



Report

The AfCFTA: unlocking the potential of the digital economy in Africa

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Key messages

The potential for intra-African digital trade and e-commerce remains constrained by traditional restrictions such as logistical challenges, limited internet penetration and access to financial systems and those related to the management and governance of data.

Issues around digital trade and e-commerce in Africa that need to be addressed include consumer protection, authentication, data localisation, cross-border data flows, cybersecurity and data protection.

The AfCFTA protocol on digital trade could provide a framework for the convergence of domestic and regional policies. There are a wide range of best practices in global bilateral agreements that could be drawn upon. A deep agreement with binding and enforceable provisions could provide a significant boost to continental integration in general, and the digital economy in particular.



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Acronyms

AfCFTA	African Continental Free Trade Area
AU	African Union
B2C	Business to Consumer
B2B	Business to Business
CoO	Certificate of Origin
DDS	Digitally Deliverable Services
DPA	Data Protection Authorities
ICT	Information and Communication Technologies
ITA	Information Technology Agreement
ITC	International Trade Centre

Executive summary

The African Continental Free Trade Area (AfCFTA) constitutes a critical tool to achieve the economic transformation objectives for the continent set out in the African Union (AU) Agenda 2063 by increasing intra-African trade and investment.

African lags behind in terms of penetration of the digital economy in retail with respect to other regions. In 2019, only 30% of the African population engaged in online shopping, compared to 45% and 50% in South America and Asia. Only \$22 billion in turnover was generated in regional business to consumer (B2C) e-commerce transactions, compared to \$1,100 billion in Asia, and \$30 billion-worth of services were digitally delivered, substantially below the \$790 billion in Asia.

The development of e-commerce and the digital economy is affected by a wide range of factors including digital and physical connectivity, the low number of people using the internet (30% of the total population), the low number of people using bank accounts or mobile money (40%), lack of secure internet servers and unreliable postal services.

The lockdowns associated with the Covid-19 pandemic have accelerated growth in e-commerce and digital trade. Even before the pandemic, it was estimated that the digital economy would represent almost 6% of African gross domestic product (GDP) by 2025, and by 2050 more than 10% of the GDP of the continent's largest economies will be generated in the digital economy.

However, this development has occurred primarily within domestic markets. The potential for intra-African digital trade and e-commerce remains constrained by traditional restrictions such as logistical challenges, limited internet penetration and access to financial systems and those related to the management and governance of data. Cooperation and collaboration between countries is required to address issues such as consumer protection, authentication, data localisation, cross-border data flows, cybersecurity and data protection.

At the global level, attempts to address these issues have advanced slowly. Many African countries have raised concerns about the World

Trade Organization (WTO) negotiations in this area given the lack of clarity about the scope of the discussions. Participation of African countries in the International Technology Agreement (ITA), which aims to reduce duties on imports of high technology products, is low. At the continental level, there have been some initiatives to address these issues, including the AU Digital Transformation and E-Commerce Strategies and the AU Convention on Cybersecurity and Personal Protection Data. These have been supplemented by initiatives in most Regional Economic Communities. In general, these initiatives tend to be more declaratory of principles, and have very few legally binding and enforceable provisions.

At the country level, South Africa appears an e-commerce leader in the continent based on its better internet connectivity, large and sophisticated banking sector and an advanced legal framework protecting consumers and their data.

Based on volumes of transactions, Nigeria leads the B2C market in Africa and has a vibrant tech sector, despite high internet costs. Should these issues be addressed, Nigeria has the potential to become a global digital economy hub. On the negative side, Nigeria has introduced a tax on services provided through digital marketplace platforms that may affect the expansion of digital trade.

The growth of e-commerce in Kenya is explained by improved connectivity and access to cost-effective mobile money platforms. Kenya has advanced legislation to govern electronic transactions and protect consumers and their data.

Ghana has made good progress in relation to legislation governing e-commerce, including electronic authentication and dispute settlement mechanisms for cross-border digital trade. It has also advanced in the development of the hard and soft infrastructure to create an enabling environment for e-commerce, and has made progress in the development of mobile payment systems. Recent attempts to introduce a tax on digital transactions may however jeopardise what has been achieved.

The AfCFTA protocol on digital trade can provide a framework for the convergence of domestic and regional policies. There is a large list of issues that will need to be addressed, but at the same time there are a wide range of best practices in global bilateral agreements that could be drawn upon. There is also the question of how deep member states want to commit. A deep agreement with binding and enforceable provisions could provide a significant boost to continental integration in general, and the digital economy in particular. There are, of course, significant challenges based on the different levels of readiness to commit and implement the provisions of the protocol.

But at the same time, the AfCFTA digital trade protocol could provide a guide as countries design their policies and institutions in line with continent-wide efforts.

1 Introduction

In 2018, 44 members of the African Union (AU) signed the agreement that established the African Continental Free Trade Area (AfCFTA). Its aim is to create a single, liberalised market for goods and services across the African continent, facilitate the movement of people and capital, establish the foundation for a continental customs union and deepen economic integration (AU, 2018). The AfCFTA constitutes a critical instrument to achieve the AU's Agenda 2063, which aims to transform the economies of Africa by increasing intra-African trade and investment.

Trading under the AfCFTA officially began in January 2021. By July 2021 54 countries had signed the agreement, and 43 have ratified it, making its provisions legally binding in those countries.

In February 2020, the AU Heads of State and Government Assembly decided that e-commerce would be included in the AfCFTA (AU, 2020b), and amplified the scope to include other forms of digital trade. This underscores the growing importance of e-commerce and digital trade in increasing market access and reach, leading to increased trade, and lowering overall trade transaction costs by reducing information asymmetries and costs related to communication and information, transactions, search and matching,¹ bolstering the integration of firms into value chains and driving the adoption of innovative technologies (UNECA et al., 2019; UNCTAD, 2017).

Negotiations on a digital trade protocol, scheduled to begin in 2022, present a unique opportunity for African countries to collectively establish common positions on digital trade and harmonise digital economy policy and regulation (Banga et al., 2021; AU et al., 2019). The protocol could also provide a blueprint for Africa's position on digital trade rules in the global context. This is particularly important as African countries have taken different positions on digital trade

¹ Traditionally, only large, productive firms were able to carry the costs associated with export entry, such as identifying and marketing to distant customers. These costs could be significant with each successive export market entry.

issues at the WTO. While the African Group is opposed to the introduction of new multilateral rules on e-commerce, six African countries are part of the Joint Statement Initiative e-commerce negotiations (WTO, 2019; 2017).

The first aim of this report is to provide summarised evidence on the importance of the digital economy in Africa, the state of e-commerce trade strategies at the continental and regional level, and the potential impact of liberalised e-commerce trade on African economies. The report uses these findings to highlight key negotiating areas for the AfCFTA.

Two typologies of trade are discussed in this report, e-commerce and digital trade.² The two concepts are interchangeable. E-commerce generally refers to the ‘production, distribution, marketing, sale or delivery of goods and services by electronic means’, according to the WTO. These transactions can be carried out between consumers, enterprises, governments and other public or private entities. Digital trade extends the definition to encompass e-commerce activities at the international level, including the movement (and potential sale) of digital data as a tradeable commodity.

Two main types of transactions are discussed: B2C and B2B transactions.

- B2C stands for Business to Consumer. These are transactions that enterprises conduct with their clients – when seen through the e-commerce lens, typically carried out through shopping websites (i.e. Amazon). These transactions are a significant source of attention due to the consumer protection considerations that revolve around them.
- B2B stands for Business to Business transactions, where enterprises trade (or exchange information) with one another. Estimated to account for 90% of all e-commerce transactions (in 2021), these transactions can be carried out either through neutral online platforms or through ad hoc platforms that enterprises set up between one another.

The report is organised as follows. In the second part, the report puts African digital trade in the global context. The third section presents the African digital trade and e-commerce policy space. Section 4 discusses the potential effects of digital trade on the economy of Africa. Section 5 discusses international governance and

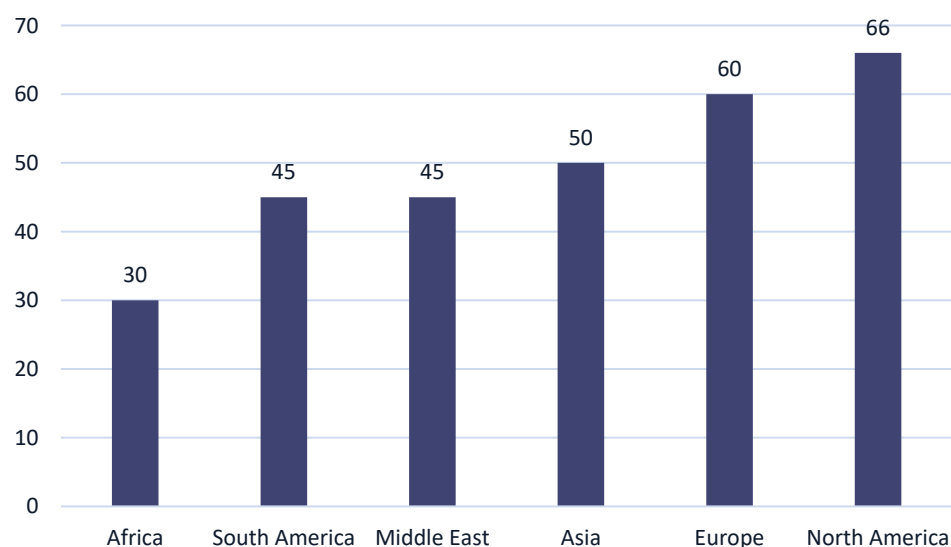
² Based on WTO (2021 and 2013) and OECD (2021).

agreements, including continental and regional, on digital trade and e-commerce. Section 6 discusses experiences in Ghana, Kenya, Nigeria and South Africa. Section 7 draws out conclusions and recommendations in relation to the negotiations on the AfCFTA.

2 Regional trends in digital trade

This section discusses digital trade trends at the regional level. Data from the Global 2020 E-commerce Report shows that Africa has the lowest share of population (30%) engaged in online shopping (see Figure 1), providing a limited pool for both B2C and potentially also B2B e-commerce activities. In 2019, the estimated population of Africa was 1.2 billion (World Bank, 2021). This suggests that there is a potential B2C market engagement of up to 350 million people, which although low compared to more populous regions with higher engagement rates, such as Asia, still represents a substantial market for e-commerce and digital trade, and one which is likely to grow over time. Data from the World Bank's Global Findex database provides even lower estimates, with an average of 5% of the total African population over the age of 15 engaged in B2C (i.e. buying something online over the last year) in 2017.

Figure 1 Share (%) of the population engaged in online shopping by region, 2019



Source: RetailX et al. (2021)

Although engagement is currently lagging, the growth rate for online purchases or payments across Africa is significantly higher than in other regions. Between 2014 and 2017, online payments or purchases in Africa grew by 240.4%, compared to 97.6% in Asia, 42.2% in Europe and 69.2% in North America (WTO, 2020). Venture capital funding for e-commerce enterprises across Africa increased by 2% between 2019 and 2020, representing approximately \$134 million (IFC and Google, 2020). As growth in e-commerce begins to level off in other regions, Africa will increasingly become the frontier growth market for e-commerce investment and development.

Figure 2 compares turnover for 2019 across different regions. It shows that total sales made through B2C e-commerce in Africa were approximately \$22 billion (nominal) in 2019, half the amount in South America and approximately 2% of the amount for Asia. In effect, B2C e-commerce turnover rates are extremely low.

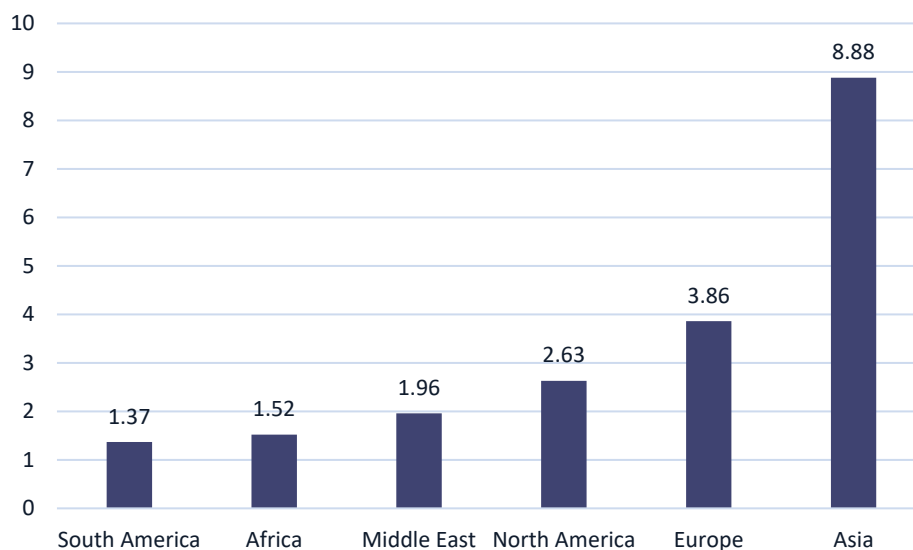
Figure 2 Regional B2C e-commerce turnover (US\$ billion), 2019



Source: RetailX et al. (2021)

If we look at African B2C e-commerce turnover rates in terms of their contribution to regional GDP (Figure 3), we see that it represents 1.5%. The figure is higher across all other regions except South America. This indicates that the B2C component of e-commerce is, currently, not a significant contributor to the African economy. However, other regions, such as Asia, Europe and North America, show that e-commerce can have significant impacts on regional GDP if properly fostered.

Figure 3 Share of total regional GDP made up by B2C e-commerce turnover (% of GDP), 2019

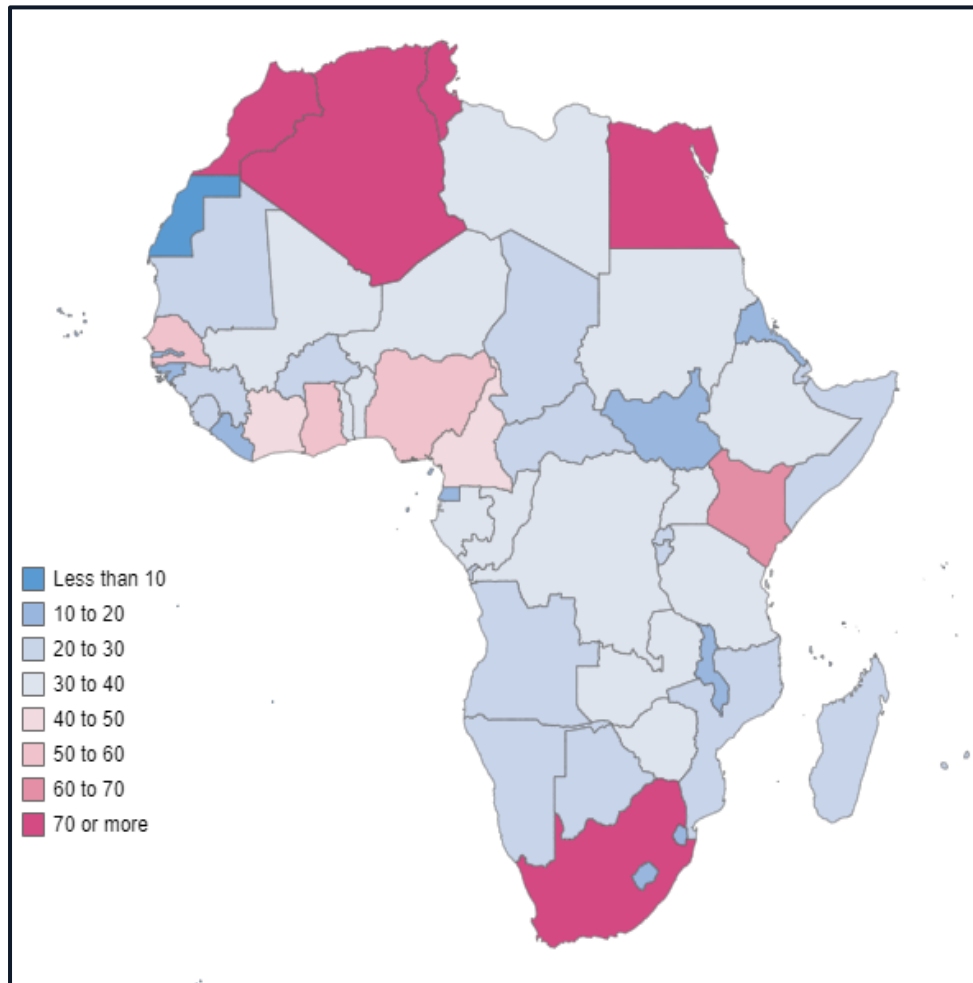


Source: RetailX et al. (2021)

Figure 4 looks at the number of e-commerce marketplaces (e.g. e-commerce trading platforms and websites) active across Africa. This shows that most e-commerce marketplaces are concentrated either in Southern Africa, i.e. South Africa, or in North Africa, in Egypt, Algeria, Morocco and Tunisia. There is also some activity in East Africa, in Kenya, and lighter activity in West Africa, in Nigeria, Ghana and Senegal (and to a lesser extent Cameroon and Côte d'Ivoire). However, significant parts of the continent have limited activity, due to lower populations which cannot sustain large e-commerce marketplaces, limited e-commerce development or a combination of the two.

According to ITC (2020), 1% of digital marketplaces in Africa are responsible for over 60% of total marketplace traffic across the continent. This means that there is a significant concentration of marketplace activity in Africa. More digital marketplaces would need to be opened if more African countries want to (or are incentivised to) successfully engage in continental e-commerce transactions.

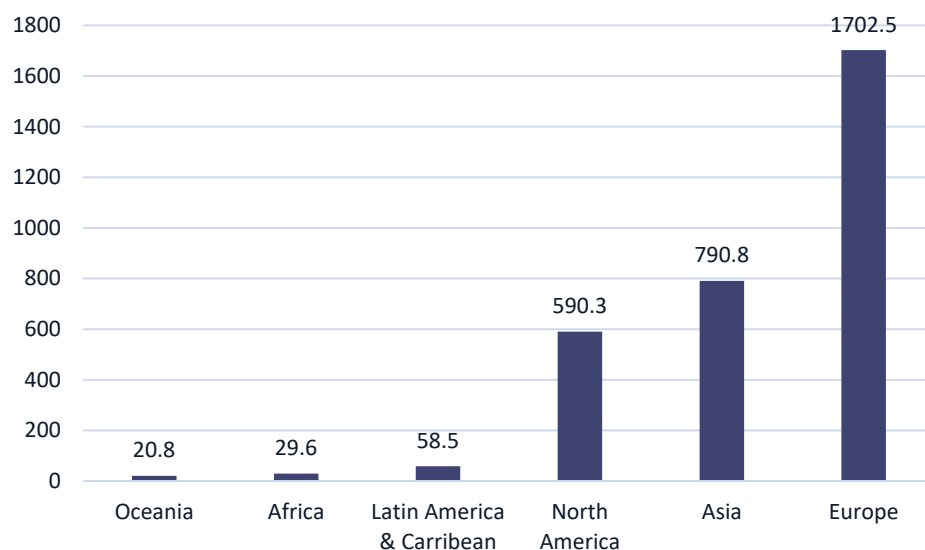
Figure 4 Number of e-commerce marketplaces per country, 2019



Source: ITC (2021)

Finally, Figure 5 looks at international trade in digitally deliverable services (DDS), which refers to services delivered through digital means between countries. It shows that African trade in DDS amounted to approximately \$29.6 billion in 2019, significantly lower than Europe, Asia and North America.

Figure 5 International trade in digitally deliverable services (US\$ billion nominal), 2019



Source: UNCTAD (2021)

These findings paint a clear picture of a continent lagging behind in terms of participation in e-commerce, international trade, e-commerce turnover and contributions to GDP. However, it also shows that e-commerce is rapidly growing in Africa, while illustrating how important it is to the economy of other regions across the world. This sends a clear message that, if the rapid growth of e-commerce across Africa can be fostered by creating a unified market across the continent, e-commerce could be a very important contributor to growth across Africa.

3 Current challenges for digital trade in Africa

This section discusses the challenges facing African countries in terms of their capacity to engage in digital trade. The aim is to understand whether there may be critical issues that need to be resolved to enhance penetration of digital trade on the continent. First, it is important to understand the digital and physical connectivity context which governs the capacity of countries to engage in large-scale digital trade. Countries with higher e-commerce uptake typically have higher digital connectivity rates (as measured by the number of internet subscribers), access to financial systems that can facilitate digital purchases (e.g. mobile money, bank accounts or credit and debit cards which can be used for online purchases, both domestically and internationally) and the digital and physical infrastructure to support these transactions, such as a reliable and effective postal service.

Table 1 provides a summary of these issues at the regional level using data from UNCTAD's B2C e-commerce index for 2020 (UNCTAD, 2020). It compares Africa to other regions, including transition and developed economies. Within the global context, the data shows that African countries are not well-placed to take advantage of, or support, digital trade and e-commerce compared to other regions. The percentage of individuals who use the internet is the lowest among all regions (30%), significantly lower than the global average of 60% and the Asian average of 57%. This indicates that there is currently a smaller pool of potential digital and e-commerce buyers and sellers. This is unsurprising as a report by the Broadband Commission (2019) posits that, although fixed broadband penetration has increased steadily in recent years in urban areas (mainly in sub-Saharan Africa), Africa still has the lowest penetration of fixed broadband worldwide.³ Mobile broadband coverage has increased substantially in sub-Saharan Africa, but the region still has

³ Subscription charges in Africa are higher than in middle-income countries, and monthly subscriptions in sub-Saharan Africa are more than twice as expensive as those in North Africa.

the largest coverage gap globally. Notably, one in five people live in an area without mobile broadband coverage (GSMA, 2021). Lack of digital and literacy skills and the costs of handsets (sub-Saharan Africa has the least affordable handsets⁴ of any region) are the most cited constraints to mobile internet adoption and use (ibid.).

Related to this is the share of individuals that have an account with either a financial institution, e.g. a bank account, or credit card account or a mobile money service account. This is an important metric: these types of accounts are fundamental to access e-commerce as cash purchases are not possible for e-commerce transactions. The data shows that Africa has the lowest percentage of individuals with these accounts out of all regions, with only 40% of individuals (aged 15 or over) having access to financial accounts. This means that more than 60% of the population (aged 15 or over) would not be able to directly engage in e-commerce transactions. However, the prevalence of mobile money has been instrumental in driving financial inclusion in Africa as it helps overcome some of the barriers to opening an account at a financial institution. In fact, the continent has the highest proportion of adults with a mobile money account of any region. Continued growth of mobile money as an alternative means of payment is encouraging the uptake of e-commerce. This is further discussed in the case studies.

A digital gender divide further hampers growth of e-commerce on the continent. Women across the continent do the majority of purchasing both offline and online (ITC, 2021), yet women are less likely to have a bank account or access to credit cards or mobile money. This is in line with data from the 2017 Global Findex database, which suggested that, in sub-Saharan Africa, only 37% of women (aged 15 and over) had bank accounts.

The number of secure internet servers (per 1 million population) can be used as a proxy for Information and Communication Technologies (ICT) sector infrastructure in Africa. In simple terms, the higher the number the greater the amount of local ICT infrastructure. A larger number of local servers provides an indication of whether data is stored locally, and hence whether consumer and seller data is more likely to be kept under local jurisdiction than located abroad, where it would fall under different data privacy regimes. Africa has the lowest number, with 28 servers per million people, significantly lower than

⁴ Across low- and middle-income countries, the median cost of the cheapest internet-enabled handset as a percentage of monthly GDP is 19%, compared to 26.5% in sub-Saharan Africa.

East, Southeast and South Asia (54) and Latin America (50). This means that there is relatively limited capacity to store data locally, potentially allowing local user data to be used in other jurisdictions. It also indicates that ICT infrastructure across Africa is not as well developed as in other regions, which limits the expansion of e-commerce and digital trade activities.

Finally, the UPU Postal Reliability Score indicates the effectiveness and reliability of postal services, which are fundamental for a number of e-commerce activities (e.g. Jumia, Amazon or Ebay parcel deliveries). Once again, Africa is at the lower end of the ranking with a UPU score of 21, compared to 58 in East, South and Southeast Asia and 29 in Latin America. The limited effectiveness and extent of postal networks across the continent means that B2C businesses have limited reach, both domestically and internationally, which limits their capacity to access new customers. Options such as motorbike delivery systems and out-of-home delivery involving collection points could be explored as alternative methods of dealing with the poor logistical network (UNCTAD, 2015).

In terms of B2B delivery logistics (i.e. transport) for e-commerce activities, an annual investment shortfall of between \$67 billion and \$107 billion in logistics infrastructure has been estimated, limiting the development of the logistics sector and imposing a 40% to 60% surcharge on the cost of goods (IFC and Google, 2020).

Table 1 Regional values for the UNCTAD B2C e-commerce index, 2020

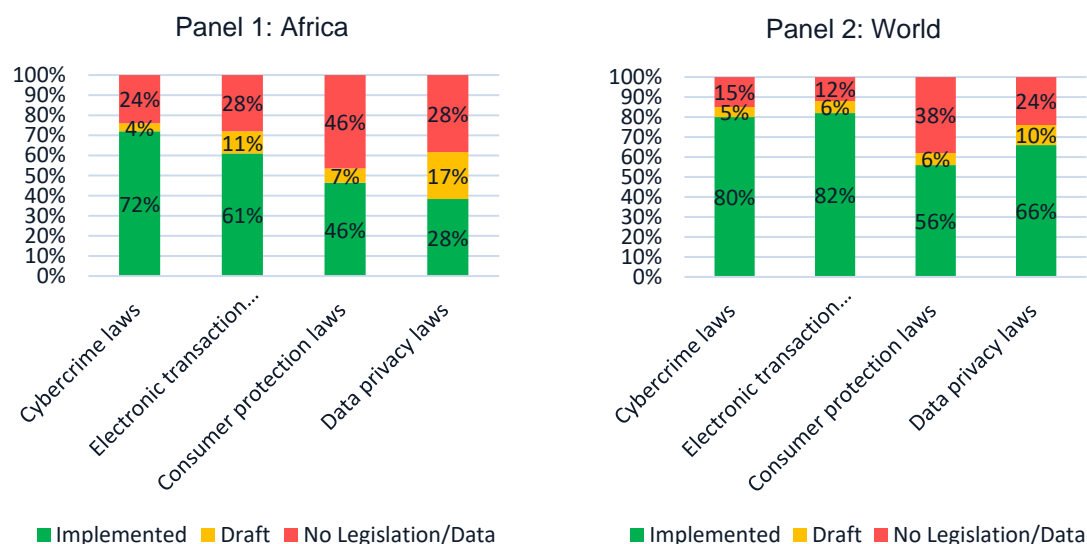
	Share of individuals using the internet (% of the population)	Share of individuals with a financial institution or mobile money account (% of 15+)	Secure Internet Servers (per 1 million population)	UPU Postal Reliability Score
Africa	30	40	28	21
East, South & Southeast Asia	57	60	54	58
Latin America & the Caribbean	64	53	50	29
Western Asia	77	58	45	50
Transition economies	71	58	60	59
Developed economies	88	93	84	80
World	60	60	53	47

Source: UNCTAD (2021a)

UNCTAD gathers data on four typologies of legislation critical to digital trade. These are: (a) legislation that protects consumers' rights, which bolsters confidence in digital purchases; (b) electronic transaction laws which recognise the legal status of digitally based forms of exchange and effectively govern e-commerce transactions; (c) data protection laws which ensure that digital trade participants' confidential data is protected, contributing to increased confidence in digital transactions; and (d) cybercrime legislation, which helps protect e-commerce and digital trade from criminal activities.

Figure 6: Panel 1 provides a breakdown of African countries that have implemented or drafted these four subsets of laws. Figure 6: Panel 2 looks at the percentages at the global level to compare the two data sets. The African dataset covers 54 countries, and the global dataset covers 194 countries.

Figure 6 Breakdown of the status of legislation to support digital trade in Africa (% of countries, 54 countries) and globally (% of countries, 194 countries)



Source: UNCTAD (2021c)

In terms of electronic transaction laws, 61% of African countries have already implemented such laws. This is slightly behind the global average, where 82% of countries have already implemented electronic transaction laws. However, 11% of the African countries are currently drafting legislation, showing there is clearly some momentum in the electronic transaction law space, and that African countries may catch up relatively soon to the global average. Countries without electronic transaction laws will have to rapidly adapt and adopt them if they want to engage in international e-commerce. Indeed, harmonised laws on electronic trade and digital signatures emerged as a critical area for boosting intra-regional e-commerce in a survey and interviews with African businesses by Banga et al. (2021). This can be addressed through the AfCFTA. The same situation is repeated across the remaining three types of legislation, with particular emphasis on the limited adoption of data privacy laws across Africa, at 28% against a global average of 66%.

There is disparity in the enforcement of these laws among the African countries that have them. For instance, Ghana and Mauritius enforce data protection rules through their data protection authorities (DPAs) by issuing fines for non-compliance with relevant personal data protection legislation (Deloitte, 2017). In contrast, Morocco, Nigeria,

Senegal and Tunisia do not require notification of breaches (Ilori, 2020). More importantly, DPAs are yet to be appointed in 15 of the 32 countries with data privacy laws: Seychelles, Angola, Chad, Equatorial Guinea, Madagascar, Guinea (Conakry), Mauritania, Niger, Algeria, Botswana, Togo, Kenya, Uganda, Congo Brazzaville and Egypt (Greenleaf and Cottier, 2020). The lack of DPAs is recognised as a major impediment to the effectiveness of data protection legislative frameworks on the continent (Banga et al., 2021). Figure 6 also illustrates that, in terms of cybercrime laws and consumer protection laws, the continent is not significantly behind the global average.

4 Potential economic impacts of digital trade in Africa

Given a clearer picture of the importance and challenges of digital trade in Africa, this section first provides a brief overview of the importance of e-commerce to economic growth, and offers a broad analysis of the potential economic impacts that growth in e-commerce and digital trade could have on the continent. This section does not attempt to carry out a new analysis of the economic impacts of e-commerce; rather, it is based on existing impact assessments at the global level and, where estimates are available, for Africa.

The main benefits from e-commerce tend to accrue through improvements in firms' access to markets, information and productivity. E-commerce benefits these areas through the use of ICT systems (e.g. computers, internet, digital payments) by reducing inefficiencies within supply chains through increased networking and connectivity opportunities enabled by ICT,⁵ allowing firms to identify and access new markets (i.e. clients), both domestically and internationally. As well as reducing the costs of market research and information gathering, it allows the establishment and efficient management of remote operations in areas with lower operational costs (Terzi, 2011; Corrado et al., 2012).

These benefits will also have a positive impact on productivity, both at the firm level and at the economy-wide level (Terzi, 2011). Positive examples of productivity increases from ICT use include France (Cette et al., 2021), Denmark (Smeets and Warzynski, 2020) and the Czech Republic (Novotna et al., 2020). At the economy-wide level there is evidence that, in the early 2000s, higher levels of ICT use in the US contributed to higher productivity and subsequently growth rates, compared to the European Union (EU), where ICT use was lagging (Biagi, 2013). In Asia, between 2000 and 2008 increased

⁵ OECD (2015) shows that labour productivity in the ICT sector (within OECD countries) is 79% higher than productivity levels in other sectors, and is estimated to have raised total labour productivity levels by between 2% (in Hungary) and 4% (in Ireland).

levels of internet penetration in high-income countries have contributed to higher growth rates through increased productivity effects, with evidence that this effect is also spreading to middle-income countries (Kurniawati, 2020). A study looking at the impact of ICT on total factor productivity (TFP) in developing countries showed that countries investing more in ICT tended to have higher TFP growth rates (Hawash and Lang, 2020).

Carbonara (2005) suggests that these factors could potentially favour the growth of both large and small firms, which is critical in terms of African development given the importance of SMEs to the African economy. Estimates suggest that, by 2018, SMEs represented more than 90% of businesses in Africa and employed approximately 60% of the workforce (ITC, 2018). Evidence from e-commerce for small-scale urban SMEs in Kenya supports these findings, suggesting that e-commerce is an important enabler of firms' competitiveness through the simplification of business operations and an enabler of increased firm productivity (Wanyoike et al., 2012). Previous evidence from South Africa and Tanzania (Wolf, 2011) shows that the use of ICT promoted the growth of SMEs throughout the 1990s.

In terms of employment impacts, a study by the World Economic Forum (WEF, 2020) estimates that, by 2025, at the global level 85 million jobs may be displaced by digital and machine equivalents, while 97 million new jobs will be created by new opportunities in these sectors. However, the rate of employment creation could be declining; for example, the same study carried out in 2018 (WEF, 2018) found that there was potential to create 133 million jobs by 2022, whilst displacing 75 million jobs. This means that, although digital and automation technologies are still likely to create more jobs than destroy old ones, the rate of creation is declining. Assuming that these technologies will be the main drivers of growth in the medium to long term,⁶ this provides greater impetus for African countries to rapidly engage with these new technologies, sooner rather than later, while there is potential for greater employment creation effects. There is also the issue of employment loss in traditional sectors when faced with increased digitalisation. From a narrow retail sector perspective, some data has emerged showing that retail job losses accruing from digital competition may not be as high as commonly thought in the US (Tempest, 2020).

⁶ WEF (2020) estimates that, by 2025, machines will overtake humans in terms of the number of work tasks undertaken.

In broad terms, the IFC and Google estimate that, by 2025, the digital economy could contribute \$180 billion a year to the African economy, increasing to \$712 billion a year by 2050 (IFC & Google, 2020). Assuming GDP growth is sustained at 4% a year, by 2025 the digital economy would effectively represent 5.9% of African GDP, growing to approximately 8.8% by 2050.⁷ In terms of e-commerce, a study by the South African Institute of International Affairs (Tempest, 2020) indicated that e-commerce can be a significant driver of jobs. It discusses the fact that, if internet use across the continent could be expanded at the same rate as its use in high-income countries, potentially 140 million new jobs would be created and \$2.2 trillion would be added to the continent's GDP. In addition, the report states that e-commerce in Africa could create 3 million new jobs in Africa by 2025.

Forecasts by the IFC and Google (2020) for 2050 expect the digital economy to represent more than 10% of GDP for at least seven African countries, with the top three expected to be Kenya (15.2%), Morocco (12.9%) and South Africa (12.9%). It is important to note that this is a broad estimate for the whole of the digital economy. However, the report states that e-commerce and Fintech will together be the main drivers of the digital economy's contribution to growth across Africa.

The IFC (2020) estimates that a 10% increase in internet penetration across Africa can contribute to an increase of 2.5% in GDP across the continent, a higher rate than the global average of 2%. It also estimates that increasing penetration to 75% could potentially create 44 million new jobs across Africa. A similar result was found by a study (Solomon and van Klyton, 2020) looking at 39 African countries between 2012 and 2016, which estimates that a 1% increase in internet use by individuals increases GDP growth by 0.25%, mainly by reducing purchasing costs, increasing labour and capital productivity and fostering human capital growth. The study also posits that growth effects could be enhanced by fostering digital skills development and an enabling policy environment, factors that are not currently having a significant impact on GDP growth rates in Africa given the limited capacity of tertiary educational institutions to provide up-to-date digital skills to the African labour force and the fact that the African digital policy space is still lagging behind more advanced economies.

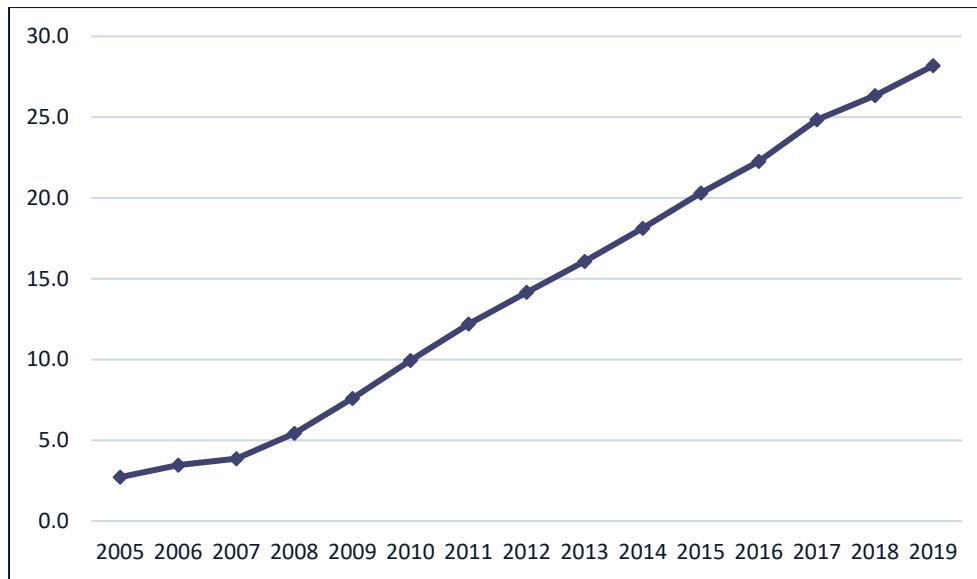
⁷ Calculations based on data from IMF (2021).

While individual countries could alleviate both these issues, were they to be tackled at the continental level additional benefits may accrue. For example a more integrated digital labour market could foster greater human capital development spill-over effects e.g. digital workers trained in larger companies could take their expertise to smaller companies or to different regions, spreading their skills and expertise to other workers. It could also promote clustering effects which would facilitate knowledge concentration, which could then be harnessed by (or linked to) local secondary and tertiary educational institutes which could offer improved digital skills and training. Harmonised digital policy could facilitate digital trade for both goods and services, creating a larger market with associated increases in economies of scale, thereby increasing productivity and output, potentially contributing to higher GDP growth rates.

Africa internet penetration shows that, between 2005 and 2019, internet penetration has been growing at an average of 2.5% a year, although the rate picked up between 2015 and 2019, with growth at approximately 3%⁸ a year. Assuming the higher rate of growth persists, we can expect Africa to achieve a 75% penetration rate (therefore the estimated 44 million job gains) between 2034 and 2035. If penetration growth rates continue to increase (e.g. an assumption based on the rapid growth in online purchases illustrated in the section above), there is therefore strong potential for African economies to achieve this target at a faster pace, particularly if fostered by increased integration of digital marketplaces across the continent through AfCFTA negotiations.

⁸ 2.968%.

Figure 7 Internet penetration in Africa (% of total population), 2005–2019



Source: ITU (2021)

5 Continental, regional and national bilateral e-commerce trade agreements and trade strategies

This section looks at the status of continental, regional and national e-commerce and digital trade agreements or strategies that are directly linked to African e-commerce. It first looks at international trade agreements that include e-commerce and have some degree of African involvement. It then looks at continental trade agreements or trade strategies in Africa, regional equivalents and national-level bilateral agreements. Finally, it looks at lessons for the AfCFTA from a review by Banga et al. (2021) of South–South PTAs which included e-commerce provisions.

5.1 International trade agreements

5.1.1 WTO negotiations

E-commerce negotiations at the WTO stalled between 1998 (WTO, 1998) and 2020 due to a moratorium on negotiations, although since 2019 there have been some efforts by a subset of WTO members to revive this negotiation strand (UNECA et al., 2019). There has however been some opposition by the WTO African group to carrying out these discussions based on issues that they had initially raised during the 11th Ministerial in 2017 (WTO, 2017). The first of these was definitional. For example, there was still no clear definition of whether digitally delivered products were counted as services, goods or a combination of the two. The African Group also argued that African SMEs were not yet ready to compete at the international level in terms of e-commerce and digital trade, particularly against well-established larger global technology firms. There were also concerns that some African countries were not yet ready to implement the trade liberalisation measures that would be required to facilitate multilateral e-commerce trade agreements (Oqo, 2020; WTO, 2017). Benin, Burkina-Faso, Cameroon, Côte d'Ivoire, Kenya and Nigeria are among the 86 members of the WTO that are party to the Joint Statement Initiative (JSI), which initiated negotiations on trade-related

aspects of e-commerce. There is no certainty that the JSI e-commerce negotiations will lead to a plurilateral agreement in the WTO as per the Marrakech Agreement, but the progress made by these WTO members by the end of 2021 includes (UNDP et al., forthcoming):

- a) Finalised clean text on spam, which aims at minimising unsolicited commercial messages.
- b) Finalised clean text on e-signatures and authentication, which seeks to ensure that the electronic signatures used in an online transaction are not denied their value or legal effect because they are submitted in electronic format.
- c) Clean article on online consumer protection, which requires members to endeavour to adopt or maintain measures aimed at ensuring that suppliers deal fairly and honestly with consumers and provide complete and accurate information on goods and services, and to ensure the safety of goods and, where applicable, services during normal or reasonably foreseeable use. The article also requires members to promote consumer redress or recourse mechanisms.
- d) Clean article on open government data, which encourages members to expand the coverage of government data made available for public access and use. It requires members to ensure, to the extent practicable, that data governments choose to make digitally and publicly available meets particular characteristics, and to endeavour to avoid imposing certain conditions on such data.

5.1.2 Information Technology Agreement (ITA)

There has been progress on the trade in digital goods and services through the ITA. The ITA aims to reduce tariffs and import duties on high-technology products (including both hardware and software). It currently includes 81 WTO members and covers approximately 97% of world trade in ICT technology products (WTO, 2021). Signatories are required to eliminate and bind custom duties at zero for all the products specified in the ITA. ITA concessions are included in participant WTO schedules of concessions and tariff concessions are provided on a Most Favoured Nation (MFN) basis, which means that even countries that have not joined the ITA can benefit from tariff elimination. African participation in the ITA is currently extremely limited and only includes four African countries, Egypt, Mauritius, Morocco and the Seychelles.

Table 2 Import tariffs on Information Technology Agreement (ITA) products within Africa

	Africa's average ad valorem MFN tariff	Africa's max ad valorem MFN tariff
Aerials, broadcasting, telecommunications and related equipment	8	25
Computers	8	20
Electric audio or visual equipment	11	25
Industrial robots	3	20
Machinery, circuits, semiconductors, resistors, capacitors and similar equipment	5	25
Other	4	20
Average across all ITA products	6	25

Source: Futi and MacLeod (2021)

Table 2 uses WTO data⁹ on MFN tariffs, drawing from products within the ITA (Futi and MacLeod, 2021). It illustrates that the average tariff applied on ITA goods across Africa is 6% across all products, and the maximum is 25%. Import tariffs therefore remain a significant cost barrier to both e-commerce and the ICT sector in general across the continent.

5.1.3 Other issues

WTO and the ITA are silent on many issues that affect the development of the digital economy and are related to the governance of data. Data localisation, cross-border data flows, cybercrime and cyberterrorism, among others, are issues that are considered extremely sensitive by countries. Given the impact that regulations on these issues have on data, which constitute the main factor behind the digital divide, they are critical in defining the scope and shape of the digital economy and digital trade.

In contrast to standards on food safety (e.g. Codex Alimentarius), there are no internationally recognised global standards that define practices in relation to data governance. Countries adopt their respective standards in relation to, for example, how and where data must be stored, without a global reference on what constitutes safe and reasonable practice. This creates a situation where countries set requirements that considerably affect the expansion of digital trade by multiplying the number of places where data must be stored and, consequently, increasing the costs. In many cases, policies are incompatible between countries, even those belonging to the same regional economic community (Banga et al., 2021).

5.2 Continental strategies

⁹ Data was available for ECOWAS, EAC and SACU countries, as well as Angola, Comoros, Egypt, Madagascar, Mauritius, Morocco, Mozambique and the Seychelles.

5.2.1 AU Digital Transformation Strategy (2020-20230)

The AU's 'Digital Transformation Strategy for Africa (2020–2030)' (AU, 2020) aims to create an integrated and inclusive digital society and economy in Africa to improve quality of life, strengthen economic sectors and ensure diversification and development. It looks to harness digital technologies to transform African societies and economies, promote African integration, create jobs, reduce the digital divide and contribute to poverty reduction.

In terms of e-commerce, the strategy aims to build a secure 'Digital Single Market' in Africa by 2030 through the AfCFTA, harmonise policies and regulations to strengthen intra-African trade, enable the coherence of future digital policies and strategies at the regional and national levels, promote data security (cybercrime, consumer protection etc.), and promote policies that foster digital trade.

More specifically, it seeks to promote postal services, particularly their digitalisation, as these tend to be significant providers of financial accounts (thereby promoting financial inclusion), which can be used to engage in e-commerce. It also aims to reduce barriers to cross-border digital trade, develop a regulatory framework for e-commerce at the continental level, promote cross-border money transfer, improve the regulatory environment for financial and payment services, reduce unjustified geo-blocking,¹⁰ support the adoption of electronic payment systems (particularly in peri-urban and rural areas), promote e-commerce skills training and resolve postal issues such as package delivery and the lack of a physical address.

5.2.2. AU Convention on Cybersecurity and Personal Data Protection

In 2014, the AU adopted the 'Convention on Cyber Security and Personal Data Protection', a legal framework for cyber-security and personal data protection aimed at removing obstacles to e-commerce across the continent. It reiterates the right to engage in e-commerce, sets out a number of regulations to promote consumer privacy, cybersecurity and personal data protection and establishes the legal right to use electronic transactions, signatures and contracts (as well as additional related issues) and regulations aimed at combating cybercrime. However, by 2020 only 14 (out of 55) AU member countries had signed the convention, of which only eight have ratified it (AU, 2020). This means that there is a significant gap and a lack of harmonisation in securing cybersecurity and personal data protection rights across the continent.

¹⁰ The practice of limiting goods for sale at a given price to specific geographic regions, a form of regional price discrimination.

5.2.3. AU (Draft) 'Africa E-commerce Strategy' (2021)

The AU is currently working on a draft e-commerce strategy, the 'Africa E-commerce Strategy' (AU, 2021). This positions the AfCFTA as the nexus of African international e-commerce trade. The draft states that e-commerce in Africa will be a critical growth component. The strategy emphasises the importance of e-commerce for African firms to better position themselves in value chains, market their products and create cross-border business partnerships. It sees the success of mobile money platforms across the continent as a significant enabler of e-commerce, particularly if these platforms become increasingly inter-connected across borders. It also states that e-commerce can act as a critical 'lubricant' to international trade, bridging demand and supply at the continental level. The strategy also illustrates the socio-economic benefits of e-commerce through improved digital literacy, developing the export capabilities of productive sector firms and bridging the rural–urban divide, e.g. helping micro, small and medium enterprises (MSMEs) in rural areas connect to larger markets. Finally, it states that, while there has been a boost to the growth of e-commerce and digital trade (in part due to the Covid-19 pandemic), e-commerce regulations are still in their infancy and therefore present a relatively clean slate, making harmonisation between countries a simpler task.

The draft e-commerce strategy also notes several issues that need to be addressed. The first is what it defines as 'digital-fog': i.e. where policy-makers do not have a clear grasp of the nature of e-commerce, its opportunities and risks, particularly when it comes to formulating policies to enable safe and effective international e-commerce trade. It also notes that there is a potential risk of funnelling trade towards those countries that currently have better internet infrastructure, productive capabilities and well-established trade relationships. This would leave behind a number of countries which would not be able to compete, hence some thought would need to be given to creating a 'baseline' state of digital readiness to ensure that these countries have some degree of competitiveness. The strategy does not point out that there may also be a need to ensure that these countries have productive capabilities in place, otherwise there is a risk of having a digital infrastructure but no products (either goods or services) that could be exported through e-commerce. The strategy also sees national interests (variances in development levels, etc.) as a potential binding constraint to international alignment. It states that there are certain areas of the e-commerce ecosystem, such as logistics (particularly cross-border logistics), which present significant trade challenges for e-commerce firms. This means that smaller e-commerce firms may not be able to physically access markets across the continent, and may be limited to sales in their local areas. This is particularly challenging in terms of cross-border returns where regulations to ensure the efficient cross-border return of products (e.g. defective goods) is not well-developed, which could be a significant barrier to cross-border e-commerce.

Finally, the strategy identifies areas where AfCFTA negotiations will be important to foster e-commerce, such as digital taxation, data governance (data protection and cross-border flows of personal data) and customs duties on electronic transmissions. The strategy identifies three technical components where harmonisation between African countries should be prioritised to create a single African e-commerce market. The first is trade

facilitation through harmonised customs rules and procedures aimed at ensuring predictability of rapid clearance of B2C orders and ensure timely delivery of goods across countries. The second is the facilitation of cross-border payments through a pan-African settlement system, which would allow cross-border payments through mobile money platforms, banks etc. This would reduce dependence on cash and eventually eliminate issues arising from cross-border cash transfers. Finally, the draft identifies the need for a harmonisation of cyberlaws to promote firms' confidence and ensure predictable operations across the African marketplace through the availability of clear (and common) legal recourse mechanisms.

5.3 Regional strategies

5.3.1 COMESA DFTA

The Common Market for Eastern and Southern Africa (COMESA), which covers 21 African countries, announced its 'Digital Free Trade Area' initiative in November 2017. Consisting of several digital instruments to support trade in the COMESA region, it aims to include tools such as an electronic certificate of origin and mobile platforms for cross-border trade. It is based on three platforms. E-regulation ensures that regulatory environments support electronic trading and promote government digitalisation. E-logistics aims to digitalise trade documentation and finance. E-trade looks at electronic payments, supports regional clearing and settlement and promotes e-commerce platforms and mobile applications for small firms (TRALAC, 2019).

Progress on the DFTA has been steady. In 2020, 15 COMESA members announced that they were ready to trail the COMESA electronic certificate of origin (Eco) System, pushed by the need to reduce restrictions to trade aggravated by the Covid-19 pandemic. In 2021, 18 COMESA members adhered to the COMESA Online Trade Portal, which allows member states to share information on the availability of products and assess demand and supply opportunities.

5.3.2. SADC 'e-commerce strategic framework'

The Southern African Development Community (SADC) is a group of 16 African countries working to promote development, economic growth, peace and stability and reduce poverty across southern Africa. In 2010, it created an ICT development strategy called the e-SADC Strategic Framework, which aims to facilitate the use of ICT for social and economic development across the bloc (SADC, 2010). The strategic framework is effectively a declaration on ICT policy and does not currently seem to have concrete initiatives built around it (SADC, 2021).

5.3.3. ECOWAS 'Digital ECOWAS' GSMA report

While not a regional strategy per se, the 2019 GSMA report (GSMA, 2019) provides several recommendations for the Economic Community of West

African States (ECOWAS). It states that internet services need to be expanded across the ECOWAS region by providing greater incentives to internet providers to increase their coverage (including greater coverage in rural areas). It also states that taxes should not be imposed on telecommunications, that local content should be promoted and that digital skills should be promoted across the community. In 2021, ECOWAS was in the process of developing a comprehensive regional e-commerce strategy with the support of UNCTAD.

5.3.4. 'Single Digital Market in East Africa' report

In 2018 the World Bank published a report in support of the 'East Africa Single Digital Market' initiative with the aim of creating an integrated, dynamic and innovative digital hub throughout the East African Community (EAC) region. The report highlights three key ideas. It aims for a single connectivity market by removing barriers to regional telecommunications and infrastructure, eliminating price differentials between countries on digital infrastructure and connectivity costs and increasing internet coverage. It looks to build a single data market by building a secure data storage and exchange network, support the development of local data infrastructure and promote data-driven services in the region. Finally, it proposes a single online market which would allow businesses, governments and consumers to access digital private and public services, and enable e-commerce transactions and seamless access to digital content and data from anywhere within the region. However, at this stage this is a proposed project and has not been implemented (TRALAC, 2019).

5.4. National-level bilateral agreements

There has been only one concrete bilateral trade agreement (or discussion) between African and non-African countries which includes provisions for e-commerce, the US–Morocco trade agreement of 2006 (Banga et al., 2021). This recognises the importance of e-commerce, the removal of customs duties (and other fees) associated with the import and export of digital products through electronic transmission and non-discrimination (e.g. tax) of digital products produced in each other's territories (USTR, 2021). The proposed FTA has a chapter on digital trade in goods and services and cross-border data flows (Ministry of Industrialization and Trade, 2020), although negotiations have since stalled.

5.5. Lessons from existing South–South trade agreements

Existing trade agreements could be a useful comparison basis for AfCFTA e-commerce negotiators. Recent joint work by ODI and UNECA (Banga et al., 2021) has identified several findings based on an evaluation of 345 preferential trading areas (PTAs), 52% of which include digital trade provisions. However, only 32% of South–South PTAs have some provisions for digital trade.

The study finds that, in terms of data protection data privacy and data flows, 23% of South–South PTAs include provisions for data protection (of which 2% are binding) dealing with personal data and data privacy issues. Provisions for free cross-border data flows are included in 12%, and 8% include provisions which ban or limit states' requirements to locally store or process data. The study suggests that AfCFTA negotiations could provide a common framework for data flow governance, building on existing approaches in SADC and ECOWAS to create a large enough marketplace where investment in data infrastructure (e.g. data centres) becomes commercially sustainable. Given the lack of secure data centres across the continent, this would be a crucial agreement area required to boost continental e-commerce. Similarly, existing regional e-commerce initiatives (as discussed above) could provide the basis for a harmonised set of regulations for data privacy and protection, for the benefit of producers, retailers and consumers. Given limited regulations at the national level, this process would not (theoretically) be slowed down by the harmonisation of existing regulations. The study suggests the creation of regional DPAs which would monitor and enforce data privacy/protection regulations, reducing the need for national DPAs.

The report also looks at electronic data facilitation, and finds that 23% of South–South PTAs recognise the importance of e-commerce, and 21% include provisions on electronic authentication, certificates and signatures. However, only 3% have made hard commitments on these issues. It also finds that 20% of South–South PTAs include provisions for SMEs, and 16% on paperless trading. It therefore suggests that one AfCFTA priority should be the creation of a single common digital certificate of origin (CoO) system, as ECOWAS is attempting.

Looking at e-commerce taxation, the report finds that 85% of South–South PTAs do not have provisions to ban customs duties on digital trade, and only 8% provide provisions for the non-discrimination (e.g. applying National Treatment rules) of foreign e-commerce actors in the country. Hence an AfCFTA priority should be discussion of removing custom duties from digital trade (which would also enable African countries to join the ITA) and ensuring non-discrimination of foreign e-commerce entities within national territories.

A general finding of the study is that South–South FTA provisions on e-commerce are far less likely to be legally binding and enforceable. Rather, such countries appear to more frequently use 'soft' e-commerce provisions to articulate common policy aspirations and best endeavours, and to consolidate positions regionally ahead of multilateral negotiations on e-commerce issues, including at the WTO.

6 Case studies

This section explores the e-commerce landscape in four African countries, assessing their e-commerce readiness/attractiveness and challenges. These countries are among the top e-commerce markets in Africa.

6.1 South Africa

South Africa is one of the leading digital trade markets in Africa. In 2019, it had the highest number of online marketplaces, representing 17% of the continent's total (ITC, 2021). This is in line with the UNCTAD 2020 B2C indicator, which suggests that the country leads the region in the number of secure internet servers per million people, a proxy for online shops located within a country. Some of the largest global digital platforms have used the South African market as an entry point to the continent, including Netflix, which launched operations in South Africa in 2016, and Spotify, which did so in 2018 (World Bank, 2019a). The country was ranked second (after Mauritius) among African countries (and 73rd worldwide) in the UNCTAD 2020 B2C e-commerce index. There are several reasons for South Africa's success in digital trade, chief among which is high internet connectivity, as approximately seven in 10 people in the country use the internet (ITU, 2021). This is largely fuelled by the expansion of fibre-optic cables; South Africa possesses the most extensive fiber-optic backbone infrastructure on the continent, with around 200,000 kilometres deployed (World Bank, 2019a). Despite network coverage, the country is increasingly facing a digital divide based on affordability. According to the Competition Commission of South Africa (2019), competition in the sector has not been sufficient to push prices down. More effort needs to be made to ensure that majority of the populace have access to affordable internet.

The country's large and sophisticated banking sector has also been vital for the growth of digital trade. Approximately 69% of South Africans (aged 15+) own a bank account, well above the sub-Saharan Africa average of 40% (UNCTAD, 2021b). This is particularly important as global e-commerce platforms such as eBay require sellers to have access to a regulated bank account in order to accept payments (ITC, 2015). Credit and debit cards are the preferred payment methods in South Africa, in addition to e-wallet services and electronic fund transfers (ITA, 2021). The mainstreaming of the upgraded payment card security protocol 3D Secure 2.0 is expected to attract new online shoppers thanks to improved transaction security and user experience (World Bank, 2019a). It is however worth noting that, although mobile money has become ubiquitous in some African countries,

uptake in South Africa is minimal with only 19% of South Africans (aged 15 years and over) having a mobile money account. This is largely because of the legal framework, which requires only locally-registered banks to issue e-money which is considered to be a form of deposit-taking, while for non-banking institutions there is a requirement to offer their services jointly with a bank (ibid.).

Trust, privacy and security concerns are additional factors affecting digital trade adoption. Consumer protection and electronic authentication are covered under the Electronic Communications and Transactions Act of 2002, the main legislation regulating digital trade in South Africa. The Protection of Personal Information Act of 2013 provides strong privacy protection. With regard to taxation, foreign suppliers of digital trade services such as music, e-books and internet games are required to register as VAT vendors and account for output tax if their turnover in South Africa meets the threshold of 1 million rand, as per the amended VAT Act of 2014 (Banga et al., 2021).

6.2. Nigeria

Nigeria is Africa's largest B2C digital trade market, both in terms of the number of shoppers and the revenue generated (UNCTAD, 2018). The country's large population of around 197 million provides a substantial market for online businesses. Its major digital trade retailers have a customer base of over 1 million and receive an average of 300,000 unique visits a day (World Bank, 2019b). In 2019, e-commerce turnover amounted to \$7 billion, around a third of the African total (Statista, 2021).

The country's vibrant tech sector has fostered innovation around digital trade. Data from GSMA (2019) suggests that Nigeria has the highest number of tech hubs in the region, while research by Google (2018) shows that marketplace applications are the most popular tech entrepreneurship, with SMEs increasingly using these platforms to sell their products. World Bank (2019b) indicates that 76% of digital private sector platforms¹¹ in Nigeria are home-grown. An example is Konga, one of the most prominent digital trade platforms in the country. Government incentives have also had a hand in the expansion of the digital trade sector. In 2017, the Federal Executive Council approved the inclusion of new industries such as technology companies in software and digital trade in the pioneer status list to encourage and attract investment into these sectors. Pioneer status includes incentives such as a three-year tax holiday, with the possibility of extension by one or two additional years and capital allowances. A Nigeria Start-up Bill is currently under development to further progress regulations for a conducive tech ecosystem.

¹¹ Private sector platforms can be classified into FinTech, e-payment channels, social media or e-commerce, all of which are accessed through digital channels such as smartphones and laptops.

In order to address the challenge of poor connectivity, the Nigerian Postal Service (NIPOST) adopted *what3words*, an innovative global addressing system (Adepetun, 2017).¹² Courier services have become more efficient, with average delivery times of two days for express mail, 3.6 days for letters and 4.4 days for parcels (UPU, 2018). In 2019, Nigeria's UPU score was 83 compared to the African average of 21, putting it among the 25 highest in the world (UNCTAD, 2021b).

Slow internet speeds coupled with high costs constrain the growth of e-commerce in Nigeria (Ramachandran et al., 2019). The quality of internet in the country is low and service unreliable due to under-development of the digital infrastructure; only 38,000km of fibre-optic cable have been deployed, yet the country needs about 120,000km for effective broadband coverage (Osuagwu and Uzor, 2018). Nigeria uses only 10–20% of the total bandwidth from international cables, and many consumers cannot get broadband connection installed (Economist Intelligence Unit, 2016). Thus, internet penetration in the country is correlated with growth in mobile data users rather than broadband. Just over 20% of Nigerians own a smartphone, 44.84% a feature phone and 32.16% a basic phone. Men are more likely to own a smartphone than women (Gillwald et al., 2018).

Nigeria's Data Protection Bill 2020, modelled after the GDPR and Convention 108 principles, is awaiting presidential assent to come into law. There is a data localisation act and cybercrime law geared towards prohibiting and preventing fraud in electronic commerce, protecting e-business transactions, company copyrights, domain names and other electronic signatures in relation to electronic transactions in Nigeria. The country's 2020 Companies Income Tax (Significant Economic Presence) Order, which complements the 2019 Finance Act, sets out the taxation conditions for non-resident companies that provide digital service (PwC, 2020). This is a break from the past, where platform businesses not registered in Nigeria, even if their products and services could be accessed in the country, were not liable to taxes.

6.3. Kenya

The country has one of the most vibrant e-commerce ecosystems on the continent. Approximately 9% of Kenyans are regular e-commerce users, with the number growing over time. In 2017, there were estimated to be some 21 million online shoppers across Africa, with Kenya ranking third, behind Nigeria and South Africa, with between 2.6 million and 3.3 million online shoppers (World Bank, 2019c). A joint 2016 National ICT Survey between the Communications Authority of Kenya and the Kenya National Bureau of Statistics (KNBS) established that 39% of private enterprises are

¹² Many streets in Nigeria are unnamed while house numbers for the streets that are named could be inconsistent or non-existent. What3words uses a three-word address system to describe where one lives.

engaged in e-commerce (CA, 2021). Due to the strategic importance of the sector, digital business (which covers digital trade) is one of the five pillars of the country's Digital Economy Strategy.

The growth of digital trade in Kenya can be attributed to improved internet connectivity, coupled with access to mobile money platforms such as MPESA. Investment in the National Optic Fiber Backbone Infrastructure (NOFBI) across all 47 counties has enhanced internet connectivity (Republic of Kenya, 2019), laying a strong foundation for e-commerce development. Private sector investment in digital infrastructure has also spurred the growth of both fixed and mobile broadband in the country, which account for almost half of the total number of active data/internet subscribers (ibid.). Competition between the main submarine cables and increased network capacity¹³ has enabled mobile operators and internet service providers to offer broadband services to retail customers at significantly lower prices and higher speeds. Kenya has the second-fastest internet speed in Africa (World Bank, 2019c).

The widespread uptake of mobile money services has increased financial inclusion for the unbanked and promoted digital transactions. A report by Jumia (2019), one of the largest e-commerce platforms in Kenya, posits that, in 2018, 70% of all transactions made on the platform were through mobile money, and 30% through other payment methods including cash on delivery and card payments. Nonetheless, cross-border mobile transactions even within the EAC have not been as successful, particularly due to varying regulation of the sector among different countries. For instance, Kenya allows for interoperability – the ability to make payments through different mobile networks – while Rwanda does not.

In terms of the legal framework for digital trade, the Kenya Information and Communications Act of 2009 (amended in 2013), which governs electronic transactions, encompasses e-authentication. The Consumer Protection Act of 2012 provides for a settlement mechanism to resolve disputes arising from cross-border digital trade. The Data Protection Act of 2019 establishes data rights, and regulates the processing of personal data and cross-border flows of data is modelled along the lines of the EU GDPR.. The Kenya Finance Bill of 2020 introduced a Digital Services Tax (DST) on income from services provided through the digital marketplace at the rate of 1.5% on the gross transaction value (KRA, 2020).

6.4. Ghana

¹³ Kenya is connected to the global internet infrastructure by four submarine cables, with total bandwidth capacity growing nearly 200% between 2015 and 2018 (World Bank, 2019c).

Ghana has made significant strides towards creating an enabling environment for digital trade. In 2017, the government launched the National Digital Property Addressing System to provide every Ghanaian with a unique permanent digital address linked to postcodes (UNCTAD, 2020). The government also provides training and support to increase the online presence of Ghanaian products and services, including initiatives such as Ghana Online Mall, Digital Marketing and Made in Ghana Mall. The country ranks third in Africa in private digital platforms, after Nigeria and South Africa. Out of 72 private digital platforms operating in the country, 42% are developed locally (World Bank, 2019).

With regard to digital infrastructure, internet penetration in Ghana stood at 53% in 2019 (ITU, 2021). This is attributable to the penetration of mobile internet supported by the rapid growth of 3G services, largely driven by value-added mobile solutions and applications provided by mobile operators (World Bank, 2020). In 2019, 3G coverage accounted for 60% of total connections, and it is estimated that 3G and 4G will account for nearly 95% of total connections by 2025 (GSMA, 2020). Although broadband penetration has been slow, the government plans to launch five submarine fibre-optic cables, which will bolster high-speed internet services (ibid.). There is however a need to expand the digital infrastructure beyond urban and commercial areas.

Widespread mobile phone ownership and network coverage has facilitated adoption of mobile money. This is supported by an enabling regulatory environment. Ghana's 2015 E-money Issuers guidelines stipulate that mobile money accounts would be included in the country's deposit protection scheme, thus making it safer and easier for excluded customers to open an account (CGAP, 2018). The government recently mandated mobile money interoperability, which allows for the seamless movement of funds between mobile money, bank and E-Zwich accounts. However, cash is still the preferred mode of payment, in part due to the high cost of digital payments, which is often passed on to users, and mistrust of digital payments (BTCA, 2017).

The Electronic Transaction Act of 2008 has provisions on electronic authentication and a dispute settlement mechanism for disputes arising from cross-border digital trade. The Data Protection Act established the Data Protection Commission (DPC), with a mandate to protect the privacy of individual and personal data by regulating the processing of personal information. In late 2018, the government established a Cyber Security Centre and is developing a cyber security strategy and capacity to address the challenge of cybercrime.

7 Key implications for the AfCFTA

Africa's digital trade market is in its infancy, yet there are a number of bright spots and growth is more rapid than in other regions. As tech markets elsewhere in the world mature and saturate, investor attention is already turning to Africa as a growth frontier. There is a strong case for strategic direction to ensure that, as it advances, Africa's digital trade landscape contributes to growth and development. In recent years, this strategic direction has emerged in the vision of the AU Digital Transformation Strategy 2020–30, in sub-regional policies such as the COMESA Digital Free Trade Area, and in national initiatives like the Nigeria Startup Bill. The AU Digital Transformation Strategy includes the goal of creating a digital single market on the continent and identifies the AfCFTA as a valuable tool for achieving this. A mandate for exactly that has now been established with the decision of the AU Assembly to incorporate a digital trade protocol within the AfCFTA. As this paper has shown, there is a breadth of issues negotiators may consider under an AfCFTA digital trade protocol (Table 3). Important and potentially transformative priorities will include trade facilitation measures to support digital trade in goods, measures to harmonise data governance across African countries, and e-commerce and digital taxation.

Table 3 Potential digital trade negotiating issues

	Issues covered	Examples
Data governance	Data protection, portability, security and privacy, including principles, frameworks or harmonisation of rules on personal data, company data, health data or public data; coordinated cybercrime laws, investigations and sharing; liability of intermediary service providers	GDPR, US–South Korea FTA, Comprehensive and Progressive Agreement for Trans-Pacific Partnership; USMCA

Data flows	Cross-border data flows and data localisation disciplines	US proposals at WTO
Electronic transactions	E-transaction laws, legal recognition of electronic signatures and contracts, delineation of jurisdiction in cross-border electronic transactions disputes	United Nations Commission on International Trade Law Model Law on E-commerce; US–Peru Trade Promotion Agreement
Digital trade taxation	Prohibitions on the imposition of customs duties on electronic transfers; de minimis thresholds and simplified customs regimes for promoting e-commerce parcel trade	WTO Moratorium on Customs Duties on Electronic Transmissions; USMCA ‘reciprocal’ de minimis levels provision
Trade facilitation	Electronic single windows, automated customs processes, online publication of customs documents	WTO Trade Facilitation Agreement
Liberalisation of goods trade	Liberalisation of capital goods and equipment	ITA and ITA II
Liberalisation of services trade	Commitments on services necessary to support e-commerce (telecommunications, computer services, electronic payments licences and delivery)	General Agreement on Trade in Services
Intellectual property rights	E-commerce-specific aspects of intellectual property, such as those related specifically to source code and algorithms and cyber theft of trade secrets	US proposals at WTO
Competition	Definitions of dominance and anti-competitiveness accounting for digital business models and the importance of data	Canada-Chile FTA
Consumer protection	Online consumer protection provisions, including returns, consumer safety and supplier liability	Costa Rica–Colombia FTA; Singapore–Australia FTA; Japan–Mongolia EPA;

Other	Open government data E-procurement provisions	USMCA; EU– Indonesia proposals
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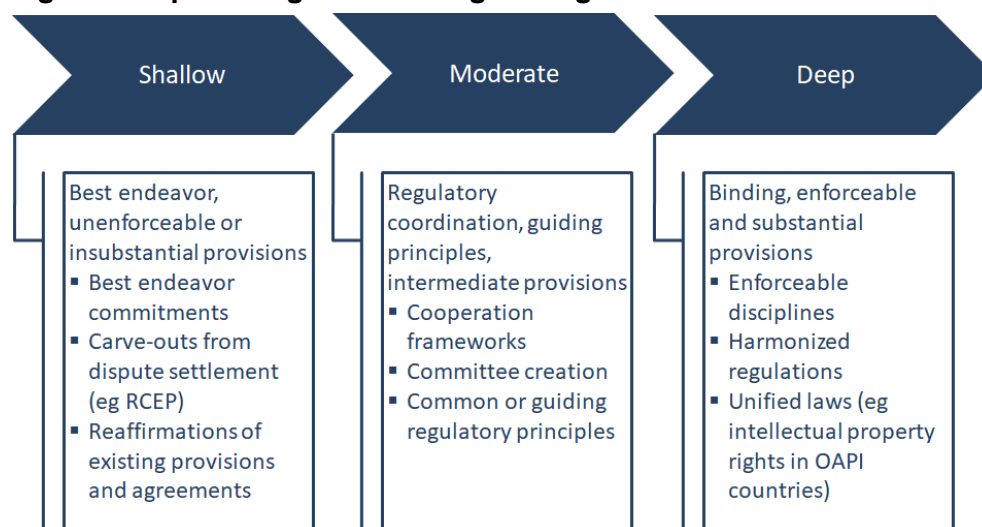
Source: Adapted from Banga et al. (2021)

What will be significant, too, is how deeply these issues are committed to in the AfCFTA. Here negotiators may select from options depending on their collective degree of ambition and confluence (or divergence) of policy goals. Negotiators may: (i) Err towards relatively shallow negotiating outcomes, such as best endeavour or unenforceable provisions, especially where the countries wish to preserve policy space

(ii) Commit to more moderate provisions as well, particularly when these relate to institution-building, such as cooperation frameworks.

(iii) Be willing to find agreement for deeper binding and substantial rules on priority issues

Figure 8 Depth of digital trade negotiating issues



Negotiators clearly have important decisions ahead of them. Moreover, there are issues that will be newer to many negotiators and, in some cases, relate to issues that have attracted considerable controversy in the context of multilateral WTO discussions on digital trade. It will be important to ensure that negotiators are equipped with a rich breadth of evidence-based analysis on the economic and legal implications of different negotiating decisions and are able to bridge knowledge and awareness gaps. Platforms to foster collaboration with the digital private sector can ensure that outcomes are aligned to the creation of a conducive landscape for digital trade growth and development. Beyond that, enforcement capacities must be accounted for to ensure that – particularly more ambitious –

negotiated outcomes translate into transformative change for the digital trade on the continent.

8 Conclusions and recommendations

There is no doubt that digital trade and e-commerce in Africa have made huge advances in the last few years. The lockdowns generated by the Covid-19 pandemic have contributed to the acceleration of an existing trend. The growth of the digital economy has been primarily domestic, which has contributed to the persistence of siloed development of the sector. Digital trade and e-commerce remain constrained by digital and non-digital barriers.

The AfCFTA presents an opportunity to address many of these constraints. The Phase I protocols on goods, services and rules will help in coordination between countries to address some of the barriers affecting digital trade, such as duties on small consignments, border procedures and the delivery of services under cross-border trade. The protocol on services should help bring down transport costs, contributing to the expansion of digital trade between countries. There are, of course, other areas that will require further coordination and cooperation, such as coordination between postal services.

Phase II protocols should also help address issues related to IPRs and competition, but the digital trade protocol is, of course, the most relevant. African countries should discuss relevant issues on data protection, security and privacy; cross-border data flows and data localisation disciplines, legal recognition of electronic signatures and contracts; and prohibitions on customs duties on electronic transfers, among a large list of issues. The challenge that countries face will be how to balance genuine concerns for the protection of the privacy of citizens with the need to streamline digital trade and e-commerce. Different approaches have been taken internationally to address this. However, the major challenges will be around reaching a common understanding across the continent when countries are adopting very different and, in some cases, opposing approaches to deal with these issues.

At the same time, African countries differ in their readiness to negotiate and implement these issues. Some African countries have not defined their digital domestic policies and/or established agencies to manage and implement them. This limits the meaningful participation of some countries in negotiations, and it may require the adoption of a variable geometry approach where members participate in the protocol once certain domestic conditions have been met. Even where they may participate and agree with the protocol, they may struggle to implement it given the lack of relevant authorities.

However, the AfCFTA could also work as a catalyst for the upgrading of members' policies and institutions. This could be extremely positive as it could facilitate enormously the implementation of the agreement as members will design their policies, relevant legislation and competent authorities based on the AfCFTA digital trade protocol.

Even when an agreement is reached, there are significant implementation challenges to be faced. A poorly or partially implemented agreement will be ineffective in achieving the objectives of the AfCFTA. This requires resources and the political commitment of all member states. Development partners should work closely in providing the funds and technical capabilities to governments and the private sector necessary for implementation. This involves support to the domestication of the provisions, institutional development and complementary policies. Support should also aim to address the lack of information that operators face in relation to the relevant provisions of the AfCFTA and how they can benefit from them. Countries should work to define and clarify the mandates of the relevant regulatory authorities and draft the necessary legislation and policies to accommodate the provisions of the digital trade protocol.

The digital trade protocol constitutes a key instrument to facilitate e-commerce and the expansion of the digital economy across the continent. Although a necessary condition, it is far from sufficient. Governments should continue investing in the relevant communications and data hard and soft infrastructure, and they should also pay attention to the development of the relevant skills in the workforce to take advantage of the benefits of the digital economy. Only when these conditions are met will the benefits of the digital trade protocol of the AfCFTA materialise.

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