

Digital Trade Developments in Kenya: Perspective under AfCFTA

Beru Lilako

Digital trade and digitally enabled transactions of trade in goods and services have been increasing globally. In Kenya, the growth of digital trade and digitally enabled transactions has been phenomenal, and digitization has become an integral part of numerous day-to-day activities and service delivery. The importance of digitization of the Kenyan economy is expected to continue, especially since the country has recently developed and published a Digital Economy Blueprint (2019). Adoption of technology and the diffusion of digitization are key drivers of the growth of digital trade and of digitally enabled transactions in the country.

The proliferation of information and communications technology (ICT) services in Kenya provides opportunities to leverage business innovations to increase exports and imports (in part through improvements in trade facilitation), enhance service delivery and improve access to information, all contributing to the ease of doing business for the general public and for international traders.

E-commerce has increasingly been used by both government institutions and private enterprises in Kenya, which ranks 89th globally and 7th in Africa in business-to-consumer (B2C) e-commerce readiness, with the share of individuals using the internet at 39 % (World Bank, 2019). The digitization of government processes by the National Population Census in 2019 was conducted through a digital system that improved efficiency and enabled a more rapid release of the final tally, when compared to previous population census rounds. At the heart of growth in digital trade in Kenya is the increased access to and use of ICT. The availability of internet services, for instance, has been driven by the development of internet infrastructure, particularly fibre optic and mobile broadband, but also the availability of affordable data enabled devices.

ICT has changed financial sector operations in Kenya, leading to a greater volume of transactions and faster transactions, including payments. The Global Findex database (2017) shows that in Kenya from 2014 to 2017 the share of the population (over 15 years of age) who made or received digital payments increased from 69 % to 79 %, the share who owned a credit card increased from 5 % to 7 %, and the share with a mobile money account increased from 58 % to 73 %. This is both in urban and rural areas thus contributing to a more inclusive financial sector.

Policies supporting Digital Trade in Kenya

ICT is identified as an enabler for socioeconomic transformation in Kenya. The Kenya ICT policy and a draft revision promote ICT as a developmental tool through increased use of information technologies, the development and use of e-government to improve efficiency and the quality of public service delivery, and the development of IT infrastructure. The ICT policy is based on the principles of:

- keeping pace with changes in technology
- providing universal service access at an affordable cost
- ensuring adequate competition
- encouraging innovation
- standardizing ICT products and services for quality
- maintaining global connectivity and safeguarding privacy and security.

The policy has provided a framework for enhanced use of ICT in both government and private enterprises. Over 48% of government institutions have an IT policy. The new Digital Economy Blueprint is expected to build on this foundation.

Kenya, in 2019, enacted a modern data protection law which is compliant with the European Union's General Data Protection Regulation. The new data protection law will go a long way towards creating the right environment for investments in digital services, as well as the use of these services by individuals and firms. In 2013, the Kenyan government implemented the Huduma (service) programme, which aims to transform public service delivery by providing access to various public services and

information. The programme, through its integrated technology platform, provides one-stop shop citizens' service centres at various counties in the country.

For cross-border trade, the government has promoted digitization and automation of trade transaction processes through the establishment of the National Electronic Single Window System (authorized under the National Electronic Single Window System Act, 2016) which aims to address challenges related to processing of import and export cargo documentation (Republic of Kenya, 2019). This online cargo clearance platform, launched in 2014, interfaces with and integrates automated export and import information from business and government agencies, issuing documents such as export and import permits, licences, and certificates, among others. The system is also linked to financial institutions, including banks and mobile payment options, through the Kenya Revenue Authority's online taxation system and the government's e-Citizen platform, hence providing a complete electronic cargo documentation platform.

The system has facilitated trade by increasing transparency in export and import processes, reducing the number of processes and documents required for processing, providing a paperless (electronic) application by traders on a 24/7 basis and allowing for multiple payment channels. This improvement in services has reduced the costs and time required to complete trade transactions. In addition, the platform accelerates communication, thus facilitating both payments and cross-border trade. The single window system is the main reason why Kenya achieved one of the largest improvements in the World Bank Doing Business indicators (2019), including improvements in trading across borders.

Opportunities for Digital Trade in Kenya

The AfCFTA offers Kenyan SMEs an alternative route to market their goods, especially those SMEs and entrepreneurs who were previously hindered by a lack of connectivity, high transaction costs and information asymmetries. Integrating Africa into a single digital market will create economies of scale and opportunities to grow both local and regional economies. Compared to many other African countries, Kenya is in a good position to benefit from the AfCFTA due to the Digital Economy Blueprint, launched in May 2019, which could set a precedent for a new digital Africa and encourage wider cooperation between African nations (Min of ICT, 2019).

Disruptive technologies such as artificial intelligence, robotics, blockchain, drones, the Internet of Things, big data and software enabled industrial platforms have great potential to impact economic development. For example, M-Pesa transformed the financial sector by significantly increasing financial inclusion. Digital technology creates opportunities for innovation. New technologies give access to markets that were previously closed and remove distortions in demand by giving customers direct access to products that were previously controlled. Rapid technological developments have created new markets that now connect consumers, lower transaction costs and reduce information asymmetry.

Chacha and Edwards (2017) find that e-commerce and the use of digital platforms afford Kenya the opportunity to diversify its export markets and move into higher value-added production segments, rather than concentrating on traditional exports (e.g. coffee, tea, fruits and vegetables). Export opportunities provided by e-commerce may help to ensure longer-term firm survival in Kenya.

E-commerce offers great opportunities for Kenya, with the possibility of trading platforms designed for the Kenyan user. Increased availability of broadband internet has enabled the digitization of the retail sector and enhanced online retailers such as Jumia.co.ke, Kilimall.co.ke, jiji.co.ke, Cheki.co.ke, Shopit.co.ke, Electrohub.co.ke, Amanbo.co.ke etc. (Republic of Kenya, 2019b).

Banga and te Velde (2018) find that digitization of production presents important opportunities for Kenyan manufacturing firms in terms of growth and employment creation. The use of digital technologies and robotics by Kenyan manufacturing firms would improve efficiency and boost their output and exports, and create job opportunities.

ICT has supported increased trade in services in Kenya. For example, some health services are now delivered over the internet due to ease of internet access. Blockchain technology can be used to track the pharmaceutical supply chain. Such tracking capability would help tackle the issue of counterfeit medication, which kills approximately 100,000 people in Africa every year (Republic of Kenya, 2019).

The digitization of the agricultural sector offers new opportunities through innovations that can upscale the agricultural value chain, for example, the precision agriculture by computer-guided aerial mapping, data collection on soil and weather, and the use of global positioning systems (GPS) (Min of ICT, 2019).

Digital Trade challenges for Kenya

Wanyonyi (2018) states that key digital infrastructure constraints include limited access to fibre and broadband connectivity due to the high costs of installation and use, low availability of spectrum for wireless connectivity, low availability of public access points, and shared access to devices. Limited

access to finance and infrastructure gaps constrains the ability of individuals and firms to purchase digital technologies. The use of enhanced, advanced digital technology in the automotive industry is also limited by gaps in skills and low investment in training as evidenced by enrolments in science, technology, engineering and mathematics (STEM), credit constraints, the high costs of electricity and steel compared with those costs in neighbouring countries such as Uganda and Ethiopia highlighted by Shiundu (2017) and Muchira (2018) and trading delays due to non-tariff barriers, slow customs procedures and poor logistics (Republic of Kenya, 2017).

A study by Australia Computer Society (2016) indicates that cybersecurity threats, poor governance and instability constrains the success of the digital economy in Kenya. Insufficient regulation and uncontrolled access to digital infrastructure, and lack of digital hygiene predispose all participants in the digital economy to cybersecurity risks and threats. Online services remain an important challenge to the development of digital trade. For example, threats to privacy appear to be a growing concern. Kenya needs to establish a legal framework for online consumer protection that enables consumers to seek legal redress in case of breach of trust.

Lack of protection of intellectual property (IP) constrains participation in digital trade. IP that can be digitized is hard to protect since consumers can copy and use online content without paying for it or without receiving permission from the rights holders (CAK, 2019).

For Kenya to enhance digital trade with the rest of the world, cross-country collaboration is still needed to fuel interoperability and integration among mobile money platforms and banks, so that the payment systems of buyers and sellers can work seamlessly with each other. Enhanced interoperability will reduce friction in e-commerce transactions, increase ease-of-use for consumers and reduce costs for platform operators.

The African Union's Digital Transformation Strategy for Africa addresses trans boundary challenges, especially interoperability of systems as well as harmonization of digital identity systems. The strategy commits member countries to promote open standards and interoperability to enhance trust in cross-border transactions, personal data protection and privacy. Improvements in digital infrastructure, which is one of the pillars in the Digital Economy Blueprint, would increase Kenya's ability to meet these challenges.

Call to action

Kenya has made significant progress in digital trade. Various opportunities abound. In particular, the launch of the AfCFTA will provide a huge market for goods and services that is also a huge digital economy. However, a lot remains to be done, including in ICT development, in order for the country to become a competitive global player in such trade.

Considerable efforts are required to strengthen transport infrastructure (such as railway systems, roads, airports and harbours), the postal system and trade logistics. Continued digitization of border procedures, strengthened surveillance of cybercrime and more effective data protection are equally important for the operation of digital platforms. In collaboration with international players this will support Kenya's march towards a truly digital economy and to becoming a global player in e- commerce.

- - -

References

African Union (2019). The Digital Transformation Strategy for Africa (2020–2030). https://www.tralac.org/documents/resources/african-union/3013-the-digital-transformation-strategy-for-africa-2020-2030.html

Australia Computer Society (2016). Cybersecurity: Threats, Challenges, Opportunities, November 2018.

Banga, K. and Velde, D. W. (2018). How to Grow Manufacturing and Create Jobs in a Digital Economy: 10 Policy Priorities for Kenya.

Chacha, P. W. and Edwards, L. (2017). "The Growth Dynamics of New Export Entrants in Kenya: A Survival Analysis", Economic Research Southern Africa (ERSA) Working Paper 712.

Communications Authority of Kenya (CAK) & Kenya National Bureau of Statistics (KNBS) (2018a). *Public Sector ICT Survey Report 2016*, Kenya National Bureau of Statistics, Nairobi.

International Telecommunication Union (ITU) (2018). *Measuring the Information Society Report,* Geneva: ITU.

Kenya National Highways Authority (2019). https://www.kenha.co.ke/index.php/roadnetwork

Ministry of Information, Communications and Technology, (2019). *Emerging Digital Technologies for Kenya, Exploration & Analysis*. https://ca.go.ke/wp-content/uploads/2019/07/Emerging-Digital

Muchira, N. (2018). "Power tariffs fiasco actually raises costs for Kenyan industry by up to 30pc", The East African, 5 August 2018. https://www.theeastafrican.co.ke/business/power-tariffs-fiasco-actually-raises-costs-for-Kenyan-industry

Republic of Kenya, (2017). *Economic Survey*, Kenya National Bureau of Statistics, Nairobi: The Government Printer.

Republic of Kenya, (2019b). *Digital Economy Blueprint: Powering Kenya's Transformation*. https://www.ict.go.ke/wp-content/uploads/2019/05/Kenya-Digital-Economy-2019.pdf

Shiundu, A. (2017). "Factsheet: The cost of electricity in Kenya". https://africacheck.org/factsheets/factsheet-costelectricity UNCTAD, (2017). *Information economy report: digitalization, trade and development*. https://unctad.org/system/files/official-document/ier2017_en.pdf

Wanyonyi, P. (2018). "E-commerce: Poor infrastructure holds Africa back", Nairobi Business Monthly, 7th February 2018

World Bank (2018). *The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution*, International Bank for Reconstruction and Development / The World Bank: Washington, DC

World Bank (2019). *Doing Business 2019: Training for Reform,* International Bank for Reconstruction and Development / The World Bank: Washington, DC

tralac gratefully acknowledges the support of its Development Partners



