United Republic of Tanzania
Rapid eTrade Readiness Assessment

UNITED NATIONS

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NOTE

Within the UNCTAD Division on Technology and Logistics, the ICT Policy Section carries out policy-oriented analytical work on the development implications of information and communication technologies (ICTs) and e-commerce. It is responsible for the preparation of the Digital Economy Report - previously known as the Information Economy Report – as well as thematic studies on ICT for Development.

The ICT Policy Section promotes international dialogue on issues related to ICTs for development and contributes to building developing countries' capacities to measure the information economy and to design and implement relevant policies and legal frameworks. It also monitors the global state of e-commerce legislation (unctad.org/cyberlawtracker). Since 2016, the Section has coordinated a multi-stakeholders initiative entitled eTrade for all (etradeforall.org), which aims to improve the ability of developing countries, particularly least developed countries (LDCs), to use and benefit from e-commerce.

Reference to companies and their activities should not be construed as an endorsement by UNCTAD of those companies or their activities.

The following symbols have been used in the tables:

Two dots (..) indicate that data are not available or are not separately reported. Rows in tables have been omitted in those cases where no data are available for any of the elements in the row;

A dash (-) indicates that the item is equal to zero or its value is negligible;

Reference to "dollars" (US$) means United States of America dollars, unless otherwise indicated;

Reference to "TZS" means Tanzanian Shilling, and one US$ is equivalent to 2,298 TZS;

Details and percentages in tables do not necessarily add up to the totals because of rounding.

PREFACE

The eTrade for all Initiative, launched at the fourteenth Ministerial Conference of UNCTAD in July 2016, is a practical example of how to harness the digital economy in support of the 2030 Agenda for Sustainable Development, notably Sustainable Development Goals (SDGs) 5, 8, 9, and 17, which address, respectively, gender equality, decent work and economic growth, industry innovation and infrastructure, and partnership for sustainable development. The initiative seeks to raise awareness, enhance synergies, and increase the scale of existing and new efforts by the development community to strengthen the ability of developing countries to engage in and benefit from e-commerce by addressing seven relevant policy areas:

- E-commerce readiness assessment and strategy formulation

- ICT infrastructure and services

- Trade logistics and trade facilitation

- Payment solutions

- Legal and regulatory frameworks

- E-commerce skills development

- Access to financing

As part of the initiative, demand-driven assessments are envisaged to provide a basic analysis of the current e-commerce situation in the countries concerned, and to identify opportunities and barriers. The resulting reports will serve as a valuable input to these countries' involvement in various discussions related to e-commerce and digital trade, such as in the context of the UNCTAD Intergovernmental Group of Experts (IGE) on E-commerce and the Digital Economy. It may furthermore help developing countries, especially LDCs, to identify areas in which they could benefit from assistance by eTrade for all partners.

Tanzania's Rapid eTrade Readiness Assessment is the twenty-third assessment conducted by UNCTAD. This report is expected to contribute to the efforts of the Government of the United Republic of Tanzania to build a robust, safe and business-friendly e-commerce and digital economy environment.

With the eTrade for all partners, UNCTAD is committed to supporting Tanzania in its resolve to make e-commerce work for the country's development.

Shamika N. Sirimanne
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ACKNOWLEDGEMENTS

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ABBREVIATIONS

A2A	Account-to-Account
AfCFTA	African Continental Free Trade Area
AGC	Attorney General's Chamber
API	Application Programming Interface
ASYCUDA	Automated System for Customs Data
B2C	Business-to-consumer
BoT	Bank of Tanzania
BPRA	Business and Property Registration Agency (of Zanzibar)
BPO	Business process outsourcing
BRELA	Business Registrations and Licencing Agency
CBE	College of Business Education
CCTTFA	Central Corridor Transit Transport Facilitation Agency
CDD	Customer Due Diligence
CGAP	Consultative Group to Assist the Poor
CLAMS	Class Licence Application Management System
CLF	Converged Licensing Framework
CoICT	College of Information and Communication Technologies, University of Dar es Salaam
COSTECH	Tanzania Commission for Science and Technology
CRB	Credit Reference Bureau
CTI	Confederation of Tanzania Industries
DAI	Digital Adoption Index
DFS	Digital Financial Services
DSE	Dar es Salaam Stock Exchange
EAC	East African Community
EASSy	Eastern Africa Submarine Cable System
eGA	e-Government Agency
EGM	Enterprise Growth Market
EIF	Enhanced Integrated Framework
EMI	Electronic Money Issuer
EMRs	Electronic Money Regulations
FCA	Fair Competition Commission
FSDT	Financial Sector Deepening Trust
FSP	Financial Service Provider
FYDP	Five Year Development Plan
GePG	Government electronic Payment Gateway
GII	Global Innovation Index
GPS	Global Positioning System
GSMA	Global System for Mobile Association
GS1	GS1 Tanzania
HDI	Human Development Index
HDIF	Human Development Innovation Fund
2IPD	Integrated Index for Postal Development

ICT	Information and Communications Technology
IFM	Institute of Finance Management
IoT	Internet of Things
ITC	International Trade Centre
ITES	Information Technology Enabled Service
ITU	International Telecommunications Union
KMs	Kilometres
KYC	Know Your Customer
LDC	Least Developed Country
LPI	Logistics Performance Index
LRCT	Law Reform Commission of Tanzania
M2M	Machine-to-machine
MFIs	Microfinance Institutions
MIT	Ministry of Industry and Trade
MNO	Mobile Network Operator
MoCLA	Ministry of Constitutional and Legal Affairs
MoEST	Ministry of Education, Science and Technology
MoEVT	Ministry of Education and Vocational Training
MoFAEC	Ministry of Foreign Affairs and East African Cooperation
MoFP	Ministry of Finance and Planning
MoICAS	Ministry of Information, Culture, Arts and Sports
MoLHHSD	Ministry of Land, Housing and Human Settlements Development
MoWTC	Ministry of Works, Transport and Communications
MSMEs	Micro, Small and Medium-Sized Enterprises
MTI	Ministry of Trade and Industry – Zanzibar
NAPS	National Addressing and Postcode System
NBS	National Bureau of Statistics
NCTF	National Committee on Trade Facilitation
NFAST	National Fund for Advancement of Science and Technology
NFIF	National Financial Inclusion Framework
NM-AIST	Nelson Mandela African Institute of Science and Technology
NMB	National Microfinance Bank PLC
NPP	National Postal Policy
NSS	National Statistical System
NSW	National Single Window
NICTBB	National ICT Broadband Backbone
NIDC	National Internet Data Center
NRI	Networked Readiness Index
NTM	Non-Tariff measure
NTP	National Telecommunications Policy
OECD	Organisation for Economic Co-operation and Development
OFC	Optic Fibre Cable

ORE	Operational Readiness for E-commerce
OSBP	One-Stop Border Post
P2P	Person-to-Person
PE	Private Equity
PMO	Prime Minister's Office
PORALG	President's Office, Regional Administration and Local Government
PPP	Public-Private Partnership
PVoC	Pre-Shipment Verification of Conformity
REC	Regional Economic Community
RIA	Research ICT Africa
RITA	Registration, Insolvency and Trusteeship Agency
RKC	Revised Kyoto Convention
SACCOs	Savings and Credit Cooperative Societies
SADC	Southern African Development Community
SCT	Single Customs Territory
SDGs	Sustainable Development Goals
SIDO	Small Industries Development Organization
STEM	Science, Technology, Engineering and Mathematics
STI	Science, Technology and Innovation
SUMATRA	Surface and Marine Transport Regulatory Authority
TAA	Tanzania Airports Authority
TABWA	Tanzania Business and Women Association
TAFFA	Tanzania Freight Forwarders Association
TAEC	Tanzania Atomic Energy Commission
TAIN	Tanzania Angels Investors Network
TANCIS	Tanzania Customs Integrated System
TANEXA	Tanzania Exporters Association
TANTRADE	Tanzania Trade Development Authority
TARURA	Tanzania Rural and Urban Roads Agency
TAZARA	Tanzania-Zambia Railway
TBA	Tanzania Bankers Association
TBS	Tanzania Bureau of Standards
TCCIA	Tanzania Chamber of Commerce, Industry and Agriculture
TCRA	Tanzania Communications Regulatory Authority
TDV	Tanzania's Development Vision
TFA	Trade Facilitation Agreement
TFSP	Trade Facilitation Support Programme
TIC	Tanzania Investment Centre
TICTC	Tanzania International Container Terminal Services Ltd
TMDA	Tanzania Medicine and Medical Devices Authority
TMEA	TradeMark East Africa
TPA	Tanzania Ports Authority

TPC	Tanzania Posts Corporation
TPSF	Tanzania Private Sector Foundation
TRA	Tanzania Revenue Authority
TSC	Tanzania Shippers Council
TTC	Tanzania Telecommunications Corporation
TTCL	Tanzania Telecommunications Corporation Limited
TVET	Technical and Vocational Education and Training
TWB	Tanzania Women's Bank
TWCC	Tanzania Women Chamber of Commerce
UCC	University of Dar es Salaam Computing Centre
UCSAF	Universal Communications Service Access Fund
UDBS	University of Dar es Salaam Business School
UDICTI	University of Dar es Salaam Information and Communication Technology Incubator
UDOM	University of Dodoma
UDSM	University of Dar es Salaam
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNFPA	United Nation Population Fund
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
UPS	Universal Postal Services
UPU	Universal Postal Union
US$	United States of America dollars
VC	Venture Capital
VETA	Vocational Educational and Training Authority
VTA	Vocational Training Authority (of Zanzibar)
WB	World Bank
WCO	World Customs Organization
WEF	World Economic Forum
WFP	World Food Programme
WIPO	World Intellectual Property Organization
WTO	World Trade Organization
ZAA	Zanzibar Airports Authority
ZBS	Zanzibar Bureau of Standards
ZFDA	Zanzibar Food and Drug Agency
ZIPA	Zanzibar Investment Promotion Authority
ZNCCIA	Zanzibar National Chamber of Commerce, Industry and Agriculture
ZPC	Zanzibar Ports Corporation
ZRB	Zanzibar Revenue Board

EXECUTIVE SUMMARY

With a growing economy, favourable geographic location and rapidly developing innovation ecosystem, Tanzania is well-positioned to integrate into the global digital economy. Economic growth over the last decade has averaged 6 to 7 per cent per year and the medium-term outlook is positive, with growth projected at 6.6 per cent in 2019 and 2020[1]. Large public investment projects and continued foreign direct investment bode well for the future, and there is growing awareness of the benefits of new technologies (as seen by the widespread use of mobile money).

Tanzania's economy has also become more diversified over the last decade. While agriculture continues to be the mainstay for the vast majority of the population, emerging sectors such as finance and communications are propelling the economy forward. Export of manufactured goods to regional markets is also growing. Micro, small and medium-sized enterprises (MSMEs) contribute to 27 per cent of the GDP and employ more than 5.2 million people[2]. More than half of the MSMES are owned by women.

As a coastal economy bordering eight countries, six of which are nearly or completely land-locked, Tanzania is well-situated to expand as a regional trade hub. E-commerce has the potential to boost the country's economy by creating new employment opportunities, diversifying sources of income and creating new value chains. For MSMEs in particular, digital technologies provide the potential to improve access to new and existing markets and customers. There is also immense development potential in tourism.

E-commerce readiness assessment and strategy formulation

The Government of the United Republic of Tanzania has taken key steps to develop the country into a regional e-commerce hub. Digitalization of government services is advancing and the Government is investing resources into enhancing the overall business environment. Despite this, Tanzania has yet to adopt a stand-alone e-commerce policy or strategy, and e-commerce is not mainstreamed into the national or sectoral trade development strategies. E-commerce development is not currently on the agenda of existing interministerial or public-private dialogue platforms.

The Government has adopted a series of e-Government services, including the establishment of a Government Portal that serves as a one-stop centre for public services. The Government has also recently introduced the Government electronic Payment Gateway (GePG) that enables all Government entities (Central, Local and Agencies) to use a single payment platform. There have also been efforts to implement e-Government services in Zanzibar, such as the Online Business Registration System implemented by the Zanzibar Business and Property Registration Agency (BPRA).

With support from the UNCTAD, the Tanzania Investment Centre (TIC) runs an e-Regulations website providing detailed step-by-step guidance for investing in Tanzania. The Ministry of Industry and Trade (MIT), with TradeMark East Africa (TMEA) and UNCTAD support, is also currently developing a National Business Portal[3].

ICT infrastructure and services

With a large and growing population, a competitive mobile network operators (MNOs) market and increasing mobile service delivery, the trajectory of growth of mobile Internet users is positive. Building the National ICT Broadband Backbone (NICTBB), connected to the region's main submarine cables, has resulted in lower mobile data prices for end-users. By the end of 2018, 3G and 4G networks covered around 61 per cent and 28 per cent of Tanzania's population, respectively. This remains considerably lower than the 2G coverage of around 90 per cent.

Although mobile data prices are reasonably low, they remain unaffordable for segments of the population that mostly reside in rural areas. This has resulted in a large gap in Internet use between urban and rural areas. Also, fewer women than men access and use the Internet. Given that most Tanzanians access the Internet through their mobile phones, the low Internet

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[1]   Tanzania Economic Outlook, African Development Bank, https://www.afdb.org/en/countries/east-africa/tanzania/tanzania-economic-outlook

[2]   Financial Sector Deepening Trust (FSDT), 2019

[3]   Similar national trade information portals are also being built in Kenya, Rwanda, Uganda and Burundi, as well as at the regional level. The national portals enable the creation of a trade index that compares steps in import, export and transit procedures among the partner states.

penetration rate - 25-30 per cent[4] - is likely due to the high cost of obtaining an Internet-enabled phone.

Trade logistics and trade facilitation

Tanzania is becoming a transport hub or corridor for many of its neighbours and improving the transportation infrastructure is a key priority for the Government. Significant investment is directed to road, rail, sea and air travel development, as well as into enhancing One-Stop Border Posts (OSBPs). Several challenges persist in the context of e-commerce development however, notably the lack of widespread home addressing. This represents a major challenge for last-mile delivery service providers. Implementation of the National Addressing and Postcode System (NAPS) project is underway but covering all regions of the country takes time.

The Parliament of the United Republic of Tanzania ratified the WTO Trade Facilitation Agreement (TFA) on 13th November 2019, but Tanzania is yet to submit the Instrument of Ratification to the WTO Secretariat. The country has also not acceded to the Revised Kyoto Convention (RKC). Despite this, the country performs better than its LDC peers on the different trade facilitation-related indicators, a reflection of the Government's efforts to improve its trade environment. Implementation of the Blueprint for Regulatory Reforms to Improve Tanzanian Business Environment[5] will further improve trade facilitation, while the National Single Window was expected to be rolled out by the end of 2019.

Payment solutions

Although many formal financial sector service providers operate in Tanzania, uptake and usage of the offered services are limited. The demand-supply gap in formal financial services is due in large part to the lack of awareness in the general population and the high cost of services. Usage gaps persist between men and women, and between higher- and lower-income segments of the population.

Mobile money has emerged as the main tool used by Tanzanians to access financial services. Based on the numbers of users and transactions, Tanzania has become one of the largest markets in the world for mobile finance. The Bank of Tanzania's regulations provide a conducive business environment for mobile money, including interoperability between mobile money service providers. Despite the growth in this form of payment, cash-on-delivery is still the most common form of payment, even for e-commerce transactions.

Legal and regulatory framework

One of the key challenges highlighted during UNCTAD's in-country consultations was the lack of an enabling regulatory environment for e-commerce development. The current legal and regulatory environment was viewed as inadequate for the modern digital economy, particularly in terms of creating trust among users of digital technologies. Stakeholders lamented the absence of specific e-commerce legislation that would provide the foundation for building this trust.

Tanzania does have an Electronic Transactions Act (2015) and a Cyber Security Act (2015), and a Personal Data Protection Bill is currently being drafted. Tanzania has also introduced the Electronic and Postal Communications Regulations (2018) to regulate online content. While consumer protection in general is covered by the Fair Competition Act (2003) which is currently under review, the Electronic Transactions Act covers elements of consumer protection in e-commerce.

Skills development for e-commerce

Although a number of efforts have been made to develop ICT human capital in the country, including adding ICT curriculum to tertiary education, skills in digital entrepreneurship and e-commerce remain limited. It is critical for policymakers to make a distinction between technical ICT skills and the broader set of skills that are needed to conceive, plan, develop, launch and operate an e-commerce business.

Currently, the formal education and training systems aimed at developing the skills required for e-commerce and digital entrepreneurship are limited to some courses on social media and digital marketing.

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[4] *ITU (2017), Research ICT Africa and University of Dodoma (2017)*

[5] *The Blueprint, from the Ministry of Industry and Trade (MIT, 2017), provides the Government's main framework for enabling a holistic review of business-enabling environment (BEE) in order to improve the business climate in Tanzania. It presents key challenges affecting the business environment in Tanzania along with a set of recommendations for reform to put in place a more business friendly environment.*

Innovation hubs are growing fast in Tanzania, however, as part of the broader innovation ecosystem, and have great potential to introduce and support new e-commerce businesses. A further challenge is the limited understanding of the different facets of e-commerce, across all levels of society, which has led to a persistent lack of trust between e-commerce vendors and their customers.

Access to Financing

Entrepreneurs and MSMEs, including those working in e-commerce, face several barriers to accessing financial services in Tanzania. In 2018, Tanzania had the highest (among EAC countries) percentage of SMEs claiming difficulties in accessing bank credits. The Government is in the process of addressing the strict requirements around Know Your Customer (KYC), which could be hindering people from joining formal financial institutions. Registration, collateral and credit history requirements, as well as the lack of products tailored to MSMEs, also pose barriers. This all makes it challenging to launch new e-commerce businesses and to expand existing ones.

The Dar es Salaam Stock Exchange (DSE) has a second-tier market, the Enterprise Growth Market (EGM), designed to attract small and medium enterprises (SMEs) with high growth potential; however, the number of SMEs served by the EGM remains small. Angel investment and venture capital, while limited, are growing and complemented by schemes led by the Government and development partners.

**Figure 1: Priority actions for e-commerce development in Tanzania
(based on 42 responses from the public sector and 25 from the private sector)**

Top key actions to grow/enhance e-commerce in Tanzania

Source: UNCTAD
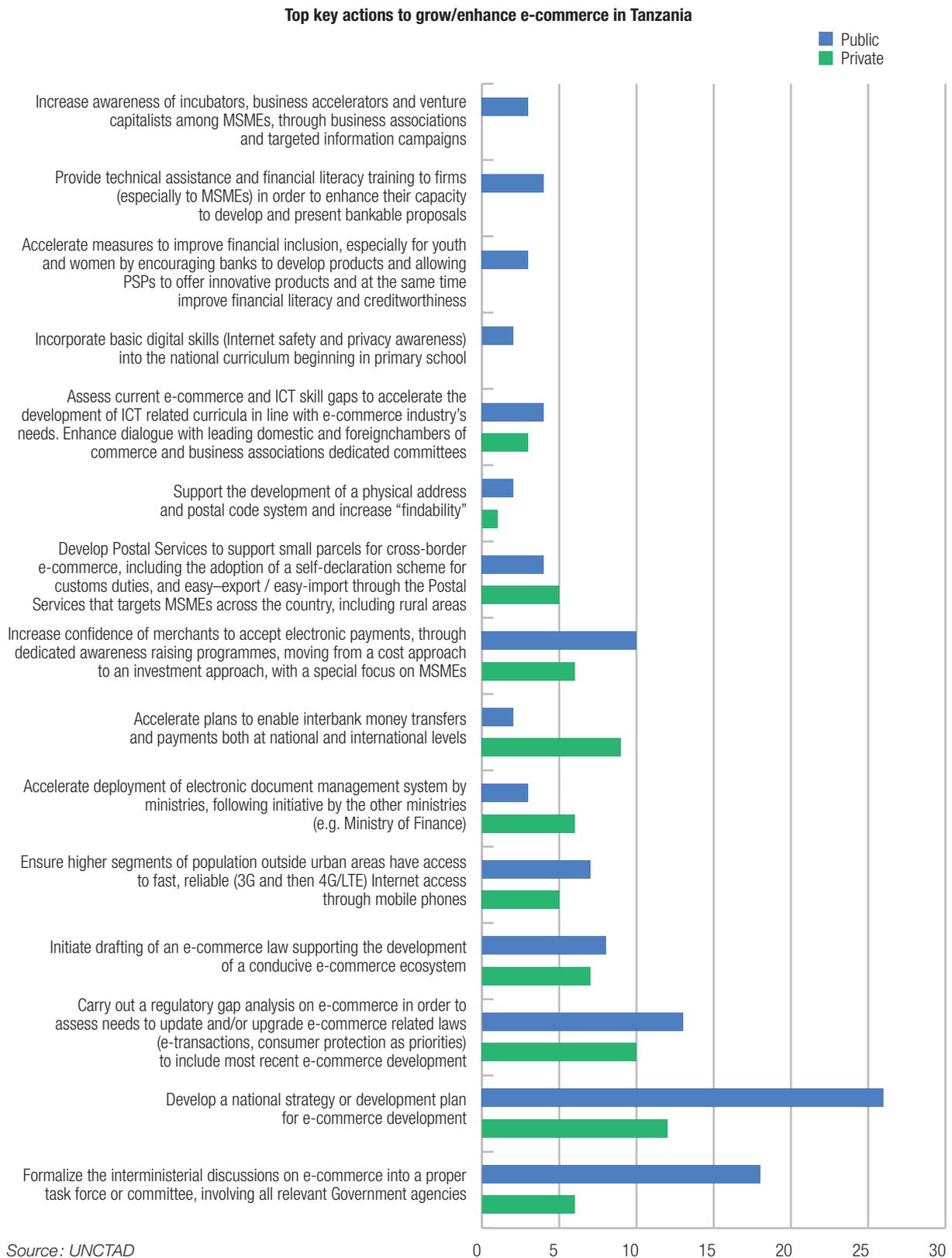
METHODOLOGY

A four-step approach was used for the Rapid eTrade Readiness Assessment of Tanzania, to ensure a high level of participation and engagement of key stakeholders in the consultative process:

Figure 2: Assessment methodology

✓ **Phase 1 | Stakeholder engagement and literature review, April – May 2019.** It included official communications between UNCTAD, Tanzania's Ministry of Industry and Trade (MIT) and the Permanent Mission of the United Republic of Tanzania in Geneva. Literature review and data analysis were made possible through access to up-to-date statistics provided by ITU, UPU and the World Bank, in addition to data compiled by UNCTAD on behalf of the eTrade for all initiative.

✓ **Phase 2 | Online survey customization and dissemination, May – June 2019.** Two (2) customized questionnaires for the most relevant public and private sectors stakeholders were distributed by MIT in Tanzania. A total of 67 completed questionnaires were used for this report.

✓ **Phase 3 | Semi-structured in-country interviews and local validation, 25 June – 4 July 2019 during the consultants' mission to Dar es Salaam, Zanzibar, and Dodoma.** In Dar es Salaam, six focus-group discussions and meetings with key development partners were organized; in Zanzibar, a full day workshop covering all seven policy areas was held; and in Dodoma, bilateral meetings and a full day

workshop covering all seven policy areas were held. Early findings and suggestions were discussed with the MIT team.

✓ **Phase 4 | Report writing and finalization with UNCTAD, July 2019 – January 2020.**

As with all Rapid eTrade Readiness Assessments, the seven policy areas used in the eTrade for all initiative were used as entry points for this assessment. These are:

✓ E-commerce readiness assessment and strategy formulation

✓ ICT infrastructure and services

✓ Trade logistics and trade facilitation

✓ Payment solutions

✓ Legal and regulatory frameworks

✓ Skills development for e-commerce

✓ Access to financing

The information provided in this report is based on data collected from respondents to the survey for both the public and private sectors (67 respondents in total) and the stakeholders' meetings during the in-country mission.

SUMMARY OF MAIN FINDINGS AND MAIN RECOMMENDATIONS

MAIN FINDINGS	MAIN RECOMMENDATIONS
e-Commerce Readiness Assessment and Strategy Formulation	
Although Tanzania aims to become a regional e-commerce hub, it does not currently have a focused stand-alone e-commerce policy or strategy. E-commerce is not mainstreamed into the national or sectoral trade development strategies, and there is no interministerial committee on e-commerce. Similarly, issues related to e-commerce and the digital economy are not typically included on the agenda of existing interministerial committees. There is limited public-private coordination on e-commerce issues and no apparent Government – Private Sector coordination body that would cover the digital economy. Furthermore, e-commerce development does not seem to receive much attention from Tanzania's development partners.	Engage in an inclusive national e-commerce policy and strategy development process lead by a champion from the Ministry of Industry and Trade (MIT). Make e-commerce part of the National Committee on Trade Facilitation (NCTF) agenda, to bolster public-private dialogue, and have the Committee serve as a steering committee for e-commerce policy and strategy development. Invite members of the start-up community/e-commerce vendors to take part in the consultations. Enhance the role of e-commerce and the digital economy in negotiations for support by development partners.
ICT Infrastructure and Services	
Overall, the country is well connected in terms of hard ICT infrastructure, such as submarine cables and the National ICT Broadband Backbone (NICTBB). The cost of mobile Internet has been reduced but is still expensive to segments of the population, mostly in rural areas. Given that most Tanzanians access the Internet through their mobile phones, the high price of smartphones is one of the key factors for why only 25-30 per cent of the population has access to the Internet.	Expand the 4G network to cover the whole country, with possible support from agencies such as the ITU, World Bank and AfDB. Identify possible PPP avenues to further develop the ICT infrastructure, including last-mile connectivity. Identify specific strategies to reduce the cost of smartphones, e.g., by adding competition in the sector, manufacturing simpler low-cost models, or reducing or removing the excise duty placed on smartphones.
Trade Logistics and Trade Facilitation	
Great improvements have been made in transport infrastructure and the One-Stop Border Posts (OSBPs). One of the main issues affecting e-commerce development is the lack of physical addressing. Tanzania outperforms most LDCs in the World Bank's Logistics Performance Index (LPI) and in the OECD trade facilitation indicators. The Tanzania Customs Integrated System (TANCIS) has been established as the platform for a National Single Window (NSW).	Expedite the implementation of the National Addressing and Postcode System (NAPS). Accelerate trade facilitation reforms, particularly those enabling the compatibility of the customs ICT systems between Tanzania and other EAC and SADC countries. Accede to the Revised Kyoto Protocol (RKC). Fully implement the National Single Window without delay.

MAIN FINDINGS	MAIN RECOMMENDATIONS
Payment Solutions	
Mobile money has become the main tool used by Tanzanians to access financial services, and the business environment is conducive to the expansion of mobile money. The Bank of Tanzania's regulations provide for interoperability between mobile money service providers. However, cash-on-delivery is still the most common form of payment for e-commerce transactions.	Address the lack of awareness pertaining to formal financial services in general and continue to raise awareness of secure payment solutions such as mobile money. This can be done by supporting and expanding the awareness campaigns of the Financial Sector Deepening Trust (FSDT). Expedite operationalization of the National Switch to further enhance interoperability and reduce costs for both bank and non-bank payment service providers.
Legal and Regulatory Framework	
Tanzania's current legal and regulatory framework is partial and may be insufficient to create a conducive e-commerce business environment. Although Tanzania has an Electronic Transactions Act (2015), a Cyber Security Act (2015) and Electronic and Postal Communications Regulations (2018), there is no specific e-commerce legislation. The Personal Data Protection Bill is underway.	Carry out a regulatory gap analysis on e-commerce. Adopt laws necessary to create a reliable and improved e-commerce business environment, including Personal Data Protection and Consumer Protection laws, beyond what is covered by the Electronic Transactions Act. Consider revising provisions in the existing legislation that may be considered restrictive for developing e-commerce businesses and, by extension, revising the space for e-commerce growth within the broader innovation ecosystem.
e-Commerce Skills Development	
Growth of e-commerce in Tanzania is hampered by the limited awareness and understanding of it by the general public and small businesses. A number of efforts have been made to develop ICT human capital in the country, including by adding tertiary education on ICT, yet there is limited formal training available on digital entrepreneurship and e-commerce skills. Schools have very limited access to computers, the Internet and skilled teachers. Innovation hubs are key actors in Tanzania's evolving innovation ecosystem, and they may become key providers of e-commerce skills training.	Upgrade the existing education curriculum at all levels by engaging the private sector in its design. This curriculum enhancement should begin at the secondary level, which is the level of education achieved by many MSME owners. Invest in building e-commerce awareness and trust within the greater public and small businesses. Train entrepreneurs and e-commerce vendors on digital business skills. Identify possible PPP avenues to provide access to connected computers in schools. Link local MSMEs with hubs/innovation ecosystem and big corporations, encouraging the transfer of knowledge.
Access to Financing	
Lack of access to financing is one of the key challenges hampering the development of a competitive e-commerce environment. Tanzanian SMEs claim more difficulties in accessing bank credit than those in the other EAC countries, mainly due to high interest rates and overall stringent conditions for lending among commercial banks. The Dar es Salaam Stock Exchange (DSE) has a second-tier market, the Enterprise Growth Market (EGM), but it has not been able to attract SMEs with high growth potential as designed. Angel investment and venture capital are limited but growing, complemented by start-up financing schemes led by the Government and development partners.	Sensitize commercial banks about the characteristics of e-commerce with the aim of having them adapt their lending criteria and offer products tailored to e-commerce ventures. Enhance Tanzania's credit reference system by easing credit conditions, including collaterals, among commercial banks. Make it easier and cheaper to release official land titles in order to facilitate access to collateral. Identify the reasons for the DSE-EGM's inability to attract SMEs with high growth potential and revise it to make it more attractive. Put in place the incentives and business enabling environment that are necessary to attract incubators, business accelerators and venture capitalists. Provide training to MSMEs to develop business proposals for e-commerce ventures. Expand start-up hubs and mentoring, including access to financing to rural areas.

FINDINGS UNDER THE SEVEN ETRADE FOR ALL POLICY AREAS

1. E-COMMERCE READINESS ASSESSMENT AND STRATEGY FORMULATION

> **The Government of Tanzania aims to develop the country into a regional e-commerce hub. Digitalization of government services is advancing and the Government is investing heavily in enhancing the business environment. Despite these ambitions, there is no stand-alone e-commerce policy or strategy and e-commerce is not mainstreamed into the national or sectoral trade development strategy. The e-commerce ecosystem, while improving over time, is still relatively embryonic. There is a National Committee on Trade Facilitation (NCTF), with participation by the public and private sectors, but e-commerce is not on its agenda. Inter-ministerial committees and public-private dialogue platforms should be used to identify ways the country can exploit the benefits of e-commerce for socioeconomic development, contribute to the policymaking process in this area and take part in monitoring implementation of strategic interventions.**

Tanzania's global rankings in ICT and e-commerce indices show a mixed performance. In 2017, Tanzania was ranked 165th out of 176 economies in ITU's ICT Development Index[6], registering a drop of one position from 2016. In 2018, Tanzania ranked 110th out of 151 economies in the United Nations Conference on Trade and Development (UNCTAD) B2C E-Commerce Index[7], a nine-place improvement in comparison to the 2017 ranking; among African countries, it ranked 16 out of 44.

The country ranked 126th out of 139 economies in the World Economic Forum (WEF) Networked Readiness Index[8] (2016), and 92nd out of 173 economies in the Universal Postal Union (UPU) Integrated Index for Postal Development[9] (2018).

Tanzania's mixed rankings in these indices show that progress has been uneven. For example, the country is performing relatively well in postal development but less well in the indicators of ICT access, use and skills. In general, there is significant room for improvement across all measures related to the country's overall ICT environment and advancement.

Table 1: IT Development Ranking in East African Community (EAC) Countries[10]		
Country	**UNCTAD B2C E-commerce Index**	**ITU IDI Ranking**
Kenya	89	138
Uganda	99	152
Tanzania	110	165
Rwanda	116	153
Burundi	147	172

Source: ITU (IDI 2017 report), UNCTAD (2018 B2C e-Commerce Index)

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6   *The ICT Development Index is based on 11 ICT indicators, grouped in three clusters: access, use and skills.*

7   *UNCTAD's B2C E-Commerce Index consists of four indicators that are highly related to online shopping and for which there is wide country coverage.*

8   *WEF's Networked Readiness Index (NRI) measures the propensity for countries to exploit the opportunities offered by ICT and is a composite of three components pertaining to the country's ICT environment, readiness to use ICT, and actual use of ICT of the country's key stakeholders.*

9   *UPU's Integrated Index for Postal Development (2IPD) offers a benchmark performance score along four dimensions of postal development: reliability, reach, relevance, and resilience.*

10 *Excludes South Sudan because rankings were not available.*

1.1 National policies related to ICT, e-Government, and e-commerce

The absence of an e-commerce policy and strategy hinders Tanzania's ability to become a frontrunner in e-commerce. The Second Five Year Development Plan (FYDP II), 2016/17 – 2020/21 does not specifically include e-commerce but covers areas linked to e-commerce such as science, technology and innovation (STI) and ICT. In terms of existing frameworks conducive to e-commerce development, Tanzania has a National ICT Policy (2016), a National Postal Policy (2003) and a National Telecommunications Policy (1997). There is no National Broadband Policy, but the national fibre-optic cable network (known as the National ICT Broadband Backbone) is managed and operated by the Tanzania Telecommunications Corporation (TTCL Corporation) on behalf of the government and is guided by a clear vision and set of objectives. Zanzibar – which is semi-independent in these matters – does not have a specific e-commerce policy either. There is, however, a Zanzibar ICT Policy (2013) overseen by the newly formulated e-Government Agency of Zanzibar.

The Second Five Year Development Plan (FYDP II) 2016/17 – 2020/21

The FYDP II considers Tanzania's country-wide ICT backbone infrastructure as one of the country's four comparative advantages[11]. Based on lessons drawn from implementation of the previous national development plans as well as lessons from successful comparable countries' industrialization experiences and an assessment of Tanzania's comparative advantages, the FYDP II adopts four sets of interventions, namely: (a) targeting growth and industrialization; (b) fostering human development and social transformation; (c) improving environment for enterprise development; and (d) developing capacity for implementation of the plan.

National ICT Policy of 2016

The National ICT Policy 2016 was formulated in line with the Tanzania Development Vision 2025, which recognizes that ICT is central to a competitive social and economic transformation. The ICT Policy's main objective is to accelerate socioeconomic development by transforming Tanzania into an ICT-driven middle-income economy and society. The policy mentions the following with regards to e-commerce:

Box 1: FYDP II

The theme of FYDP II, "Nurturing Industrialization for Economic Transformation and Human Development", incorporates the focus of the two previous national development frameworks, namely growth and transformation (FYDP I) and poverty reduction (MKUKUTA II). The FYDP II is built on three pillars of transformation: industrialization, human development and implementation effectiveness.

The FYDP II also implements aspects of Tanzania's Development Vision (TDV) 2025, which aspires to transform Tanzania into a middle-income, semi-industrialized nation by 2025. The current Plan paves the way for the upcoming FYDP III (2021/22 - 2025/26) aimed at "Realizing Competitiveness-led Export Growth". Specifically, FYDP II aspires to:

I. Build a base for transforming Tanzania into a semi-industrialized nation by 2025;

II. Foster development of sustainable productive and export capacities;

III. Consolidate Tanzania's strategic geographical location through improving the environment for doing business and positioning the country as a regional production, trade and logistics hub;

IV. Promote availability of requisite industrial skills (production and trade management, operations, quality assurance, etc.) and skills for other production and services delivery;

V. Accelerate broad-based and inclusive economic growth that reduces poverty substantially and allows shared benefits among most of the people through increased productive capacities and job creation especially for the youth and disadvantaged groups;

VI. Improve quality of life and human wellbeing;

VII. Foster and strengthen implementation effectiveness, including prioritization, sequencing, integration and alignment of interventions;

VIII. Intensify and strengthen the role of local actors in planning and implementation; and

IX. Ensure global and regional agreements (e.g. Africa Agenda 2063 and SDGs) are adequately mainstreamed into national development planning and implementation frameworks for the benefit of the country.

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[11] The other three comparative advantages are: (i) abundance of natural resource endowments; (ii) a young, growing population; and (iii) rapid urbanisation.

1. there are limited e-transaction services such as e-commerce due to lack of local credit cards and supportive legal framework appropriate for e-business promotion;

2. the current development and use of ICTs, especially e-commerce and e-transactions globally, poses certain socioeconomic and legal challenges to developing countries like Tanzania.

National Postal Policy of 2003

The National Postal Policy (NPP) of 2003 aimed to improve postal services across the country through the following strategies:

1. commercializing the Public Postal Operator;

2. modernizing and expanding the postal network;

3. having a comprehensive national address system that includes, among others, street names and identification of buildings;

4. attaining optimum security and safety in the provision of postal services;

5. building capacity of the human resources base that is able to deliver the increasingly diversified postal services;

6. providing equal opportunity to women to participate in the postal sector; and by fostering international co-operation in postal matters.

The status of implementing the comprehensive national address system is discussed in Section 3 on trade logistics and trade facilitation.

Currently, postal services are provided by the Tanzania Posts Corporation (TPC) and a number of privately-owned courier service companies.

National Telecommunications Policy of 1997

The National Telecommunications Policy (NTP) was drafted to accelerate the development of an efficient telecommunications sector that would provide a national information and communication infrastructure and access to modern telecommunication technologies by all sectors of the economy and all segments of the population. The NTP was designed to cover a predetermined period, from 1997 to 2020, and facilitates and promotes sharing and access to information in Tanzania through (1) regulation, (2) fair competition, (3) enforcement of standards, (4) rural connectivity, and (5) human resource development in telecommunications. The status of rural connectivity is discussed in Section 2 on ICT infrastructure and services.

National ICT Broadband Backbone

The National ICT Broadband Backbone (NICTBB) is managed and operated by the Tanzania Telecommunications Corporation (TTCL Corporation) on behalf of the Government, through the Ministry of Works, Transport and Communications.

The NICTBB vision is for Tanzania to become a hub for ICT infrastructure and solutions that enhances sustainable socioeconomic development and accelerates poverty reduction, both nationally and globally. As such, the NICTBB will play a key role in developing a conducive e-commerce environment. The NICTBB's key objectives include making ICT-related services, particularly the Internet, affordable and readily available to all Tanzanians.

The NICTBB also aims to provide access to international submarine fibre-optic cables via Dar es Salaam, as a landing point to all landlocked neighbouring countries i.e. Burundi, Democratic Republic of Congo, Malawi, Rwanda, Uganda and Zambia. Furthermore, the NICTBB plans to provide equal access of the backbone network to all licenced operators in Tanzania. This would help create an open and healthy competitive environment for the delivery of ICT services.

1.2 National policies related to trade

While Tanzania has adopted e-Government platforms, e-commerce is not mainstreamed into national and sectoral trade development strategies. Tanzania is currently reviewing its trade policy to align it with the upcoming FYDP III with the theme "Realizing Competitiveness-led Export Growth". According to the MIT, the new trade policy to be drafted will, among other new issues, cover the aspects of e-commerce. The new trade policy and any e-commerce policy and strategy should be aligned with the e-trade initiatives of the East African Community (EAC) and Southern Africa Development Community (SADC), as well as those that are being negotiated in the context of the African Continental Free Trade Area (AfCFTA) Phase II negotiations.

Since the beginning of 2018, the Government has focused its trade-related efforts on implementing the Blueprint for Regulatory Reforms to Improve Tanzanian Business Environment. The Blueprint provides the Government with a holistic review of the business-enabling environment and a set of recommendations to improve the business climate in Tanzania. It covers regulatory issues across key sectors in both rural and urban areas. While the Blueprint makes no specific provisions for e-commerce, implementation of it should improve the e-commerce business environment, particularly for aspects related to trade logistics and trade facilitation, as well as legal and regulatory frameworks.

e-Government Services

The Government of the United Republic of Tanzania has adopted a series of e-Government services. One of the key achievements has been the establishment of a Government Portal offering a one-stop centre for public information and services. Currently, 24 e-Government service providers are linked to the Portal, each offering one or more online services. Six of them provide business services with relevance to e-commerce[12]. The Portal also features links to six e-Government service providers offering mobile services. One of these – the Tanzania Revenue Authority (TRA) – offers electronic payments for all customs duties and other related payments.

The Government has also recently introduced the electronic payment gateway (GePG), which enables all Government entities (central, local and agencies) to use a single payment platform. With support from UNCTAD, the Tanzania Investment Centre (TIC) runs an eRegulations website providing activity-by-activity guidance for investing in Tanzania.

A number of efforts have been made in Zanzibar to implement e-Government services. One example is the Online Business Registration System, implemented by the Zanzibar Business and Property Registration Agency (BPRA). The system automates BPRA's existing business processes and shortens the application process for new businesses in Zanzibar.

Furthermore, the Ministry of Industry and Trade, with TMEA and UNCTAD support, is developing a National Business Portal. The Technical Team is under the Business Registration and Licencing Agency (BRELA) and so far the Team has managed to develop a "Trade Information Module", which provides step by step procedures on the export, import and transit of goods. This module uses the TIC's eRegulations technology. The partnership has also started working with the Zanzibar Investment Promotion Agency (ZIPA); they are still at the project design stage.

Coordination and oversight of e-Government initiatives, as well as enforcement of e-Government standards, are managed by the e-Government Agency (eGA). Zanzibar and the mainland currently have their own separate agencies. The eGA Strategic Plan enhances compliance to policies, laws, regulations, standards and guidelines, and improves coordination and harmonisation of e-Government initiatives in public institutions and other stakeholders. A National e-Government Policy was to be finalized by the end of 2019. This policy is expected to accelerate the automation of e-Government services through the Government Portal, the TIC eRegulations system, the National Business Portal, and the BRELA and BPRA portals.

With the plethora of e-Government services and portals currently available, and with additional services expected to come online in the future, consideration should be given to consolidating and streamlining these online services. It will also be important to bring more e-Government services to mobile devices.

Regional Groupings

Tanzania is part of the East African Community (EAC) and the Southern Africa Development Community (SADC), which are both spearheading initiatives to put e-commerce at the centre of their regional trade integration strategies. The fifth EAC development strategy, covering the period 2016/17 - 2020/21, includes enhancing e-business opportunities as one of its key priorities. An EAC e-commerce strategy is also currently being drafted.

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[12] *These are (1) Tanzania Ports Authority (TPA), (2) Business Registration and Licencing Agency (BRELA) has linked their Online Registration System featuring: Business name registration, Company registration, Industrial Licence registration, Mark registration, Patent registration, and Information services, (3) Tanzania Revenue Authority (TRA) offers online and through the Portal Cargo Management System Tax Payment Registration System, Fiscal Device Management System, Property Management System, and Tax Stamp Management System, (4) Immigration provides links to the Permit Information Verification System and to the e-Immigration System with an online application for visa, residence permit, and passport, (5) Tanzania Bureau of Standards (TBS) links through the Portal an Importation/ Exportation Inspection Management System, (6) the Tanzania Communication Regulatory Authority (TCRA) has made available through the Portal a Class Licence Application Management System (CLAMS), including Online Contents Services licences, and an IMEI Code Verification system.*

The e-SADC Strategic Framework (2010) focuses on the harmonisation of ICT infrastructure, services and indicators, and promotes the use of ICT for regional economic integration, enhancement of connectivity and access to services. In the first quarter of 2019, the SADC multi-stakeholder workshop on e-commerce resulted in the development of a draft Concept Note on Intra-Regional e-Commerce and Trade Facilitation for SMEs, and a draft SADC Regional e-Commerce Hub Framework. These have been submitted to the organization's process for approval and implementation.

Tanzania has yet to ratify the African Continental Free Trade Area (AfCFTA), which came into force on 30 May 2019. Aspiring to establish a deep trade agreement between African countries, the Heads of State and Governments of the African Union (AU) agreed that the AfCFTA should address 'behind the border' trade issues. The AfCFTA was hence structured with phase II-negotiations on three issues: a) competition policy; b) intellectual property rights; and c) investment. Beyond these specific topics, digital trade and e-commerce have been identified as new areas in which dedicated policy alignment in Africa could be of value.

1.3 National coordination

Increasing inter-agency government collaboration to develop an enabling e-commerce environment is essential. Equally important is the participation of the private sector in the formulation and roll out of e-commerce strategies. Coordination is particularly important because different Government agencies are responsible for different aspects of the e-commerce environment. The Ministry of Works, Transport and Communications (MoWTC) oversees the ICT sector, while the Ministry of Industry and Trade supervises and coordinates the development of e-commerce services.

Stronger public-private dialogue is needed for the development of e-commerce in Tanzania. In the survey of Tanzanian public sector officials carried out for this assessment, the majority of respondents were not aware of any national platform/mechanism/committee involved with developing policies and strategies for e-commerce. While there is a National Committee on Trade Facilitation (NCTF) dealing with planning and implementing trade facilitation reforms, the committee currently addresses e-commerce-related issues in a very limited manner.

The role of local private sector stakeholders in the decision-making process could be further enhanced. During the in-country consultations for this assessment, only one representative of an e-commerce platform participated. There appears to be very little interaction or coordination between the Government and e-commerce vendors/digital business entrepreneurs. As such, the NCTF could be a base to anchor further national dialogue and coordination on e-commerce. Given that they are at the leading edge of developing e-commerce

Figure 3: Responses by the public sector to the question is there any national platform/mechanism/committee that is involved with developing policies and strategies for e-commerce in the country.

To your knowledge, is there any national platform/mechanism/committee that is involved with developing policies and strategies for e-commerce in your country?
(Responses from the public sector: 42)
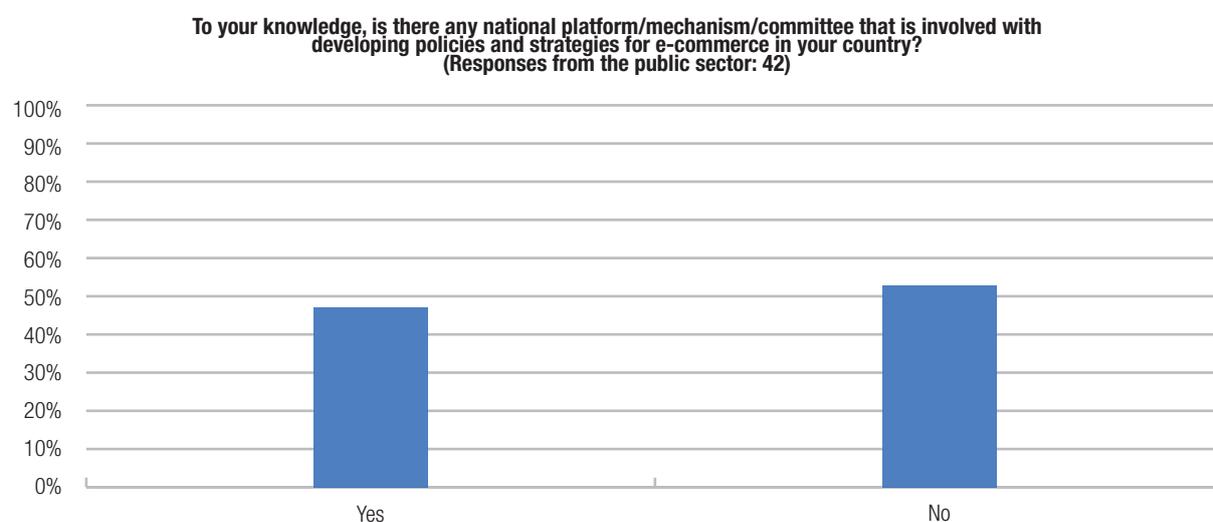
Source: UNCTAD

solutions, the participation of e-commerce vendors will be critical.

1.4 Current status of e-commerce activities in Tanzania

E-commerce in Tanzania is growing, but it is still in its infancy and the growth potential is enormous. Although only a few private sector companies have established business-to-business websites, e-commerce via mobile phones is growing rapidly. Some vendors market their goods on Facebook, Instagram and WhatsApp groups and deliver to customer residences or other locations.

Although e-commerce is growing, only a limited number of official companies offering such services. Existing sites include Jumia, OLX, Shoponline, Zudua, Kivuko, and Inauzwa that typically sell various types of consumer goods. In Zanzibar, KiKUU delivers goods to physical addresses. However, payment is still a challenge and is usually done as cash-on-delivery. Tanzania Posts Corporation (TPC) runs what they characterize as an "integrated e-commerce multivendor market platform" called Postashoptz.

The Government has signalled interest in establishing a national e-commerce platform, but information on any concrete plan to design and implement it is limited. A development partner – TMEA – has already expressed readiness to advise and support the Government in such an endeavour, including by facilitating learning from other countries that have done so in collaboration with a large international e-commerce platform, as well with countries that have implemented a national platform on their own. Other development partners like UNIDO (Dar es Salaam Office), have expressed their initiatives towards bolstering e-commerce growth in the country. Such initiatives included providing experience to small scale e-commerce business owners through linking them to giant e-commerce companies like Amazon.

1.5 Access to relevant statistics

The National Bureau of Statistics (NBS) was established as an autonomous public office by the Statistics Act of 2015 and has the mandate to provide official statistics to the Government, business community and the public at large. The Act also gives NBS the mandate to act as a coordinating agency, within the National Statistical System (NSS), to ensure that qualitative official statistics are produced.

Currently, the availability of data in Tanzania varies depending on the sector and on the indicators measured. ICT-related data is for the most part readily available, clear and reliable. Collection of such data, notably the number of mobile and fixed-broadband Internet subscribers, is the responsibility of the Tanzania Communications Regulatory Authority (TCRA). International databases, such as the ITU, get most of their data from the TCRA.

Moving forward, clear and authoritative data on all aspects of the ICT sector in general and e-commerce specifically will be critical to reliably inform policy reforms. Robust data will support the planning, monitoring, and evaluation of various ICT and e-commerce initiatives and will be particularly important for benchmarking and measuring progress.

2. ICT INFRASTRUCTURE AND SERVICES

> The National ICT Broadband Backbone (NICTBB), connected to the region's main submarine cables, has led to lower consumer prices for fixed and mobile broadband. Mobile data prices are reasonably low, but still a barrier for segments of population that mostly reside in rural areas. The Internet penetration rate of only 25-30 per cent is an indication that the affordability of the input device — Internet enabled phone —remains a key challenge. By the end of 2018, 3G and 4G networks covered around 61 per cent and 28 per cent of Tanzania's population, respectively; this remains considerably lower than the 2G coverage at around 90 per cent. With a growing population and competitive mobile network operators (MNOs) market, network coverage and mobile Internet use is expected to grow considerably in the coming years.

2.1 Broadband, mobile, and smartphone penetration

Despite the widespread use of mobile phones, only around 25-30 per cent of Tanzanians have an active mobile Internet account. This suggests that many mobile phones are used for voice-only services. When they do access the Internet, Tanzanians do so almost exclusively through their mobile phones, with data from the TCRA indicating that 96 per cent of all Internet subscriptions were mobile subscriptions.

Growth of mobile phone subscriptions in Tanzania has been rapid, from 27.4 million subscribers in 2013 to 43.5 million in 2018 (Table 2). In 2018, Tanzania had 77.2 mobile-cellular telephone subscriptions per 100 inhabitants (ITU, 2019). Similar to other countries in Sub-Saharan Africa, mobile phone use is expected to grow considerably in the coming years. According to estimates by the GSM Association, by 2025 Tanzania will have 10 million new mobile phone subscribers.

While the growth of mobile Internet users has been even more rapid, from an estimated 7.5 million users in 2013 to 19 million in 2018 (TCRA, 2019), the difference between the number of mobile phone subscribers and mobile Internet users indicates a relative limited use of smartphones. ITU[13] estimates that the percentage of individuals using the Internet (fixed + mobile) in 2017 was 25 per cent, in line with the results of Research ICT Africa and the University of Dodoma that found close to 30 per cent of Tanzanians used the Internet in 2017.

Mobile Internet access in Tanzania is expected to grow rapidly. The GSM Association estimates that smartphone connections in Sub-Saharan Africa will more than double by 2025, with countries in the East African Community, led by Rwanda and Tanzania, seeing the largest growth. Mobile Internet use in the EAC is expected to grow from 33 per cent of the population in 2018 to 66 per cent in 2025. Mobile content in Swahili is also growing in the region, with the number of mobile apps in the language rising from roughly 5,000 in 2014 to almost 30,000 in 2017 (GSM Association, The Mobile Economy 2019).

Table 2: Telecom services subscriptions and teledensity						
Year	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Fixed	164,999	142,950	142,819	129,597	127,094	124,238
Mobile	27,442,823	34,108,851	39,665,600	40,044,186	39,953,860	43,497,261
Total	**27,607,822**	**34,251,801**	**39,808,419**	**40,173,783**	**40,080,954**	**43,621,499**
Penetration	**61%**	**71%**	**79%**	**80%**	**78%**	**81%**

Source: Tanzania Communications Regulatory Authority (TCRA), Quarterly Communications Statistics, March 2019

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[13] *ITU COUNTRY ICT DATA accessible at https://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx*

Table 3: Estimated number of Internet services users by technology type						
Type of Service	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Fixed Wireless	1,056,940	1,913,082	662,882	1,218,693	3,468,188	135,954
Mobile Wireless	7,493,823	11,320,031	16,280,943	18,014,358	19,006,223	22,281,727
Fixed Wired	761,508	984,198	319,698	629,474	520,698	725,279
Total	**9,312,272**	**14,217,311**	**17,263,523**	**19,862,525**	**22,995,109**	**23,142,960**
Penetration	**21%**	**29%**	**29%**	**34%**	**40%**	**43%**

Source: Tanzania Communications Regulatory Authority (TCRA), Quarterly Communications Statistics, March 2019

Regulations and fees

In 2018, regulations related to licence fees for online content[14] were enacted. According to the regulations, all Tanzanian bloggers are supposed to be subject to licencing requirements and the payment of licence fees. The licence fees include an application fee, an annual licence fee and a renewal fee. The fees are not charged to telecommunications operators or other electronic communications service providers; only to online content providers. It appears that no distinction is made between a large corporate entity providing online content and an individual blogger. Consequently, the licence fees establish a de facto tax, given that nearly everyone with Internet access uses social media and generates online content (by posting messages or videos on Facebook, for example). No information is yet available on the impact of fees on the number and types of blogs active in the country.

Mobile network operators

Eight mobile network operators (MNOs) currently exist in Tanzania: Airtel, Smart, Halotel, Tigo, TTCL, Vodacom, Zantel, and the latest addition in 2018, Azam Telecom. Of these, four major operators own most of the market: Vodacom Tanzania (a unit of South Africa's Vodacom); Tigo Tanzania (part of Sweden's Millicom); Bharti Airtel Tanzania; and Halotel (owned by Vietnam-based telecoms operator Viettel). Figure 4 shows the

market share of the main MNOs as of March 2019. In Zanzibar, Zantel (also part of Sweden's Millicom) is the main operator. Other operators play a minor role and competition here is less pronounced compared to the mainland.

The state-owned Tanzania Telecommunications Corporation Limited (TTCL) serves a dual role as both a mobile service provider and a national communications solution provider, the latter in the form of the National ICT Broadband Backbone (NICTBB). Concerns were raised during the consultations for this assessment that there might be a perceived conflict of interest due to TTCL's role as a national communications solution provider, while at the same time competing in the mobile service market with private sector companies. However, clarifications were made that the NICTBB is treated as a separate part of TTCL's overall business and is being conducted with appropriate accountability measures.

There is somewhat of a price war among the operators in the fast-growing MNO sector, which is beneficial for consumers. Mobile network operators are also complying with a government requirement for all telecom companies to list at least 25 per cent of their shares locally. The Government is hoping that this will help improve transparency of telecom companies and offer the public a share in industry profits.

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[14] *Limpitlaw J (2019). Human rights impacts of taxing popular Internet services: The cases of Kenya, Tanzania and Uganda. Association of Progressive Communications. Available at: https://www.apc.org/en/pubs/human-rightsimpacts-taxing-popular-internet-services-cases-kenya-tanzania-and-uganda.*
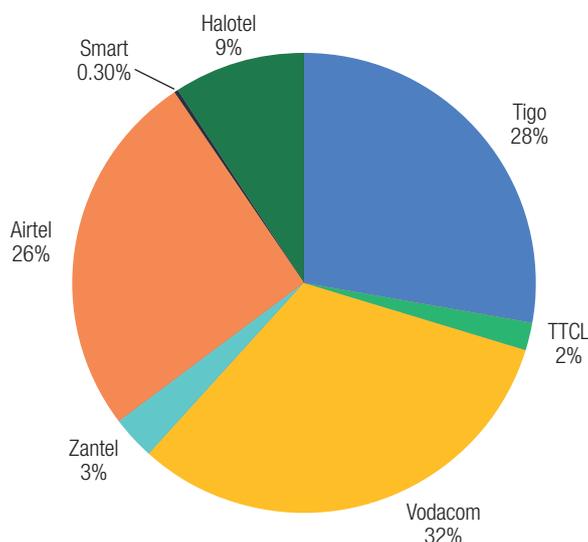
Source: Tanzania Communications Regulatory Authority (TCRA), Quarterly Communications Statistics, March 2019

2.2 Reliability, affordability, latency, speed and coverage

While the cost of mobile Internet has decreased significantly over the past several years, affordability is still a factor affecting Internet uptake in Tanzania. Several policy actions have led to lower mobile Internet prices. In 2005, the Tanzania Communications Regulatory Authority (TCRA) introduced a Converged Licensing Framework (CLF), which provides separate licences for infrastructure and service industries. In 2012, Tanzania committed to building a national open access backbone to reduce the duplication of networks and facilities and to drive down costs. This plan seems to have worked, with lower wholesale prices leading to lower mobile Internet prices. At the same time, the government's taxes on telecommunication services are undermining their own efforts to ensure universal access. For example, the airtime excise tax on mobile phone use is 17 per cent (the highest in Africa), which increases the cost of airtime consumption and communication.

The cost of mobile Internet has decreased significantly. Today, a 500MB data package costs about US$ 2, which represents three per cent of the country's monthly GNI per capita (ITU, 2017). Although a 500MB package is the bare minimum for entry-level Internet access, it is not nearly enough data to regularly engage in e-commerce activities. Somewhat surprisingly, reasonably low mobile data prices have not translated to widespread Internet adoption. This suggest that Internet-enabled smartphones remain unaffordable for large segments of the population, and that mobile data prices are still an issue for segments of the rural population. In a survey by Research ICT Africa and the University of Dodoma (2017), 63 per cent of people reported that the main hindrance to Internet access is that smartphones are unaffordable. To address the high cost of smartphone devices, the Government is planning to invest in a smartphone factory. An immediate policy intervention to reduce the cost of smartphones would be to reduce or remove the excise duty placed on smartphones, or to subsidize the cost of existing smartphones.

By the end of 2018, 3G and 4G networks covered around 61 per cent and 28 per cent of Tanzania's population, respectively. This lags behind other EAC countries and remains considerably lower than Tanzania's 2G coverage of 90 per cent, underscoring the need for more collaboration between mobile operators, government agencies such as the Universal Communications Service Access Fund (UCSAF) and other stakeholders, including development partners.

The 2017 survey by Research ICT Africa and University of Dodoma confirms the information drawn from the stakeholder interviews made for this assessment: fewer women than men access and use the Internet, and there is large gap in Internet use between urban and rural areas. In 2017, 86 per cent of the rural population remained unconnected to the Internet, compared to 44.6 per cent in urban areas. One of the reasons for this stark divide is the tendency for operators to target urban markets.

Figure 5: 3G and 4G coverage as percentage of population (2018)
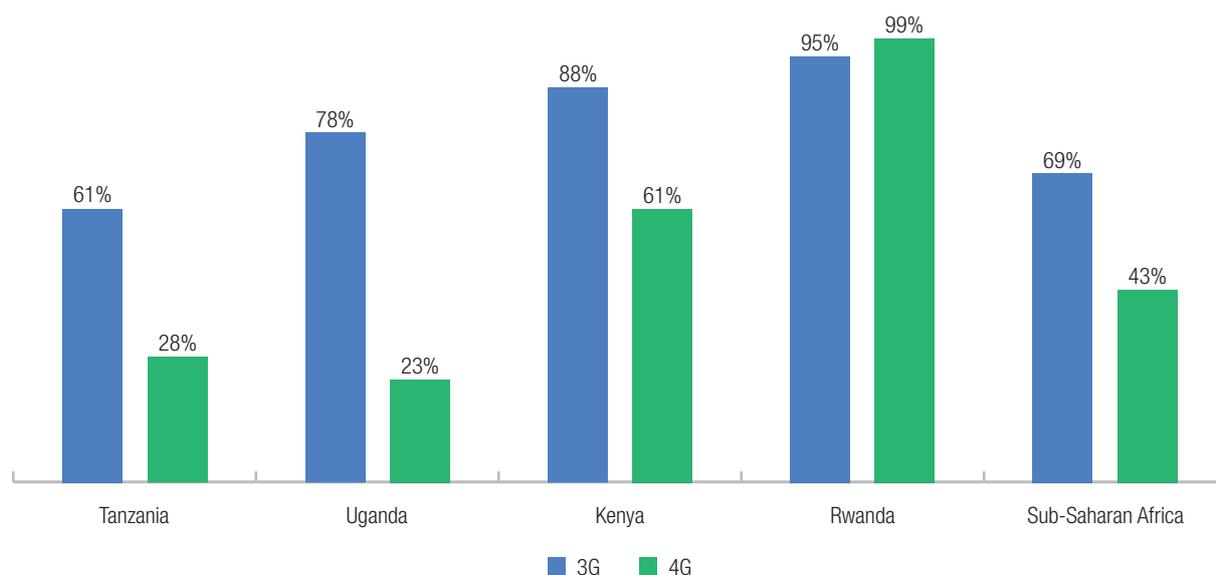
Source: GSM Association; Digital transformation in Tanzania, 2019

Table 4: Mobile phone and Internet penetration in Tanzania (individuals aged 15+)

	Mobile phone ownership	Knowing what the Internet is	Internet use	Social media use
Tanzania	57.0%	44.6%	29.8%	11.9%
Male	62.7%	51.3%	31.5%	14.3%
Female	52.0%	38.7%	27.8%	9.8%
Urban	72.6%	59.2%	55.4%	28.9%
Rural	50.5%	38.6%	13.6%	4.8%

Source: RIA's Beyond Access Survey, 2017

Box 2: UCSAF

The Tanzania Universal Communications Service Access Fund (UCSAF), established by the Universal Communications Service Access Act of 2006, was created to foster social and economic development in rural and urban areas through ICT interventions. The mission of the fund is to facilitate and coordinate access to communication services in rural and urban underdeveloped areas, in line with the Tanzania Development Vision 2025, through partnerships with key stakeholders in the telecommunications sector. In this context, several public-private-partnerships have been established, many including UCSAF as a key public partner, to enhance Internet connectivity in rural Tanzania. Despite some progress, more efforts will be needed to bridge the rural-urban connectivity gap and to bring reliable and affordable Internet to all Tanzanians.

Figure 6: Key elements for a conducive e-commerce environment in ICT

Responses from the public sector: 42 and from the private sector: 25

Source: UNCTAD

Very important   Important   Neutral   Not important
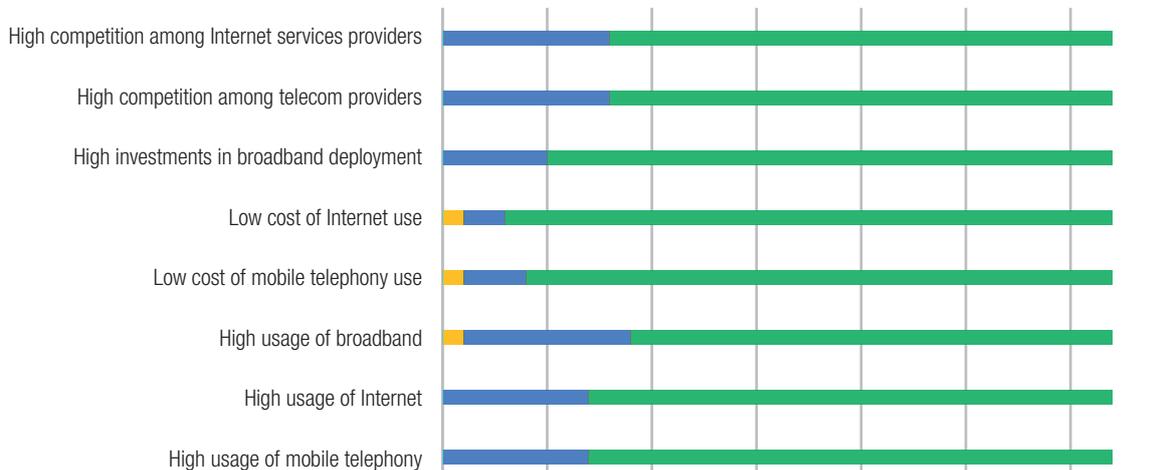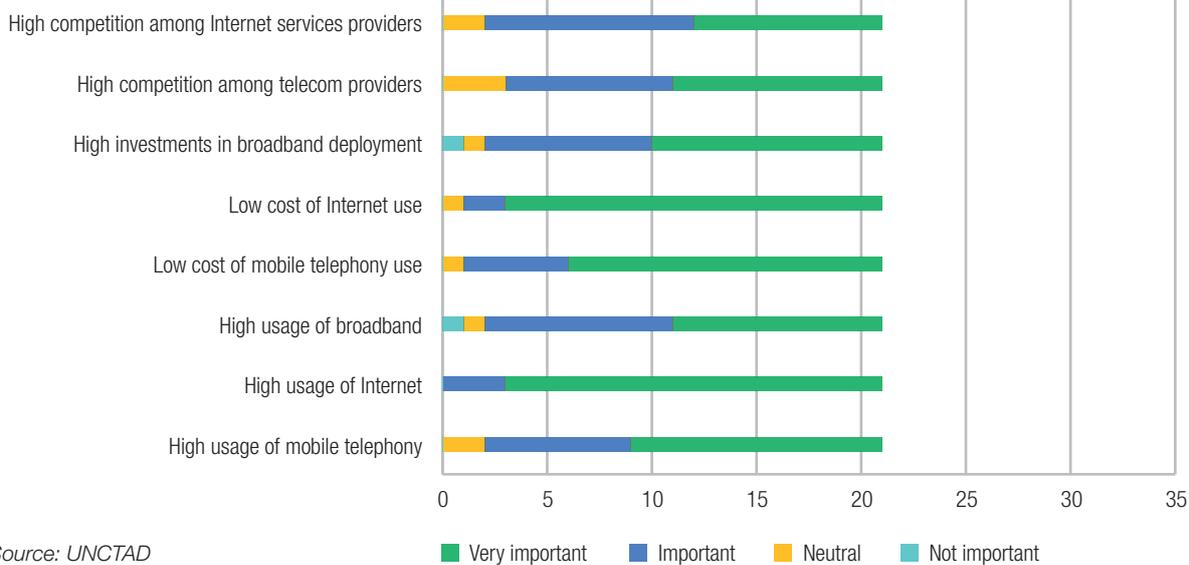
2.3 Major infrastructure projects

Telecommunications infrastructure in Tanzania took a leap forward with the development of a national backbone network connecting to two submarine cables, the Eastern Africa Submarine Cable System (EASSy) and the Seacom. The government-backed National ICT Broadband Backbone (NICTBB) now extends over 7,500 km across the country. The Fibre Consortium (comprising Airtel, Tigo, Vodacom and Zantel), meanwhile, has constructed about 400 km of metro fibre in Dar es Salaam, Dodoma, Morogoro, Mwanza and Arusha, as well as over 1,500 km of backbone fibre linking the major cities of Dar es Salaam, Dodoma, Arusha and Moshi. There is also an extended network of fibre in Zanzibar.

Pemba (the second island of Zanzibar) is still largely isolated however and depends on satellite for its connectivity. By leveraging its unique geographical position, Tanzania now also serves neighboring countries – some of which are landlocked – by extending the benefits of high-capacity submarine cables, through the NICTBB infrastructure, to Burundi, Kenya, Malawi, Rwanda, Uganda and Zambia.

The deployment of 2G coverage in rural areas – the government's policy over the last decade to allow passive infrastructure sharing, the liberalization of the international gateway, and rural roaming – have all contributed to the expansion of network coverage in the country. It is essential for these interventions to continue, and more could be achieved by allowing more infrastructure sharing, especially in rural areas. This would mean allowing network providers access to public infrastructure, such as government buildings, roads and power lines, to lower the cost of network deployment and equipment. For example, there could be increasing investment in the Fibre Consortium through a collaborative partnership between the NICTBB and mobile operators.

Recent additions to Tanzanian ICT infrastructure include the National Internet Data Center (NIDC) in Dar es Salaam, a tier-4 Data Center offering multiple redundancy schemes to ensure availability and reliability along with disaster recovery centres in Dodoma and Zanzibar. The NIDC was built with a Chinese loan and has been designed to attract ICT stakeholders from Tanzania and abroad looking for a facility to store their data. In the pipeline, the smartphone factory is expected to start production in about two years.

2.4 ICT-enabled Public Services

Across the country, increasing mobile Internet access is providing people with access to key services. There are a number of PPP initiatives aimed at improving the delivery of public and private sector services. Some examples include:

- The National eHealth Strategy (2013–2018) to help improve the health and social welfare of all citizens through mobile technology.

- The Vocation Education Training Authority of the Ministry of Education, Science and Technology partnered with Airtel and Dar Teknohama Business Incubator (starting in May 2016) to develop and implement a mobile e-learning platform called VSOMO. This platform expands the reach of VETA by providing digital content to clients who cannot physically attend classes.

- The Registration Insolvency and Trusteeship Agency (RITA), in partnership with Tigo and UNICEF, (October 2015) launched an initiative to help parents register their children's births by mobile phone as part of efforts to better plan health, education and other public services.

Figure 7: Tanzania National ICT Broadband Backbone Network Map
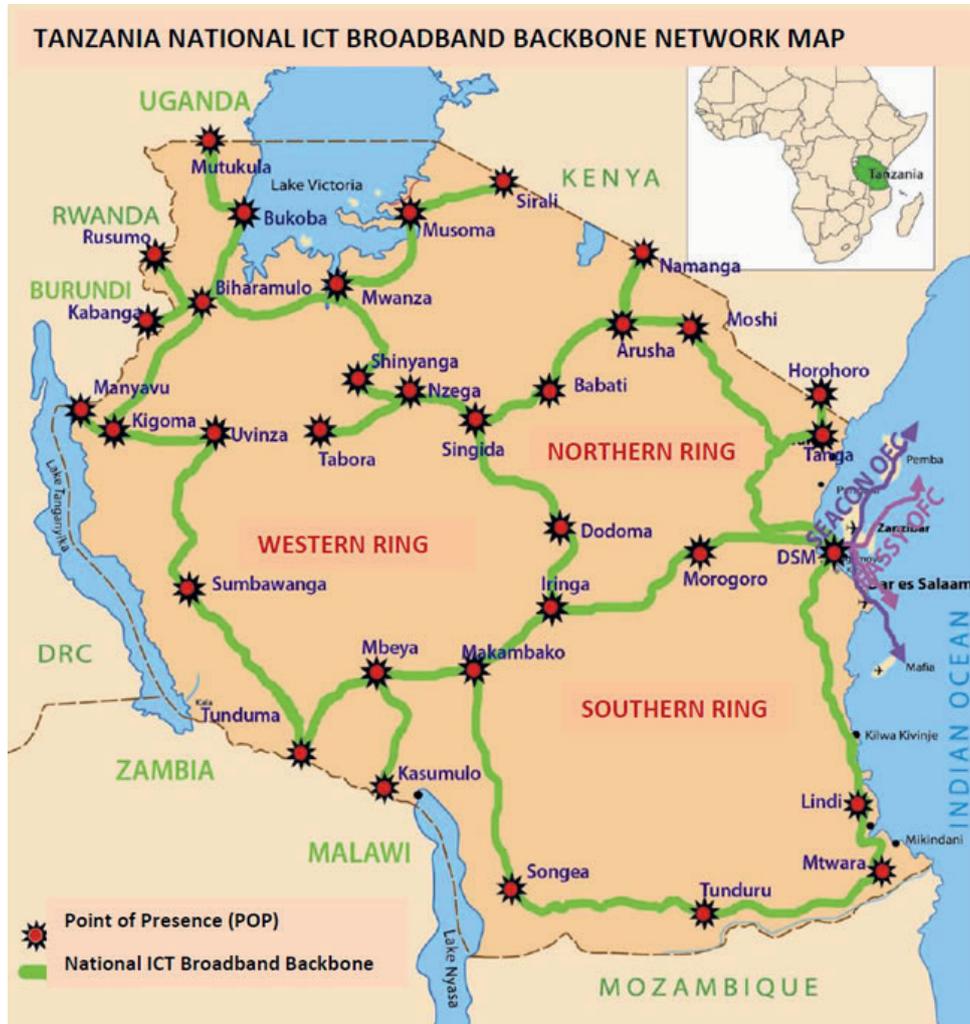
Source: NICTBB

3. TRADE LOGISTICS AND TRADE FACILITATION

Tanzania borders the Indian Ocean to the east and has land borders with eight countries, many of which are landlocked. The country is becoming a transit hub or corridor for many of its neighbors and improving the transportation infrastructure is a key priority for the Government. Significant investment is directed towards road, rail and air travel development as well as into enhancing sea- and airport capacity and One-Stop Border Posts (OSBPs). One of the key e-commerce challenges facing Tanzania is the weak physical addressing system. Although implementation of the National Addressing and Postcode System (NAPS) project continues, progress is slow. Implementation of the Blueprint for Regulatory Reforms to Improve Tanzanian Business Environment will further improve trade facilitation, and the National Single Window (NSW) was expected to be rolled out at the end of 2019.

3.1 Mode of delivery, last mile delivery, traffic and regulations

The transportation sector is a key driver of economic development in Tanzania and supports other key sectors, in particular tourism, industry and trade. Tanzania borders the Indian Ocean to the east and has land borders with eight countries: Burundi, Democratic Republic of Congo (across Lake Tanganyika), Kenya, Malawi, Mozambique, Rwanda, Uganda and Zambia. Comoros and the Seychelles are Tanzania's neighbours by sea. The country includes Zanzibar (consisting of the main island Unguja), Pemba and other smaller islands.

Tanzania is also an entry point for several trade routes. The country has the potential to become a transport hub or corridor for many of its landlocked neighbours. Although roads are the backbone of transport infrastructure in the country, Tanzania also has well-developed maritime and port capacity that is expected to expand with added investment.

Improving the transportation infrastructure is a key priority for the Government. Recent policy developments have put an emphasis on the renovation of the rail network and construction of the Standard Gauge Railway (SGR). This would include establishing interconnections in Eastern and Southern Africa and encouraging foreign investment. There has also been increased investment in the national air carrier and in the promotion of new air connections. By 2017, Tanzania had 152,600 km of roads, 232 3,676 km of railway lines, 3,937 km-tonnes of cargo capacity on its national air carrier, and four international ports.

Tanzania's roads are the backbone of its transport infrastructure, transporting over 90 per cent of passengers and 75 per cent of freight traffic. Pursuant to the Implementation Strategy of the Transport Policy of 2011-2025, an increase in the local roads programme is expected to improve roads overall and provide greater access to rural areas and areas with economic potential. There has been increasing capacity and improvements of roads during the current Government. However, there is still room for improvement in terms of quality and capacity.

In 2016, pursuant to a Government Directive, road transport and transit along the central corridor was improved, with less time spent at weighbridges. The Directive required only a maximum of three stops at weighbridges, compared to eight previously, thus improving transport times. In line with this directive, weigh-in motion bridges have been constructed along the central corridor and they have substantially reduced the time tracks used to weigh in a normal weighbridge. Tanzania is also a member of the Central Corridor Transit Transport Facilitation Agency (CCTTFA) with five neighbouring countries, which aims to assist the landlocked countries in transit trade. As part of this initiative, the countries are working towards constructing more One-Stop Border Posts (OSBPs) to further reduce the number of checks and transit times.

Tanzania has four main international seaports, in Dar es Salaam, Mtwara, Tanga and Zanzibar. These ports not only handle the persons and cargo for Tanzania but also for many of its landlocked neighbours.

Through TradeMark East Africa (TMEA), Tanzania is involved in a project to improve physical access to markets by modernizing the Dar es Salaam port, one of the major hubs of East and Southern Africa.

The conversion of mainland Tanzania border crossings into OSBPs is included in the action plan of most Regional Economic Communities (RECs), notably the West African Economic and Monetary Union, Economic Community of West African States, EAC, SADC, and Common Market for Eastern and Southern Africa. The OSBP facility simplifies processes related to vehicle registration and licensing in Tanzania, cutting the time and costs involved by putting these services under one single facility[15].

E-commerce would benefit from efforts being made to improve the transport infrastructure across the country. More efficient multi-modal transport networks enable e-commerce operators to satisfy the needs of their clients more quickly and reliably. This is true for both domestic and cross-border e-commerce. Transport for e-commerce goods is currently mostly carried out by express delivery couriers. These consist of the big international players and smaller domestic companies.

Importers in Tanzania are required to establish whether the goods to be imported are subject to Pre-Shipment Verification of Conformity (PVoC). In general, any shipment valued at over US$ 5,000 is subject to PVoC. Imports to Tanzania are subjected to different stages whereby the importer is advised to make declaration through his/her appointed Clearing and Forwarding Agent by lodging documents at least seven days before arrival of the vessel. However, as of July 2019, the government presented a new process allowing importers to clear their goods at the Dar es Salaam port without the need for agents. This greatly enhances the ability to quickly clear e-commerce parcels, which tend to be small in size and of relatively low value. More could be done to

develop Postal Services to support small parcels for cross-border e-commerce, including the adoption of a self-declaration scheme for customs duties, and easy–export/easy-import through the Postal Services that targets MSMEs across the country, including rural areas.

Tanzania Posts Corporation (TPC) is the designated national public postal operator. As in many developing countries, one of the key e-commerce challenges facing TPC's ability to provide end-to-end reliability is the weak physical addressing system, affecting the safety and efficient delivery of parcels. Tanzania embarked on a National Addressing and Postcode System (NAPS) project in 2010 with the government rolling out guidelines for street address and postcode systems to be used by local government authorities to implement NAPS. It is a long-term project and thus far, only the city centres of Dodoma, Arusha and Kilimanjaro have been covered. Zanzibar also has a similar initiative that so far has only covered the Stone Town area in Unguja. This issue has been raised by a series of operators, who have started to use alternative options such as GPS to track the location of customers.

During the in-country mission for this assessment, one of the private delivery operators shared their experience of operating in Zanzibar. They highlighted the lack of postal codes as the main challenge facing their operations. This slows down the delivery process, which as a result depends on manual telephone calls to customers. It also increases the cost of delivery, which is eventually shifted to the customer. Moreover, weak physical addressing is a problem for local start-ups and e-commerce vendors, in particular delivery businesses.

Box 3: UPU's ORE Methodology

A seamless and efficient e-commerce environment requires effective postal services to meet the needs of e-shoppers and e-retailers. With a growing volume of e-commerce parcels crossing the border, the question of operational efficiency of delivery services has become a key priority for any postal services provider in the world. UPU implements regional cooperation projects to coordinate and improve the quality of service through an integrated postal supply chain approach. The purpose of these projects is to help the designated postal operators meet operational readiness targets for e-commerce within the following five focus areas: minimum operational requirements; visibility; data quality; supply chain integration; and end-to-end reliability. At the heart of the programme lies a standard onsite assessment methodology known as Operational Readiness for E-commerce (ORE) coupled with an efficient use of IT standardized tools and end-to-end systems. By enhancing the end-to-end reliable delivery performance and providing consumers with more visibility, postal operators can contribute to the expansion of cross border e-commerce. Tanzania Post's operational capability to support e-commerce and ensure operational efficiency of the postal network to facilitate ecommerce transactions could be strengthened by using the Operational Readiness for E-commerce (ORE) methodology.

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[15] *The EAC OSBP program covers the following Tanzanian borders: 1. With Kenya: Namanga, Taveta-Holili, Lunga Lunga-Horo Horo, Isibania-Sirari; 2. With Uganda: Mututkula-Mutukula; 3. With Rwanda: Rusumo-Rusumo; 4. With Burundi: Kobero-Kabanga. The wider Tripartite Regional Integration Program OSBP program further covers the following Tanzanian borders: 1. With Zambia: Tunduma-Nakonde; 2. With Malawi: Kasumulu-Songwe; and 3. With Mozambique: Unity Bridge (Mtambaswala-Namoto).*

3.2 Trade Facilitation

The Parliament of the United Republic of Tanzania ratified the 2014 World Trade Organization (WTO) Trade Facilitation Agreement (TFA) on 13th November 2019; however, Tanzania is yet to submit the instrument. The TFA presents an opportunity for Tanzania to accelerate trade facilitation reforms. The agreement contains provisions for expediting the movement, release and clearance of goods traveling across borders through effective cooperation between customs and other authorities on trade facilitation and customs compliance issues. It also sets out measures to promote cooperation among customs and border authorities on customs compliance issues. Tanzania has only notified six Articles from the Trade Facilitation Agreement, which were notified under category A in 2015. It is important for the country to assess their need for an extended implementation timeframe as well as Technical Assistance and Capacity Building (TACB) before notifying further articles. The WTO TFA provides countries with the option to request an extended implementation timeframe and TACB, where needed, by notifying Articles under B (time) and C (time and TACB). Therefore, Tanzania should carefully assess their needs and existing levels of implementation for each of the WTO TFA Articles. This could be done with assistance from development partners such as the ITC and UNCTAD.

Not all trade facilitation measures adopted by the EAC have been fully implemented by all members. Enabling the compatibility of the customs ICT systems between Tanzania and other EAC and SADC countries, and thus allowing full exchange of information between the different customs operators would likely be a key measure to focus the implementation. It would serve to eliminate inefficiency at the border and customs points and reduce trade costs and time spent to cross the border. Funded by TradeMark EA, UNCTAD provides technical assistance for strengthening the capacity of the National Committee on Trade Facilitation (NCTF) of Tanzania in support to the implementation of the trade facilitation reforms.

The World Bank's Logistics Performance Index (LPI) ranks countries on a range of trade facilitation measures based on the perception of business users[16].

Box 4: EAC and Tanzania's Trade Facilitation Measures

Tanzania is committed to implementing the TFA through its active membership in the East African Community (EAC). Tanzania's customs policies and administrative regulations are driven by the EAC Customs Management Act, 2004 and the EAC Customs Management Regulations, 2006. Tanzania has not acceded to the Revised Kyoto Convention; however, the core principles of the convention are embodied in the EAC legislation and regulations.

The EAC has rolled out implementation of various trade facilitation initiatives covered by the community laws including the Treaty establishing the EAC, the Customs Union Protocol, Customs Management Act, and Common Market Protocol. The trade facilitation measures adopted by the community include among others: adoption of the harmonized EAC customs procedures with reduced and standardized customs documents; standards, quality assessment, testing and metrology procedures; Single Window; Authorized Economic Operators; electronic cargo tracking system; single customs transit guarantee bond; establishment of One-Stop Border Posts (OSBP); harmonization of business hours and attempt to operate 24 hours at some borders stations; harmonization of transport regulations and standards; and strengthening the NTB's monitoring mechanisms through national and regional monitoring committees; and SMS and online notifications and resolution mechanisms.

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[16] *The logistics performance (LPI) is the weighted average of the country scores on the six key dimensions: (1) Efficiency of the clearance process (i.e., speed, simplicity and predictability of formalities) by border control agencies, including customs; (2) Quality of trade and transport related infrastructure (e.g., ports, railroads, roads, information technology); (3) Ease of arranging competitively priced shipments; (4) Competence and quality of logistics services (e.g., transport operators, customs brokers); (5) Ability to track and trace consignments; and (6) Timeliness of shipments in reaching destination within the scheduled or expected delivery time.*

Figure 8 shows that Tanzania improved significantly in the different logistics performance indicators from 2007 to 2018, according to the World Bank's Logistics Performance Index (LPI). It performs better than the average of Least Developed Countries (LDCs) in customs, infrastructure, international shipments, logistics competence, tracking and tracing, and timeliness. Similarly, Tanzania outperforms the LDC averages in the OECD trade facilitation indicators, particularly in the areas of automation, information availability, appeal procedures and advance rulings.

Figure 8: World Bank's Logistics Performance Index: Tanzania

Logisitics performance Index (LPI) (1-5)
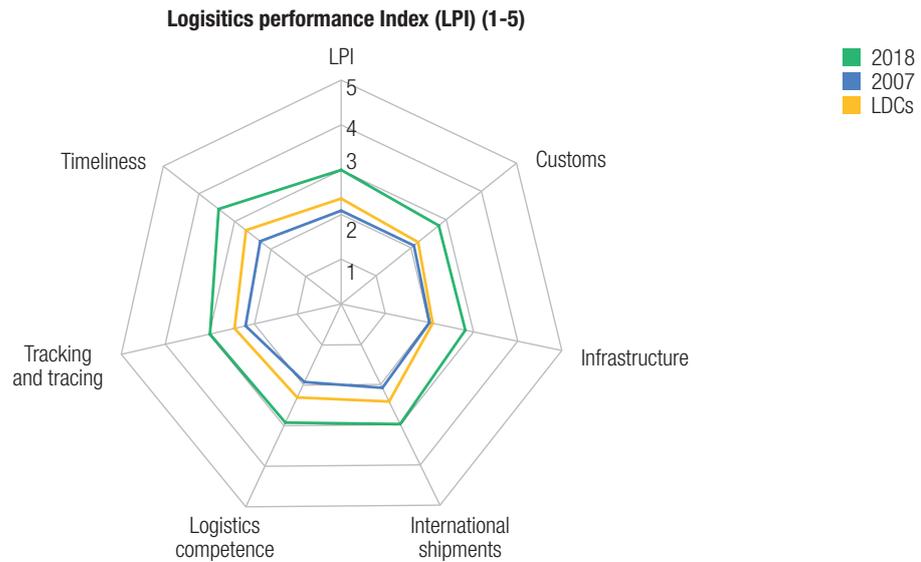
Source: OECD, WTO 2019

Figure 9: OECD Trade Facilitation Indicators: Tanzania
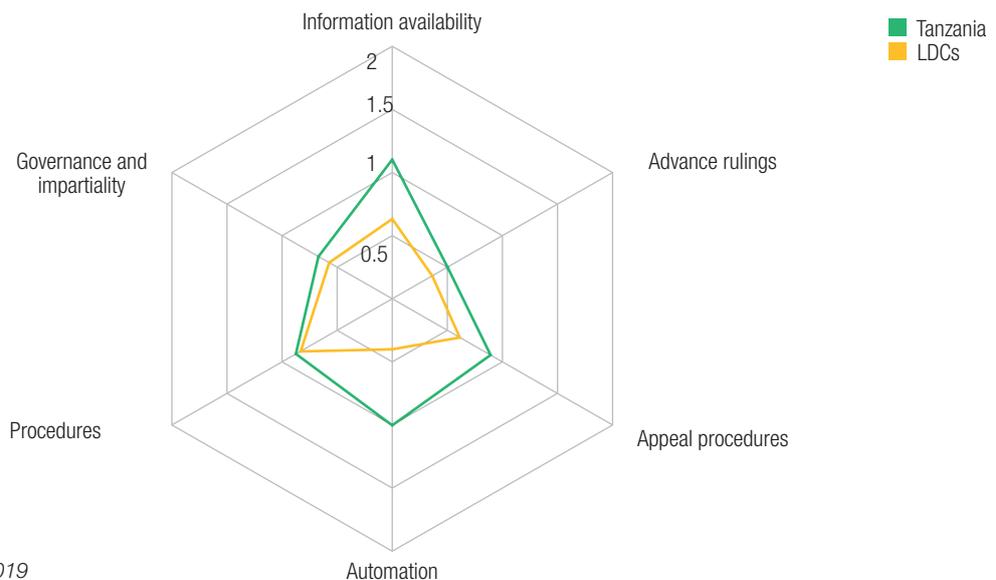
Source: OECD, WTO 2019

Despite many positive developments in trade facilitation, a cross-border trade assessment would help improve understanding of the persistent and ongoing problems faced by traders, especially women and youth. The findings of such an assessment would help to develop evidence-based policy recommendations.

The Zanzibar Investment Promotion Authority (ZIPA) has taken steps to improve trade logistics in Zanzibar. They have set up a single facility where all stakeholder organizations involved in trade are co-located and have the mandate to operate. This has simplified the process of setting up businesses in Zanzibar.

Customs

The EAC rolled out customs interconnectivity in 2013 and has thereafter enhanced the customs interconnectivity through the gradual implementation of the Single Customs Territory (SCT). The Tanzania Revenue Authority (TRA) is the lead agency in Tanzania responsible for managing the borders and customs clearances. At the end of 2014, the TRA transitioned to a new bespoke customs clearance software called Tanzania Customs Integrated System (TANCIS).

TANCIS was designed as a web-based system to facilitate moving towards paperless operations and reducing the costs of doing business by increasing transparency, reliability and efficiency. TANCIS is a modular-based system with over 35 different modules covering a variety of operations. The TRA is the custodian and administrator of TANCIS, which is also used in Zanzibar. This new system has automated many regulatory activities, enabling the TRA (and potentially other key border agencies) to effectively and efficiently perform their respective regulatory functions.

National Single Window

Following the implementation of TANCIS, the software appears to be a reliable and versatile automated system catering to the needs of both the public and private sectors. The system illustrates a considerable degree of flexibility, enabling needed changes based on user requirements. As a result, TANCIS has been established as the platform for a National Single Window in Tanzania. The TRA has been entrusted with the responsibility of taking the lead role in planning and implementing the National Single Window. Several other government agencies are already interfacing with TANCIS to some degree and are in the process of deepening the joint effort to establish a national single window. These include other agencies involved in regulating imports such as the Tanzania Bureau of Standards (TBS), the Zanzibar Bureau of Standards (ZBS), Tanzania Medicines and Medical Devices Authority (TMDA), and the immigration authorities. The National Committee on Trade Facilitation (NCTF), supported by UNCTAD, provides oversight and coordination of the process.

The Blueprint for Regulatory Reforms to Improve Tanzanian Business Environment and its Action Plan guides the Government agencies in taking the steps required for the implementation of the National Single Window. System testing for the National Single Window is expected to start soon. The first phase of the platform is expected to be rolled out by the end of 2019, with other phases to follow thereafter. During the consultations for this assessment, a hot topic of discussion was the need for the border agencies, banks and customs points to operate 24 hours a day and 7 days a week (24h/7d), especially at those border points where large volumes of traffic are reported. EAC border agencies, which most of them are under One Stop Border Posts (OSBP) are already operating 24h/7d.

4. PAYMENT SOLUTIONS

> Financial sector service providers in Tanzania include banks, microfinance institutions, insurance providers, self-organized Savings and Credit Cooperative Organizations (SACCOs), social security and pension providers, and non-traditional players such as mobile network operators that offer financial products. Despite the manifold options, usage of the services is limited, mainly due to the lack of awareness of available services and also the high costs. Mobile money has emerged as the main tool used by Tanzanians to access financial services. The Bank of Tanzania's regulations contribute to a conducive environment for mobile money, including interoperability between mobile money service providers. Despite the growth in this form of payments, cash-on-delivery is still the most common form of payment for e-commerce transactions, as in many other developing countries.

4.1 Banking penetration and financial inclusion

The emergence of mobile money has helped Tanzania achieve a fivefold increase in financial inclusion[17], going from 12 per cent of the adult population in 2006 to 65 per cent in 2017 (FSDT 2006, 2017). Based on information from the Bank of Tanzania, there are 40 fully-fledged commercial banks, three development financial institutions, 11 community banks, five microfinance banks, three financial leasing companies and one mortgage finance institution in Tanzania. In addition, 250 Microfinance Institutions

(MFIs) and 5,871 Savings and Credit Cooperatives (SACCOs) are registered in the country.

Other financial service providers include insurance providers, social security and pension providers, as well as non-traditional financial sector players such as mobile network operators. In 2017, over 1,500 different financial products were used in the market (16 per cent more than in 2015) and the number is expected to grow as the sector continues to innovate to meet the needs of customers (Financial Sector Deepening Trust, 2017).

Figure 10: Number of financial products in the market (2017) and increase of uptake of formal financial services (2013-2017), Tanzania

Number of Financial Products in the market
Base: All products; n = 1,534

Banks	64%
SACCOs	12%
Insurance	11%
MFIs	7%
Pension	3%
Development banks	1%
MNOs	1%
Aggregators	1%
Money transfer	0%

Uptake of Formal Financial Services

	2017	2013
Mobile money services	60%	50%
Commercial bank services	17%	14%
Insurance services	15%	13%
Pension services	4%	3%
MFI/microlender services	7%	2%
SACCOs	2%	3%
Capital markets	0.01%	0.40%

Source: FinScope Tanzania 2017

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[17] *According to the National Financial Inclusion Framework (NFIF), the working definition of Financial Inclusion for Tanzania entails the "regular use of financial services, through payment infrastructures to manage cash flows and mitigate shocks, which are delivered by formal providers through a range of appropriate services with dignity and fairness".*

Tanzania is one of ten economies, all in Sub-Saharan Africa, where the number of adults who have a mobile money account is higher than the number of adults who have an account with a financial institution (World Bank, The Global Findex Database 2017). This has promising implications for e-commerce development, because payment through mobile money can often be less cumbersome than through traditional banking systems. If mobile money is mainstreamed into the daily lives of Tanzanians, then it will be easier to develop integrated payment solutions as well.

Uptake and usage of services with financial institutions remains limited. Only 47 per cent of Tanzanian adults have a bank account, with gaps between men and women (9 per cent difference) and between the richer and poorer quintiles (16 per cent difference)[18]. In Zanzibar, only 38 per cent of adults had a bank account in 2017.

Access to financial services does not appear to be the main barrier. According to FSDT (2017), 86 per cent of Tanzanians live within 5 km of a financial access point (Figure 12). In rural areas, however, this number drops to 78 per cent and some groups, including women, youth and micro, small and medium-sized enterprises (MSMEs), remain excluded. Usage is not maximised across the population due to a persistent demand-supply gap.

Figure 11: Financial inclusion by demographics, Tanzania, 2017

Financial inclusion by demographics
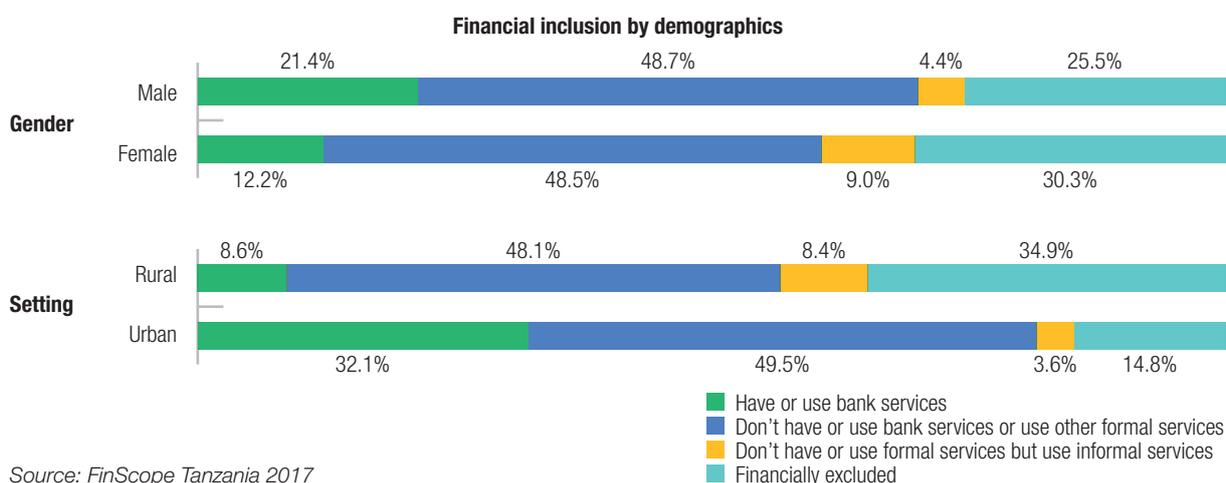
Source: FinScope Tanzania 2017

Figure 12: Financial services key figures, Tanzania, 2017
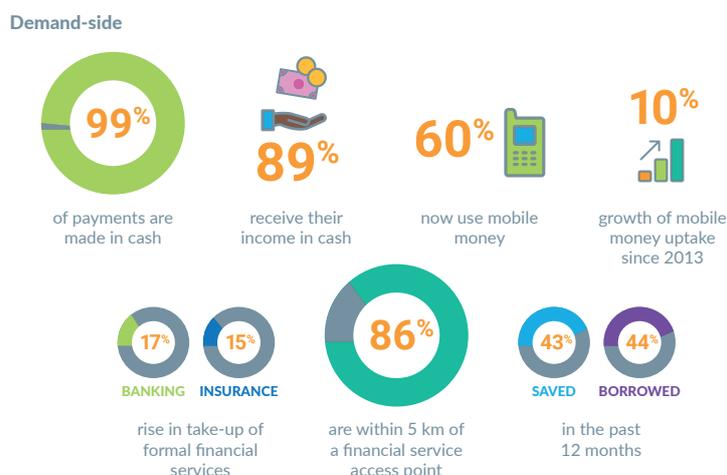
Source: Financial Sector Deepening Trust (FSDT, 2017)

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[18] World Bank Global Findex Database 2017

Several barriers face Tanzanians in relation to the use of formal financial services provided by banks, MFIs, SACCOs, mobile money and insurance providers (see Table 5). Lack of awareness of the services available as well as affordability of services play a major role. FSDT's work aims to develop market systems that benefit underserved individuals, households and enterprises. This involves addressing challenges and also supporting innovations and market interventions in the financial sector through partnerships with financial sector stakeholders. Increasing financial inclusion should be a key area of focus for enhancing the enabling environment for e-commerce.

Mobile money has created a certain amount of familiarity and trust in formal financial services. Customers that have used mobile payments at least once are more likely to engage in other forms of formal financial transactions. Therefore, financial service providers could take advantage of the existing trust in mobile payment when introducing their services. For example, financial services providers could provide compatibility with mobile money when they launch new products. Similar synergies could be gained by connecting community microfinance groups to formal channels, hence leveraging the social coherence, trust, financial records and financial behaviours already nurtured by these groups.

4.2 Financial regulations

The Government continues to drive the financial inclusion agenda through coordinated policy actions. The Bank of Tanzania Act of 2006 stipulates that the Bank of Tanzania (BOT) would "conduct oversight functions on the payment, clearing and settlement systems in any bank, financial institution or infrastructure service provider or company." The Act has had significant implications for the provision of financial services. By extending BOT oversight of payments providers to include non-financial institutions that were not traditionally under its purview, the 2006 Act gave the BOT broad powers to directly oversee mobile money providers. This, in turn, led to the rapid emergence of mobile money service providers throughout the country.

The Government has continued to respond to market needs through its Second Five Year Development Plan (2016/17-2020/21) and second National Financial Inclusion Framework 2018-2022 (NFIF 2.0), as well as by setting up the National Microfinance Policy 2017, the National Payment System Strategy 2017-2027, the National Payment Systems Act and new Savings and Credit Cooperative Organizations (SACCOs) regulations.

With the increase in mobile and electronic payments, the 2015 National Payment Systems Act was enacted to regulate new electronic and mobile money transfers. The Act defines a Payment System as a facility consisting of payment instruments, banking and transfer of money procedures, interbank funds transfer systems or payment system providers' system that ensures circulation of money. All service providers offering payment system services are to be registered by the Bank of Tanzania. In addition to the Act, payment systems in Tanzania are regulated by the Licensing and Approval Regulations and the Electronic Money Regulations, all adopted in 2015.

Table 5: Reasons for not using formal financial services, Tanzania, 2017		
Provider	**Primary barrier**	**Secondary barrier**
Banks	Insufficient income to consider opening an account	Cannot maintain minimum balance on the account, due to insufficient income
MFIs	Lack of awareness of how MFIs operate and where they are located	Insufficient income to become a MFI customer
SACCOs	Lack of awareness of how SACCOs operate, how to join them, and where they are located	Membership fee is perceived to be too high
Mobile Money	Non-users state that they do not engage in frequent transactions and hence do not need it	Non-users do not have the necessary device, i.e., phone, to be able to use services
Insurance	Lack of awareness of how insurance services work and how to obtain them	Perceived high cost of insurance and inability to afford insurance payments

Source: FinScope Tanzania 2017

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Box 5: EMR-related enablers of Tanzanian DFS success

The Consultative Group to Assist the Poor (CGAP) is a global partnership of more than 30 leading development organizations, housed by the World Bank. The CGAP works to improve the lives of the poor through financial inclusion. This global partnership has identified four regulatory enablers, linked to the Electronic Money Regulations (EMR), that have been crucial to the success of digital financial services (DFS) in Tanzania.

1. Nonbank E-Money Issuance. Regulations include a specialized licensing window for nonbank providers to issue prepaid accounts without being subject to the full range of prudential rules applicable to banks and without the condition of being permitted to intermediate funds. Tanzania's Electronic Money Issuer (EMI) Guidelines allow nonbank providers to receive a license as "a separate legal entity for issuance of electronic money".

2. Use of Agents. Providers—both banks and nonbanks—are permitted to use third-party agents to deliver financial services. The EMI Guidelines address the use of agents by EMIs, whereas banking agents are covered under the Guidelines on Agent Banking for Banks and Financial Institutions, 2017.

3. Risk-Based Customer Due Diligence. A proportionate anti-money laundering framework allows simplified customer due diligence (CDD) for lower-risk accounts and transactions. The Electronic Money Regulations introduced four "tiers" for CDD, including a lower level for opening individual entry level accounts that requires (among other things) a registered phone number, voter registration card, or a letter from a ward executive.

4. Consumer Protection. Ideally, consumer protection rules should be tailored to the full range of DFS providers and products. In Tanzania, consumer protection rules are included in the Electronic Money Regulations, but the country has no overarching consumer protection framework for financial services.

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In Zanzibar, more focus should be placed on monitoring diaspora remittances, which play a large role in the island's economy. No regulatory framework currently exists, leading to difficulties in identifying involved stakeholders and also in instilling trust and creating a conducive financial environment.

4.3 Main mobile, cashless payment solutions

New mobile money systems have provided access to financial services to those previously excluded from the traditional banking system. Mobile money uses the existing mobile infrastructure to provide services online, bringing costs down and enabling efficiency in the provision of cash-in and cash-out services. This translates into more savings and allows people to smooth their consumption patterns. Mobile money also reduces transportation costs (compared to dealing in cash) and improves information flows between parties. In Tanzania, the launch of financial services and micropayments via mobile phones has been a key driver in reducing the unbanked population.

Although Tanzania was not the first country to establish interoperable digital financial services, it was unique insofar as industry participants led the process of setting up governance and business rules. Between October 2014 and September 2017, interoperable person-to-person (P2P) transactions grew steadily at an average rate of 16 per cent per month. Moreover,

almost all new growth in P2P transactions during this time were from interoperable transactions. An October 2017 CGAP survey of Tanzanian adults found that 60 per cent of mobile money users had made an interoperable P2P transaction in the prior 12 months. Twenty-five per cent of respondents who had not conducted an interoperable transaction were unaware that such transactions were even possible, pointing to an ongoing need to educate customers and raise awareness (CGAP, 2018).

Interoperable mobile money services continue to contribute to substantial increases in transactions across network operators. During the first half of the 2018/19 financial year, 83.4 million transactions worth TZS 2,898 billion were processed representing 85.7 per cent and 52.1 per cent annual increases in volume and value, respectively. The number of active registered accounts for mobile money increased from 19.4 million in December 2017 to 23.3 million in December 2018 (BOT, 2019).

Mobile money providers' integration with banks has significantly increased the volume of transactions moving between mobile money and the banking systems. Account-to-account (A2A) interoperability gives users the ability to transfer between customer accounts held with different mobile money providers and other financial system players. This interoperability between banks and MNOs is typically facilitated by an

aggregator, which acts as the glue helping different parts of the digital financial services ecosystem to work together.

The Bank of Tanzania has engaged key stakeholders in the financial sector to develop the National Switch, with a view towards further enhancing interoperability and reducing costs for both bank and non-bank providers. The National Switch is expected to become operational in September 2020 and could render the aggregators redundant since the cost of interoperability is expected to decline significantly.

The Tanzanian mobile money market is competitive, with six providers: Vodacom with M-Pesa (40 per cent

market share), Tigo with Tigo Pesa (33 per cent), Airtel with Airtel Money (17 per cent), Halotel with Halopesa (six per cent), Zantel with Ezy Pesa (two per cent), and TTCL (two per cent).

Despite the expansion of mobile money, cash remains the most common method of payment for online as well as offline purchases. One of the top five e-commerce operators in the country stated that 90 per cent of their sales are paid by cash-on-delivery, with only five per cent of sales paid through mobile money and five per cent paid through bank transfers. Familiarity with cash and the lack of trust in online transactions is recognized as the key factor hindering the use of mobile payments for e-commerce transactions.

Figure 13: Tanzanian Mobile Money Subscriptions Market Share as of March 2019
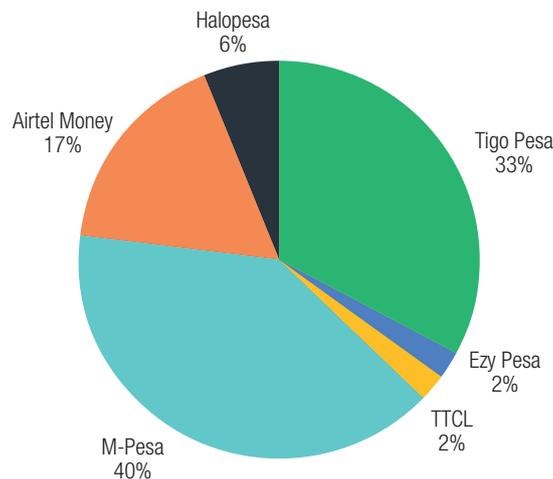
Source: Tanzania Communication Regulatory Authority (TCRA), 2019

Figure 14: Payment systems offered to their customers by private sector respondents to the survey for this assessment

Responses from the private sector: 25
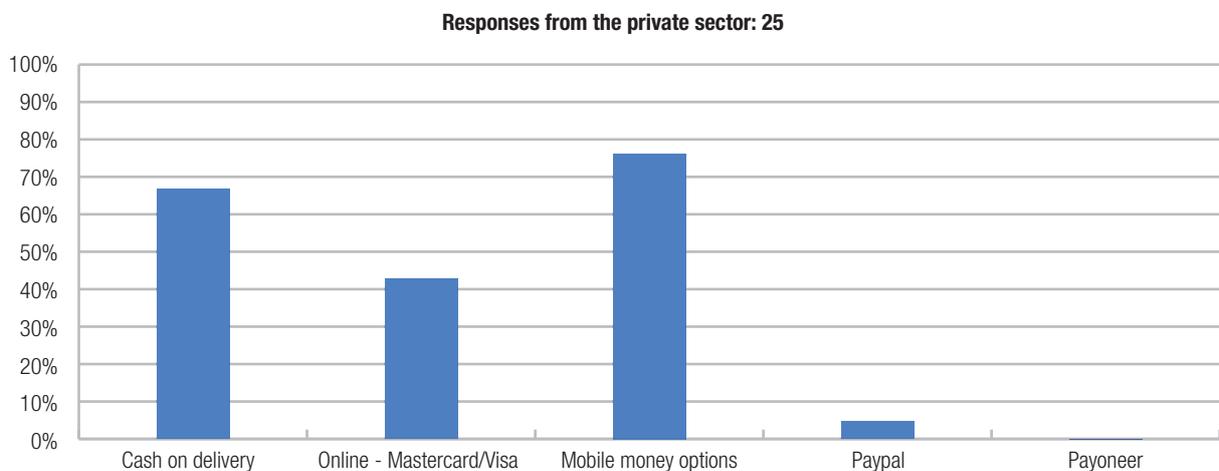
Source: UNCTAD

One way to increase trust in online transactions is to sensitize the population to the use of digital payments for government services. The Government could leverage the increasing use of mobile money to identify possible avenues - technical and regulatory - to enable Tanzanians to pay their taxes online. This could improve revenue collection and serve as a broad-based DFS sensitization campaign.

Given the enabling role of FinTech for e-commerce development, the Government could adopt policies and regulations that encourage the establishment of more FinTech companies and solutions. Alongside this, the Government could identify possible PPP avenues to expand financial inclusion and non-cash payment solutions for e-commerce. Although the Government would play an important enabling role, the private sector is best positioned to improve the design and overall accessibility of financial and digital payment services for consumers and e-commerce vendors.

5. LEGAL AND REGULATORY FRAMEWORKS

> The existing legal and regulatory framework has gaps and is not fully conducive to creating an enabling environment for e-commerce development. Tanzania has an Electronic Transactions Act (2015) and has enacted the UNCITRAL Model Law on Electronic Commerce, as well as substantive provisions of the Electronic Communications Convention. A Cyber Security Act was also enacted in 2015 and preparation of a Personal Data Protection Bill started at the same time with it but is still underway. Meanwhile, the Electronic and Postal Communications Regulations (2018) are set to regulate online content. While consumer protection is generally covered by the Fair Competition Act (2003) which is currently under review, the Electronic Transactions Act covers elements of consumer protection in e-commerce.

Both public and private sector stakeholders surveyed for this assessment noted that carrying out a regulatory gap analysis on e-commerce is among the most important actions that should be undertaken to spur e-commerce development (see Figure 1). Such an analysis would provide the evidence-base for updating the existing legal and regulatory framework to meet the needs of the evolving digital economy, including increased e-commerce activity.

The 2015 Electronic Transactions Act provides for the legal recognition of electronic transactions, e-Government services, the use of information and communication technologies in the collection of evidence, and admissibility of electronic evidence. The Act also facilitates the use of secure electronic signatures and other related matters. The Act enacts the UNCITRAL Model Law on Electronic Commerce, as well as the substantive provisions of the United Nations Convention on the Use of Electronic Communications in International Contracts. In that respect, it is a fairly recent text in line with prevailing regional and global legislative standards.

The 2015 Cyber Security Act aims "to make provisions for criminalizing offences related to computer systems and Information Communication Technologies; to provide for investigation, collection, and use of electronic evidence and for matters related therewith". The Act seeks to protect sensitive infrastructure, reduce vulnerability and cyberbullying, and minimize the damage that cyberattacks may cause.

The current regulatory framework does not include sufficient provisions for data protection and gaps have been identified in the following areas: i) data ownership and whether individuals have power over the information that they supply to third parties; ii)

restrictions related to the processing or storage of any type of data outside of the country's jurisdiction; and iii) security of data for individuals in an organization (the issue of security is dictated by company policies and guidelines). Preparations for the Personal Data Protection Bill have begun and are now at advanced stage awaiting Government approval and thereafter the Bill will be tabled to the Parliament.

Regarding online content regulation, the 2018 Electronic and Postal Communications Regulations, based on the Electronic and Postal Communications Act, 2010, require that: (1) bloggers, online forums, online radios, online televisions be registered with TCRA; (2) registration of online content providers is subject to tax compliance; (3) Internet cafés are to install surveillance camera to record and archive activities inside the café; and (4) breach of the regulations will lead to fine of not less than TZS 5 Million and/or imprisonment for a term of not less than 12 months.

The Fair Competition Commission is an independent government body established under the Fair Competition Act, 2003 (No. 8 of 2003) to promote and protect effective competition in trade and commerce, as well as to protect consumers from unfair and misleading market conduct. The Law Reform Commission of Tanzania is, however, reviewing the legal framework governing consumer protection in Tanzania. The Commission states that due to science and technology advancement and globalization in general, it is very easy for consumers to be affected health-wise, economically and socially. The existing legal framework does not adequately account for the new risks associated with such developments. Furthermore, the existing laws are scattered and regulated by various authorities. The Commission has

therefore embarked on studying and identifying the shortcomings in the legal framework and will propose actionable recommendations for reform.

Finally, the Electronic Transactions Act covers the following elements of consumer protection related to e-commerce: duties of suppliers to online consumers; time for execution of order; cancellation rights; particulars to be provided in an electronic communication; and unsolicited goods, services or communications.

The Government could also take steps to make it easier to establish and operate a business, including an e-commerce business. Consideration should be given to adopting MSME-specific incentives such as tax breaks, and grants, as well as to further increasing and streamlining the availability of information for setting up a business. This would lead to an improved business environment, especially for MSMEs, and could bring some informal businesses into the formal sector.

The current laws contain few provisions on cross-border e-commerce. Tanzania could consider the adoption of the United Nations Convention on the Use of Electronic Communications in International Contracts as a first step to fill that gap. The accession process would be facilitated by the fact that the substantive provisions of the Convention have already been incorporated in the Electronic Transactions Act. Adoption of the Convention would have a positive impact also on the implementation of the WTO Trade Facilitation Agreement once the agreement has been adopted.

6. E-COMMERCE SKILLS DEVELOPMENT

> A number of efforts have been made to develop ICT human capital in the country, including by adding ICT curricula to tertiary education and integrating technology into some secondary schools. Despite these efforts, there is often a gap between the skills gained by graduates and the expectations of their future employers. Courses aimed at building skills in digital entrepreneurship or e-commerce are limited but some offers exist in the context of some degrees, such as international business. Innovation hubs, already key actors in Tanzania's evolving innovation ecosystem, may become the default providers of skills development in e-commerce. A further challenge is the limited awareness and understanding of e-commerce across society, which contribute to the lack of trust between private sector enterprises and their customers. Those who do purchase online, or are at least interested in e-commerce, fear that they might be scammed or hacked if they engage in online transactions.

6.1 Skills gap identification

More effort is needed for the development of ICT and digital skills of the general population to accompany the improved access to ICT services. Key skills related to application development, search engine optimization, data analytics, inventory management, platform integration and web-based marketing are sorely lacking. As a result, there is a skills gaps that could hinder the development of e-commerce in the country. Also, there is a gap in the level of digital skills between the youth and the adult population.

A recent survey of ICT stakeholders[19] (mainly consumers) found that for the majority of those who have not shopped online, the main reasons were concerns related to the safety of making online payments or their low level of trust in the online stores. While listing other reasons for slow adoption of e-commerce in Tanzania[20], the article presenting the survey states that investment in both training and awareness-building programs is vital for attitudinal changes in the public.

According to a 2017 study published in the International Journal of Information and Education Technology[21], most Tanzanian secondary schools do not have computers and Internet connections in place. In schools where ICT infrastructure is present, the student to computer ratio is very high. The

findings revealed that most of the secondary school teachers (77 per cent) possess either a laptop or a smartphone, or both. This implies that they have some ICT familiarity, but they will need additional training on how to use such tools in the teaching and learning process. Emerging edutainment companies, led by Ubongo, may help bridge the skills gap for the future generations (Box 6).

6.2 Availability of tertiary education, professional training

Efforts have been made to develop the ICT skills of the workforce by establishing ICT colleges in universities, such as the College of Information and Communication Technologies at the University of Dar es Salaam (UDSM) and the school of Informatics at the University of Dodoma. ICT programmes have also been introduced in privately-owned and operated universities. The Basic Statistics Portal, in the Ministry of Education, Science and Technology (MoEST), lists over one hundred universities and more than 250 technical colleges in the country, and some of them offer ICT-related degrees, certificates or diplomas. There do not appear to be any degrees, programmes or certificates related to e-commerce, digital entrepreneurship or the digital economy.

Perhaps the most prominent provider of ICT tertiary education, UDSM's College of Information

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[19] *The study, published in the International Journal of Computer Applications (2015), analysed 213 responses of Tanzanian e-commerce stakeholders, mostly consumers. Most respondents were below 41 years of age (only six percent were above 41 years) and mainly male (62%). Only seven percent of respondents had education at secondary level and below (Chachage, B., Mlelwa, K. L., and Zaipuna, Y.O., 2015).*

[20] *These were rather similar to those discussed in this assessment and include: infrastructural issues linked to Internet coverage; bandwidth and appropriate technology; cost and financing; risks and security; and financial and regulatory issues.*

[21] *Ngeze, Lucian V.: "ICT Integration in Teaching and Learning in Secondary Schools in Tanzania: Readiness and Way Forward", International Journal of Information and Education Technology, Vol. 7, No. 6, June 2017*

and Communication Technologies (CoICT), offers undergraduate, postgraduate and PhD programmes in ICT-related areas hosted in two departments: (1) the Department of Computer Science and Engineering (CSE); and (2) the Department of Electronics and Telecommunication Engineering (ETE). Currently, CoICT is home to more than 1,200 students, and its incubator, known as the University of Dar es Salaam Information and Communication Technology Incubator (UDICTI), nurtures UDSM students who wish to establish their own ICT-related businesses by developing their ideas via incubation training.

The University of Dar es Salaam Computing Centre (UCC) is an ICT company owned by the UDSM. UCC's core businesses include IT training, software development and systems integration, IT Infrastructure and security systems planning, design, as well as deployment, data hosting, cloud and co-location, website design, development and hosting, and IT Consulting. The Centre is headquartered at UDSM's Julius Kambarage Nyerere Mlimani Campus and has branches in Dar es Salaam, Arusha, Dodoma, Mbeya and Mwanza.

The Government of Zanzibar, via the Vocational Training Authority of Zanzibar (VTA), has established several Zanzibar specific vocational training centres – in Mkokotoni, Mwanakwerekwe and Vitongoji – focused on teaching digital skills.

The e-Government Agency (eGA) provides various specialized training programmes to government employees to build competences and skills necessary for the implementation and promotion of e-Government initiatives in Tanzania.

For students who decide to enrol in ICT-related careers, there is often a gap between the skills obtained by the graduates and the expectations of future employers. The syllabus and curricula used do not always address the needs of the market. It is therefore crucial that employers inform educational institutions of what is required to close the gap between student learning and the needs of the labour market. In Tanzania, feedback loops between the private sector and education institutions happen on an ad hoc basis and there seems to be no regular skills-gap analysis.

New graduates joining the labour market sometimes are required to undergo ICT-related practical training before starting their new jobs. One of the reasons for this is that in some cases, ICT equipment in IT training institutions are not enough for each student to be acquainted with them and some of them are not contemporary.

Specific e-commerce or digital entrepreneurship training is also limited. Realistically, no single course or program will be sufficient to develop the skills necessary to become an e-commerce entrepreneur or operator. The skill set required is broad and will require training in general business, marketing, inventory management, accounting, dispute resolutions and many other areas. To achieve this, a mixture of formal education and traineeship or mentorship could be one model to pursue.

6.3 Business incubators and business accelerators

The innovation ecosystem in Tanzania has developed rapidly over the past few years and the innovation hubs may become an important source of digital entrepreneurship skills. Tanzania has climbed in the Global Innovation Index (GII) rankings from 123 in 2013 to 92 in 2018. Co-published by Cornell University, INSEAD, and the World Intellectual Property Organization (WIPO), the GII relies on two sub-indices — the Innovation Input Sub-Index and the Innovation Output Sub-Index — each built around key pillars[22]. Tanzania's performance is a solid achievement for a country lacking a strong innovation environment. While Tanzania's ranking in 2019 dropped five positions from 2018 and now stands at 97, it is still the only country in the low-income group that achieves high impact for its innovation efforts with a considerably low levels of input[23].

Four countries (Egypt, Kenya, Nigeria and South Africa) account for about 60 per cent of Africa's total digital entrepreneurship activity. Tanzania is one of the six second-tier countries (with Ghana, Morocco, Senegal, Tunisia and Uganda) that make up another

20 per cent, while the remaining 44 countries in Africa account for the remaining 20 per cent (UNCTAD, DER 2019).

Innovation hubs are emerging quickly and form a key part of Tanzania's evolving innovation ecosystem. According to a November 2018 study by the Human Development Innovation Fund (HDIF), there were approximately 35–40 active hubs[24] in the country, with more than half in the greater Dar es Salaam region[25].

Three groups of innovation hubs operate in Tanzania (HDIF, 2018)[26]. One group is made up of non-independent hubs run by organizations, such as universities and the National Commission for Science and Technology (COSTECH) or run as part of donor projects and not necessarily intended to be permanent. The second comprises professionally run hubs with a budget, board of directors, technology or sector focus, and at least some full-time staff. The third group consists of the more informal, community-driven hubs that focus on skills, employability, as well as human and community development.

Table 6: 10 Best-ranked Low-income economies, Global Innovation Index (GII) 2019			
Rank Global	**Innovation Index**	**Innovation Input Sub-index**	**Innovation Output Sub-index**
1	Rwanda (94)	Rwanda (65)	United Republic of Tanzania (73)
2	Senegal (96)	Nepal (93)	Ethiopia (80)
3	United Republic of Tanzania (97)	Uganda (96)	Senegal (81)
4	Tajikistan (100)	Senegal (103)	Tajikistan (83)
5	Uganda (102)	Tajikistan (107)	Mali (100)
6	Nepal (109)	Burkina Faso (111)	Uganda (107)
7	Ethiopia (111)	Benin (114)	Madagascar (109)
8	Mali (112)	United Republic of Tanzania (115)	Zimbabwe (110)
9	Burkina Faso (117)	Mozambique (118)	Malawi (112)
10	Malawi (118)	Malawi (119)	Mozambique (114)

Source: Global Innovation Index (GII) 2019

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[22] *Five input pillars capture elements of the national economy that enable innovative activities: (1) Institutions, (2) Human capital and research, (3) Infrastructure, (4) Market sophistication, and (5) Business sophistication. Two output pillars capture actual evidence of innovation outputs: (6) Knowledge and technology outputs and (7) Creative outputs. Each pillar is divided into sub-pillars and each sub-pillar is composed of individual indicators (80 in total in 2019). The Innovation Input Sub-Index is the weighted average of the first five pillar scores; the Innovation Output Sub-Index is the weighted average of the last two pillar scores; and the overall GII score is the average of the Input and Output Sub-Indices.*

[23] *Tanzania's Innovation Input Sub-Index ranking is 115 and Innovation Output Sub-Index ranking 73 (2019).*

[24] *Most of the hubs are indicated on the http://innovate.co.tz map.*

[25] *Here, as in the HDIF study, the word 'hub' is used to encompass all the different models: business incubators, co-working spaces, living labs, makerspaces and other innovation spaces.*

[26] *According to the HDIF study, roughly two-thirds of the hubs have five or fewer staff. Typically, some of the staff are paid and some work on a voluntary basis, but several hubs rely entirely on volunteers. Half of the hubs have an annual budget and the rest either work on a project budget basis or have no budget at all. 65 per cent of the hubs received either donor or government support in the form of direct financial assistance or, for example, free space. Only 30 per cent of the hubs charge their users for any service they provide; 83 per cent offer a physical workspace; Internet access is available in 65 per cent of the hubs; and training or short courses are offered by 83 per cent of them.*

Most hubs acknowledged that they would like to have more female users and were keen to do more in that regard[27]. As per the HDIF study, 65 per cent had already taken some action to bring in more women and 70 per cent had taken concrete action to make sure girls and women feel safe coming to the hub. Only 25 per cent of the hubs had a clear gender policy. Thirty-five per cent of the hubs said they make a point of engaging female staff and facilitators to provide role models for women and girls.

A 2017 survey funded by UK Aid yielded responses from 329 Tanzania innovation ecosystem stakeholders.

According to them, the top barriers to innovation in the country are access to financing (63 per cent), lack of partnerships (29 per cent), and attitude (27 per cent). The HDIF study found that the most common challenges faced by the hubs related to financial sustainability and revenue streams, which affect long-term strategy and contribute to high turnover of staff. A few acknowledged that attracting the right clients was challenging, and some recognized that university students might not be the best target group since they may not be ready to become entrepreneurs. Trying to do too many things at the same time was quoted as another challenge.

Box 7 – Buni Hub and Sahara Ventures

Tanzania Commission for Science and Technology (COSTECH) hosts within its premises one of Tanzania's major hubs – Buni Hub – established with financial and technical support from Finland in 2011. COSTECH's vision is to transform Buni into a model 'Hub of Hubs', creating a central node that can offer support to other hubs, labs, and innovation spaces nationally. Buni Hub, in Dar es Salaam, accommodates preliminary stage startup companies; over 400 registered members are part of the community annually. Buni programs include: 1. Buni Internship Program; 2. Buni Mentoring Program; 3. Buni Community Outreach Program; and 4. Buni Divaz (Women startup community). The hub is also home to a mini fabrication lab for small scale production of electronic software and hardware

Rooted in the Buni Hub, Sahara Ventures is perhaps the most successful and well-known company that has evolved from the Hub's community. Sahara Ventures today consists of Sahara Consulting, Sahara Accelerator, Sahara Capital and Sahara Sparks.

- Sahara Consulting is an impact project management firm. The company seeks to focus on sustainable data-driven projects and makes use of ICT tools and innovative approaches.

- Sahara Accelerator is a corporate and venture-backed accelerator, accelerating post revenue startups and managing corporately focused acceleration programmes offering co-working space, technical support and access to investors. The space also organizes events and meetups: Startup (CEO) Roundtables, Angels Meetups, Hack Weekends, Entrepreneurship Bootcamps and Mentoring Sessions.

- Sahara Capital is an investment advisory firm and seed stage investment fund for SMEs and startups in Africa.

- Sahara Sparks is a corporate events management company, and the company that organizes Sahara Sparks, the largest East and Central Africa event on Innovation and Technology Entrepreneurship. The event promotes an avenue for discussion on global trending technology and supports early-stage companies by providing them with a platform to pitch and exhibit their businesses to access investors and partners.

In September 2019, Sahara Sparks ventured to Europe: Nordic Sparks in Espoo, Finland was organized by Sahara Sparks Event Ltd and the University of Turku together with other partners, with the main aim of nurturing the relations between Africa and the Nordic Region. The event was tailored to Nordic tech businesses that can be adopted in Africa, Nordic investors who want to invest in Africa, Non-Governmental organizations and other stakeholders (innovators, intellects, tech enthusiasts, developing partners, entrepreneurs etc.).

Both Buni Hub and the Sahara Ventures offices can be found in Silicon Dar, Dar es Salaam's new technology district located between Bamako bus stand and the Morocco junction, where also most telecom companies, UDSM's College of ICT, COSTECH and a number of other hubs and start-up companies are located.

Source: https://saharaventures.com, https://www.saharasparks.com/nordicsparks/, https://www.silicondar.org and Author's interviews

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[27] *New players, as of the end of 2018, targeting young and adult women on innovation, tech and entrepreneurship, include Ndoto Hub and SafeSpaceco. They both offer support to women to develop their skills, build their confidence and explore new opportunities. The longer existing players, such as SheCodesForChange and Apps and Girl, continue to inspire more girls and young women in tech and leadership (Jumanne Rajabu Mtambalike, article in Medium, 05.08.2018).*

Box 8 – More Players Are Entering Tanzania's Innovation Ecosystem

There are also a number of events and meetups (Google Startup Grind, FinDisrupt, Sahara Header_File, Bits and Bytes, COSTECH STI Conference, HDIF Innovation Week and the Sahara Sparks event), which are all driving the growth of the innovation ecosystem. Corporate companies are also entering the ecosystem with some starting their own innovation spaces, such as Smart Lab from Smartcodes. Telecom companies are also becoming more involved with the ecosystem by working with entrepreneurs and innovation spaces, and co-implementing programs and activities. Products such as Tigo Backup, Twende, Jamii Micro-Health Insurance, Visomo and Mpaper show positive signs of collaboration between startups and telcos in Tanzania.

Tanzania is one of the few developing countries where 3D printers are being used to create prosthetics (UNCTAD, DER 2019). In addition to the established STICLab, which played a crucial role in the making of the first electronic waste 3D printers in Dar es Salaam, there is now also the Robotech Lab, Projekt Inspire and Buni Mini Makerspace. The Tanzanian startup ecosystem even covers the areas of mapping, with Humanitarian OpenStreetMap Tanzania doing different mapping exercises in the country. The drone sector is also growing with drones used in different projects, mapping lands, assessing flood risks, delivering medicines, etc. Companies like Zipline and WeRobotics are already in the country to explore such opportunities (Jumanne Rajabu Mtambalike, article in Medium, 05.08.2018).

7. ACCESS TO FINANCING

Limited access to financing is one of the main challenges affecting the development of a competitive e-commerce environment. Only 10 per cent of MSMEs had access to banking financial services in 2010 and still in 2018, among the EAC countries, the percentage of MSMEs claiming difficulties in accessing bank credit was the highest in Tanzania. The Government is in the process of addressing the strict requirements around Know Your Customer (KYC) and formal registration, collateral and credit history requirements to access credit, as well as the lack of financing products tailored for MSMEs. Angel investment and venture capital are still limited but growing, complemented by schemes led by the Government and development partners.

Micro, small and medium-sized enterprises' (MSMEs) inability to access financing is one of the most frequently cited constraints to their growth. MSMEs contribute to 27 per cent of GDP in Tanzania, employing more than 5.2 million people. In 2010, only 10 per cent of the 3.1 million MSMEs in Tanzania (half owned by women) had access to banking financial services[28].

The Tanzania Development Vision (TDV) 2025 highlights small and medium-sized enterprises (SMEs) as an important contributor to the country's long-term development. The National Financial Inclusion Framework 2018-2022, the second framework to be implemented under the Financial Inclusion National Council, recognizes the financing challenges faced by SMEs. The priority areas identified in the Framework include: ensuring the existence of a robust electronic information infrastructure for individual and business profiles; making proper use of credit history and collateral; ensuring that customers are informed and protected; and encouraging the design and development of demand-based solutions.

7.1 Financing by banks and MFIs

Formal financing for MSMEs is limited and almost all financial service providers (FSPs) have products targeting individuals rather than businesses or groups. Only MFIs, who at their core were developed to support small businesses, target MSMEs as a significant portion of their portfolio (50 per cent)[29]. The lack of access to financing for MSMEs is partly attributed to financial services providers' strict requirements related to Know Your Customer (KYC) and the need for formal registration, collateral and credit history. The lack of products tailored for MSMEs is also a barrier.

The latest available data from the World Bank country overview of Tanzania show a positive trend, with credit to the private sector edging upward to 4.9 per cent in September 2018. Yet, among the EAC countries the percentage of SMEs claiming difficulties in accessing bank credit is the highest in Tanzania (44 per cent), and the cost of financing remains prohibitive for smaller companies[30].

No specific financing products target e-commerce vendors or start-ups. Separate data or analysis on their ability to access financing by banks and MFIs are also not available.

One of the largest banks in terms of customer base and branches (more than 150) is the National Microfinance Bank PLC (NMB), which offers SMEs loans ranging from US$ 7,500 to US$ 750,000. NMB loans can be used as a working capital loan or for longer-term investment needs. The bank emphasizes its flexibility on repayments for businesses with irregular cash inflows. Its loans, however, are not for start-up businesses. Eligibility for their loans requires at least three years in business, steady cash flow, a proper recording system, the capability to operate a profitable business, and the necessary permits and licences for operations.

The Tanzania Women's Bank (TWB) was established in 2009 to assist women entrepreneurs with their financing needs. The bank offers loans for small businesses that can provide three years of audited accounts, a tax clearance certificate, business plan and certificate of registration[31].

[28] MSME Baseline Survey; FSDT and the Ministry of Industry and Trade; 2010
[29] Financial Sector Deepening Trust (FSDT): "State of the Financial Sector – Supply-side Report 2017", 2017
[30] IMF: Seventh Review Under the Policy Support Instrument, Staff Report, 2018
[31] World Bank: Tanzania Diagnostic Trade Integration Study (DTIS) Update, 2017

Figure 15: Target for financial service providers, Tanzania, 2017

Legend: MSME, Individual, Small Holder Farmer

Provider	MSME	Individual	Small Holder Farmer
Banks	27%	61%	12%
SACCOs	25%	40%	35%
Insurance	20%	57%	23%
MFIs	50%	30%	20%
Pensions	5%	90%	5%
MNOs	34%	43%	23%
Aggregators	34%	59%	7%
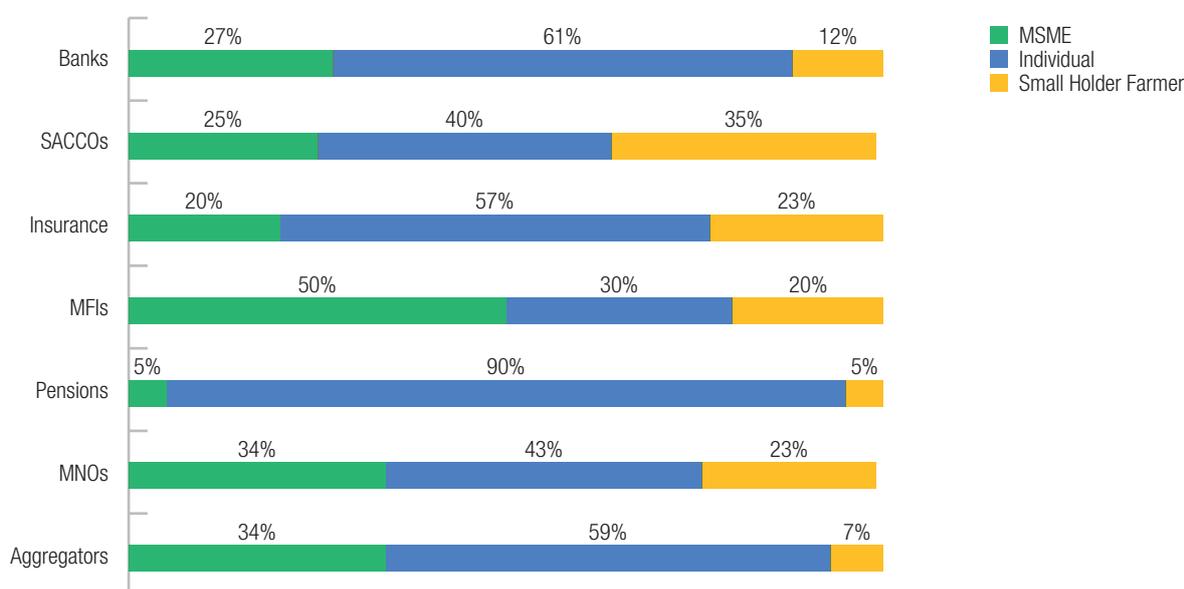
Source: FSDT Supply Side Survey 2017

Similar to the findings of a number of studies and reports, commercial banks interviewed for this assessment stated that issues pertaining to their ability to meet Know Your Customer (KYC) requirements were among the key barriers to extending credit (and other financial services). Under this requirement, all formal financial service providers require their customers to have a recognized form of identification.

FinScope Tanzania found that that 84 per cent of Tanzanians have at least one form of identification, with the majority having a voter ID card. Meanwhile, 71 per cent of Zanzibaris have a Zanzibar resident ID. Though possession of a voter ID card raises the number of adults with valid identification significantly, the cards are not regularly updated. There are loopholes in existing KYC procedures as young adults (those who turn 18 after the year of election), as well as those that have misplaced their IDs, must wait for the next election to be registered and acquire an ID[32]. Closing these loopholes could make it easier for Tanzanians to open bank accounts and access credit. The National Identity Cards, which are being issued by the Government, will be main official document for official purposes and will address this challenge, among others.

The Bank of Tanzania (BOT) issued licences to two private companies, namely Creditinfo Tanzania Ltd and Dun & Bradstreet Credit Bureau Tanzania Ltd, to act as credit reference bureaus (CRBs) at the end of 2012. Although this was intended to improve transparency and lead to greater lending, the credit reference system has underperformed and is not widely used. Limited trust in the CRB services (from the perspective of the financial service providers) is also a challenge.

Despite the effort by the Government to sensitize and ease the land registration, most of the land in Tanzania is still unregistered and without title, which leaves residents, enterprises and investors with uncertain property rights. The lack of secure property rights reduces access to long-term financing, since unsecured land cannot be used as collateral for borrowing from financial institutions. Obtaining official land titles has recently been simplified and costs have been reduced. The process of issuing land titles has been decentralized to zonal offices available across the country in the following centres: Dodoma, Mwanza, Moshi, Mtwara, Mbeya, Tabora, Dar es Salaam and Morogoro. In addition, the responsible Ministry has indicated the future plans of ensuring land tiles are issued in every region.

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[32] *Finscope 2017*

In 2013 the Dar es Salaam Stock Exchange (DSE) launched a second-tier market, the Enterprise Growth Market (EGM), with lower listing requirements. The EGM is designed to attract SMEs with high growth potential. So far, the EGM has only attracted half a dozen companies. Reasons for the EGM's inability to attract more companies should be studied and based on the findings, recommendations should be developed to reform it.

This year, the DSE launched, in collaboration with FSDT, the Enterprise Acceleration Program, a program aimed at enhancing the capacity of SMEs, encouraging long-term investments in growth companies, and enabling SMEs to attract diverse sources of capital.

7.2 Business incubators, business accelerators and venture capitalists

A World Bank study of Dar es Salaam's tech start-up ecosystem in 2017 found that investment options are limited for start-ups. The study identified only 11 startup investors: a third of these were venture capital firms, and two-thirds were angel investors. The majority of fundraising captured in the study, with data from 13 years, was in the initial small-value seed range: 84 per cent of investments received (37 out of 44) were below $25,000, but there are a few large outliers (one start-up raised $4.5 million in one round)[33].

Investments focused on early-stage startups and mainly targeted companies a single time, suggesting that there is a lack of maturity in the investment infrastructure to support the growth of start-ups. Investments at the scale-up stage do not occur often and there are few long-term investors available for startups. A few startups had advanced to the scale-up stage in 2017 in Dar es Salaam but risk-tolerant venture financiers were few.

The following Tanzania-based sources for seed funding have emerged following the lead of Sahara Ventures: Tanzania Angel Investors Network (TAIN); the Amua Accelerator II; and the HDIF Mawazo Challenge. TAIN is the first organized angel investor network in Tanzania that seeks to promote an angel-investing culture and to grow innovative start-ups in Tanzania. The network is managed by SSC Capital, a corporate and investment advisory firm from Tanzania.

The Amua Accelerator II focuses on identifying, accelerating and scaling innovative inclusive solutions that aim to address challenges related to sexual reproductive health, focusing on people with disabilities. The project is implemented by United Nation Population Fund (UNFPA) in collaboration with Sahara Ventures.

The Mawazo Challenge is under the Human Development Innovation Fund (HDIF), a UK Aid established project that aims to identify and support innovations that have the potential to create social impact in education, health, water, sanitation, and hygiene (WASH) across Tanzania. The most promising ideas are rewarded seed funds to launch ventures and mentorship to sustain their ventures.

The Human Development Innovation Fund (HDIF) and Tanzania Venture Capital Network are considered scaling funds. Tanzania Venture Capital Network is a platform to promote the growth and development of angel investing, venture capital (VC) and private equity (PE) in Tanzania. The network carries out various activities that include deal preparation, pipeline management, networking and deal matching, investment support, and improving the investment climate in Tanzania.

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[33] World Bank: "Tech Start-up Ecosystem in Dar es Salaam - FINDINGS AND RECOMMENDATIONS", 2017

> ### Box 9 – Other Initiatives Providing Support to Start-ups
>
> There are also corporate sponsored initiatives looking to support the innovation ecosystem, including hackathons, meetups, bootcamps, programmes and funding. For example, the Tigo Digital Changemakers Competition searches for digital innovations that improve education, increase digital inclusion or promote business entrepreneurship in Tanzanian communities. Further, the Barclays' 'Kijana Ibuka' programme, in partnership with Restless Development in the Mbeya region, aims to scale up and provide on-the-ground and ICT-enabled solutions to support young people who are starting youth-led micro-enterprises.
>
> Other initiatives include the FSDT's FinDisrupt, which seeks to leverage end user evidence and insights to start conversations on how financial services providers and policymakers can develop innovative solutions that meet the needs of their users. FinDisrupt is a quarterly three-day innovation sprint that brings together financial sector stakeholders and provides them with the time and space to connect, collaborate and develop financial solutions.
>
> The World Food Programme (WFP) Innovation Hub in Tanzania is the first innovation hub focused on addressing food insecurity and developing agritech solutions. The WFP hub seeks to identify, pilot and scale innovations for zero hunger in Tanzania and to make WFP's field logistics and IT expertise available to partners in Tanzania and in the region.
>
> Tanzania GS1 E-commerce training, based in Dar es Salaam, is an initiative aimed at providing e-commerce training to youth (employment age 18 and above). The project, started in 2019, provides training of trainers who become future resources of e-commerce in the country. The trainers are provided with knowledge on procedures to design e-commerce systems, including understanding relevant regulatory frameworks and general disciplines governing e-commerce.

7.3 Financing by development partners

Although development partners are providing support to improve access to financing in Tanzania, none of the programmes that provide funding appear to be dedicated to e-commerce. Several of them are, however, focused on strengthening the enabling environment for e-commerce and the digital economy.

The Financial Sector Deepening Trust (FSDT), supported by the Governments of Canada, Denmark and Sweden, as well as the Bill and Melinda Gates Foundation, aims to develop market systems that can benefit underserved individuals, households and enterprises. The Human Development Innovation Fund (HDIF) provides support in catalysing, developing, testing, and scaling up innovative solutions on WASH. The HDIF is funded by UK Aid. Finland is supporting Tanzania's efforts to develop a national system for funding innovation through the National Fund for Advancement of Science and Technology (NFAST) based at the Tanzanian Commission for Science and Technology (COSTECH).

The World Bank Group is providing assistance to Tanzania's financial sector with investments and advisory services that should: (i) strengthen the soundness of the financial sector; (ii) increase access to financial services and promote financial inclusion; and (iii) build the foundations for long-term finance and tapping into regional capital markets. The International Finance Corporation, with a rapidly increasing footprint in Tanzania, provides direct investment and advisory services complemented by the World Bank's support in deepening financial inclusion and expanding MSMEs' access to credit.

CONCLUSION

As Tanzania continues to diversify its economy, it has ambitions to become a regional e-commerce hub. Although the country is geographically well-positioned to reach this goal and has made strides in key areas such as mobile money and logistics infrastructure, an enabling environment across policy areas will be key. The Government should take an integrated approach to policy action, with a clear focus on mainstreaming e-commerce into national development planning and engaging more strongly with the private sector. Deeper trust in digital commerce will also need to be developed among consumers, merchants and investors.

To overcome the interconnected challenges and create an enabling e-commerce environment, the Government should begin developing a national e-commerce policy and strategy. This should be led by the Ministry of Industry and Trade (MIT) and be anchored in the National Committee on Trade Facilitation (NCTF). E-commerce vendors and the start-up/innovation community should become part of the NCTF, as part of broader efforts to strengthen public-private sector dialogue and partnerships.

The potential benefits of e-commerce are not limited to external trade; it can also spur domestic markets and provide a key avenue for income generation for women. Most Tanzanian MSMEs today, many of which are owned or operated by women, are unable to immediately access international markets. The large domestic market, as well as the market of the East African Community Customs Union, can serve as stepping stones. The Government has signalled interest in establishing a national e-commerce platform, which could help Tanzanian MSMEs deepen their access to domestic and regional markets.

With the telecommunications infrastructure now largely in place, efforts to increase access to the Internet should focus on making mobile phones, particularly smartphones, more affordable. Significant improvements have been made in transport infrastructure and the One-Stop Border Posts (OSBPs), yet Tanzania's performance in trade logistics could be further enhanced by expediting the implementation of the National Addressing and Postcode System (NAPS). Similarly, relevant agencies should unite and expedite the full implementation of the National Single Window.

Despite the expansion of mobile money, cash remains the most common method of payment for both online and offline purchases. Further expansion of mobile money for online transactions would require more awareness building and sensitization. Digital skills across the general population should also be improved, starting with the introduction of relevant curriculum in secondary educational institutions. Innovation hubs, which have developed rapidly over the past few years, can play an increasing role in digital business skills development and in connecting entrepreneurs with resources. Start-ups, including e-commerce vendors, can also act as magnets that pull others into the digital economy.

The Tanzanian legal and regulatory environment needs to be upgraded to meet the needs of the evolving digital economy. As a starting point, legislation on Electronic Commerce should be adopted.

Along with the Government and the Tanzanian private sector, the role of international development partners will be crucial to facilitate the implementation of the recommendations made in this report. Tanzania will require significant and sustained technical and financial support to ensure that e-commerce is firmly integrated in private sector and trade development initiatives.

THE WAY FORWARD: ACTION MATRIX

E-COMMERCE READINESS ASSESSMENT AND STRATEGY FORMULATION			
Indicative action	**Expected outputs**	**Priority Level**	**Potential support by**
Draft and approve a national e-commerce policy and implementation strategy. These should be part of the NCTF agenda and be aligned with EAC, SADC and AfCFTA e-trade initiatives. Ensure the consultation process is inclusive by inviting the start-up community, e-commerce vendors, business associations and community groups to take part in the consultations.	A national policy is drafted and adopted, and a plan for the development of e-commerce, reflecting the needs and opportunities of each sector, is developed and approved.	High	AGC, PMO, MIT, TCRA, MoFP, MoWTC, COSTECH, MoEST, MoFEAC, BRELA, eGA, TANTRADE, FCC, FCT, TIC, EPZA, TRA, TAEC, TBS, SIDO, TDMA, TPSF, TCCIA, TWCC, GS1, SIDO, TAFFA, TANEXA, TSC, Buni Hub, UNCTAD, WB, TMEA, EIF
Adapt the draft trade policy and the upcoming FYDP III to include e-commerce as a cross-sectoral vehicle for economic growth, national development, regional and international trade, and poverty alleviation. These national plans should reflect Tanzania's ambition to become a regional e-commerce hub.	E-commerce is recognized as a vehicle for economic growth.	High	AGC, PMO, PORALG, MIT, MTI-Zanzibar, TCRA, MoFP, MoWTC, MFEAC, MoEST, TRA, eGA, SIDO, TANTRADE, BRELA, FCC, FCT, TIC, EPZA, TBS, TDMA, TAEC, GS1, CTI, TWCC, TCCIA, TWCC, TPSF, TAFFA, TANEXA, TSC, COSTECH, Buni Hub, UNCTAD, WB, TMEA, EIF
Expedite implementation of the Blueprint for Regulatory Reforms to Improve Tanzanian Business Environment, and ensure that key e-commerce bottlenecks are addressed. Strengthen improvement on ICT interfaces among government parastatals to facilitate attainment of favorable business environment.	Enhanced business enabling environment, including for e-commerce, and improved ranking in the WB's Ease of Doing Business Index and UNCTAD's B2C E-Commerce Index. Available integrated ICT system (internetworking) within the government.	High	PMO, AGC, PORALG, MIT, MTI-Zanzibar, MoCLA, TCRA, TRA, ZRB, eGA, TBS, ZBS, TDMA, TANTRADE, TIC, ZIPA, BRELA, TAEC, BPRA,TPSF, CTI, TANEXA, TWCC, TABWA, TAFFA, TSC, UNCTAD, WB, TMEA, EU
Identify "champions" across the Governmental departments and private sector apex-organizations, to ensure that e-commerce is adequately mainstreamed and integrated across the policy spectrum. Champions should meet regularly to exchange good practices; coordinate, collaborate and ensure coherence in implementation; become e-commerce mentors within their own organizations; and lead/organize trainings in their organizations.	E-commerce-related needs are adequately addressed, and the e-commerce policy is rolled out throughout government development actions.	High	PO – Public Service Management, PMO, MIT, MTI-Zanzibar, TANTRADE, ZIPA, VETA, TIC, SIDO, UDBS, COSTECH, TABWA, TWCCZNCCIA), TPSF, CTI, TAFFA, TSC

E-COMMERCE READINESS ASSESSMENT AND STRATEGY FORMULATION			
Indicative action	**Expected outputs**	**Priority Level**	**Potential support by**
Perform mapping of domestic online shops for developing effective plan of their business.	A number of online shops mapped and robust mechanism developed for supporting e-commerce.	High	PORALG, MoFP, MIT, BOT, TRA, BRELA, TIC, TANTRADE, TCRA
Put in place a stable multi-stakeholder dialogue covering e-commerce and the digital economy, integrating the experience and recommendations of the private sector into the policy making process. If possible, this should be initiated through the NCTF. Invite members of the start-up community/e-commerce vendors to take part in the dialogue.	Improved policy decision-making process and stronger coordination between different stakeholders working on e-commerce.	High	PO – Public Service Management, PMO, MIT, TIC, COSTECH, TANTRADE, BRELA, VETA, TCCIA, ZNCCIA, TWCC, GS1, TABWA, TPSF, CTI, SIDO, UDSM, TSC, all NCTF members, Buni Hub, UNCTAD, TMEA, WB
Encourage more PPP's in e-commerce development, including for the creation of a national e-commerce platform. Consult private sector companies and other countries in the region on whether the platform should be developed independently or in collaboration with an established e-commerce player (e.g. Rwanda and Alibaba; Kenya and Amazon).	Tanzanian MSMEs expand to e-commerce and grow their domestic and regional market shares.	Medium	PORALG, MIT, MTI-Zanzibar, TCRA, eGA, TCCIA, ZCCIA, TWCC, TPSF, CTI, SIDO, COSTECH, TANTRADE, TSC NCTF members, Buni Hub, WB, TMEA, EU, ITC, China
Make e-commerce development a key pillar of negotiations for technical and financial support from development partners. Develop joint programmes and activities focused on e-commerce and the digital economy.	Financing for implementation of recommendations of this report and the upcoming implementing strategy for e-commerce; increased international PPPs and investment in the sector by partner country investors.	Medium	MIT, MTI-Zanzibar, MOFP, MoEAC, MoWTC, TANTRADE, eGA, GS1, ZIPA, TIC, ZNCCIA, TCCIA, COICT, UDBS, COSTECH, UNCTAD, WB, TMEA, EIF, EU, UNIDO, UNDP and other development partners (such as AfDB, UK, US, Finland, Sweden, China, etc.)
Expedite the implementation of e-government services, particularly those aimed at facilitating businesses in Zanzibar. Given most Tanzanians access the Internet through their mobile phones, e-government services should be developed with a "mobile-first" approach.	Zanzibar e-government services, particularly those aimed at businesses, are at par with those in the mainland.	Medium	MIT, MTI-Zanzibar, TCRA, eGA-Zanzibar, ZIPA, ZRB, BPRA, UNCTAD, WB, TMEA, EU
Expand the automation of e-government services through the Government Portal, TIC eRegulations system, and the BRELA and BPRA portals. Consolidate and streamline these systems and bring more services to mobile devices.	Improved governmental procedures and more conducive business environment.	Medium	PORALG, PMO, MIT, MTI-Zanzibar, MoWTC, eGA, TIC, BRELA, TCRA, TANTRADE, TTC, BPRA, TPSF, UNCTAD, WB

E-COMMERCE READINESS ASSESSMENT AND STRATEGY FORMULATION			
Indicative action	**Expected outputs**	**Priority Level**	**Potential support by**
In the context of trade negotiations on e-commerce (EAC, AfCFTA, WTO etc), there should be implementation of a training programme for negotiators on e-commerce-related matters. This could be developed in cooperation with development partners.	Increased ability of e-commerce decision-makers to defend their positions and interest in the international fora, as well as forge coalitions.	Low	MIT, MTI-Zanzibar, MoEAC, TRA, BOT, TCRA, TPSF, TWCC, TCCIA, TANTRADE, ZIPA, UNCTAD, EIF, WTO
Establish Research and Development (R&D) Centers for ICT and e-commerce perspective.	Increased innovations on e-commerce forms as well as e-commerce MSMEs.	Low	PORALG, MIT, MTI-Zanzibar, TRA, eGA, UDBS, UDOM, COICT, COSTECH, CBE, GS1, SIDO, VETA, TPSF, TCCIA, TWCC, TABWA

ICT INFRASTRUCTURE AND SERVICES			
Indicative action	**Expected outputs**	**Priority Level**	**Potential support by**
Identify and take the necessary actions to reduce the price of smartphone devices, to encourage broader access to mobile Internet. An immediate policy intervention to reduce the cost of smartphones would be to reduce or remove the excise duty placed on smartphones, or to subsidize the cost of existing smartphones.	Internet access becomes more affordable; more people benefit from being connected to the Internet.	High	MoWTC, MoFP, MIT, MTI-Zanzibar, BOT, TRA, ZRB, TCRA, TTCL, TPSF, TWCC, TCCIA, TABWA, TANTRADE, ZIPA, ZNCCIA UNCTAD, WB, IMF
Promote the accessibility of fast, reliable and affordable mobile broadband services (3G/4G) to the wider population by expanding the country's ICT infrastructure in rural areas. This could include PPPs to tackle ICT infrastructure shortcomings in both mobile and fixed broadband access.	Rural areas are widely covered by 3G/4G network and fibre internet access.	High	PORALG, MoWTC, MoFP, MIT, TARURA, NICTBB, TRA, TCRA, TTCL, COSTECH, COICT, TCCIA, ZNCCIA, TWCC, TABWA, UCSAF, TPSF, UNCTAD, WB
Review taxes on telecommunication services (e.g. the airtime excise on mobile phone use), with the aim of increasing affordability.	Internet/telephony access becomes more affordable; more people benefit from being connected to the Internet.	High	PORALG, MoWTC, MoFP, MIT, BOT, TRA, TCRA, TTCL, TPSF, TCCIA, ZNCCIA, TWCC, UDBS, UNCTAD, WB, IMF
Expand interventions to more forms of infrastructure sharing, especially in rural areas, to allow fair access to public infrastructure. Increase investment in the Fibre Consortium through a collaborative partnership model between the NICTBB and mobile operators.	Cost of network deployment and equipment is further reduced; Rural areas are properly covered by 3G/4G network and fibre internet access.	High	PORALG, MIT, MTI-Zanzibar, MoWTC, MoFP, BOT, TRA, TCRA, TANTRADE, TTCL, SUMATRA, TARURA, UCSAF, TPSF, TCCIA, ZNCCIA, TWCC, TABWA, UNCTAD, NICTBB, WB

ICT INFRASTRUCTURE AND SERVICES			
Indicative action	**Expected outputs**	**Priority Level**	**Potential support by**
Evaluate the role of the UCSAF by analyzing the challenges it has faced in achieving its objectives. Based on this analysis, and if needed, identify ways to strengthen its mandate and capacities.	Improved UCSAF efficiency in the delivery of services. Increased capacity of the Fund, leading to more accessible ICT-related services.	High	MoWTC MIT, MIT-Zanzibar, MoEST, TCRA, COSTECH, COICT, UDBS, UDOM, TPSF, NICTBB, UCSAF
Review the excise duty charged to online content providers and consider making revisions, which would create separate categories (and associated duties) for different types of content providers. Currently there is no distinction between large corporate entities and individual bloggers or Facebook users.	Improved provision and reduced costs of online services.	High	MoFP, BOT, MoICAS, MIT, MTI-Zanzibar, MoWTC, TRA, TCRA, SUMATRA, TPSF, TCCIA, ZNCCIA, TANTRADE, ZIPA UNCTAD, WB

TRADE LOGISTICS AND TRADE FACILITATION			
Indicative action	**Expected outputs**	**Priority Level**	**Potential support by:**
Expedite the countrywide implementation of the National Addressing and Postcode System (NAPS). This would help provide an important foundation for domestic e-commerce growth.	Improved business environment for e-commerce operators.	High	PORALG, MoWTC, MoLHHSD, TTC, TCRA, NAPS, TPC, TCRA, MIT, MTI-Zanzibar, TPSF, TCCIA, UDBS, UDOM, WB, UNCTAD, UPU
Ensure roll out of the National Single Window by its target completion date of end-2019, and expedite its full implementation. This would enable a single point for submission and processing of customs documents.	More efficient and transparent trade environment. Reduced time for documentary compliance as per the WB DB Trading across borders.	High	PORALG, PMO, MIT, MTI-Zanzibar, MoWTC, BOT, TCRA, TPA, TRA, TBS, ZBS, TDMA, TAEC, ZPA, ZAA, ZFDA, SUMATRA, TANTRADE, TIC, BPRA, ZIPA, BRELA, TANTRADE, TAA, TPSF, TWCC, TANEXA, TABWA, CTI, TAFFA, TSC, UNCTAD, WB, TMEA, EU
Ensure sustainable service on automated customs system (TANCIS), whereby current challenge has been revealed by system clients to be regular breaking of system which causes some unnecessary delays hence more cost involved in transit.	Increased number of transit flows and less or diminished complaints regarding TANCIS operability.	High	BOT, TRA, MIT, MIT-Zanzibar, ZRB, TBS, TAA, TPA, TDMA, TRL, ZAA, ZPC TAEC, TPSF, CTI, TSC, TANEXA, TATOA, TAFFA, TICTS
Enable the compatibility of the customs ICT systems between Tanzania and other EAC and SADC countries, allowing for the efficient exchange of information between different customs operators.	Elimination of inefficiency at the border and customs points, reduction in in trade costs and time spent to cross the border. Improved trading environment.	High	MoWTC, MIT, MTI-Zanzibar, TRL, MoFEAC, eGA, TRA, TPA, TAFFA, TCRA, TAA, TBS, TDMA, UNCTAD, WB, TMEA, EU, Global Alliance for Trade Facilitation, WCO

TRADE LOGISTICS AND TRADE FACILITATION			
Indicative action	**Expected outputs**	**Priority Level**	**Potential support by:**
Ensure more borders agencies and customs points operate 24 hours a day / 7 days a week, especially in those border points where large volumes of traffic are reported. At a minimum, ensure that operational hours for land borders are aligned with the hours of the bordering country.	Increased trade and reduced waiting time and cost at borders due to border closures.	High	PORALG, MoFEAC, PMO, MoFP, BOT, TRA, MIT, MTI-Zanzibar, MoFP, TAFFA, TANEXA, TATOA, TPSF, TSC
Expedite implementation of the TFA, requesting technical assistance as required to implement the identified Category C provisions. Also, accede to the Revised Kyoto Protocol.	Significant reduction in cost of trade logistics; improved country competitiveness and enhanced e-commerce environment.	High	PMO, MoFEAC, MIT, MTI-Zanzibar, TRA, BOT, TBS, TDMA, TPA, ZBS, ZFDA TAEC, SUMATRA, TANTRADE, TANEXA, TSC, UNCTAD, WB, TMEA, EU, EIF, ITC
Develop postal services to support small parcels for cross-border e-commerce, including the adoption of a self-declaration scheme for customs duties and easy–export / easy-import procedures. Target MSMEs across the country, including rural areas.	MSMEs across the country can access export and import markets using the postal network.	High	PORALG, MoFP, TRA, MIT, MTI-Zanzibar, eGA, MoWTC, SUMATRA, eGA,TPC, TPSF, UPU
Strengthen the operational capability of Tanzania Post to support e-commerce and ensure operational efficiency of the postal network to facilitate ecommerce transactions, using the Operational Readiness for E-commerce (ORE) methodology.	Strategic positioning of the post, postal technology and supply chain improvements, improvement in the operational efficiency of the post, and the sustainable development of the postal sector.	Medium	PORALG, MIT, MoWTC, TCRA, eGA, BRELA, TPC, TPSF, UPU, UNCTAD, TMEA, WB and other development partners
Carry out a Cross-Border Trade assessment highlighting the existing issues affecting traders, in particular women and youth. Develop policy recommendations based on the findings of the assessment.	Better understanding of the problems faced by traders, especially women and youth, enabling a better decision-making process.	Medium	MoFEAC, TRA, MIT, TANTRADE, MoHA-POLICE, TWCC, TCCIA, TABWA, UNCTAD, UNIDO, ITC, TMEA, EU, WB
Consider establishing and strengthening security collaborations with countries implicated on e-commerce basis with Tanzania.	Raised confidence among e-commerce clients regarding to security hence flourish e-commerce in the country.	Medium	AGC, MoHA, MoFEAC, MIT, MTI-Zanzibar, TCRA, BRELA, eGA
Consider establishing a de minimis import value (USD 50-100) in anticipation of increasing levels of low-value e-commerce parcels. Carry out an impact assessment of the estimated effect it would have on revenue and/or competition, including potential time and cost-savings to customs authorities.	Enhanced e-commerce environment, and improvement of the overall trading environment.	Low	MoFP, BOT, MIT, MTI-Zanzibar, MoWTC, TRA, COSTECH, TPA, TPC, ZRB, TANTRADE, TCRA, ZIPA, TPSF, TCCIA, ZNCCIA, UDBS

PAYMENT SOLUTIONS			
Indicative action	**Expected outputs**	**Priority Level**	**Potential support by:**
Expedite operationalization of the National Switch to achieve full interoperability between banks and mobile money operators.	Reduction of service fees, leading to an increase in use of mobile money and possibly other financial services.	High	PORALG, MoFP, MoWTC, MIT, MTI-Zanzibar, eGA, BOT, TCRA, TTC, TBA
Carry out dedicated trainings for merchants through the different chambers of commerce and associations, aiming to increase their confidence in using electronic and mobile payment tools.	Increased confidence on the use of electronic and mobile payments.	High	MIT, MTI-Zanzibar, MoFP, MoEST, TRA, ZRB, BOT, TCRA., TANTRADE, ZIPA, COICT, UDBS, TPSF, TCCIA, ZNCCIA, TWCC, FSDT
Carry out nation-wide campaigns raising awareness and sensitizing the population on existing digital payment solutions and their benefits.	Increased demand for financial and digital payment services.	High	MoEST, MoWTC, MIT, MTI-Zanzibar, MoFP, TANTRADE, TRA, ZRB, BOT, FSDT, TCRA, TPSF, TCCIA, ZNCCIA, TWCC
Identify possible avenues (technical and regulatory) that would enable the population to pay taxes through an online system.	Increased use of digital payments, improved revenue collection.	Medium	MoFP, MoEAC, BOT, MIT, MTI-Zanzibar, TRA, ZRB, BRELA, TIC ZIPA, TANTRADE, eGA, BPRA-Zanzibar, TPSF, ZNCCIA, TCCIA, TWCC, FSDT, IFC, WB
In Zanzibar, establish a system to monitor and facilitate diaspora remittances. Currently, there is no regulatory framework on this, leading to difficulties in identifying involved stakeholders as well as in instilling trust and creating a conducive financial environment. Similarly to mainland, a system should be developed to track roaming transactions whereby at current there is no relevant system on tracking roaming transactions.	Increased capacity to identify concerned stakeholders and improved facilitation of remittances flows. Available effective system for tracking roaming services.	Medium	MoFP, MoEAC, BOT, MIT, MTI-Zanzibar, TCRA, TRA, eGA, ZRB, BRELA, TIC ZIPA, TANTRADE, BPRA-Zanzibar, FSDT, WB. TPSF, ZNCCIA, TCCIA, TWCC
Identify and adopt the necessary policies and regulations to encourage the establishment of FinTech companies. Understanding the practical challenges faced by the private sector in this area will be key.	Innovations in the FinTech space lead to increased options on digital payments for consumers and businesses.	Low	MoFP, MIT, MTI-Zanzibar, ZRB, TRA, BOT, TCRA, TTC, TANTRADE, UDBS, COICT, TBA, TPSF, TWCC, TCCIA
Identify possible PPP avenues and/or measures to facilitate the expansion of financial inclusion and cashless payment solutions for e-commerce.	Improved designs and accessibility of financial and digital payment services.	Low	PORALG, PMO, MoFP, MIT, MTI-Zanzibar, TRA, BOT, TCRA, GS1, COSTECH, TBA, TPSF, TWB, TWCC, TCCIA, UDBS

LEGAL AND REGULATORY FRAMEWORK			
Indicative action	**Expected outputs**	**Priority Level**	**Potential support by:**
Carry out a legal and regulatory gap analysis on e-commerce including cross-border provisions, in order to assess current and future needs. Based on this analysis, update e-commerce related bills and laws as needed to provide the foundation for developing deeper trust between consumers, merchants and investors involved in online commerce and the digital economy.	Improved e-commerce regulatory business environment.	High	AGC, AGC-Zanzibar, MoCLA, PORALG, MIT, MTI-Zanzibar, MoWTC, TPSF, TWCC, SIDO, TANTRADE, TCCIA, TABWA, LRCT, UNCTAD, UNCITRAL
Build the capacity of the judiciary in enforcing the e-commerce related bills and laws, as they emerge from the e-commerce legal and regulatory gap analysis, and so as to ensure functioning of the improved e-commerce environment.	Improved e-commerce business environment.	High	AGC, PORALG, AGC-Zanzibar, MoCLA, MIT, MoWTC, LRCT, TPSF, TWCC, TABWA, TCCIA, UNCTAD, UNCITRAL
Expedite the development of the Personal Data Protection Bill, which has been on the drafting table for some time. Carry out broad-based stakeholder consultations to ensure a balanced Bill that is broadly acceptable to the public.	Improved data protection and online security; Consumers' trust on e-commerce enhanced.	High	AGC, PORALG, PMO, MoCLA, MIT, MTI-Zanzibar, MoWTC, TANTRADE, TCRA, TTC, TPSF, TCCIA, TWCC, UNCTAD
Adopt MSME-specific incentives for engaging in online commerce, such as tax breaks and grants. Increase the information available to MSMEs for setting up an online business.	Improved business environment, especially for MSMEs. More MSMEs entering the markets. Informal sector reduced.	Medium	PORALG, MoFP, BOT, TRA, MIT, MTI-Zanzibar, SIDO, VETA, COICT, COSTECH, TPSF, TWCC, TCCIA

E-COMMERCE SKILLS DEVELOPMENT			
Indicative action	**Expected outputs**	**Priority Level**	**Potential support by:**
Conduct a skills-gaps analysis, recognizing the broad set of skills that are required to successfully start and operate an e-commerce venture.	Up-to-date full picture on the skills gap and action matrix to address it.	High	MoEST, MoWTC, MIT, MTI-Zanzibar, VETA, COSTECH, COICT, UDSM-UDBS, CBE, IFM, Nelson Mandela University, UDOM, TPSF, UNIDO, Buni Hub, ITC
Upgrade ICT and digital business skills in secondary and tertiary curricula. Establish partnership between the private sector and education providers to continually revise and update the curricula.	IT, ICT and related curricula gain popularity among future graduates and are aligned with the industry's needs.	High	MoEST, MoWTC, MIT, MTI-Zanzibar, SIDO, VETA, COSTECH, TPSF, TWCC, TCCIA, UNIDO, COICT, UDBS, CBE, IFM, Nelson Mandela University, UDOM, Buni Hub

E-COMMERCE SKILLS DEVELOPMENT			
Indicative action	**Expected outputs**	**Priority Level**	**Potential support by:**
Develop the capacity of e-commerce vendors on advanced business and management skills, covering areas such as: digital marketing, search engine optimization, creating and managing online inventory, integrating online payment solutions, proposing logistics options, handling customer orders and service, etc.	Capacity of enterprises to create business opportunities is increased and new IT related jobs created.	High	MIT, MTI-Zanzibar, MoEST, GS1, TANTRADE, SIDO, ZIPA, TCRA, COSTECH, COICT, UDBS, CBE, IFM, Nelson Mandela University, UDOM, TPSF, TWCC, TCCIA, ZNCCIA, TABWA, UNIDO, ITC
Expand the UCSAF program and similar initiatives, and provide computers, tablets, and IT tools to all primary and secondary schools.	Population becomes more familiar and comfortable with ICT tools.	High	PORALG, COICT, MoWTC, MoEST, MIT, MTI-Zanzibar, TCRA, VETA, COSTECH, UCSAF, UNIDO
Increase technical and financial support to innovation hubs, incubators and other organizations involved with upgrading ICT and e-commerce skills. Initiate specific training courses aimed at developing digital business skills.	Tanzanian businesses become more professional, being able to operate in an efficient and sustainable way.	High	MIT, MTI-Zanzibar, MoEST, TANTRADE, ZIPA, COSTECH, GS1, SIDO, COICT, CBE, UCC, UDBS, Nelson Mandela University, TPSF, TCCIA, ZNCCIA, Buni Hub, HDIF, EU, UNIDO, ITC
Link local MSMEs and start-ups with domestic and international e-commerce businesses to encourage transfer of knowledge. This could be done through mentorships, dedicated internship programmes, exchange programmes, and training.	A capability of MSMEs is increased, and they are able to provide further value-added due to the acquired know-how.	Medium	MIT, MTI-Zanzibar, COSTECH, GS1, TANTRADE, SIDO, BRELA, UDBS, COICT, TPSF, TCCIA, ZNCCIA, TWCC, TABWA, Buni Hub, UNIDO, WB, ITC

ACCESS TO FINANCING			
Indicative action	**Expected outputs**	**Priority Level**	**Potential support by:**
Build the capacities of MSMEs to enable them to develop business plans and funding proposals that meet the requirements of banks and other formal lending institutions. Make use of government institutions under MIT, business apex bodies, and development partners working in this area.	Capacity of enterprises to prepare proposals and create business opportunities is increased.	High	MoFP, TRA, MIT, MTI-Zanzibar, BOT, ITC, COSTECH, GS1, UNIDO, HDIF, Buni and other prominent hubs, FSDT, TBA, WB, IFC, EU, ITC TWCC, TCCIA, TAFFA, TPSF, TABWA, UDSM, UDOM, CBE

ACCESS TO FINANCING			
Indicative action	**Expected outputs**	**Priority Level**	**Potential support by:**
Expand knowledge among MSMEs of existing incubators, business accelerators and venture capitalists, both locally and internationally, through business associations and targeted information campaigns. Support MSMEs with developing attractive financing proposals.	Increased awareness of non-traditional types of financing. Access to financing is increased, especially among MSMEs.	High	MoFP, MIT, MTI-Zanzibar, BOT, TIC, COSTECH, GS1, TWCC, TCCIA, TPSF, TABWA, UDSM, UDOM, CBE, UNIDO, HDIF, Buni and other prominent hubs, FSDT, TBA, WB, IFC, ITC
Carry out sensitization forums aimed at commercial banks and other lenders, showcasing the unique characteristics and needs of e-commerce businesses. Encourage lenders to adapt their lending criteria to properly assess the risk profile of digital businesses.	Banks adapt their products to the e-commerce needs.	High	MoFP, BOT, MIT, MTI-Zanzibar, COSTECH, SIDO, VETA, TBA, TPSF, TWCC, TCCIA, HDIF, Buni and other prominent hubs, FSDT, WB, IFC, ITC
Identify, analyze and address loopholes in existing Know Your Customer requirements and procedures. This could include looking at ways to make it easier for individuals to obtain/replace identification cards.	Credit providers' needs for decreasing risks related to lending better met and MSMEs' access to financing improved.	High	PORALG, MoFP, BOT, SIDO, TRA, ZRB commercial banks, TBA, TPSFr, TCCIA, TWCC, ZNCCIA, TABWA
Identify shortcomings in Tanzania's credit reference system and make necessary enhancements to increase trust in the system among commercial banks.	Credit providers' needs for decreasing risks related to lending better met and MSMEs' access to financing improved.	High	MoFP, TRA, ZRB, BOT, ZIPA, TANTRADE, commercial banks, TBA, TPSF, TCCIA, TWCC, credit reference bureaus, etc.
Make obtaining official land titles easier and cheaper, as a means of improving access to collateral for loans from financial institutions.	Credit providers' needs for decreasing risks related to lending better met and MSMEs' access to financing improved.	High	AGC, PMO-Investment, MoFP, MoLHHDS, BOT, TRA, ZRB, EPZA, TIC, BRELA, BPRA, ZIPA, TANTRADE, TBA, commercial banks, TPSFr, TCCIA, TWCC, etc.
Revise the design and operation of the Dar-es-Salaam Stock Exchange EGM so that it better attracts SMEs with high growth potential. Consider ways to make this mechanism more attractive to SMEs involved in digital commerce.	Relevance and effectiveness of the EGM improved in servicing SMEs with high growth potential.	Medium	MoFP, MIT, MTI-Zanzibar, BOT, TCRA, SIDO, UDBS, DSE, TPSF, TWCC, TABWA, TCCIA, CTI, TBA

Annex I: Tanzania country profile on etradeforall.org

eTrade for all
Connecting the dots

COUNTRY PROFILE: UNITED REPUBLIC OF TANZANIA   Contact: info@etradeforall.org

ⓘ GENERAL INFORMATION - 2016

Population
55.6 Millions

GDP
48 860 Millions current US$

Merchandise trade
14 659 Millions current US$

Internet users
7.2 Millions

GDP growth
7.0 %

Land area
885 800 km2

Source: UNCTAD and ITU (complete URL addresses in the General Notes)

📋 E-COMMERCE ASSESSMENT - 2017

Rank in UNCTAD B2C E-commerce Index	Rank in ITU ICT Development Index	Rank in WEF Networked Readiness Index
119/144	165/176	126/139

Source: UNCTAD, ITU and WEF (complete URL address in the General Notes)   Note: 1 = Best

☁ ICT INFRASTRUCTURE AND SERVICES - 2016

Per 100 inhabitants

- Internet users, 13.0
- Fixed broadband subscriptions, 3.3
- Active mobile broadband subscriptions, 8.9

Fixed broadband Internet tariffs, PPP $/month

Hightest tariff — 874.4
500

UNITED REPUBLIC OF TANZANIA, 77.0

50 — Tariffs in 50% of eco. are below this value — 34.1

Lowest tariff
5 — 5.1

Source: ITU (complete URL address in the General Notes)

💵 PAYMENTS - 2014

Debit card used in the past year
- UNITED REPUBLIC OF TANZANIA, 4.3
- AFRICA, 7.6
- WORLD, 21.9

Credit card used in the past year
- UNITED REPUBLIC OF TANZANIA, 0.4
- AFRICA, 1.8
- WORLD, 13.5

Used an account to make a transaction through a mobile phone
- UNITED REPUBLIC OF TANZANIA, 6.2
- AFRICA, 4.9
- WORLD, 8.5

Per 100 inhabitants

Source: World Bank (complete URL address in the General Notes)

COUNTRY PROFILE: UNITED REPUBLIC OF TANZANIA

TRADE LOGISTICS - 2016

Percent of population having mail delivered at home

UNITED REPUBLIC OF TANZANIA	0.0
WORLD	83.3

Postal reliability index (0 to 100, 100 = Best)

UNITED REPUBLIC OF TANZANIA	29.9
WORLD	56.0

Days to clear direct exports through customs

UNITED REPUBLIC OF TANZANIA	12.4
WORLD	7.7
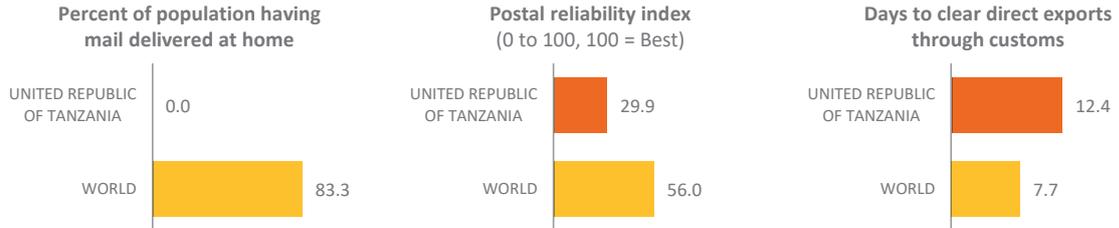
Source: UPU and World Bank (complete URL addresses in the General Notes)

LEGAL AND REGULATORY FRAMEWORKS - 2017

Legislation in 4 areas
Legislation in 3 areas
Legislation in 2 areas
Legislation in 1 area
No legislation

UNITED REPUBLIC OF TANZANIA

Electronic Transactions:	Legislation
Consumer Protection:	Draft legislation
Privacy and data protection:	Draft legislation
Cybercrime:	Draft legislation
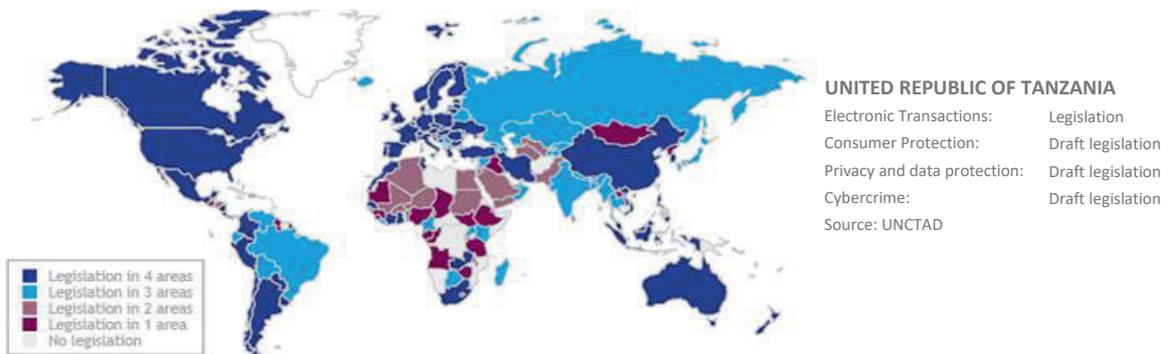
Source: UNCTAD

For more information see: http://unctad.org/en/Pages/DTL/STI_and_ICTs/ICT4D-Legislation/eCom-Global-Legislation.aspx

SKILLS DEVELOPMENT - 2013-17

Percentage of firms using e-mail to interact with clients/suppliers

WORLD AVERAGE 70.7

UNITED REPUBLIC OF TANZANIA	LDCs	AFRICA	WESTERN ASIA	SOUTHERN, EASTERN & SOUTH-EASTERN ASIA AND OCEANIA	TRANSITION ECONOMIES	LATIN AMERICA AND THE CARIBBEAN	DEVELOPED ECONOMIES
30.0	47.8	53.0	62.1	72.6	84.6	84.1	81.4
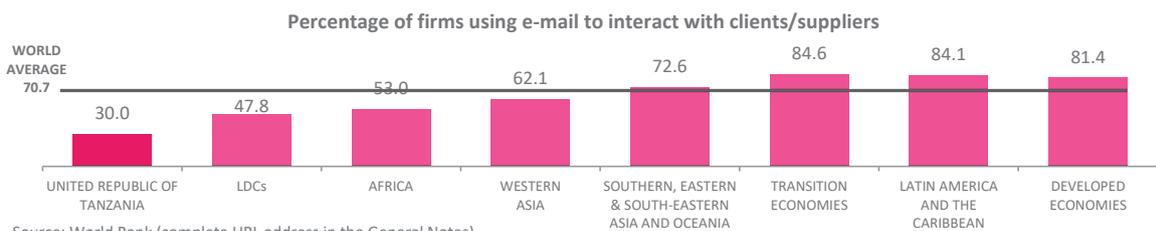
Source: World Bank (complete URL address in the General Notes)

FINANCING FOR eCOMMERCE - 2014-15

Percentage of firms identifying access to finance as a major constraint

WORLD AVERAGE 18.4

UNITED REPUBLIC OF TANZANIA	DEVELOPED ECONOMIES	TRANSITION ECONOMIES	SOUTHERN, EASTERN & SOUTH-EASTERN ASIA & OCEANIA	LATIN AMERICA AND THE CARIBBEAN	LDCs	WESTERN ASIA	AFRICA
43.9	15.2	20.2	11.0	32.7	31.7	27.8	34.2
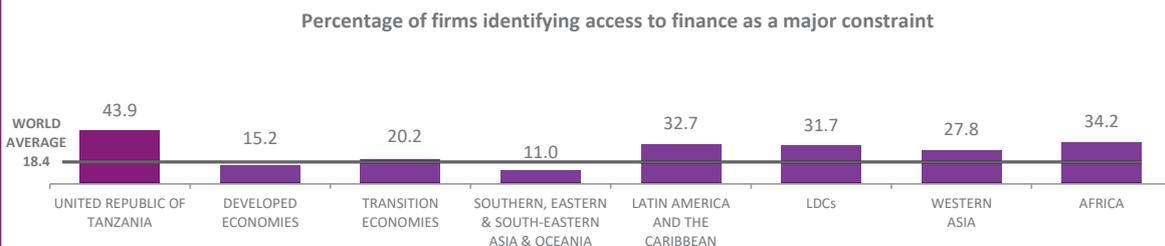
Source: World Bank (complete URL address in the General Notes)

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