, Eswatini was one of the top five countries that improved the most in SSA for mobile connectivity between 2017 and 2021.

Figure 28 Mobile Connectivity Index



42 Here access means "People's fundamental access level to ICT in countries, including issues about communications infrastructure and affordability"

⁴³ Source: Portulans Instute (2022) Network Readiness Index 2021,

In 2020, Eswatini had 108.4 secure internet servers per 1 million people, which was lower than the average of 779 per 1 million in Sub-Saharan Africa. Seychelles had the highest number of 61,110 per 1 million people, and South Africa had the second highest at 14,122. The lowest rates were in the Central African Republic, Chad, and Niger, with only 1 server per 1 million people. However, Eswatini has made significant improvements in the deployment of Servers with the number of servers per million people increasing from just 4.5 in 2010 to 108.4 in 2020. Secure internet servers are key for data localisation, storing data within the country and processing it locally. This is thought to have a detrimental effect on micro, small and medium-sized enterprises.



Figure 29 Secure Internet Servers in Eswatini, 2010-2020

Source: World Bank

Figure 30 Undersea Cables in Sub Saharan Africa



44 Secure internet servers are servers using encryption technology in internet transactions. These servers help maintain privacy online, particularly in trusting websites with respect to a user's personal information. The data comes from a survey that examines the use of encrypted transactions through extensive automated exploration, checking for a valid certificate of authenticity.

Submarine cables are the more reliable source of internet connectivity due to their uninterrupted nature, higher bandwidth, and operating cost-effectiveness. At present, Eswatini does not have a direct connection to an international subsea cable. Eswatini relies on its neighbouring countries for international bandwidth which implies that internet access pricing is relatively high, and market penetration remains relatively low.⁴⁵However, recent developments include, the Paratus cable completing 750km terrestrial cable linking Maputo through Eswatini to Johannesburg and the opening of the Mbabane Internet Exchange Point (MB-IX) to route local traffic thus bringing a revolutionary impact to the ICT infrastructure of the country. The Mbabane Internet Exchange Point was established in 2014 which is connected to the SEACOM and EASSy undersea cables through Mozambique and South Africa respectively for extra security. Eswatini is also connected to the West African Cable System (WACS), from its exchange point in South Africa.⁴⁶





Note: Number of respondents= 20; Source: Authors based on survey results conducted in Feb 2023

Survey responses from both consumers and government agencies indicated that digital connectivity in Eswatini was quite strong with high levels of mobile phone and mobile internet connections. The use of fixed line broadband was also considered to be relatively strong. However, in comparison the availability of secure internet servers was weak. Lastly, almost half of the consumers believed that, despite high internet access rates, internet speeds and reliability was quite weak.

⁴⁵ Buddecomm (2022). Improved internet connectivity in Eswatini sees steady growth in broadband subscribers. April. Available from: <u>https://developingtelecoms.com/telecom-business/market-reports-with-buddecom/13323-improved-internet-connectivity-in-eswatini-sees-steady-growth-in-broadband-subscribers.html</u>

⁴⁶ ITU (2017). Eswatini country profile. Available from: <u>https://www.itu.int/en/ITU-D/LDCs/Documents/2017/Country%20Profiles/Country%20Profile_Eswatini.pdf</u>

Figure 31 Feedback on digital connectivity by consumers



Note: Number of respondents= 45; Source: Authors based on survey results conducted in Feb 2023

A strong ICT (Information and Communications Technology) infrastructure plays a vital role in the development of E-commerce. Survey respondents across all e-commerce activities of Eswatini had mixed views on the overall strength of the ICT infrastructure. Most respondents belonging to government agencies, enterprises and other e-commerce services considered the ICT infrastructure to be weak, whereas consumers and telecommunications providers were optimistic about the existing ICT infrastructure in Eswatini.

Figure 32 Feedback on the strength of ICT infrastructure



Note: Number of respondents= 96; Source: Authors based on survey results conducted in Feb 2023

3.4. People Connectivity

3.5. Reliability, affordability, latency, speed, and coverage

Digital economies are creating unprecedented opportunities for countries to unleash new opportunities, create jobs, and transform people's lives⁴⁷. More broadly, accessible, reliable, and affordable digital infrastructure is the critical foundation for an inclusive digital transformation and economy.⁴⁸ Fast internet provides a platform for innovation used as a key input across sectors and reverberates throughout the economy. It enables entrepreneurship, with businesses and individuals using fast internet to create new applications and services in areas such as ecommerce and financial services. It also allows digital service delivery in sectors critical for inclusive growth, such as education, health, and agriculture. Likewise, it allows the public sector to deliver services to citizens and businesses more effectively and inclusively. On these accounts, broadband has the potential to transform Eswatini's economy and help the country leapfrog development stages, provided that effective policies are put in place that encourage its use as an essential input by all sectors of the economy.

Additionally, reliable, and affordable fixed-line and mobile broadband connections have ensured seamless social and economic interaction both during and after the COVID crisis. With more economic and social activities online, digital technologies have helped and will continue to enable economies to handle the uncertainties of the COVID-19 crisis. Digital connectivity has indeed become a lifeline for using data, consuming content, and engaging in digital applications by individuals, governments, and businesses to ensure the continuity of economic and social activities.

As outlined in its NDP, a key priority for the Government of Eswatini is to ensure the deployment of accessible, robust, reliable, and affordable ICT services to its citizens. In the medium to long term, the Government intends to focus on ensuring the adoption of innovative measures for interconnectivity and use this as a vehicle for the improvement in the efficient and reliable delivery of services across all sectors of the economy. Furthermore, the Government intends to create an enabling environment for broad stakeholder participation and industry liberalisation.

Figure 33 Proportion of ICT prices to GNI in Eswatini



Source: ITU (2023)

The cost of accessing the internet in Eswatini is high due to factors such as limited infrastructure and economies of scale. Fixed line broadband packages are as high as 14.1% of Gross National Income (GNI) and mobile data and voice packages are as high as 5.6% of GNI. According to participants of the Focussed Group Discussions (FGDs), the affordability of internet is extremely high and act as a barrier for greater internet access across both rural and urban populations. Therefore, with the increasing demand for ICT services in Eswatini and the continent, the government and private sector need to together work to improve the availability and affordability of ICT services, including broadband internet access and mobile services.

47 Draft Digital Transformation Strategy for Africa (2020 – 2030)

⁴⁸ Draft Digital Transformation Strategy for Africa (2020 – 2030): Available at: <u>ITU (2017). Eswatini country profile. Available from:</u> <u>https://www.itu.int/en/ITU-D/LDCs/Documents/2017/Country%20ProfileS/Country%20Profile Eswatini.pdf</u>

Position	Country	Mean download speed (Mbps)		
	World	34.8		
	SSA Average	8.9		
48	Rwanda	52.2		
88	South Africa	28.6		
122	Nigeria	15.4		
130	Mauritius	13.4		
142	Ghana	11.2		
146	Lesotho	10.7		
148	United Republic of Tanzania	10.5		
160	Namibia	9.3		
164	Malawi	8.5		
185	Eswatini	4.8		
186	Mali	4.7		
213	Ethiopia	1.7		
214	Somalia	1.6		
217	Guinea-Bissau	1.0		

Source: cable.co.uk

Access to high-speed Internet is limited, with broadband download speeds averaging around 4.8 Mbps. However, in terms of coverage, Eswatini performs better than Sub-Saharan Africa (SSA). Almost 99% of the population is covered by a mobile cellular network, which is 3G connectivity coverage. 4G coverage, on the other hand, is lower at 80% of the population. In SSA, the share of 4G is forecasted to rise from over 10 per cent to 28 per cent between 2020 and 2025, with 5G coverage being introduced as late as 2023.

Figure 34 Network coverage in Eswatini



Source: ITU (2023)

Table 5 MTN Eswatini, internet coverage

Technology	MTN Eswatini Geographic Coverage	MTN Eswatini Population Coverage
2G	92. 3%	98.7 %
3G	94.8 %	99. 1%
4G	57.7%	80.4%
Source: MTN Mobile	e	

As mentioned above, internet coverage in Eswatini is relatively high. Eswatini's leading mobile 92.3% connectivity provider. MTN boasts geographic coverage and 98.7% population coverage for 2G data and 94.8% geographic coverage and 99.1% population coverage for 3G data. However, 4G data coverage is significantly low, with only 57.7% geographic coverage and 80.4% population coverage. This implies that, while most of the population has access to 2G and 3G data, 4G data availability is limited, particularly in rural areas. This could limit the country's ability to fully engage in the digital economy, as greater internet connections are required for certain online activities like video conferencing and online gaming. The government and internet service providers such as MTN need to work together to increase 4G coverage to bridge this digital divide and ensure equitable access to high-speed internet for all citizens.

Survey results suggest that the cost of mobile internet and the cost of fixed-line broadband is very high, while the reliability of internet connections remains low. Internet coverage is considered very strong in urban areas; however, coverage remains poor in rural areas. On the other hand, survey respondents believed that internet speeds for mobile internet and fixed-line broadband were high across Eswatini. Similarly, in 2022, ESCCOM received 19 consumer complaints against service providers, with the majority being in the telecommunications sector. These complaints were divided into five categories, with the largest percentage being service interruption and billing, both at 32%. The next category was contract termination at 16%, followed by broadcast outage and delayed service connection, both at 11%. The high percentage of service interruption and billing complaints suggests that consumers are experiencing difficulties with the quality and reliability of their services, as well as issues with pricing and billing accuracy. The Commission will need to work closely with service providers to address these concerns and ensure that consumers receive fair and reliable services.

Figure 35 Feedback on internet affordability by consumers



Note: Number of respondents=65; Source: Authors based on survey results conducted in Feb 2023

⁴⁹ ESCCOM (2022). Annual report. Available at: https://www.esccom.org.sz/publications/reports/docs/2022_AR.pdf

Figure 36 Feedback on internet reliability and coverage by consumers



Note: Number of respondents=65; Source: Authors based on survey results conducted in Feb 2023

4. Private Sector Development

Key Findings

Access to funding poses a significant challenge for entrepreneurs in Eswatini, as they face difficulties to raise the collateral requirements to satisfy the needs of banks. Initiatives such as the establishment of a credit rating agency, Junior Achievement's incubator centre, and partnerships with organizations like UNDP and SEDCO provide seed capital and funding opportunities for young entrepreneurs.

There is a need for training and improvement in financial intermediaries' knowledge on e-commerce financing, and the introduction of a crowdfunding platform in the future could be beneficial. Microfinance is a primary financing option, while commercial banks offer products such as savings accounts, loans, and credit cards, but access is difficult for many MSMEs, and limited to those with good credit history and collateral. Debit cards have gained popularity and replaced cheques, but there has been a trend of replacing debit cards with mobile money, which is increasingly popular, with both mobile network suppliers having licenses for mobile payment systems.

The government has taken initiatives to promote technical and vocational education training (TVET) and digital skills, including the establishment of Youth Centres and the Royal Science and Technology Park. However, there is a lack of digital competencies, hindering business development in fields such as electrical engineering and electronics. Efforts are needed to address skill deficits and promote ICT education in schools.

Business incubators and accelerators play a crucial role in enabling entrepreneurs to engage in digital commerce, with the Small Enterprise Development Company (SEDCO) being a leading incubation organization in Eswatini. Government support for startups and entrepreneurship is weak, highlighting the need for improved coordination between early-stage businesses and incubators to foster an entrepreneurial mindset in the country.



4.1. Regional Value Chains

Global value chain (GVC) exports have defined the landscape of global division of labour and cross-border fragmentation of production stages. Meanwhile, the rapid advancement of the digital economy allows firms and consumers to interact via digital platforms, particularly e-commerce platforms, and engage in real-time commercial transactions with amazing efficiency and volume.

Regional value chains can help Africa integrate into global value chains while also facilitating productive development. African producers continue to be essentially marginal actors in international production, accounting for 1.7% of global value chain participation in 2019 compared to 1.5% in 2000. Regional value chains account for only 2.7% of Africa's global value chain participation, compared to 26.4% in Latin America and the Caribbean and 42.9% in emerging Asia, according to our findings. Regional productive capacity. In 2019, processed and semi-processed items accounted for 79% of intra-African exports, while other destinations accounted for 41% of Africa's exports. Furthermore, closer physical, social, cultural, and institutional links might assist African enterprises in diversifying and developing their productive capacity when entering regional and continental markets. These additional talents and inputs would allow businesses to enter and thrive in increasingly competitive marketplaces.

GVC participation as a percentage of gross exports ranged from 31% to 55% in Southern African nations in 2015, with higher participation in countries with larger manufacturing sectors. Lower percentages of gross exports related to nations with smaller manufacturing sectors in comparison to total outputs, such as Angola (6.0% of GDP) and Mozambique (9.3%). Eswatini (33.2%) and Lesotho (16.9%), had higher industrial outputs.

Table 6 Comparisons of global value chain (GVC) trade with gross trade, 2015

	GDP (USD million)	Gross exports (USD million)	GVC participati on (USD million)	GVC participation as % of exports	Participation as % of GDP	Manufacturi ng as % of GDP
South Africa	317,578.0	118,445.0	49,366.0	41.7%	15.5%	13.4%
Angola	116,194.0	26,108.0	8,029.0	30.8%	6.9 %	6.0%
Zambia	21,245.0	4,273.0	1,459.0	34.1%	6.9%	7.9 %
Mozambique	15,951.0	901.0	285.0	31.6%	1.8%	9.3 %
Botswana	14,445.0	1,059.0	446.0	42.1%	3.1%	6.4%
Namibia	1,450.0	2,148.0	899.0	41.9 %	7.9 %	12.4%
Malawi	6,402.0	1,102.0	368.0	33.4%	5.7%	10.8%
Eswatini	4,061.0	1,129.0	561.0	49.7 %	13.8 %	33.2%
Lesotho	2,207.0	304.0	168.0	55.2%	7.6 %	16.9%
Southern Africa	509,532.0	155,468. 0	61,581.0	39.6 %	11.8%	11.2%

The advantages of E-commerce are not only seen in international trade, but it is also a great asset to stimulate domestic markets. This is especially true for MSMEs who struggle to access international markets right away, so domestic markets can be a platform to start from. Particularly, emerging markets can benefit the most from E-commerce, as they typically have limited domestic market size and geographical boundaries which make trading more difficult. Recent studies indicate that E-commerce can reduce trading costs by up to 65% as compared to traditional transactions. All of this is essential for development. Therefore, Eswatini should prioritize policy and regulatory reform that encourages digital transformation of the economy and enable participation of the country in regional and global value chains.

E-commerce and regional value chains (RVCs) are two key elements in the global economy that are increasingly becoming intertwined. E-commerce refers to the buying and selling of goods and services online, while RVCs refer to the networks of businesses and producers involved in the production of goods and services across multiple countries within a specific region. These two concepts have several linkages that can benefit businesses and economies, as well as enhance the overall performance of RVCs. One of the primary linkages between E-commerce and RVCs is that E-commerce provides a platform for businesses to expand their reach beyond their immediate geographic region. By selling their products and services online, businesses can access new markets, both within and outside their region, and reach a larger customer base. This can lead to increased demand for their products, as well as opportunities to diversify their product offerings to meet the needs of different markets.⁵⁰

E-commerce can also play a role in enhancing the competitiveness of businesses within RVCs. By adopting E-commerce technologies, businesses can improve their efficiency, reduce their costs, and increase their productivity. E-commerce can also help businesses to streamline their supply chains and improve their logistics, which can enhance their overall performance within RVCs.

Furthermore, E-commerce can facilitate the integration of RVCs into the global economy. By enabling businesses within RVCs to access new markets and customers around the world, E-commerce can help to break down the barriers that can limit the flow of goods and services within RVCs. This can lead to increased investment, greater job creation, and enhanced economic growth within RVCs.

Despite the potential benefits of E-commerce for RVCs, there are also challenges that need to be addressed. One of the primary challenges is the limited access to E-commerce infrastructure, particularly in developing countries. This includes issues related to broadband connectivity, payment systems, and logistics, which can limit the ability of businesses to participate in E-commerce. Another challenge is the need for greater regulatory and policy frameworks to support E-commerce and its integration into RVCs. This includes issues related to data privacy and security, consumer protection, and intellectual property rights, among others. Governments and other stakeholders need to work together to develop effective policies and regulations that can support the growth of E-commerce within RVCs.

Eswatini's participation in RVCs has been growing in recent years, particularly in the agribusiness and manufacturing sectors. The country has identified these sectors as key areas for growth and development and has taken steps to attract investment and promote exports in these sectors. Eswatini is also seeking to position itself as a hub for logistics and distribution services, which could further enhance its participation in RVCs. However, there are challenges that need to be addressed to fully realize the potential of RVCs for Eswatini's economic development. These include limited infrastructure, low levels of technological innovation, and a skills gap in key sectors. Eswatini is taking steps to address these challenges, including investing in infrastructure, promoting innovation and entrepreneurship, and providing skills training to its workforce.

⁵⁰ United Nations Conference on Trade and Development (UNCTAD). (2020). E-commerce and Development Report 2020: Digital Platforms and the Future of Productivity.

In addition to these domestic efforts, Eswatini is also seeking to leverage regional and international partnerships to enhance its participation in RVCs. The country has signed several trade agreements with other African countries and is a member of the African Continental Free Trade Area (AfCFTA), which is expected to create new opportunities for regional integration and trade. Eswatini is also working closely with international organizations such as the World Bank and the United Nations Development Programme (UNDP) to promote economic development and regional integration.

The AfCFTA provides significant prospects for African countries to integrate into RVCs, particularly by investing in innovative capacities that enhance digital firms in Africa. According to a study on African value chains benefited by the AfCFTA, E-commerce is a critical input in enabling B2B e-commerce. The study recommends expanding E-commerce and digitising value chains to improve intra-regional trade and development.

A recent paper by Giovanni Pasquali, Shane Godfrey and Khalid Nadvi on "Understanding regional value chains through the interaction of public and private governance: Insights from Southern Africa's apparel sector", saw that the growth of apparel RVCs in Southern Africa was mainly driven by South African retailers who expanded their sourcing and retailing presence within the region. This growth was mainly influenced by various trade and investment regimes such as the African Growth and Opportunity Act (AGOA) and access to the EU market under the Economic Partnership Agreements (EPA). Through the EPA and AGOA, several new opportunities were unlocked for SSA countries, with duty and quota-free access to the US markets. However, the level of protection within the SACU implies South Africa's position is better than that of its global alternatives in terms of foreign competition. This in turn increases regional trade through regional sourcing.⁵¹

Finding new markets, as well as accessing and retaining them, can be difficult for most SMEs. Governments must establish procedures that direct e-commerce adoption towards involvement in RVCs. In most situations, SMEs decide to enter new markets without the necessary market knowledge, offer, or enough resources, and hence are unable to fully exploit RVC integration. Increased emphasis on developing digital infrastructure will also allow for the bridge between technological building blocks and industrial applications to be built. The interconnection of production can be enhanced through digital adoption to incorporate foreign production chains within domestic businesses. As the availability, cost, and performance of digital infrastructure increase, chances for enterprises of all sizes to engage and compete in global marketplaces become more common, supporting a country's positioning in global and regional value chains. As a result, the growth of E-commerce is a critical market channel for the development of African markets as well as Eswatini's increased participation in RVCs.

Overall, Eswatini's participation in RVCs is an important part of the country's economic development strategy. By leveraging its regional and international partnerships and addressing key challenges, Eswatini has the potential to enhance its competitiveness and promote sustainable economic growth in the years to come.

Pasquali, G., Godfrey, S. & Nadvi, K. Understanding regional value chains through the interaction of public and private governance: Insights from Southern Africa's apparel sector. J Int Bus Policy 4, 368–389 (2021). <u>United Nations Conference on Trade and Development (UNCTAD). (2020). E-</u>
<u>commerce and Development Report 2020: Digital Platforms and the Future of Productivity.</u>

4.2. Access to Financing

According to the World Bank's Doing Business Indicators, Eswatini scores better than the Sub-Saharan Africa average in accessing credit. Eswatini was ranked 94th out of 190 economies in 2020 with a score of 55 out of 100, in the getting credit parameter. The country scores were a result of high credit bureau coverage, i.e., 54.2% of adults, compared to the SSA average of 11%.

Figure 37 World Bank Doing Business Getting credit scores



Getting Credit - Eswatini

Indicator	Eswatini	Sub-Saharan Africa	OECD high income	Best Regulatory Performance
Strength of legal rights index (0-12)	4	5.1	6.1	12 (5 Economies)
Depth of credit information index (0-8)	7	3.9	6.8	8 (53 Economies)
Credit registry coverage (% of adults)	0.0	8.3	24.4	100.0 (2 Economies)
Credit bureau coverage (% of adults)	54.2	11.0	66.7	100.0 (14 Economies)

Source: World bank 2020

As per an ITC survey on SMEs, Eswatini firms use a mix of financing sources to bankroll company operations. Personal savings are the primary source of financing, accounting for 41% of the total survey responses. Company savings, family or friends, cooperatives and banks follow this. They have a high reliance on informal finance. Companies with four employees or fewer rely mainly on personal savings and financial support from family and friends. Only 2% had received financing from commercial banks. On the other hand, larger firms tend to rely more on company savings than personal savings, and 10% have borrowed from commercial banks.⁵²

Banks are the main source of formal borrowing by men-led firms, and cooperatives were relatively more popular among women-led firms. **One of the primary financing options available to Eswatini's citizens is microfinance.** Microfinance institutions provide small loans to individuals and small businesses that cannot access financing from traditional financial institutions. The loans are usually provided at lower interest rates and with more flexible repayment terms, making them a viable option for people with limited resources. The Government of Eswatini has supported the growth of microfinance institutions by providing funding and regulatory support. In addition, the government has also established the Eswatini Development and Savings Bank, which offers savings and loan products to low-income earners and small businesses.

⁵² ITC (2022). Promoting SME Competitiveness in Eswatini. International Trade Centre. Geneva. Available from: https://intracen.org/media/file/13369

In Eswatini, microfinance institutions also provide clients with additional services such as support with group formation, training in financial literacy and management, skills training, and legal advocacy among some borrowers. In Eswatini, there are three forms of microfinance institutions, namely, i) the formal, ii) semi-formal, and iii) informal sources of credit (Dlamini & Mohamed, 2018).

Commercial banks offer a range of products and services, including savings accounts, loans, and credit cards. However, access to financing from commercial banks is limited to those with a good credit history and collateral. As a result, microfinance institutions and government-backed funds remain the primary financing options for many Eswatini citizens. Formal Institutions⁵³ include commercial banks, development banks, and regulated legal co-operatives, subject to common laws specific to banking regulations. In Eswatini, the banking sector consists of: i) three commercial banks; namely, the First National Bank, Nedbank, and Standard Bank; ii) A mutual building society: Eswatini Building Society; and iii) a statutory bank, the Eswatini Development and Saving Bank (trading as Eswatini Bank), a wholly Government owned bank. Formal institutions offer loans to SMEs and have certain requirements, including proof of collateral for borrowers to qualify for credit products. Banks are the main source of formal borrowing by menled firms, and cooperatives were relatively more popular among women-led firms. Evidence suggests that fewer women than men have bank accounts in Eswatini

Informal sources include NBFIs. A non-banking financial institution (NBFI) is a financial institution that provides services like banks but does not accept deposits. Companies that provide this type of services include insurance brokers, management firms and pension funds. Due to their low capital requirements and limited services, these institutions are licenced under a separate category, and a state agency frequently oversees them. (Jahanian et al. 2012) non-bank financial institutions, including cooperatives, drive women's financial inclusion in the country.

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Other financing sources include:

- Imbita is a donor-funded organization established in 1991 to address women's lack of financial services. Imbita operates both a savings and lending scheme. Lending consists of both consumption and business loans, where savings serve as collateral for the loan.
- Inhlanyelo Fund is a non-profit organization whose beneficiaries are 71% women and 29% men. The Inhlanyelo Fund is regarded as a source of gender empowerment since women make up most of the fund, 3,500 small business enterprises. Instead of collateral, the Fund uses the local leadership in the screening and follow-up process and peer pressure is used to ensure repayment. The annual fixed interest is 15%, the lowest rate charged by any financial institution in Eswatini.

⁵³ African Development Bank. (2020). Eswatini Country Strategy Paper 2021-2025. Retrieved from <u>https://www.afdb.org/en/documents/document/eswatini-country-strategy-paper-2021-2025</u>

⁵⁴ Source: ITC (2022). Promoting SME Competitiveness in Eswatini

⁵⁵ Source: ITC (2022). Promoting SME Competitiveness in Eswatini

The Government of Eswatini has also established various funds to support specific economic activities. For example, the **Small Enterprises Development Company (SEDCO)** provides financing and technical assistance to small businesses in the country. The Company offers loans to small businesses at lower interest rates and with flexible repayment terms. SEDCO also provides training and mentorship to small business owners to help them develop their businesses. In addition, the Eswatini Youth Enterprise Fund provides financing and support to young entrepreneurs, enabling them to start and grow their businesses.

Commercial banks and other formal institutions, such as the development bank and the building society, are reluctant to grant loans to micro, small and medium enterprises (SMEs), especially to women- and rural businesses, because of a lack of acceptable collateral. Some of these institutions require a deposit of 10% of the value of the loan as counterpart funding which can be viewed as a commitment fee. The requirement for acceptable collateral is regarded as a challenge because loan applicants lack the collateral in most cases. Thus, their loan applications are declined forcing them to turn to small money lenders (shylocks) for loans that charge interest rates much higher than those charged by commercial banks.

Bells & Mustapha (2021) observe that people with a low level of education, lack of experience and training and other factors may be why commercial banks and other lenders deny them loans. In Eswatini, businesspeople, particularly entrepreneurs running MSMEs, face many challenges to getting credit. This is particularly the case with players in the SME sector, including and rural-and women-run businesses.

Most (if not all) microfinance institutions have in place a requirement for a co-signee as surety for a loan application. Usually, people are reluctant to stand in as sureties because of the consequences that might arise if the applicant defaults in settling the loan. Before adopting the Constitution in 2005, women in Eswatini were regarded as minors in law. As such, they had to rely on their husbands' sureties to get credit from commercial banks and other institutions. While women have been given equal rights since, the requirement for a surety still presents a challenge for people to access credit in Eswatini.

The rate of interest charged on loans by the various microfinance institutions vary significantly. In Eswatini, commercial banks typically charge low-interest rates on loans, while informal microfinance institutions, particularly small money lenders (shylocks) whose interest rates on loans sometimes range between 20% and 30% interest rate on the outstanding balance interest per month. The high-interest rates charged on loans is a serious challenge preventing businesses, especially SMEs from getting credit from microeconomic institutions.⁵⁶

The Government has tried to ease SME access to finance, for example,

- by launching the Small-Scale Enterprise Loan Guarantee Scheme
- by drafting development plans and policies such as the Micro Finance Policy,
- drafting the National Financial Inclusion Strategy,
- passing the Small, Micro and Medium Enterprise policy, and
- drafting the Financial Sector Development Strategy.

⁵⁶ Eswatini Revenue Authority. (n.d.). Taxation. Retrieved from https://www.sra.org.sz/taxation/

However, Eswatini SMEs still consider lack of finance as the most binding constraint at start-up and during operation, and a vast majority remain excluded from accessing formal credit.

As mentioned by stakeholders, access to funding is a significant challenge for entrepreneurs in Eswatini. The misuse of lending is a common issue, as some lending institutions do not provide the money but manage procurement needs themselves, resulting in costly lending. There is also a physical address requirement while starting a company which makes it harder for E-commerce companies to comply as not all would require- physical premise to operate. A credit rating agency has also been established for making it easier for young entrepreneurs and new businesses to secure funding as they might not be able to produce collateral for seeking loans. Moreover, Junior Achievement (JA), an NGO that encourages entrepreneurship amongst the youth has introduced a few initiatives to fund Ecommerce schemes.

JA has also created an incubator centre that can house up to 100 people and has produced 100 graduates in the past year with 70% starting their own business. Additionally, an Angel investor concept has been started by JA for businesses to secure larger funding opportunities, but limited funding is available so far. The Royal Science and Technology Park (RSTP) partnered with UNDP to fund 40 to 48 startups with seed capital funding, while SEDCO funded 30 to 70 enterprises. The Government's pioneered Regional Development Funds (RDPs) funded through the Ministry of Tinkhundla Administration and Development (MTAD) are also a source of funding. There is also no formal crowdfunding platform in Eswatini but can be foreseen in the near future. Thus, efforts to improve the knowledge of financial intermediaries on E-commerce financing are necessary, and training efforts are needed (Feedback from workshop on E-commerce in Eswatini, 2023).

Figure 38 Feedback on access to finance by governments, n=20



Note: Number of respondents=20; Source: Authors based on survey results conducted in Feb 2023

4.3. Payment Solutions

Over the past decade, digital banking and mobile money services have become increasingly popular, and many people are turning away from traditional banking and cash payments. There are several reasons why this shift is a positive one, including increased convenience, enhanced security, and greater financial inclusion.

Digital payment solutions play a crucial role in the success of E-commerce. As more and more people turn to online shopping, the ability to make digital payments securely and conveniently has become increasingly important. One of the most significant advantages of digital banking and mobile money services is their convenience. With these services, people can access their accounts, make transactions, and check their balances from anywhere in the world using their smartphones or other digital devices. Eliminating the physical banking quotient makes banking and financial transactions much more convenient and accessible for everyone, especially those living in remote or underbanked areas where traditional banks are scarce.

Another important benefit of digital banking and mobile money services is enhanced security. Digital banking and mobile money services use advanced encryption technology to protect users' sensitive information via secure internet servers. Thus, a strong server infrastructure is essential for enabling digital payments.

Moreover, digital banking and mobile money services are helping to promote financial inclusion by giving people who have never had access to traditional banking services a way to manage their finances. According to the World Bank, over 1.7 billion adults worldwide do not have access to basic financial services, such as savings accounts, credit, and insurance⁵⁸ Mobile money services are helping to bridge this gap by providing a low-cost, accessible, and convenient way for people to save, borrow, and transfer money.

Digital payment solutions can also help E-commerce businesses increase sales by making it easier for customers to complete transactions. Moreover, they allow E-commerce businesses to reach a global customer base with the ability to accept payments in different currencies and from different countries.

According to the survey, respondents had mixed views regarding the access to e-payments and cashless solutions in Eswatini. While government agencies, consumers and financial services providers reported that e-payments and cashless solutions were generally substantial, telecom operators, other e-commerce providers and enterprises reported otherwise.



Figure 39 Feedback on the strength of payment solutions in Eswatini

Note: Number of respondents=96; Source: Authors based on survey results conducted in Feb 2023

⁵⁷ Seligman, A. (2019). Digital Payment Systems in E-commerce. Journal of Business & Economic Policy, 6(1), 1-10.

⁵⁸ The World Bank. (2021). The Global Findex Database 2017. Retrieved from Seligman, A. (2019). Digital Payment Systems in E-commerce. Journal of Business & Economic Policy, 6(1), 1-10.

According to businesses surveyed, the most common method for online purchases is bank transfers, followed by mobile payments and cash on delivery. While the acceptance of mobile payments is a positive sign for e-commerce transactions, the use of bank transfers burdens the payment process, leading to a loss of business.





Note: Number of respondents=14; Source: Authors based on survey results conducted in Feb 2023

In Eswatini, like in many countries, the use of debit cards has increased, and they have almost completely replaced cheques. The development of debit cards has generally been country specific, resulting in a few different processing systems around the world, which were often incompatible. There are currently four payment gateway providers operating in Eswatini, including PayGate, Paynet, EFTswazi, and Ecocash which help with the processing of credit and debit card payments in addition to other banking needs.

As of December 2019, the number of active debit cards stood at 624.6 thousand being used for over 18 billion transactions amounting to a value of SZL 19.7 billion. However, despite the uptake of debit cards, there was a 50% decline in the number of active debit cards between December 2019 and December 2021. Despite the decline in active debit cards, the volume of payments via debit cards increase in 2021 to 10.8 billion, indicating higher adoption of debit cards. The decline in active number of cards suggests fewer number of debit cards per person which are being used to make most transactions. Moreover, as cash is quite dominant is Eswatini, cash out requests are made at the 368 Automated Teller Machines (ATMs)⁵⁹, processing payments of SZL 16.4 billion. Some businesses have Electronic Funds Transfer at Point of Sale (EFTPOS) machines which processed payments transactions of SZL 4.1 billion, however, the active number of Point of Sale (POS) machines declined in 2021 possibly due to the high costs associated with using such machines.

⁵⁹ as of December 2021

Table 7 Payment Systems in Eswatini

Payment Systems	Indicator	Dec-19	Dec-20	Dec-21	Annual Change (%)
	Active number of cards	624,653	394,177	311,969	-20.9
Debit Cards	Volume of payments (millions)	18,329	18,395	20,812	13.1
	Value of payments (SZL. billion)	19.74	20.43	20.44	0.04
Automated Teller Machines (ATMs)	Active number of ATMs	296	324	368	13.6
	Volume ('000)	12,629	12,681	15,440	21.8
	Value (SZL. billion)	15.9	16.5	16.4	-1
Points-of-Sale (POS) Terminals	Active number of POS	3,186	3,354	3,714	-4.6
	Volume ('000)	5,700	5,714	5,372	-6
	Value (SZL. billion)	3.8	3.9	4.1	4.4

Source: Central Bank of Eswatini, 2022

Mobile payment, also referred to as mobile money or mobile money transfer or mobile wallet (e-Wallet) generally refers to a safe and easy electronic payment service that allows users to store, send, and receive money using their mobile phones. Instead of paying with cash, cheque, or credit cards, a consumer can use a mobile phone to pay for a wide range of services and digital or hard goods. The payment system can be used on both smartphones and basic feature phones. Although the concept of using non-coin-based currency systems has a long history, it is only recent that the technology to support such systems has become widely available. Currently, both mobile networks in Eswatini, namely, Eswatini Mobile and MTN, have licenses for mobile payment system. The system stores funds in secure electronic accounts linked to mobile phone numbers and ensures they are secure, as with banks. The Mobile Money payment system is more convenient where people are less likely to have bank accounts.⁶⁰ Mobile money systems, offer a key financial payments lifeline to a substantial portion of Eswatini's homes and small businesses. Mobile money transactions increased significantly in the fiscal year ending June 2022. Transaction value increased by 16.7 percent from SZL 1.9 billion in June 2021 to SZL 2.2 billion in June 2022. Similarly, transaction volume climbed by 8.6 percent from 9.9 million in June 2021 to 10.8 million in June 2022.

⁶⁰ Eswatini Finance (n.d). Cashless payments. Available at: as of December 2021

⁶¹ Central Bank of Eswatini (2022). Financial Stability Report. Issue 6. June. Available at: Eswatini Finance (n.d). Cashless payments. Available at: as of December 2021.

Local fintech Digimage started up in 2014 and providing a range of digital solutions that meet the needs of businesses and end-users in Eswatini. Despite being a small business of young tech entrepreneurs, Digimage has been recognized by and managed to build strategic partnerships with many government and industry players since 2020. These include the <u>Central Bank</u>, <u>Taiwan ICDF</u>, and <u>MTN Mobile Money</u>.

Digimage has developed two promising digital financial services (DFS) products with the potential to improve access to financial services for rural men and women in Eswatini. The first product is called ePayNet, and the second is called iCredit both of which use the power of digital financial services to increase the impact and enhance the effectiveness of local women's community savings and loan groups on women's financial lies.

- ePayNet is a digital wallet that links local women's Savings and Credit Cooperatives (SACCOs) and Savings Groups to their bank accounts. The e-Wallet makes it possible for members to deposit their savings, request digital Quick Loans, and repay loans from their local SACCO and Savings Group digitally from their mobile phones quickly and easily.
- iCredit is an innovative application that enables financially excluded people to use their informal transactions to develop an alternative credit history. It records the informal saving and credit transactions of SACCO and Savings Group users and uses this data to form individualized alternative credit histories which formal financial institutions can use to make credit decisions for borrowers without formal credit histories.

Overall, as per survey responses, the payment solutions ecosystem in Eswatini is regarded as well-developed. Eswatini's digital payment systems like mobile money, interoperability between banks, and overall banking penetration area are considered to in the high levels of development. However, the acceptance of credit and debit cards by businesses is relatively low.

Figure 41 Feedback on the strength of payment solutions by enterprises



Note: Number of respondents=14; Source: Authors based on survey results conducted in Feb 2023

Figure 42 Feedback on payment solutions by government agencies



Note: Number of respondents=20; Source: Authors based on survey results conducted in Feb 2023

4.4. ICT skills, TVET education and digital learning

Over the years, Eswatini has maintained a high literacy rate. According to the United Nations Educational, Scientific and Cultural Organization (UNESCO) statistics, in 2022 Eswatini had a literacy rate of 87.47%⁶², which is almost the same as some of the neighbouring countries such as Botswana and Namibia who have a literacy rate of 88.22% and 90.6%⁶³, respectively. The high literacy rate as internet penetration rate stood at 47% of the total population at the start of 2022,⁶⁴ indicating that the level of ICT skills remained high in the country.

Technology is transforming learning in ways that no other invention has done before. The government of Eswatini recognises that education, learning, and meaningful labour are critical drivers of economic development. The government is also aware that there has been a transition towards a digital work environment, which requires high level information and communication technology (ICT) skills. This is driven by the never-ending creation of new technologies that enter the economy as required by the various economic activities and the global economic system. On this premise, the Eswatini government has guaranteed that IT is included in the national school curriculum. As a result, according to the 2018 Education Sector Policy, ICT as a subject is to be introduced in all schools to allow blended learning, as well as for school management and administration and the education and training system as a whole. Most crucially, the Education Sector Policy emphasises that "ICT plays a vital role in the development of 21st Century capabilities. It is critical to Eswatini's achievement of its national development goals." As a result, the Ministry of Education and Training (MoET) has been instructed to create an enabling environment for the use of ICT in all education and training establishments by digitising curriculum, mebile learning, e-learning, e-assessment, and e-governance information.

⁶² UNECSO (n.d.). Eswatini country profile. Available at: <u>http://uis.unesco.org/en/country/sz?theme=education-and-literacy</u>

⁶³ Ibid

⁶⁴ Data Reportal (2022). DIGITAL 2022: ESWATINI. Available from: https://datareportal.com/reports/digital-2022-eswatini

⁶⁵ The Government of Eswatini, Ministry of Education and Training, National Education and Training Sector Policy P2 (<u>https://www.unicef.org/eswatini/media/336/file/UNICEF-SD-Education-Sector-Policy-report-2018.pdf</u>)

According to the National Skills Audit of 2022 the ICT sector is becoming a prominent employer in the economy, employing approximately 4.5% of the working age population. The sector's efforts to include women in STEM-related fields, particularly in ICT development, can be seen through the distribution of women and men in the industry. At the time of the study, 43% of women were involved in the industry, while men accounted for 57%. Women in executive and director/HOD positions were less than men (77% versus 84%) in the ICT sector. However, this sector has more females in middle management positions than males.

The study also revealed that most workers in the industry were young people between the ages of 31 and 35 years, which is slightly younger than the preferred age range of 36 to 40 years in the industry. Furthermore, older age cohorts occupied senior positions while 26 to 30-year-olds generally held ICT specialist or professional roles. The sector imported about 3% of the labour, mostly as specialists or for professional skills such as editors, technical engineers, and managers, from Zimbabwe, South Africa, the US, Botswana, Congo, India, and Nigeria.

Source: Eswatini National Skills Audit Report, 2022

The education system in Eswatini is divided into four levels: early childhood care, primary education, secondary education, and post-school education and training (PSET), which includes tertiary education and technical and vocational education and training (TVET). There are five public formal and approximately 29 private TVET institutions, and adult education and lifelong learning programs are provided through the Sebenta National Institute, Emlalatini Development Centre, and eight Adult Education Centres. In the country, the University of Eswatini (UNESWA) is the only public university in Eswatini, there also three private universities and 34 public and private colleges, including teacher training institutions (TTIs).



Figure 43. Structure of Education System in Eswatini

Source: Education Status Analysis for Eswatini, World Bank

In 2020, many private schools started using e-learning as schools were closed due to the COVID-19 restrictions intended to slow down the spread of the coronavirus. Schools that had the capacity to engage in remote teaching and e-learning could be on track with the school curriculum. This gave students access to ICT infrastructure and the tools needed to perform their work remotely, further developing and enhancing their ICT skills.

The introduction of ICT as a subject in primary and secondary schools in Eswatini faces several challenges. Firstly, there is a shortage of primary and secondary school teachers with expertise in ICT. Secondly, access to computers by children at the primary school level is low, especially for those living in rural areas. Thirdly, less than 10% of primary schools are connected to the internet, and few use digital technologies for teaching. Similarly, secondary schools also face challenges in attracting qualified teachers in ICT and providing stable internet connectivity. Moreover, only half of the secondary schools in Eswatini have a qualified Information Technology (IT) teacher, and few students are qualifying to enter STEM-related courses after graduating from senior secondary school.

Despite these challenges, some progress has been made at the secondary education level, with almost all schools having access to electricity and computer labs, and 60% of schools having access to the internet. About 55% of secondary schools offer ICT as an examinable subject at the certificate level. However, students' low uptake and performance in Mathematics, Physical Science, and ICT could be due to several reasons, including a lack of trained teachers who can deliver this content with clarity and a lack of facilities and materials to conduct certain classes, and poor internet connectivity.⁶⁶

The low uptake and performance in Science Technology Engineering and Mathematics (STEM)related subjects are concerning because STEM education is crucial for producing critical thinkers receptive to technological advances, researchers, and innovators who can help solve economic challenges. Therefore, massive investments are required to meet the target of introducing ICT as a subject in primary education from 2021 and to improve the quality of STEM education in Eswatini. Moreover, the proportion of youth and women with relevant technical and vocational skills is only 24%, well short of the anticipated 50% of the National Development Plan.⁶⁷

In 2015, the Kingdom of Eswatini established the Higher Education Council (ESHEC) to raise the quality and relevance of tertiary education and TVET services, including developing and implementing a quality assurance system for registration and accreditation of institutions, developing standards, promoting quality, and conducting institutional audits. Access to tertiary education has substantially increased since the establishment of ESHEC, with about 11,400 students receiving university education in 2017, over half of whom were enrolled at UNESWA. Females are well represented in Eswatini's universities, accounting for just over half of the enrolment. The university participation rate was 993 in 2017, rising to 1,426 when students to enrol in accredited tertiary education institutions abroad, cost-effectively expanding access to tertiary education.

For technical and vocational education training (TVET), the Government of Eswatini in collaboration with Taiwan, established Youth Centres that offer courses on ICT. The course offered provides students with Microsoft Skills and basic computer skills. The Youth Centres are located in different parts of the country. The youth centres remain highly accessible for the public as the courses are affordable as against the courses offered by private sector players.

⁶⁶ World Bank (2020). Eswatini Digital Economy Diagnostic Report. Washington.

Recognizing the importance of science, technology, innovation, and digital skills, the Government established the Royal Science and Technology Park (RSTP) under the Ministry of ICT. The private company, Aptech Limited, operates Advanced School of IT (ASIT), aiming to create an IT-literate society in Eswatini capacitated in software development, multimedia, cyber security and forensics, and networking. The establishment of ASIT aims to increase the number of IT graduates and the quality and relevance of graduates' digital skills. The first group of ASIT students graduated at the end of 2020.

Eswatini has 70 Technical Vocational and Education Training (TVET) institutions of which 27 are public, 29 private for-profit, and NGOs, churches and communities run 14⁶⁸. The institutes provide programmes in 60 different disciplines, ranging from basic vocational programmes to specialist technical and professional degrees, including business management, computer programming, and education. Twenty colleges offer computer programming, but just a few offer programmes connected to high-demand specialisations such as mechanical, electrical, electronic, and computer technicians. TVET access is increasing, with new institutions opening through public formal TVET institutions soon. While almost half of the institutions have internet connectivity and computers in good order, very few TVET institutions use ICT for online training delivery.

The Eswatini Economic Policy Analysis and Research Centre (ESEPARC) undertook an Industry Labor Force Skills Gap Study in 2018, focusing on the automotive, electrical engineering, and information and communication technology industries. According to the report, a lack of digital competencies is a major impediment to developing these businesses, particularly in electrical engineering and electronics fields, which are strongly related to the development of digital technologies.⁶⁹

ESEPARC identified key occupations where there is an abundance or scarcity of technicians based on interviews with a sample of private and public companies and graduates from Gwamile Vocational and Commercial Training Institute (VOCTIM) and Eswatini College of Technology (ECOT), Eswatini's leading TVET training institutions. It also identifies critical competency areas where specific skill deficits exist. Network engineers and operators, programmers, and software and system developers/engineers were among the technicians in short supply in the ICT industry. According to the survey, the country's ICT graduates can install and operate software and provide home and office support in basic assembly/disassembly and computer hardware setup. Nevertheless, they lack the advanced coding and programming skills to create original/Eswatini-owned software and systems. This affects the development of e-commerce in the country as advanced coding skills are essential to developing e-commerce application systems and for the e-commerce integration of companies.

ESEPARC results are in line with the survey conducted in this study. Government agencies, telecommunication operators and enterprises believe that the access to digital skills in Eswatini is between weak to very weak in Eswatini.

⁶⁸ World Bank (2014): Assessing Swaziland's Technical and Vocational Education and Training System to Improve Economic Growth.

⁶⁹ Swaziland Economic Policy Analysis and Research Centre. https://onthinktanks.org/think-tank/swaziland-economic-policy-analysis-and-researchcentre/
Figure 44 Feedback on the strength of digital skills access in Eswatini



Note: Number of respondents=96; Source: Authors based on survey results conducted in Feb 2023

This is due to the low consumer awareness of e-commerce, which was ranked as very weak in Eswatini by both consumers and government representatives. Moreover, according to the responses by government agencies and consumers, there is a high need for workshops on E-commerce-related digital skills. Furthermore, the availability of ICT education in universities and TVET institutions is reasonably robust. However, ICT education in schools is insufficient. Additionally, public sector employees' capacity-building activities are expected to be relatively weak in Eswatini.

Figure 45 Feedback on ICT skills by governments agencies



Note: Number of respondents=20; Source: Authors based on survey results conducted in Feb 2023

Figure 46 Feedback on ICT skills by consumers



Note: Number of respondents=45; Source: Authors based on survey results conducted in Feb 2023

4.5. Entrepreneurship

Figure 47 Global Entrepreneurship Index 2018, Eswatini



Source: GEDI Institute 2018

Figure 48 Global Entrepreneurship Index 2018, Sub Saharan Africa scores

		GEI
1	Botswana	35%
2	South Africa	33%
3	Namibia	31%
4	Gabon	25%
5	Swaziland	24%
6	Rwanda	21%
7	Ghana	21%
8	Nigeria	20%
9	Zambia	20%
10	Senegal	19%
11	Côte d'Ivoire	19%
12	Kenya	18%
13	Ethiopia	18%
14	Tanzania	16%
15	Gambia, The	16%
16	Mali	16%
17	Liberia	16%
18	Cameroon	15%
19	Angola	14%
20	Mozambique	14%
21	Madagascar	14%
22	Benin	13%
23	Burkina Faso	13%
24	Guinea	13%
25	Uganda	13%
26	Sierra Leone	12%
27	Malawi	12%
28	Burundi	12%
29	Mauritania	11%
30	Chad	9%

Source: GEDI Institute 2018

According to the Global Entrepreneurship Index, Eswatini ranks 86th out of 137 economics with a 24% score. Compared to the region, Eswatini was 5th in SSA, after Botswana, South Africa, Namibia, and Gabon. Eswatini is the strongest in the components of risk capital, opportunity perception and cultural support. The poorest scores were for startup skills, risk acceptance, networking, and process innovation.

Moreover, there is a stark difference between the two main sub-indicators of the Index. In the individual component of the index, Eswatini scores 73% for the entrepreneurial qualities of people; however, in the institutional component, the country scores relatively low at 31% for the quality of the institutions that support entrepreneurship.

This is in line with the survey findings where survey respondents rated the strength of government support for start-ups and entrepreneurship as very weak. Additionally, respondents also rated the availability of innovation hubs and business incubators as well as the integration of e-commerce in trade promotion at weak levels.

Source: GEDI Institute 2018

Survey results also suggest that the capacity of MSMEs of Eswatini in E-commerce is also weak, indicating that businesses face challenges in expanding their activities and find it difficult to keep their offerings up to date with changing trends.





Note: Number of respondents=20; Source: Authors based on survey results conducted in Feb 2023

Thus, the role of business incubators and accelerators is key in enabling entrepreneurs and businesses to engage in digital commerce. Business incubators and accelerators are programmes that help start-ups and early-stage firms grow. Incubators often offer a supportive atmosphere and tools to assist entrepreneurs in developing their goods or services, establishing operations, and building their workforce.⁷⁰ They could provide office space, equipment, mentoring, and networking possibilities. Universities, government entities, and private groups frequently support incubators. Accelerators, on the other hand, are meant to assist firms in rapidly scaling up by delivering intense, short-term programmes that focus on refining business models, enhancing operations, and preparing them for investment or acquisition. In return for stock in the firm, accelerators often give mentorship, coaching, and funding options.⁷¹

In Eswatini, the Small Enterprise Development Company (SEDCO), a government owned initiative operating within the Ministry of Commerce, Industry and Trade is the leading incubation organization. The purpose of this agency of government is to sustain and stimulate the small business sector in the country. SEDCO's main services are tailor-made training programmes and very low rental premises available in most of the cities and towns in the country (SEDCO, 2019). Apart from lowering running costs, the provision of physical incubation contributes to helping enterprises be incubated with a network of individuals, purchasing from one another, and assisting each other. SEDCO was established in 1970 to provide infrastructure and business development services, registration of start-up ventures, coaching, and training on business management (MCIT, 2014).

According to the SEDCO data bank, SEDCO incubates various SMEs, including textile and clothing, construction, woodworking, motor repairs, soap and non-edible oils manufacturing, and restaurant/restaurant/butchery and miscellaneous businesses. The incubation process starts with enterprises applying to be accepted for incubation into the controlled conditions, which are meant to guide and protect the infant businesses until their graduation. In Eswatini, very few businesses graduate and leave the incubator, as many companies remain within the SEDCO estates countrywide as permanent incubators.

Additionally, the Royal Science Technology Park (RSTP) started operations in 2017 as a platform for research and development in Information Technology (IT), production of high-tech products, marketing, and trading (Sebenzile, 2018). RSTP aims to help enterprises survive and grow through the vulnerable primary stages of business initiation to become bankable and competitive businesses. RSTP nurtures innovation start-ups in electronics, communication technology, value-added agriculture, renewable energy, environmental management, health, and beauty (RSTP, 2019). Moreover, Eswatini Water and Agricultural Development Enterprise (ESWADE) offers office space, including IT equipment, business development processes, fundraising support, and technical support for innovation development and validation.

Furthermore, University Business Incubators (UBI) have also been set up to assist in research and development (R&D) of entrepreneurial initiatives that could lead to spin-off enterprises from the university to become fully-fledged organizations whilst still being supported by the university. UBIs focus more on technology transfer through innovation and research to organizations.

The entrepreneurship ecosystem in Eswatini has made significant progress in the past few years with various schemes to boost start-ups and foster greater innovation. While challenges in government support exist, it is essential to prioritize coordination between early-stage businesses and incubators to encourage Emaswati entrepreneurial mindset.

⁷⁰ Kappel, R., D. Santoni, and L. Buchholtz. 2014. Incubators and accelerators: A literature review. International Journal of Entrepreneurship and Small Business, 23(4), 431–446.

⁷¹ Isenberg, D. (2010). How to start an entrepreneurial revolution. Harvard business review, 88(6), 40-50.

5. Cross-cutting areas

5.1. Public Private Partnerships

Investing in infrastructure helps enhance economic growth rates, creates new economic prospects, and supports investments in human capital. By leveraging both public and private sector investment, well-defined public-private partnerships (PPPs) can be utilized to increase efficiency in providing public services, particularly for telecommunications infrastructure. PPP projects typically centre around government commitments to improve facilities and services in various domains, including infrastructure development. In essence, PPPs involve contractual agreements between government agencies and private sector entities, whereby the private sector partner delivers required services and assumes associated risks.⁷²

PPPs can be an effective way of embracing ICT developments and successfully providing services that the market and customers need by utilizing the strengths of the private sector. PPPs can be established in various areas, including the dissemination of digital skills, construction of submarine cables for the internet, affordability of internet access, interoperability of financial institutions, postal services development, and more. The Universal Postal Union (UPU) recommends building PPPs in e-services as they require less investment and more technical know-how.⁷³

In recent years, Eswatini has taken various measures to enhance its public-private partnership framework.⁷⁴One such action was implementing the Public Procurement Act in 2012, which aimed to improve procurement systems and procedures and establish a legal basis for PPPs in Eswatini. In May 2011, the government and the World Bank collaborated to hold a seminar called "Swaziland's Prospects for Private Sector-Led Growth" in Mbabane to explore opportunities to attract investors and promote private sector growth.

In July 2012, the government, the Ministry of Finance, and the Eswatini Investment Promotion Authority (EIPA) organized a Regional PPP Training Workshop to strengthen project capacity in collaboration with private actors.⁷⁵ The workshop aimed to assist Eswatini in creating its PPP model by analysing recent developments in the Common Market for Eastern and Southern Africa (COMESA) region. After the training workshop, a joint report by EIPA and the COMESA Investment Agency suggested that public-private partnership initiatives could catalyse the developing and procuring assets in various sectors such as water supply, health care, and education. As a result, a new Public Private Partnership Policy was implemented, reaffirming the government's commitment to improving the quality of life of its citizens through the provision of quality infrastructure and services.⁷⁶

In the case of postal services, PPPs can combine the postal operator's network and logistics with the digital expertise and efficiency of a private-sector player. However, for PPPs to be successful, they must benefit all stakeholders, including the government agency, the private firm, and the consumers. Therefore, it is crucial to establish a better dialogue mechanism between the government and the private sector through a public-private dialogue (PPD) mechanism. This will ensure that the government becomes the trusted advisor of businesses and supports those who need it the most among the targeted beneficiaries.

⁷² World Bank (2019). Overview: Public-Private Partnerships. October. Available at: https://www.worldbank.org/en/topic/publicprivatepartnerships/overview#1

⁷³ UPU (2016). Guide to public-private partnerships for e-services in the postal sector. Available from: https://www.upu.int/UPU/media/upu/publications/guideToPublicPrivatePartnershipsForEServicesInThePostalSectorEn.pdf

⁷⁴ Government of Eswatini. (2012). Public Procurement Act. Retrieved from https://www.world-tenders.com/Swaziland/Procurement Act 2012.pdf

⁷⁵ Swaziland Investment Promotion Authority. (2013). Regional PPP training workshop. Retrieved from <u>http://www.sipa.org.sz/news/news/regional-ppp-training-workshop-organized-by-sipa-9</u>

⁷⁶ African Development Bank. (2018). Public-Private Partnership (PPP) in Eswatini. Retrieved from <u>https://www.afdb.org/en/documents/document/public-private-partnership-ppp-eswatini-109746</u>

⁷⁷ Microsoft (2020). Public-private partnerships hold the key to future development. Microsoft News Centre. September. Available at: https://news.microsoft.com/en-xm/2020/09/22/public-private-partnerships-hold-the-key-to-future-development/

Digital transformation is crucial in modernizing service delivery mechanisms and platforms to provide end-users with better experiences and quality service. Business associations and chambers of commerce also play an essential role in PPPs and should be more involved during e-commerce development. Furthermore, digital platforms heavily rely on telecommunication services, electricity supply, and network infrastructure to contribute to a digital economy.

As essential service providers, governments can benefit from digital transformation by using technology to provide most of its services, including healthcare, education, trade, and other public services. Moreover, in the private sector, online and mobile shopping platforms, also known as e-commerce or mobile commerce, continue providing customers with alternative shopping methods and making payments.

Developing domestic Information Technology (IT) skills and capabilities can enable the country to become digital by creating affordable digital platforms that can serve both the public and private sectors. Therefore, PPPs can form the cornerstone in reaping the benefits of digitalization that, in turn, boost e-commerce.

Currently, there are several PPP projects in various stages of development in Eswatini, including the construction of a water supply project. However, PPPs in the country face challenges, such as inadequate institutional capacity and legal frameworks, limited private sector interest, and difficulty in securing financing. Despite these challenges, PPPs remain a vital tool for Eswatini to deliver public services and infrastructure efficiently and effectively, and to attract private sector investment for economic growth.⁷⁸

5.2. Small and Medium Enterprises

E-commerce has become an essential component of modern-day business operations. The internet has revolutionized the way businesses operate, making it easier for businesses to reach their target audience and sell products and services online. Small and medium-sized enterprises (SMEs) play a critical role in the growth and development of any economy. However, SMEs face various challenges, including limited financial resources, inadequate infrastructure, and difficulty in accessing foreign markets. E-commerce can be a game-changer for SMEs by providing a platform to reach new markets, increase sales, enable RVC participation and streamline operations.

Small and medium-sized enterprises (SMEs) are essential to realise the economic potential of Eswatini.⁷⁹ These small businesses employ roughly 41% of the country's working-age population, either formally or informally. Despite its small size, the SME sector is critical for building a more competitive and resilient business environment and driving economic development in Eswatini. According to research, these enterprises employ 65% of the workforce and contribute up to 50% of national GDP.⁸⁰

⁷⁸ African Development Bank. (2018). Public-Private Partnership (PPP) in Eswatini. Retrieved from https://www.afdb.org/en/documents/document/public-private-partnership-ppp-eswatini-109746

⁷⁹ In 2017, the government of Eswatini along with Finmark Trust conducted a Micro, Small and Medium Enterprise Survey for Eswatini. The report outlines the overall profile of MSMEs in the country, the institutional framework to promote MSME development as well as lists down a set of recommendations for policy-makers, NGOs and financial service providers to improve the overall competitiveness of MSMEs. See Govt. of Eswatini & Finmark Trust (2017). FinScope MSME Eswatini Report 2017.

The Eswatini Government has established policies and laws, organisations, and financing options to emphasise the importance of SMEs to the local economy. Yet, problems persist. In recent years, the SME sector has suffered greatly, with the COVID-19 pandemic, social upheaval, and climate change disrupting routine business operations and forcing many enterprises to temporarily close. As the Eswatini economy recovers from the epidemic, it is important to reinforce these vital enterprises for Eswatini's economic development initiatives.

E-commerce presents various benefits for SMEs. It provides an opportunity for SMEs to reach a wider market. Additionally, E-commerce allows SMEs to overcome geographical limitations by reaching customers in different locations without having a physical presence in those locations. This, in turn, increases the potential market size for SMEs, leading to increased sales and revenue. E-commerce platforms also offer a cost-effective way for SMEs to sell their products and services. E-commerce eliminates the need for physical storefronts, reducing overhead costs such as rent, utilities, and maintenance. Additionally, E-commerce reduces the need for extensive marketing and advertising campaigns since the platforms have a built-in audience. This allows SMEs to focus on creating quality products and services while saving on operational costs.



Figure 50 Feedback on company size and ease of adoption of E-commerce

Note: Number of respondents= 14. Source: Authors based on survey results conducted in Feb 2023

Most firms surveyed belonged to micro, small and medium categories involved primarily in the services and manufacturing sectors. However, around 35% respondents did not sell their goods or provide their services online. Most SMEs in Eswatini felt that it was difficult to build and integrate E-commerce into their business with 14% saying it was very hard and 43% responding as hard for adopting E-commerce.

According to Eswatini's SMME Policy, a set of common challenges were observed that affect the full potential of SMEs in Eswatini. Firstly, there is a disparity in the size of businesses with most businesses either being too small or too large with smaller firms unable to scale operations. Secondly, most businesses face difficulties in accessing finance due to lack of awareness of available credit facilities, limited bankable projects and lack of collateral. Thirdly, there is a lack of entrepreneurial culture due to the lack of management and business development abilities of the SMME owners to establish long-term vision and be pro-active. Lastly, there exist regulatory and licensing issues for domestic businesses as foreign investors are given preferential treatment. These challenges led to the revision of the SMME Policy in 2018 with the vision of "a vibrant entrepreneurial SMME sector that contributes to the economic development of Eswatini through innovative and creative business practices supported by an enabling environment, which fuels transformation of rural households and other communities in productive economic structures." ⁸¹

In addition to the SMME Policy, the government has put in place several strategies for the betterment of the sector.

5.3. Gender

E-commerce can change the economic landscape by opening new avenues for women's entrepreneurship, employment, and economic empowerment. E-commerce has risen dramatically in recent years, as has the number of female entrepreneurs and workers in E-commerce businesses.

During the last decade, E-commerce has evolved into a critical component of the global economy and a potent economic development accelerator. Due to the surge in digital platforms and online marketplaces during the COVID-19 pandemic, e-commerce growth has been tremendous. As consumers and entrepreneurs/traders, women have been active participants in the e-commerce business. Yet, despite advancements in E-commerce, there is a gender digital divide in which women experience reduced inclusion as well as various economic and societal hurdles in the industry.

According to studies, the pandemic has reversed women's progress in E-commerce, with women experiencing higher losses than males in every study. According to one estimate, eliminating the income gender gap between men and women business owners by 2025 would result in an added market value of USD 14.5 billion for e-commerce in Africa. E-commerce can boost company growth across several industries, while minimising the pandemic's negative effects on female business owners⁸².

Women make the majority of Eswatini's population at 52%. Moreover, 72% of women in the country are believed to be self-employed. According to ITCs SME Competitiveness Survey from 2022, women led 56% of the companies surveyed. However, while there were more female business owners than male business owners in the country, women-owned companies are more likely to remain as micro and small business owners and not be employed by any other firm.[1] Banks are the main source of formal borrowing by men led firms, and cooperatives were relatively more popular among women led firms.⁸³Evidence suggests that fewer women than men have bank accounts in Eswatini. It also supports evidence that non-bank financial institutions, including cooperatives such as the Savings and Credit Cooperatives of Eswatini, drive women's financial inclusion in the country.⁸⁴

⁸¹ Government of Eswatini (2018). Revised Small, Micro, & Medium Enterprise Policy of Eswatini.

⁸² CFR (2021). Women and E-commerce: The \$300 Billion Opportunity. Women around the world. June. Available at: https://www.cfr.org/blog/women-and-e-commerce-300-billion-opportunity

⁸³ Grameen Foundation (n.d). USAID W-GDP Eswatini Women's Employment for Economic Recovery Project (WEER) Financial Ecosystem Gap Analysis Findings. Available from: <u>https://grameenfoundation.org/documents/USAID-WEER-Financial-Ecosystem-Gap-Analysis-Findings-Presentation.pdf</u>

According to the International Trade Centre, despite having less access to digital technology, women use them to their advantage. Cross-border E-commerce is one of the fastest-growing areas of international trade and has the potential to help bridge the existing gap in opportunity, inclusion, and justice.⁸⁵

In 2021, the ITU organised a high-level webinar to commemorate the 10-year anniversary of programme Girls in ICT, of which ESCCOM was a part. The theme of the event was "Connecting Girls, Building Better Futures," and panellists included ITU Secretary General Houlin Zhou and UN Youth Envoy Jayathma Wickramanayake. The discussions centred on fostering inclusive, equal access and usage of ICTs for females, as well as investigating approaches to achieve equality in ICT for a creative economy. ESCCOM also used social media to spread information about the Girls in ICT project. To that purpose, the Commission has put together and approved an internal Girls in ICT Development Plan, which is applicable to any female child who wishes to pursue a career in ICT. The goal of this programme is to expand ICT skills, encourage more women to seek professions in ICT, and offer the Commission with an organised way to find and appoint eligible applicants to pursue a degree in ICT at an accredited tertiary institution.⁸⁶

The International Finance Corporation found that in the absence of action to address gender disparities, the regional E-commerce market in Africa is expected to grow at a compound annual growth rate of 15.5 percent. Considering a current market size of \$20 billion in 2020, the value of African E-commerce might reach \$84.5 billion by 2030. In this situation, women's contribution to the entire anticipated value of the E-commerce market in 2030 would be 48% of \$84.5 billion, or \$40.56 billion, while men's contribution would be \$43.94 billion. Nevertheless, closing gender inequalities and establishing earnings parity on E-commerce platforms might boost the sector's worth even more. In the second scenario, if women's Gross Merchandise Value (GMV) reaches parity with males in 2025, an extra \$14.57 billion in gains would accrue from 2025 to 2030. The gains were computed by taking the present expected growth rate for area E-commerce and analysing how future growth might be impacted if women's GMV equalled -the one for men. As the E-commerce market expands in size, the importance of narrowing the gender gap grows accordingly.⁸⁷

When governments and other relevant actors step up their efforts to foster an ecosystem conducive to the establishment and success of e-commerce businesses, they must ensure that gender-specific problems and structural inequities are addressed across all relevant legislation. Women will be unable to fully participate in increasingly digital societies and may face exacerbated inequalities, particularly in the E-commerce sector, unless they have equal and affordable access to technology hardware and the internet and the necessary skills for engaging in online economic activities and content development. The digital gender difference also harms countries' economic growth and development prospects. As a result, in a developing global digital economy, e-commerce rules should be considered an instrument for women's empowerment in pursuing developmental objectives. As a result, developing nations and LDCs are interested in including gender concerns and addressing women's difficulties in crucial E-commerce enabling laws.⁸⁸

⁸⁵ Al-Saleh, H. (2020). E-commerce is globalization's shot at equality. World Economic Forum. January. Available at: <u>https://www.weforum.org/agenda/2020/01/e-commerce-sme-globalization-equality-women/</u>

⁸⁶ ESCCOM (2022). Annual Report. Available at: https://www.esccom.org.sz/publications/reports/docs/2022 AR.pdf

 ⁸⁷ IFC (2021). Women and E-commerce in Africa. European Commission, Kantar, Jumia and IFC. Available from: <u>https://www.ifc.org/wps/wcm/connect/47361305-6ebe-431a-8dd9-db2290919823/202105-digital2equal-women-and-e-commerce-africa.pdf?</u> <u>MOD=AJPERES&CVID=nCGRGTr</u>

⁸⁸ Y Ismail, Y., Hirani, H. (2021). Addressing the Gender Dimension of E-commerce: Towards a Holistic Analytical and Policy Framework. Geneva: CUTS International, Geneva.

The private and public sectors can act to support women's participation and growth in Africa's E-commerce industry. One key opportunity is for fintech platforms to target women who are less likely to have access to finance and could use their sales history on E-commerce platforms as proof of income. Social commerce tools like WhatsApp are also important for women vendors and can be used to support their transition to a platform with increased support. Platforms can recruit women by offering training on entrepreneurship and digital skills, which women value more than men. Disruptive technologies have the potential to reinforce inequalities, but action now can reverse the pandemic's impact and ensure that women entrepreneurs can lead the future of Africa's digital economy.

5.4. Youth Development

Almost 60% of Africa's population is under the age of 25 today. Young Africans are predicted to account for 42% of global youth by 2030. Africa's youth have made great strides when it comes to creating wealth. As the millennial generation has seen the continent's mobile and internet adoption rates skyrocket, African youngsters are increasingly active in securing and stabilising their future through the adoption of technology. Fully fledged start-up scenes are altering how we think about African agriculture, industry, IT, and sustainability in various Sub-Saharan African countries.⁸⁹

The bulk of start-up enterprises are headed by those under the age of 35. 2021 was a recordbreaking year for Africa's start-up scene, with over \$2 billion in capital acquired. According to the African Development Bank (AfDB), this is primarily due to "big economies and sizable populations."

Moreover, according to Sanwal et al. (2016), "Young graduates today prefer the E-commerce sector and even aspire to become first-generation successful entrepreneurs by investing in the sector."⁹⁰ For young entrepreneurs, E-commerce presents the opportunity to experiment with niche market products in a way that's less risky and saves them from investing a large amount of capital.⁹¹

The International Labour Organization (ILO) projects that the labour force in Sub-Saharan Africa will witness an increase from 417 million in 2018 to over 460 million by 2022, driven mainly by youth seeking employment opportunities. To promote entrepreneurship and job creation, the E-commerce industry should create a dynamic environment that supports youth-led businesses. Research has shown that innovation-led entrepreneurship can boost employment opportunities and earnings among young people. For policymakers looking to improve labour productivity and efficiency, digital adoption can act as a crucial source of youth employment. This requires creating a digital environment conducive to the creation of start-ups and promoting innovative financing for small and medium-sized enterprises (SMEs), as well as disseminating up-to-date skills.

⁸⁹ Hicham El Habti (2022). Why Africa's youth hold the key to its development potential. World Economic Forum. September. Available from: https://www.weforum.org/agenda/2022/09/why-africa-youth-key-development-potential/

⁹⁰ Sanwal, T. et al. (2016). E-commerce and its sway on the minds of young generation. International Journal of Scientific and Research Publications, Volume 6, Issue 3, March 2016. Available at: <u>http://www.ijsrp.org/research-paper-0316/ijsrp-p5120.pdf</u>

⁹¹ https://tribune.com.pk/story/2309314/e-commerce-economic-solution-for-our-youth

Digital technology holds enormous potential for the African region, with digital finance contributing to the growth of entrepreneurship and self-employment. However, policymakers must create a digital environment conducive to the creation of start-ups, promote innovative financing for SMEs, and provide up-to-date skills dissemination to improve labour productivity and efficiency. The ecomConnect program by the International Trade Centre supports youth in E-commerce by providing training, market research services, B2B matching with larger enterprises, and help with digitization processes.

Eswatini's National Skills Audit Report from 2022 states that Eswatini's unemployment rate stood at 33.3%, with youth unemployment at a whopping 58.2%. This reality implies that the components that lead to a country's healthy aggregate employment reality are clearly misaligned in Eswatini. According to the National Skills Audit Study, this misalignment was primarily caused by the education system's inability to create competent graduate cohorts while meeting industry expectations. The report highlights that a competitive ICT sector could create jobs for youngsters and the general population. Yet, even with the sector's current structure, there is a shortage of technical and advanced ICT skills in the country, which poses a severe bottleneck in the economy. Hence, building and expanding the IT industry before getting an understanding of the current skills available and skill demands, as well as guaranteeing adequate skill reforms, if necessary, would still leave sectoral opportunities untapped.⁹²

5.5. Environmental implications

Studies indicate that E-commerce has both positive and negative environmental impacts. On the positive side, E-commerce is over 17% more carbon-efficient compared to traditional brick and mortar stores. This can be attributed to its efficient transportation, physical buildings, and warehousing practices. Additionally, retailers with an online presence can adopt more carbon-efficient measures due to the flexibility that e-commerce provides.

However, e-commerce activities also negatively impact the environment, particularly regarding packaging and transportation costs for small parcels. International shipping, a critical component of e-commerce, is expected to result in global carbon emissions of 709 million metric tonnes of carbon dioxide (CO2) by 2025.⁹³ However, this figure is anticipated to decrease significantly to 120 million metric tonnes by 2070. International shipping ranked as the third-largest pollutant in the global transportation sector, accounting for over 11% of all emissions in 2020, after passenger cars and trucks.⁹⁴

According to Statista (2023), the predicted environmental effect of E-commerce logistics in the world's biggest 100 cities by 2030 will be significantly higher. By the end of this decade, the delivery car fleet might number 7.2 million cars, with total emissions from package and freight shipments expected to equal 25 million metric tonnes of CO2. Furthermore, the average commuting time, which includes last-mile deliveries, is predicted to rise from 53 minutes in 2019 to 64 minutes in 2030.⁹⁵

⁹² Government of Eswatini (2022). Eswatini National Skills Audit Report. September.

⁹³ Statista (2021). Sustainability in e-commerce, Statista Dossier on sustainability in e-commerce. Available at: https://www.statista.com/study/102849/sustainability-in-e-commerce/

⁹⁴ Research and markets (2020). 2020 Report on the Environmental Impact of E-commerce. January. Available at: https://www.globenewswire.com/news-release/2020/01/23/1974226/0/en/2020-Report-on-the-Environmental-Impact-of-E-commerce.html

⁹⁵ Statista (2023). Environmental impact of e-commerce logistics worldwide in 2019 with a forecast for 2030, by indicator. Available from: https://www.statista.com/statistics/1248537/e-commerce-environmental-impact-worldwide/

Nevertheless, shipping isn't the only concern. Return rates, particularly for fashion products, have surged, topping 30% of all purchased goods. More and more online shops, large and small, allow shipping back goods conveniently and frequently for free. According to a consumer behaviour survey, 79% of consumers prefer free return shipping and 92% are inclined to buy again if the things they buy are easy to return.⁹⁶

Excessive packaging, especially non-recyclable, widely used packaging, is the real environmental threat relating to e-commerce. The greatest share of greenhouse gas emissions generated by the e-commerce industry comes from the packaging material of goods, accounting for approximately 45% of total estimated emissions, followed by return rates at 25%. Returns, on the other hand, involve double transportation, which doubles the effect.



Figure 51 Breakdown of estimated E-commerce greenhouse gas emissions 2020, by source

Source: Statista 2021

Packaging waste is one of the most significant environmental impacts of E-commerce. With online shopping, products are packaged and shipped individually, often in oversized boxes, to protect them during transit. This leads to excessive packaging waste, including cardboard boxes, plastic bags, bubble wrap, and Styrofoam peanuts. According to a report by the Ellen MacArthur Foundation and the WEF (2016), the equivalent of a truckload of plastic enters the world's oceans every minute, much of which comes from packaging waste.

E-commerce companies can reduce their packaging waste by implementing more sustainable packaging solutions. For example, some companies use recycled and biodegradable materials for their packaging, while others use "right-sized" boxes that fit the product perfectly, reducing the need for excess packaging. Some companies are experimenting with reusable packaging that customers can send back for refilling. E-commerce companies can reduce their carbon footprint by optimizing delivery routes and using more efficient delivery vehicles. For example, some companies use electric or hybrid delivery vehicles, while others partner with logistics companies to consolidate shipments and reduce the number of delivery vehicles on the road. Some companies are even experimenting with drone delivery, which has the potential to reduce carbon emissions by delivering products more efficiently.

^{96 &}lt;u>https://earth.org/online-shopping-and-its-environmental-impact/</u>

To reduce the potential for increased energy consumption, e-commerce companies can encourage more sustainable consumer behaviour. For example, some companies are implementing "green nudges" that enable customers to choose slower, more sustainable shipping options. Others use behavioural science to incentivize customers to choose more sustainable products or more sustainable packaging options.

Finally, to adopt sustainable solutions across the value chain process of production to transportation, manufacturing businesses, logistic service providers, retailers, and consumers must collaborate to allow e-commerce. Governments will need to cooperate with the players to provide long-term support for e-commerce. The government must engage in appropriate conversation to strengthen sustainability policies and regulations. Policymakers must guarantee that manufacturers and merchants widely employ sustainable packaging technologies. Proper packing will prevent returns due to item maltreatment while also easing delivery and benefiting ecologically concerned customers. This is especially essential in Eswatini, where 78.5% of survey respondents reported having a return policy for online shoppers.

6. Conclusion

Eswatini has enjoyed a favourable starting position compared to many other countries in the region, benefiting from increased policy dialogue for ICT infrastructure and its strategic location giving access to Southern African markets. The business environment reforms in Eswatini have not only fostered competition among telecom operators but also created a conducive atmosphere for the growth of E-Commerce. E-Commerce presents an opportunity for Eswatini to enhance international trade and establish itself within global supply chains.

E-commerce has the potential to significantly boost economic growth in Eswatini. E-commerce offers businesses with the capacity to reach distant markets and new customer segments, particularly for MSMEs. Entry costs for E-commerce are quite low, which facilitates small firms in growing their consumer base.

The country has made significant progress in mobile connectivity and ICT infrastructure recently. With 105 mobile cellular subscriptions per 100 people, the country's mobile phone penetration is on par with the global average and higher than the Sub-Saharan Africa average. However, fixed-line broadband and telephone subscriptions remain low. Internet adoption rates are also relatively low at only 47% of the population, potentially due to the high costs associated with accessing the internet. While Eswatini's ICT infrastructure performance, regulatory environment, and access fall below the African average according to the Network Readiness Index, the country has shown improvement in mobile connectivity, ranking among the top five countries in Sub-Saharan Africa in terms of progress between 2017 and 2021. The deployment of secure internet servers has also increased significantly. However, Eswatini lacks a direct connection to an international subsea cable, leading to higher internet access pricing as it relies on neighbouring countries for international bandwidth. The high cost of internet access acts as a barrier to greater adoption and slows the development of e-commerce in the country.

To overcome these challenges and support the growth of e-commerce, collaboration between the government and the private sector is crucial. Efforts should focus on improving the availability and affordability of ICT services, including broadband internet access and mobile services. By addressing these issues, Eswatini can enhance its ICT infrastructure, increase broadband penetration, and create a more conducive environment for e-commerce development.

Significantly, e-Commerce opens doors for MSMEs to access markets that would typically require substantial start-up capital and significant investments. To support this, Eswatini has implemented various initiatives aimed at assisting MSMEs. These include grant schemes, incubators, accelerators, innovation labs, mentoring programs, entrepreneurship promotion, training programs, and tax incentives.

In recent years, Eswatini has adopted several new laws to strengthen and update its legal and regulatory framework for e-commerce, as well as enhanced its tax system and facilitate crossborder trade, thereby creating additional market opportunities. Strengthening consumer rights, establishing better regulations, and ensuring effective enforcement are necessary to boost confidence in this field, and implementing these laws will need to be effective and efficient. Stakeholders report the level of implementation of policies and regulations to cause significant hindrances to the overall functioning of the e-commerce ecosystem. The government's Digital Eswatini program, initiated in 2023, aims to enhance public service delivery through online platforms and has been expanding its scope in recent years. This plan acts as a catalyst in the e-commerce environment of Eswatini and can lead to the advancement of the digital agenda. The recommendations for the government will focus on maintaining momentum and the positive direction of reforms. Mobile phone adoption, advancements in mobile telephony, financial inclusion, and the use of ICT by African SMEs to boost export performance are all essential elements in the growth of ecommerce. Lack of cybercrime control, weaknesses in the regulatory framework, and poor consumer protection are major roadblocks to e-commerce development. These concerns should be addressed by harmonising the legal objectives of the continent's many countries on the one hand and by enacting new laws on cybersecurity, consumer protection, and e-commerce development on the other. Furthermore, for Eswatini, enforcement should be reemphasised, and efforts should be made to educate individuals about the legal framework and the opportunities offered by e-commerce. Algeria, South Africa, Morocco, Senegal, and Tunisia can serve as e-commerce role models for driving E-commerce adoption in the country.

It is recommended that the government should develop, adopt, and implement an overall Ecommerce policy and strategy. An E-commerce committee comprised of policymakers, businesses, civil society, and regulators is required to lead, design, and monitor the plan. None of which are currently in existence. While public-private sector committees have been launched with some success in Eswatini, notably in the field of trade facilitation, similar PPPs are required in other crucial E-commerce areas.

⁹⁷ Igue C. et Al (2020). E-commerce in Africa: issues and challenges. WTO. Available from: https://earth.org/online-shopping-and-its-environmental-impact/

7. Way forward: Action Matrix

Pillar I: Business Enabling Environment							
Indicative actions	Expected outputs	Priority Level	Duration	Lead Agency	Supporting Agency(ies)	Development Partners*	
1. Issue implementation guidelines and communicate and raise awareness on E- commerce. Inform and demonstrate the enabling laws for civil society and the private sector to access and utilise, including informing on where to get information and access focal points.	Improved awareness and increased trust from the population in the digital environment as a day-to- day channel to conduct business and purchases. Cases and complaints increase over time.	High	Short term	ESCCOM	MICT	UNCTAD, EU, UNECA	
 Identify gaps in the implementation of the current legislations relating to ICT and E-commerce. Establish focal points that are accessible to the public to obtain information and provide feedback on raised concerns. Promote awareness of a cybersecurity focal point to disseminate information on the key provisions of the latest cybersecurity act. Publish cases investigated and solved under data protection, consumer protection, cyber security, etc. 	Improved recognition of electronic documents. Fully operationalise the electronic commerce laws.	н	Medium term	ESCCOM	MICT; MOJCA	EU, World Bank, UNCITRAL	

Indicative actions	Expected outputs	Priority Level	Duration	Lead Agency	Supporting Agency(ies)	Development Partners*
3. Ratification of international conventions such as the Budapest and Malabo convention for cybersecurity. Evaluate the options to ratify these conventions by carrying out a regulatory impact analysis and stakeholder consultations.	Adherence to international treaties on cybersecurity.	High	Medium term	MICT	ESCCOM; MCIT; PMO; MOFAIC	
4. Evaluate the opportunities and costs related to accession to the WTO Information Technology Agreement (ITA) to lower price of digital products. Carry out an impact assessment with consultations.	Lower costs of digital products to use the internet and to manage businesses.	High	Medium term	MOF	ESCCOM; MICT; MCIT; PMO; MOFAIC	WTO, EC
5. Draft a position paper for the WTO joint statement initiative and AfCFTA negotiations on the protocol on digital trade, pushing for the reduction of barriers to cross-border trade, while safeguarding public policy interests.	Reduced trade costs. Improved market access.	Med	Short term	MCIT	MICT; MCIT; MOF; MET; Private sector	EU, GIZ, UNCTAD, WTO

Indicative actions	Expected outputs	Priority Level	Duration	Lead Agency	Supporting Agency(ies)	Development Partners*
6. Draft a National E-commerce Strategy , in coordination with the private sector, and the possible support from international donors, by identifying the Vision, Mission, Impact and Strategic Objectives, together with a detailed implementation roadmap and a set of concrete actions to improve E-commerce in the country. Due consideration is paid to the need of women, youth, SMEs, and the environment	E-commerce Strategy drafted and approved.	High	Medium term	MICT	ESCCOM; MCIT; MOF; MET; MLSS; Private Sector	UNCTAD, ITU, GIZ, EU, ITC
7. Establish an E-commerce Committee or merge with the National Trade Facilitation Committee to: (1) guide the development of the National E- commerce Strategy, comprised of representatives of the private and public sectors; and (2) respond to the changing nature of E-commerce and ensure that the country adopts the necessary regulation and legislation to stay at the front of such changes. Draft a concrete set of Terms of Reference guiding the work of such a committee. The committee should also put in the spotlight possible unforeseen impacts – both positive and negative – on women, youth, SMEs, and the environment.	National E-commerce Committee established with working programme.	н	Medium term	MICT	ESCCOM; MCIT; MOF; MET; MOJCA; MLSS; Private sector	EU, UNCTAD, ITC, GIZ

Indicative actions	Expected outputs	Priority Level	Duration	Lead Agency	Supporting Agency(ies)	Development Partners*
6. Draft a National E-commerce Strategy , in coordination with the private sector, and the possible support from international donors, by identifying the Vision, Mission, Impact and Strategic Objectives, together with a detailed implementation roadmap and a set of concrete actions to improve E-commerce in the country. Due consideration is paid to the need of women, youth, SMEs, and the environment	E-commerce Strategy drafted and approved.	High	Medium term	MICT	ESCCOM; MCIT; MOF; MET; MLSS; Private Sector	UNCTAD, ITU, GIZ, EU, ITC
7. Establish an E-commerce Committee or merge with the National Trade Facilitation Committee to: (1) guide the development of the National E- commerce Strategy, comprised of representatives of the private and public sectors; and (2) respond to the changing nature of E-commerce and ensure that the country adopts the necessary regulation and legislation to stay at the front of such changes. Draft a concrete set of Terms of Reference guiding the work of such a committee. The committee should also put in the spotlight possible unforeseen impacts – both positive and negative – on women, youth, SMEs, and the environment.	National E-commerce Committee established with working programme.	н	Medium term	MICT	ESCCOM; MCIT; MOF; MET; MOJCA; MLSS; Private sector	EU, UNCTAD, ITC, GIZ

Indicative actions	Expected outputs	Priority Level	Duration	Lead Agency	Supporting Agency(ies)	Development Partners*
8. Improve the collection of statistics on E- commerce in Eswatini, using the system of national accounts to include the digital economy, specifically the breakdown of services and goods, and by destination, mode of payments and platform. Build on the work of international organizations such as the International Monetary Fund (IMF) to complete separate digital economy indicators which capture e- commerce transactions. Include data on formal or informal E-commerce operators that are listing on Facebook, Instagram and other social media platforms, use VAT receipts to extrapolate and estimate E-commerce sales numbers. Implement the SADC initiative to collect ICT statistics and build an ICT observatory.	<text><text></text></text>	н	Medium term	Central Statistics Office (CSO)	MICT; ESCCOM; MCIT; MLSS; Private Sector (Platforms); PMO	World Bank, UN
9. Improve the dissemination of statistics by having the CSO manage its own website which can be linked to the government website and deploy an ICT observatory module on the CSO website.	E-commerce statistics are regularly published on the CSO website	Med	Short term	CSO	PMO; MICT; ESCCOM	World Bank, UN

Indicative actions	Expected outputs	Priority Level	Duration	Lead Agency	Supporting Agency(ies)	Development Partners*
10. Complete the move of the government to move to a fully digitalised system of operation. Consider areas that are not fully digitalised or aligned to e-gov guidelines currently, and put in place a plan to remove physical in-person processes (e.g., Company Act requiring physical addressing; practise of using personal email addresses by officials; obtaining scholarships; automation of business registration; etc.)	eGov targets are met.	нigh	Long term	MICT	All government agencies	World Bank
11. Conduct a study on taxes for E-commerce. Study on the level of fiscal leakages caused by the digital economy and consideration of the applications of VAT (and other potential duties) on E-commerce.	Study with recommendations approved.	Med	Medium term	MOF	MICT; MCIT, ERS	EU, UNCTAD, World Bank, IMF

Indicative actions	Expected outputs	Priority Level	Duration
12. Review proposals for data localization requirements . Considering data sovereignty efforts as well as the promotion of the national data centre, prepare a study to evaluate the costs and benefits of moving in this direction.	Position paper prepared.	Med	Medium term
13. Create clear divisions and guidelines on the roles and responsibilities of different government departments, such as the e-government unit and the ministry of ICT. Differentiate between the various areas of ecommerce managed by both organisations.	Smooth e- government functioning. Lower levels of overlaps between departments leading to greater efficiency.	Med	Medium term

Note: ESCCOM=Eswatini Communications Commission; MICT= Ministry of Information Communications and Technology; MCIT= Ministry of Commerce, Industry and Trade; MOJCA= Ministry of Justice and Constitutional Affairs; PMO= Prime Minister's Office; CSO= Central Statistics Office; MOF= Ministry of Finance; MLSS= Ministry of Labour and Social Security; MET= Ministry of Education and Training; MPWT= Ministry of Public Works and Transport; *: Examples



Pillar II: Connectivity

Indicative actions	Expected outputs	Priority Level	Duration	Lead Agency	Supporting Agency(ies)	Development Partners*
1. Continue upgrading the transportation (air and road) infrastructure using Public Private Partnerships (PPPs) to enhance connectivity and lower transport and shipping cost.	Improved physical connectivity (air and road) to markets.	High	Long term	MPWT	MCIT; MEPD; Private Sector	AfDB; EU; TMA; AFD; JICA; WB
2.Promote services from Eswatini Post and other private postal providers to further support Eswatini's efforts towards E-commerce readiness, especially improving track and trace, and the delivery of small parcels for cross-border E- commerce and facilitating the fulfilment of trade- related documentation, such as the self-declaration scheme for customs duties, and easy–export / easy-import. Implement the planned upgrades aimed at improving Eswatini Post's E-commerce readiness offering. Improve customer service offering.	Increased digitalisation of services and training to staff for postal services to improve.	Med	Medium term	EPTC	ESCCOM; MPWT; MICT; MHUD; Private Sector	UPU; UNECA; UNCTAD
3. Build capacity within Eswatini Post to enable the expansion of E-commerce across the country and promote the operational efficiency of the postal network based on the Universal Postal Union (UPU) programmes:Operational readiness for E-commerce (ORE); Digital readiness for E-commerce (DRE); and Payment Readiness for E-commerce (PRE).	Better digitalisation of services introduced and training to staff for postal services to improve.	Med	Medium term	EPTC	ESCCOM; MPWT; MICT; MHUD; Private Sector	UPU; UNCTAD

Pillar II: Connectivity

Indicative actions	Expected outputs	Priority Level	Duration	Lead Agency	Supporting Agency(ies)	Development Partners*
4. Expedite the implementation of the newly launched project on home addressing system based on the UPU standards. Alternatively, implement a geocode system to facilitate the last- mile delivery of parcels.	Improved operations of postal service deliveries.	High	Short term	EPTC	ESCCOM; MPWT; MICT; MHUD; Private Sector	UPU
5. Evaluate the possibility to increase the de minimis threshold customs value , to promote small package E-commerce. Advocate for the same across SADC and eventually AfCFTA regions.	Lower transaction costs and reduced times for IRS clearance.	Med	Medium term	MOF	MCIT; MOF; ERS	UNCTAD, World Bank
 6. Expand the network of 3G and 4G towers and promote the cooperation and sharing of infrastructure amongst the telecommunications service providers. Promote rural access to broadband and 3G/4G mobile data by subsidising 3G/4G adoption costs for those residing in rural areas and including in policies the expansion of 3G/4G coverage in rural areas. Revisit the competition in the sector. Prices are considered very high which makes adoption of internet difficult. 	Improved network coverage, reliability, and affordability across the country.	High	Long term	Private Sector	MICT; MCIT; ESCCOM	N/A

Pillar II: Connectivity

Indicative actions	Expected outputs	Priority Level	Duration	Lead Agency	Supporting Agency(ies)	Development Partners*
7. Introduce broadband packages and plans specifically designed for E-commerce firms and small businesses.	Lower business operating costs and higher rates of e- commerce adoption.	High	Medium term	MICT	Telcos Private Sector	N/A
 8. Enable smooth customs procedures through: Greater efforts in implementing a single window for customs. -Eswatini Revenue Service to make all charges and duties transparent for E-commerce transactions. Also improved transparency in customs costs for the buyer. Prepare and disseminate a brochure on costs related to E-commerce parcels 	Improved trading environment and overall ease of doing business. Greater level of SME trust on customs procedures.	High	Long term	MOF	MICT; ERS; MICT	UNCTAD, World Bank
9. Strengthen internet connectivity and reliability as ERS faces connectivity issues and hardware issues by ISP providers which makes it harder to access customs streamlining ASYCUDA world.	Reliability of the internet for streamlining customs procedures.	High	Medium term	MCIT	ERS; MCIT	UNCTAD, World Bank

Note: ESCCOM=Eswatini Communications Commission; MICT= Ministry of Information Communications and Technology; MCIT= Ministry of Commerce, Industry and Trade; MOF= Ministry of Finance; MPWT= Ministry of Public Works and Transport; MHUD: Ministry of Housing and Urban Development; MEPD= Ministry of Economic Planning and Development; ERS= Eswatini Revenue Service; EPTC= Eswatini Posts and Telecommunications Corporation; *: Examples

Indicative actions	Expected outputs	Priority Level	Duration	Lead Agency	Supporting Agency(ies)	Development Partners*
1. Study the role of digitalisation within Eswatini's domestic, regional, and global value chains and issue policy recommendations for B2B transactions in RVCs based on lessons learnt.	Improved integration into regional and global value chains.	Med	Medium term	MCIT	MICT; ESCCOM	EU, GIZ
 2. Increased ICT education and Business Incubator support for innovative enterprises in the informal sector. Expand initiatives under the Technology Hub to empower youth. 	Greater adoption of digitalisation and increased entrepreneurial spirit amongst the youth	High	Short term	MCIT	Ministry of Youth, Sports, and Culture	GIZ, UNECA
3. Undertake sensitisation exercises to educate businesses and citizens to increase their confidence in electronic and mobile payment tools.	Reduced trade costs. Improved market access.	High	Short term	Eswatini Bankers Association (EBA)	Private Sector	EU, GIZ, ITC, UNCTAD
4. Strengthen bank guarantee schemes, particularly for innovative SMEs. Sensitise commercial banks on the risks and valuation of businesses of E-commerce. Train businesses on cashflow sensitivity analysis and responsible financial management.	Improved access to finance in the E- commerce segment.	High	Medium term	Ministry of Finance	Central Bank of Eswatini; Commercial Banks; private sector	World Bank

Indicative actions	Expected outputs	Priority Level	Duration	Lead Agency	Supporting Agency(ies)	Development Partners*
5. Expedite the implementation of the National Switch Programme. Aim to accelerate the onboarding on mobile money operators and fintech service providers on the National Switch Programme.	Improved commercial banking integration. Onboarding of money providers into a national switch.	Med	Medium term	Central Bank of Eswatini	Eswatini Bankers Association; Mobile Money Providers; Commercial Banks	IMF
6. Establish a working group made up of commercial banks and mobile operators to work towards a payments gateway that would operate seamlessly and securely in Eswatini, with a view to having it adopted across eMarketplaces. This is a follow-up to Activity 5 above on the National Switch.	Improved business environment. Interoperability amongst financial operators.	High	Long term	Central Bank of Eswatini	Private Sector; Mobile money operators; Commercial Banks	N/A
7. Address the gap between tertiary education and the market needs of businesses for E- commerce and improve the effectiveness of internship and training programmes by fostering linkages between educational institutions and the private sector.	Reduced brain drain from the country. Increased jobs and lower unemployment.	High	Long term	MOLSS	MET, MCIT, MICT, Private sector	EU, World Bank, UNDP

Indicative actions	Expected outputs	Priority Level	Duration	Lead Agency	Supporting Agency(ies)	Development Partners*
 8. Address the critical shortcomings in accessing finance, such as: Strengthen the capacity of the credit rating agency thus simplifying the process to secure loans. Revisit the physical addressing requirement for accessing finance. Addressing the collateral requirements for loans, especially for women and youth. Promote the angel investor concept. Improve resources for incubator centres. -Introduce crowd funding platforms. Provide trainings for firms to carry out better financial planning. Seed Capital Funding of the kind provided by RSTP/UNDP and SECDO needs to be scaled up and follow sustainable measures. 	Greater access to finance and ease in getting credit for businesses and entrepreneurs. Accessibility of funding by women and vulnerable groups.			MOF	Central Bank of Eswatini; Eswatini Bankers Associations, Commercial Banks	UNDP, IMF, World Bank, EU, GIZ
9. Provide training to MSMEs and women and youth owned businesses to build business proposals to acquire financing/investments.	Improved business skills amongst women, MSMEs and youth	High	Short term	MET	MCIT, MICT, SEDCO, RSTP, Private Sector	GIZ

Indicative actions	Expected outputs	Priority Level	Duration	Lead Agency	Supporting Agency(ies)	Development Partners*
10. Expand the capacity of e-commerce enterprises by increasing or extending the capacity of existing innovation-focused business incubators and accelerators. Use Public Private Partnerships to deliver such trainings.	Improved business coaching, mentoring and access to finance.	High	Short term	MET	MCIT, MICT, SEDCO, RSTP, Private Sector	GIZ
11. Promote the use of sustainable packaging products for e-commerce deliveries and parcels	Mitigating the environmental impacts of e- commerce	Med	Long term	MCIT	Business Associations; Private sector	N/A

Note: ESCCOM=Eswatini Communications Commission; MICT= Ministry of Information Communications and Technology; MCIT= Ministry of Commerce, Industry and Trade; MET= Ministry of Education and Training; MOLSS = Ministry of Labour and Social Security; EBA = Eswatini Bankers Association; CBE= Central bank of Eswatini; RSTP= Royal Science and Technology Park; SEDCO: Small Enterprises Development Company; *: Examples; N/A: Not applicable

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Annex 1. Eswatini E-Commerce Country Profile

Population 1.2 million Year 2021

Region **Africa**

GDP Per Capita \$4,215 Year 2021 Development Group Developing Income Group
Lower middle income

GDP Per Capita (Current US\$)



GDP per capita of Eswatini had its highest peak in 2012 at \$4.5 thousands and reached its lowest level in 2002 at \$1.4 thousands. The most recent GDP per capita available for Eswatini is \$3.4 thousands for the year 2020. GDP (Current US\$)



Eswatini had its highest GDP (Current US\$) value in 2021 at a value of \$4.9 billion and its lowest value in 2002 at \$1.4 billion. The most recent GDP value available for Eswatini is \$4.9 billion for the year 2021.

Source IEC Country Profile based on IMF



The net FDI was at its highest in 2017 with a value of \$121.5 million and at its lowest at -\$0.1 billion in 2010. The most recently available net FDI for Eswatini is -\$0.1 billion for the year 2020.

Source IEC Country Profile based on IMF

Current Account Balance (US\$)



The Current Account Balance of Eswatini reached its highest in 2015 with a value of \$533.3 million and its lowest in 2009 with a value of -\$0.4 billion. The most recent available Current Account Balance for Eswatini is \$0.3 billion for the year 2020.



Source: World Bank

Secure Internet Servers (per 1 million people)



Source: World Bank





Source: ITU

Mobile Connectivity Index



Source: GSMA


Source: Network Readiness Index 2021, Portulans Instute



DHL Global Connectedness Index 2019



Annex 2. Survey Results

See below.

Assessment of Eswatini's E-commerce Readiness

Would you like to answer this survey as:



Survey responses by Telecommunications Service Providers

Do you face infrastructure barriers while providing telecommunications services?



According to you, how regulated is the market for basic telecommunications?



According to you, what infrastructure barriers exists in Eswatini that limit the full delivery potential of E-commerce (Infrastructure barriers include deficiencies in telecommunication enabling infrastructure as a foundation of e-commerce adoption) (select all that apply)



As per your knowledge, can you rate the following critical areas of the e-commerce ecosystem in Eswatini?



According to you, what is the priority level for E-commerce development in Eswatini? (select one)



According to you, which area is in greater need of e-commerce development?



Survey responses by Financial Service Providers

According to you, is the technology infrastructure of commercial financial institutions capable of supporting online authorization and settlement of e-commerce transactions?



Do government regulations restrict electronic settlement of e-commerce transactions or the use of electronic payment technologies?



According to you, what infrastructure barriers exists in Eswatini that limit the full delivery potential of E-commerce (Infrastructure barriers include deficiencies in telecommunication enabling infrastructure as a foundation of e-commerce adoption) (select all that apply)



As per your knowledge, can you rate the following critical areas of the e-commerce ecosystem in Eswatini?



According to you, what is the priority level for E-commerce development in Eswatini? (select one)



According to you, which area is in greater need of e-commerce development?



Survey responses by Other Services Providers

What key services does your business provide to support e-commerce in Eswatini? (tick all that is relevant)



According to you, what infrastructure barriers exists in Eswatini that limit the full delivery potential of E-commerce (Infrastructure barriers include deficiencies in telecommunication enabling infrastructure as a foundation of e-commerce adoption) (select all that apply)



As per your knowledge, can you rate the following critical areas of the e-commerce ecosystem in Eswatini?



According to you, what is the priority level for E-commerce development in Eswatini? (select one)



According to you, which area is in greater need of e-commerce development?



Survey responses by Enterprises

How many full-time equivalent employees does your company employ?



Please specify your main business sector.



What e-commerce channels do you engage in (tick all that apply):



Does your business/organization sell goods and/or provides services online?



Survey responses by Enterprises that sell goods online

What motivated you to sell goods/services online? (optional/tick all that apply)



To which markets do you mainly sell products or services:



What is you/your organisation's level of involvement in the development of egovernment policies (e.g., data protection, consumer protection, e-gov services, etc.) if any?



According to you, what is the involvement of the private sector in the dialogue process of e-government policies in Eswatini?



According to you, how easy or difficult is it to build and integrate e-commerce into your business?


Q52: How significant have been the following critical areas of the e-commerce ecosystem in Eswatini, for your company to adopt e-commerce?



Does your business have a website or are you listing your products on a marketplace? (click all that apply)



Which methods of payment for online purchases are you currently offering to your customers? (click all that apply)



Please rate the following payment solutions relevant to your business according to the level of development (to your knowledge) in Eswatini.



Do you use digital marketing to promote your e-commerce business?



If yes, specify which channels (click all that apply):



Do you have a digitalised inventory system?



Do you offer multiple shipping options to your customers?



For small parcels (up to 2 kg in weight), do you use any of the following shipping companies (tick all that are applicable)



For large parcels (above 2 kg and less than 30 kg in weight), do you use any of the following shipping companies



Do you have a returns and refund policy in place for on-line shoppers?



Survey responses by Enterprises that do not sell goods online

Does your company have or plans to develop a plan for your e-commerce activities (e.g., strategy, payments, shipping, customer service, etc.)?



67: To which markets do you mainly sell products or services:



What is you/your organisation's level of involvement in the development of egovernment policies (e.g., data protection, consumer protection, e-gov services, etc.) if any?



According to you, what is the involvement of the private sector in the dialogue process of e-government policies in Eswatini?



How significant have been the following critical areas of the e-commerce ecosystem in Eswatini (to your knowledge), for companies to adopt e-commerce?



Please rate the following payment solutions relevant to businesses according to the level of development (to your knowledge) in Eswatini.



Do you have a digitalised inventory system?



Survey responses by Government agencies and parastatals

What are your main categories of e-commerce purchases for the government? (tick all that apply)



According to you, what is the priority level for E-commerce development in Eswatini? (select one)



According to you, which area is in greater need of e-commerce development?



As per your knowledge, can you rate the strength of the following critical areas of the e-commerce ecosystem in Eswatini?



According to you, what is the level of e-commerce adoption in Eswatini?



Do you think policies are conducive for E-commerce in Eswatini?



According to you, are E-commerce policies effectively implemented in Eswatini?



Do you think Eswatini needs an E-commerce Policy/Strategy?



If yes, what is the level of urgency to develop an E-commerce Policy/Strategy for Eswatini? (optional)



To your knowledge, what is the strength of the government regulations in terms of scope (up to date laws, complete laws, covers all relevant aspects, etc) in the following E-commerce related areas in Eswatini?



To your knowledge, what is the level of implementation of government regulations in the following E-commerce related areas in Eswatini?



What is you/your organisation's level of involvement in the development of egovernment policies, if any?



According to you, what is the involvement of the private sector in the dialogue process of e-government policies in Eswatini?



Please rate the availability of the following areas according to the current scenario (to your knowledge) in Eswatini that are essential for developing an E-commerce enabling environment.



According to you, what is the level of complexity of customs procedures for cross border trade?



Please rate the strength of the following areas of digital connectivity (to your knowledge) in Eswatini.


Please rate the strength of the following e-commerce enabling areas (to your knowledge) in Eswatini



According to you how strong are the following ICT Skills areas (to your knowledge) in Eswatini?



Please rate the strength of the following areas (to your knowledge) in Eswatini.



Please rate the strength of the following areas (to your knowledge) in Eswatini.



Please rate the strength of the following payment solutions (to your knowledge) in Eswatini.



Survey responses by Consumers

What are your main categories of e-commerce purchases? (tick all that apply)



According to you, what is the priority level for E-commerce development in Eswatini? (select one)



According to you, which area is in greater need of e-commerce development?



To your knowledge, can you rate the following critical areas of the e-commerce ecosystem in Eswatini?



According to you, what is the level of e-commerce adoption in Eswatini?



Do you think policies are conducive for E-commerce in Eswatini?



According to you, are E-commerce policies effectively implemented in Eswatini?



Do you think Eswatini needs an E-commerce Policy/Strategy?



If yes, what is the level of urgency to develop an E-commerce Policy/Strategy for Eswatini? (optional)



Q110: Please rate the availability of the following areas according to the current scenario (to your knowledge) in Eswatini that are essential for developing an E-commerce enabling environment.



Q111: Please rate the strength of the following areas of digital connectivity (to your knowledge) in Eswatini.



Q112: Please rate the strength of the following e-commerce enabling areas (to your knowledge) in Eswatini



Q113: According to you how strong are the following ICT Skills areas (to your knowledge) in Eswatini?



Q114: Please rate the strength of the following areas (to your knowledge) in Eswatini.



Q115: Please rate the strength of the following payment solutions (to your knowledge) in Eswatini.



Annex 3. List of Consulted Stakeholders

Please note that for GDPR purposes the names of individuals have been hidden

Organization
Nedbank
Nedbank
Logico Couriers
Eswatini MTN
Ministry of Information, Communication, and Technology
Central Bank of Eswatini
Eswatini Bank
Eliang Courier
Eswatini Competition Commission
Ministry of Information, Communication and Technology
ESCCOM
Interfreight
DHL
Eswatini Building Society
Ministry of Commerce, Industry and Trade
Ministry of Information, Communication and Technology
Eswatini Posts and Telecommunications Corporation
University of Eswatini
Junior Achievement Eswatini
Royal Science and Technology Park
Eswatini College of Technology
Ministry of Information, Communication and Technology
ENACTUS
Ministry of Information, Communication and Technology
Eswatini Investment Promotion Authority
Central Statistics Office
Consumer Association
Industrial Development Cooperation of Eswatini
Eswatini Communications Commission
Small Enterprise Development Company
ESCCOM
Eswatini Economic Policy and Research Centre
Eswatini Economic Policy and Research Centre
Ministry of Information, Communication and Technology
ESCCOM
Ministry of Information, Communication and Technology
Eswatini Bankers Association
Eswatini Mobile
Eswatini Mobile
PC Systems
MTN FINTECH
Akwandze
Standard Bank
Ministry of Commerce, Industry and Trade
National Agriculture Marketing Board
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Ministry of Education and Training	
Ministry of Education and Training	
European Union Development	

Annex 4. List of organisations present in the validation workshop

No	Name of Organisations
1	AfCFTA Youth Advisory
2	Bankers' Association
3	Business Eswatini
4	Central Bank of Eswatini
5	Central Statistics Office
6	Delegation of the European Union to the Kingdom of Eswatini
7	ENACTUS Eswatini
8	Eswatini Bank
9	Eswatini Building Society
10	Eswatini College Of Technology
11	Eswatini Communications Commission
12	Eswatini Economic Policy Analysis and Research Centre
13	Eswatini Mobile
14	Eswatini Posts and Telecommunications Corporation
15	Fair and Square
16	Interfreight Ltd
17	Junior Achievement Eswatini
18	Ministry of Commerce, Industry and Trade
19	Ministry of Economic Planning and Development
21	Ministry of ICT
22	MTN Eswatini, MTN Fintech
23	National Agriculture Marketing Board (NamBoard)
24	Nedbank
25	Prime Minister's Office
26	Royal Science and Technology Park
29	Simzer's Upholstery
30	Small Enterprise Development Company (SEDCO)
31	Standard Bank
32	The Eswatini Investment Promotion Authority
33	The Industrial Development Company of Eswatini
34	UNDP
35	University of Eswatini



For more information about this learning brief and the full study behind this paper, or if you want to learn more about the EU Africa RISE facility, please contact us at info@esccom.org.sz

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