

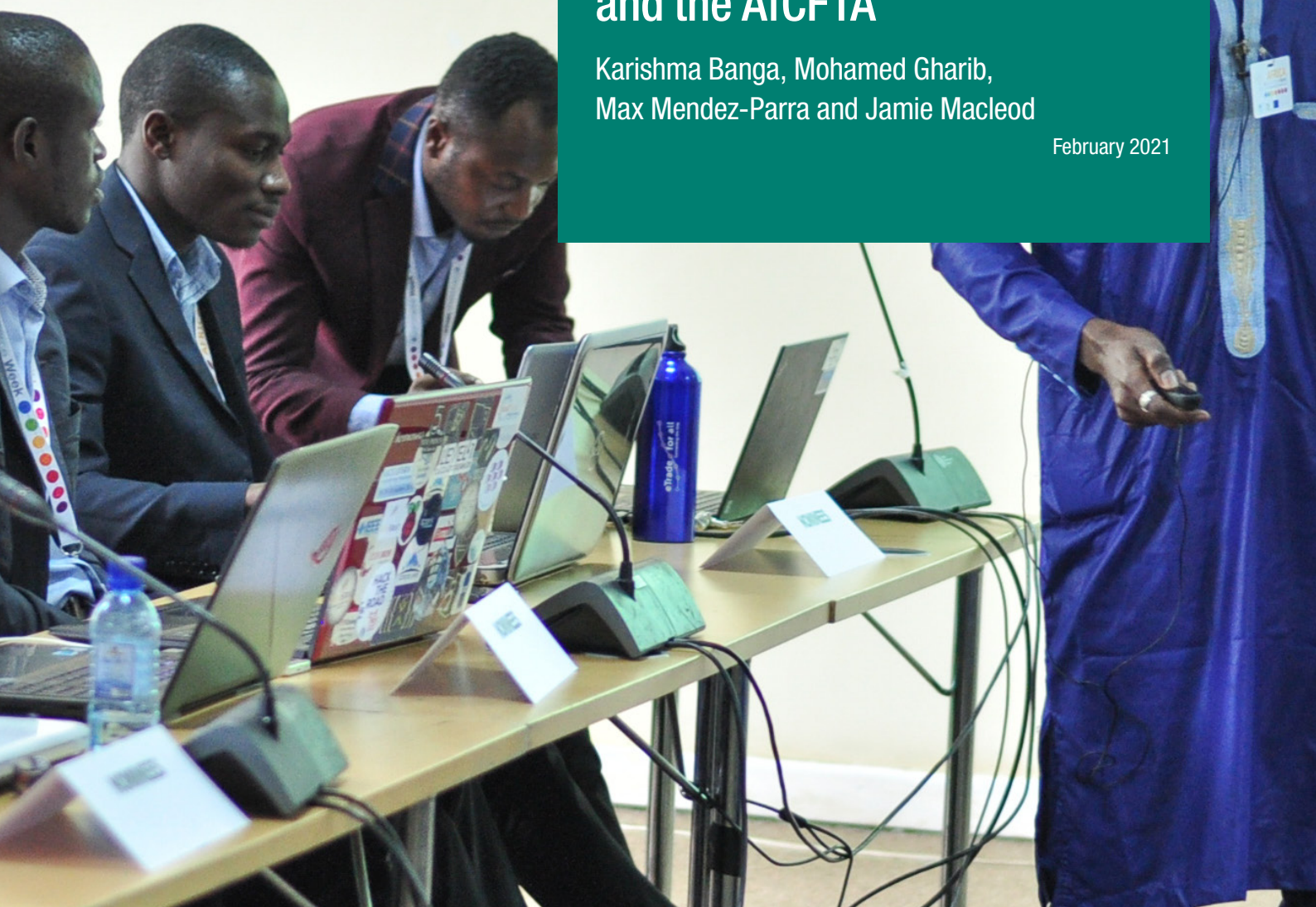
Report

E-commerce in preferential trade agreements

Implications for African firms and the AfCFTA

Karishma Banga, Mohamed Gharib,
Max Mendez-Parra and Jamie Macleod

February 2021





Readers are encouraged to reproduce material for their own publications, as long as they are not being sold commercially. ODI requests due acknowledgement and a copy of the publication. For online use, we ask readers to link to the original resource on the ODI website. The views presented in this paper are those of the author(s) and do not necessarily represent the views of ODI or our partners.

This work is licensed under CC BY-NC-ND 4.0.

Cover photo: Africa E-commerce Week event, Nairobi, Kenya. UNCTAD on Flickr.

Acknowledgements

We are grateful to participants at the E-commerce Expert Group Meeting and in particular for the feedback and suggestions provided by Yasmin Ismail, Alastair Tempest, Alban Odhiambo, James Howe, Shamel Azmeh, Aime Mangoumen Mbatkam, Nadira Bayat, Guy Futi, Tunde Fafunwa, Jean-Bertrand Azapmo, Stephen Karingi, Tsotetsi Makong, Ahmed Ndyeshobola and Nadia Hasham. Overall guidance for this project was provided by David Luke, with valued programmatic and administrative support from Batanai Chikwene, Hanna Getachew and Eden Lakew. The views expressed in this report are the sole responsibility of the authors and they do not represent the views of ODI, ATPC or FCDO. Any errors belong to the authors. For any queries related to the paper, please contact k.banga@odi.org.uk.

Contents

Acknowledgements	3
List of boxes, tables and figures	5
Acronyms	6
Executive summary	8
1 Introduction	10
2 Classification of e-commerce products	12
3 Landscape of e-commerce negotiations	14
3.1 Typology of e-commerce negotiating issues	14
3.2 Plurilateral and regional trade agreements	16
3.3 Scope of e-commerce issues at the WTO	18
4 Scope and methodology	19
5 African firms' response to Covid-19: spotlight on e-commerce	21
6 What do e-commerce proposals mean in practical terms for business in Africa?	24
6.1 Data governance	25
6.2 Digital business taxation	35
6.3 Cross-border e-commerce and trade facilitation	38
7 Conclusions and recommendations	46
References	49

List of boxes, tables and figures

Boxes

Box 1	Taxes on electronic transmissions/intangibles (including digital products)	37
Box 2	Regional efforts to facilitate cross-border e-commerce within Africa	45

Tables

Table 1	Categories of e-commerce trading	12
Table 2	Types of e-commerce issues addressed in trade negotiations	15
Table 3	Import tariffs on ITA products within Africa	17
Table 4	E-commerce proposals: a summary	25

Figures

Figure 1	Respondents, per country	20
Figure 2	Respondents, per industry	20
Figure 3	Share of firms, by size	20
Figure 4	Share of firms, by gender of owner	20
Figure 5	Share of firms reporting an increase in e-commerce during the Covid-19 pandemic	21
Figure 6	Percentage of firms by type of data storage	27
Figure 7	Top challenges constraining e-commerce	30
Figure 8	Respondents by type of e-commerce models (number of firms)	39
Figure 9	Respondents by end user of e-commerce	39
Figure 10	Top obstacles in conducting cross-border e-commerce	40
Figure 11	Regulations critical for boosting e-commerce with EAC countries	43

Acronyms

AfCFTA	African Continental Free Trade Area
AGOA	African Growth and Opportunity Act
API	active pharmaceutical ingredient
AUDTS	African Union Digital Transformation Strategy
B2B	business-to-business
B2C	business-to-consumer
B2G	business-to-government
C2C	consumer-to-consumer
CII	critical information infrastructure
COMESA	Common Market for Eastern and Southern Africa
CPTPP	Comprehensive and Progressive Agreement for Trans-Pacific Partnership
DDA	Doha Development Agenda
DFTA	Digital Free Trade Area
EAC	East African Community
ECOWAS	Economic Community of West African States
ET	electronically traded
EU	European Union
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GDPR	General Data Protection Regulation
GST	Goods and Service Tax
IP	intellectual property
ITA	Information Technology Agreement
ITC	International Trade Centre
ITU	International Telecommunication Union
JSI	Joint Statement Initiative
LDC	least developed country
MFN	most-favoured nation
NAMA	non-agricultural market access
OECD	Organisation for Economic Co-operation and Development
OIDAR	online information database access and retrieval
PAPSS	Pan-African Payment and Settlement System
PTA	preferential trade agreement
REC	Regional Economic Community

RCEP	Regional Comprehensive Economic Partnership
R&D	research and development
RTA	regional trade agreement
SACU	Southern African Customs Union
SADC	Southern African Development Community
SMEs	small and medium-sized enterprises
SPS	sanitary and phytosanitary
TBT	technical barriers to trade
TFA	Trade Facilitation Agreement
TISA	Trade in Services Agreement
TPP	Trans-Pacific Partnership
TRIPS	Trade-Related Aspects of Intellectual Property Rights
USMCA	United States–Mexico–Canada Agreement
UNCTAD	United Nations Conference on Trade and Development
WTO	World Trade Organization

Executive summary

At continent level, the African Continental Free Trade Area (AfCFTA) negotiations are scheduled to include a protocol on e-commerce under Phase III, presenting a unique opportunity for African countries to collectively establish common positions on e-commerce, harmonise digital economy regulations and leverage the benefits of e-commerce. In this paper, we examine developments in e-commerce negotiations, their implications for African businesses and the role of the AfCFTA. This is done using desk-based research, complemented with primary survey data from 31 African businesses predominantly across Kenya, Rwanda and Nigeria, and in-depth semi-structured telephone interviews with 15 firms. A majority of the firms in our survey are small enterprises.

Key messages

- E-commerce is now more important than ever. Out of 21 respondents, 13 firms report an increase in online sales through e-commerce since the onset of the Covid-19 pandemic. The average share of online sales since Covid-19 is 43%, up from 31% in 2019. Some firms report diversification into new markets through e-commerce during the pandemic.
- Commission fees charged by third-party e-commerce platforms is a key obstacle to selling on cross-border platforms. Eighteen out of 28 respondents report selling online through own e-commerce enabled websites. Only four firms are predominantly selling using third-party platforms, which tend to charge between 10% and 15% commission on product sales, in addition to transport and taxes. This pushes up the price of the product for African sellers, making their products uncompetitive.
- Consumer protection has emerged as an important obstacle to e-commerce; 60% of small firms in the sample rank low online trust as a primary obstacle constraining local e-commerce. Low online trust among consumers can stem from concerns around privacy of their data, cybercrime and lack of dispute resolution mechanisms. Younger populations are using e-commerce platforms more than older populations and have higher online trust but low purchasing power.
- On data collection and storage, our survey revealed that out of 31 African firms, 29 are collecting online sales data, with 61% of respondents storing their data on the cloud and 38% on local data servers within their country. Out of 31 firms, 22 report capacity to analyse and process sales data within the firm, five firms are not sure about their capacity, and four report having no capacity to analyse the data. Data localisation, privacy, source-code sharing and the free flow of data form contentious issues in e-commerce negotiations. If countries decide to put in place data localisation policies to meet specific development objectives, this needs to be accompanied by a strengthening of local data storage and data processing capacity. Interestingly, Johannesburg and Nairobi feature in the 15 least expensive markets for construction of data centres, which can drive significant investments in this sector.
- There is strong interest in selling on regional platforms, access to digital intelligence and intra-Regional Economic Community (REC) data sharing. But there is a need to build capacity for data sorting and analysing as well as awareness regarding terms and conditions of data sharing. There are concerns regarding data privacy and accuracy, particularly in the case of any

-
- regional data sharing platforms which are run by the government.
- The top five reported challenges to cross-border e-commerce are: (1) postal competence and delivery and transport costs; (2) issues of taxation, including foreign taxation, double taxation and VAT regulations; (3) lack of reliable payment solutions; (4) lack of awareness of national and regional rules; and (5) custom duties and custom procedures. Most goods are imported and exported through non-formal channels using a network of buses, which are cheaper and enable faster delivery of parcels than courier services. However, this informality comes at the cost of disjointed logistics, with firms only able to sell online in those towns where the bus companies have an office.
 - The African private sector ranks harmonised laws for taxation of cross-border e-commerce as the most important regulation needed to boost intra-regional e-commerce, followed by consumer protection regulations for building digital trust and electronic trade facilitation.
 - Lack of reliable online payment systems is constraining cross-border e-commerce. Some local payment providers, such as Equitel and Pespal, do not work on internationally hosted websites.
 - The requirement imposed by many markets in Africa for a local presence to provide services is also creating challenges. Jumia, for instance, has had to incorporate and set up offices in each country of operation. This is an expensive requirement, implying that only businesses with significant capital can scale e-commerce across the continent.
 - Important gender differences emerge in terms of e-commerce and data use. Among female-owned enterprises, 50% of respondents want intra-REC data sharing, while the other 50% either do not want intra-REC sharing or are not sure about it; among male-owned enterprises, 70% want intra-REC data sharing. All of the firms in our sample that are predominantly selling through third-party platforms are male-owned enterprises.
 - Before entering into negotiations on e-commerce, African countries may want to engage in deeper discussions around the classification of digital products, General Agreement on Trade in Services (GATS) modes of supply and the sectoral commitments and coverage of the WTO moratorium on electronic transmissions, including the revenue implications of digitally delivered products.
 - The AfCFTA can further provide a guiding framework for data protection, privacy policies and stronger enforcement, which can help build online consumer trust in African economies and facilitate business-to-consumer (B2C) e-commerce. Sector-specific policies on data may be explored within the AfCFTA if, for instance, regulators want to retain control of data pertaining to critical sectors. On digital business taxation, the AfCFTA can provide a framework for harmonising indirect taxes on digitally traded goods, to promote digital industrialisation, ensure a level playing field among local and foreign suppliers and to bolster revenue. Facilitating a regional dialogue in Africa to open opportunities to cross-border e-commerce trade is key.

1 Introduction

The regulatory environment for digital trade has been crucially shaped by preferential trade agreements (PTAs).¹ Of the 346 PTAs entered into force in the period 2000–2019, 184 contain provisions relevant to digital trade, with 108 PTAs having specific e-commerce provisions and 78 having dedicated e-commerce chapters (Burri and Polanco, 2020). PTAs with digital trade provisions accounted for 61% of all such agreements concluded between 2010 and 2018 (*ibid.*), and two-thirds of World Trade Organization (WTO) members are now party to a PTA with e-commerce provision (Willemyns, 2020).

In its Work Programme on Electronic Commerce, the WTO defines e-commerce as ‘the production, distribution, marketing, sale or delivery of goods and services by electronic means’ (WTO, 1998). There currently exists no comprehensive agreement on digital trade at the WTO, but some aspects of digital trade have been covered under the WTO Information Technology Agreement (ITA) on tariffs and, since 1998, WTO members have also agreed to a moratorium on customs duties for electronic transactions.

E-commerce is also included in virtually all of the recent mega-regional trade agreements, including the recently concluded Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), the United States–Mexico–Canada Agreement (USMCA) and the Regional Comprehensive Economic Partnership (RCEP). Moreover, the United States (US) has announced its intention to include e-commerce rules in post-African Growth and Opportunity Act (AGOA) negotiations with African countries.

African countries have been less involved in e-commerce negotiations. Though a subset of 86 countries have signed a Joint Statement

Initiative to commence negotiations on trade-related aspects of e-commerce, only five African countries are involved (Cote d’Ivoire, Benin, Burkina Faso, Kenya and Nigeria). And only one African country is party to a PTA that includes provisions on e-commerce (the Morocco–US FTA).

This is set to change. At continental level, the AfCFTA negotiations are scheduled to include a protocol on e-commerce under Phase III, presenting a unique opportunity for African countries to collectively establish common positions on e-commerce, harmonise digital economy regulations and leverage the benefits of e-commerce.

With the overall aim of understanding how the AfCFTA can leverage e-commerce negotiations, this study first attempts to understand e-commerce development in existing PTAs under the areas of: (1) data governance (privacy, security, localisation, data portability, data regulation harmonisation across Africa); (2) digital business taxation; and (3) cross border e-commerce trade facilitation (electronic trade, paperless trade, single windows, parcel delivery). It then examines implications of these proposals for the African private sector by conducting primary data analysis through a survey of 31 companies in Africa – predominantly across Kenya, Rwanda and Nigeria – complemented with 15 in-depth, semi-structured interviews.

In what follows, we provide a summary of developments in e-commerce negotiations and their implications for African businesses. Chapter 2 lays up-front some of the foundational issues of definitions and classifications in e-commerce negotiations. Chapter 3 presents an overview of the landscape of e-commerce negotiations occurring at different levels.

1 PTAs here are taken to include bilateral, regional and multilateral trade agreements or arrangements that confer preferences between participating countries.

Chapter 4 presents the scope and methodology of the study. Chapter 5 highlights the increasing importance of e-commerce as a pathway to mitigate losses due to Covid-19 for the African private sector. Chapter 6 presents key

e-commerce proposals being advanced, their implications for African firms and how these issues can be addressed in the AfCFTA. Chapter 7 provides concluding recommendations.

2 Classification of e-commerce products

Table 1 shows the different categories of e-commerce and the agents involved across these categories. Four committees within the WTO deal with e-commerce related issues: the Council for Trade in Goods, the Council for Trade in Services, the Council for Trade-Related Aspects of Intellectual Property Rights (TRIPS) and the Committee for Trade and Development. A key outstanding issue in e-commerce negotiations is the classification of e-commerce products (both goods and services). Some e-commerce goods may be digitalised (e-books and video games) while others are tangible goods ordered electronically; there are also electronically traded services (cloud computing, software management, etc.) often protected by intellectual property (IP) rights. Since e-commerce emerged after the conclusion of the Uruguay Round in 1994, the WTO negotiations are silent on the subject, with issues emerging around the classification of e-commerce products within the existing WTO framework.

If the internet is simply treated as a delivery channel through which transactions for a given physical product are made between one WTO member and another, then electronically traded

(ET) goods such as software, e-books and video games will be treated as goods and will be covered by WTO rules as specified under the General Agreement on Tariffs and Trade (GATT) in 1994.

If these products are treated instead as ET services, then it brings into question the applicability of general GATS rules and specific commitments to e-delivery of services. Furthermore, if these products are classified as digital services, then there is an issue around applicability of different modes of supply. Should these services be classified as Mode 1 (cross-border trade) services or Mode 2 (consumption abroad)? If these services are classified as Mode 1, then any WTO member that has made commitments to open up a given service sector to Mode 1 delivery has agreed to open up that sector to digital trade in that service, subject to the limitations listed in its GATS schedule.

Mode 2 covers the provision of a service in the territory of one WTO member to a consumer in another WTO member. To the extent that venturing onto the internet to procure a service is considered ‘consumption abroad’, Mode 2 commitments are also of relevance

Table 1 Categories of e-commerce trading

Category	Agents involved	Description
Business-to business (B2B)	Sales between wholesalers, retailers, manufacturer, etc	Exchange of services, or information between businesses rather than between businesses and consumers
Business-to-consumer (B2C)	Firms sell products directly to consumers	Includes financial transaction or online sale between a business and consumers
Business-to-government (B2G)	Firms and the public sector	Use of internet for public procurement, licensing procedures, and other government-related operations
Consumer-to-consumer (C2C)	Consumers	Consumers selling products to other consumers; also involves use of second-hand or used products

Source: Compiled from WTO (2013).

(Wu, 2017). In addition, there is an issue around which sectoral commitments are more appropriate (audio-visual, value-addition or basic telecommunication under GATS), as well as the classification of new and emerging digital services (ibid.).

Furthermore, the GATS schedule covers commitments in a number of service sectors critical for enabling digital trade, including computer and related services and other relevant sectors such as banking and other financial services, postal and courier services, insurance services, distribution services, storage services, and so on. For such sectors, GATS commitments in Modes 3 and 4 are particularly relevant.²

Related to these issues is the rise of ‘Mode 5’ services, which are services embodied within a wide range of manufactured products traded globally (Cernat and Kutlina-Dimitrova, 2014). When these services are traded as part of products they are subject to duty rates applicable to the product, but when they are traded as a service, commitments made by countries under GATS (Mode 1) apply (Antimiani and Cernat, 2018). For instance, software services imported as part of industrial equipment are subject to duty rates applicable to the imported equipment, but software services imported via Mode 1 (i.e. online) can be imported without custom duties. United Nations Conference on Trade and Development (UNCTAD) (2019) brings forward the debate on ‘carrier’ versus ‘content’. Does the existing moratorium on custom duties on electronic transmissions cover the ‘carrier’ of the software or the software itself (i.e. just the carrier or the carrier’s content as well)? There has been a stalemate in the WTO on how ‘digital content’ should be treated. The US has been the primary advocate of treating digital content as goods and disciplining its trade under GATT, while the European Union (EU) has advocated for categorising electronic transmissions as services, to be disciplined under countries’ services commitments under GATS (WTO, 2003).

Another issue added to this debate is the inconsistency of the moratorium with the principle of ‘technological neutrality’. ‘Digital content’ is treated differently depending on the delivery technology (it is subjected to customs duties if it is delivered physically, but has no customs duties if delivered electronically). This puts the *physical* trade of these digitisable products at a disadvantage, which is against the principles of technological neutrality (UNCTAD, 2019).

These inconsistencies and their revenue implications have become even more important in the digital economy, with manufacturing becoming increasingly embedded within digital services (ibid.). A key principle of the African Union’s African Digital Transformation Strategy (AUDTS) (2020–2030) is to promote intra-African integration in digital trade, with a focus on the development of cross-border digital commerce. African countries may therefore want to engage in deeper discussions around the classification of digital products, GATS modes of supply and the sectoral commitments and coverage of the WTO moratorium on electronic transmissions, including the revenue implications of digitally delivered products. To avoid taking an explicit position on the ongoing debate on classification of e-commerce products, several regional trade agreements (RTAs) – particularly those with the US – include e-commerce rules under a separate chapter (Willemys, 2020). Others – such as the Chile–Thailand RTA, the Malaysia–Turkey RTA, and the China–Georgia RTA – include e-commerce provisions under other relevant chapters on goods and services. The CPTPP has a chapter on ‘electronic commerce’ and, while the USMCA largely follows agendas set by the CPTPP, it includes rules in a chapter on ‘digital trade’ that goes beyond issues on e-commerce to cover related aspects of digital and data (Digital Trade Tracker, n.d.).

2 Mode 3 commitments clarify whether a foreign service provider is allowed to establish a commercial presence in the territory to deliver such a service. Mode 4 commitments clarify whether an individual foreigner from a given WTO member may be temporarily present in the territory to supply such a service.

3 Landscape of e-commerce negotiations

Negotiations on a multilateral agreement or on rules for e-commerce have not yielded any consensus. Around 2016–2017, the US, the EU and Japan advocated intensely for text-based negotiations to formulate multilateral rules on e-commerce. At the time, a group of WTO developing countries and least developed countries (LDCs), led by India and the African Group, called for the negotiations to be focused on the unresolved Doha Development Agenda (DDA) issues and for continuing the discussions on e-commerce within the existing mandate of the 1998 Work Programme on Electronic Commerce. A third group of countries, the ‘Friends of E-commerce for Development’ (consisting of Argentina, Chile, Colombia, Costa Rica, Kenya, Mexico, Nigeria, Pakistan, Sri Lanka, Uruguay and China), advocated for more focused discussions around e-commerce, while prioritising developing countries’ issues. Since no consensus was reached on these issues, the digital trade agenda has been pushed forward largely through bilateral and regional trade agreements, while a subset of interested members in the WTO continue to pursue a plurilateral agreement on e-commerce. Critically, the norms that are established in these smaller groupings can strongly influence the evolution of future multilateral agreements. Section 3.1 discusses e-commerce provisions in plurilateral and regional agreements, while Section 3.2 discusses the scope of WTO e-commerce negotiations.

3.1 Typology of e-commerce negotiating issues

Negotiators considering e-commerce in the AfCFTA have two dimensions to consider: (1) how *broadly* they would like to address e-commerce; and (2) how *deeply* they would like to address e-commerce issues. In the case of former, it is important to recognise that when negotiators talk about e-commerce, they may be considering widely different issues. This is unlikely to be an accident, with definitional conceptualisations of ‘e-commerce’ reflecting offensive negotiating interests or defensive deflections away from sensitive areas. When African negotiators begin tackling e-commerce under the AfCFTA, they will need to decide what parts of the gamut of what can be considered ‘e-commerce’ are most relevant for their purposes. Moreover, some issues, such as requirements for the use of electronic customs processing, might be considered a part of the traditional topics (for example, ‘trade facilitation’). Eliminating tariffs on infrastructure equipment necessary for digital trade, as in the Information Technology Agreement, might be considered merely a conventional trade in goods issue. Other issues, such as data protection or third-party content liability laws, would seem wholly novel e-commerce issues. As a result, negotiators and policy-makers must also decide *where* they might like to speak on these issues – in the dedicated and upcoming AfCFTA E-Commerce Protocol, in other existing AfCFTA Protocols, or engaging on them in discussions. Table 2 summarises the types of e-commerce issues that can be addressed in trade negotiations.

Table 2 Types of e-commerce issues addressed in trade negotiations

Category	Issues covered	Examples
Specific e-commerce issues		
Data governance rules and regulations	<ul style="list-style-type: none"> Data protection, portability, security and privacy, including principles, frameworks or harmonisation of rules on personal data, company data, health data or public data Cross-border data flows and data localisation provisions Coordinated cybercrime laws, investigations and information sharing Third-party content liability laws 	<ul style="list-style-type: none"> EU GDPR and most EU FTA proposals; Costa Rica–Colombia FTA US–Korea FTA CPTPP; USMCA USMCA; US proposal in US–Kenya FTA
Electronic transactions	<ul style="list-style-type: none"> E-transaction laws, including legal recognition of electronic signatures and contracts and the delineation of jurisdiction in cross-border electronic transactions disputes 	<ul style="list-style-type: none"> UNCITRAL Model Law on E-commerce; US–Peru Trade Promotion Agreement
E-commerce taxation	<ul style="list-style-type: none"> Prohibitions on the imposition of customs duties on electronic transfers Principles, frameworks or the harmonisation of laws for the taxation of cross-border e-commerce, including online jurisdictional issues 	<ul style="list-style-type: none"> WTO Moratorium on Customs Duties on Electronic Transmissions OECD/G20 negotiations
Facilitation of e-commerce goods trade	<ul style="list-style-type: none"> De minimis thresholds and simplified customs regimes for promoting e-commerce parcel trade 	<ul style="list-style-type: none"> USMCA ‘reciprocal’ de minimis levels provision
General principles and coordination	<ul style="list-style-type: none"> Most-favoured nation and national treatment provisions for electronic and digital products and services Non-discrimination of digital goods and services Cooperation, transparency and coordination over the design, implementation and review of national e-commerce rules and regulations Capacity-building and resource pooling 	<ul style="list-style-type: none"> Singapore–Australia FTA US–Korea FTA; US–Singapore FTA Korea–Viet Nam FTA Many WTO proposals incorporating Aid for Trade on e-commerce (e.g. JOB/GC/116)
Issues that cut across conventional negotiating topics		
Trade in goods	<ul style="list-style-type: none"> Tariff elimination for goods necessary to support e-commerce (such as computers, telecommunications equipment and semiconductors) Digital trade facilitation for trade in goods, including e-logistics, paperless trading, single windows and electronic customs procedures Liberalisation of electronically traded ‘goods’ 	<ul style="list-style-type: none"> WTO Information Technology Agreement Costa Rica–Colombia FTA; China–Peru FTA; most recent Australia and New Zealand FTAs
Trade in services	<ul style="list-style-type: none"> Commitments on services necessary to support e-commerce (such as telecommunications, computer services, electronic payments and delivery) Liberalisation of electronically traded ‘services’ 	<ul style="list-style-type: none"> GATS (depending on interpretation of the classification of e-commerce; see section below)
Intellectual property rights	<ul style="list-style-type: none"> E-commerce specific aspects of intellectual property, such as source code and algorithms and cyber theft of trade secrets Technology transfer issues 	<ul style="list-style-type: none"> Recent US FTAs (e.g. on digital rights management and source code disclosure) US WTO proposals
Competition	<ul style="list-style-type: none"> Updated definitions of dominance and anti-competitiveness accounting for digital business models and the importance of data Online consumer protection provisions, including returns, consumer safety and supplier liability 	<ul style="list-style-type: none"> Costa Rica–Colombia FTA; Singapore–Australia FTA; Japan–Mongolia EPA; Korea–Vietnam FTA Proposals in US–Kenya FTA negotiations (third-party liability limitations)
Investment	<ul style="list-style-type: none"> E-commerce related investment issues 	<ul style="list-style-type: none"> US WTO proposals
Other	<ul style="list-style-type: none"> Open government data E-procurement provisions 	<ul style="list-style-type: none"> USMCA EU–Indonesia proposals

Note: GDPR, General Data Protection Regulation; FTA, free trade agreement; CPTPP, Comprehensive and Progressive Agreement for Trans-Pacific Partnership; USMCA, United States–Mexico–Canada Agreement; UNCITRAL, United Nations Commission on International Trade Law; WTO, World Trade Organization; GATS, General Agreement on Trade in Services; EPA, economic partnership agreement.

Source: ECA (forthcoming).

The depth of negotiations refers to how deep the commitments are. E-commerce provisions can range from basic cooperation, to common principles for regulations, to unified laws. At one end of the spectrum are recent RTAs that have taken an ambitious approach to e-commerce. An example is the amended Australia–Singapore Free Trade Agreement, with an e-commerce chapter addressing a wide range of issues, including data localisation and source-code sharing. At the other end of the spectrum are trade agreements that reaffirm the WTO moratorium on custom duties on electronic transfers and seek cooperation between regulatory authorities. In the middle are heterogeneous agreements with discussions on customs duties and non-discriminatory treatment to domestic regulatory frameworks, electronic signatures, consumer protection, data protection, paperless trading and unsolicited or undesired electronic messages.

3.2 Plurilateral and regional trade agreements

Out of 312 RTAs currently in force, 92 contain e-commerce-related provisions, but only 63 have a chapter solely dedicated to e-commerce, and these are largely those with the US (Willemys, 2020). Others – such as the Chile–Thailand RTA, the Malaysia–Turkey RTA and the China–Georgia RTA – include e-commerce provisions under other relevant chapters on goods and services. While the total number of RTAs incorporating e-commerce provisions remains limited, more than half of WTO members have signed such RTAs so far, including many developing countries (Grollier and Simon, 2020). But within these RTAs, Africa is the least represented region, with only six countries having adopted three RTAs – two of which make only broad reference to e-commerce (ibid.). In the EU–Eastern and Southern Africa States Interim EPA (2012), ICT policy, infrastructure and services are included in the development cooperation areas. In EU–Ghana

(2016), reference to e-commerce is limited to the parties endeavouring to facilitate the conclusion of a global EPA with West Africa, which should cover, *inter alia*, trade in services and electronic commerce.

Analysing 32 RTAs, Grollier and Simon (2020) note that 35% of the agreements have addressed the issues of non-discrimination of digital products. These mainly refer to the national treatment principle, committing parties in relatively firm terms (‘shall’) to grant treatment to digital products originating from abroad that is no less favourable than that granted to its own like digital products. The most significant RTA with an African country is the US–Morocco agreement, which has a standalone chapter on e-commerce (Willemys, 2020). A detailed article in this agreement commits parties to non-discriminatory treatment. Not a single RTA with a sub-Saharan African country includes a separate e-commerce chapter, while the two existing RTAs between the EU and sub-Saharan African countries only contain one e-commerce-related provision addressing privacy, which, as a policy objective, is already covered by GATS (ibid.).

In terms of plurilateral agreements, commitments on market access for technological products have been made by 53 countries under the ITA,³ which has lowered barriers for trade in much of the critical infrastructure equipment necessary for digital trade. Egypt, Mauritius, Morocco and the Seychelles are the only African signatories to this agreement.⁴ Across Africa, tariffs on the ITA products average 6%, but with notable tariff peaks reaching 20–25% on certain products in some countries (Table 3).

In addition, the WTO Trade Facilitation Agreement (TFA)⁵ includes commitments for WTO members to adopt and maintain procedures for electronic pre-arrival processing of documents; for electronic payment of customs duties, fees, and other charges; and for acceptance of electronic versions of supporting documentation required by customs authorities.

3 www.wto.org/english/tratop_e/inftec_e/inftec_e.htm.

4 The Seychelles joined at part of its accession to the WTO, rather than as an initial signatory.

5 www.wto.org/english/docs_e/legal_e/tfa-nov14_e.htm.

Table 3 Import tariffs on 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 sound 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

Notes: Data was available for Economic Community of West African States (ECOWAS), East African Community (EAC), and Southern African Customs Union (SACU) countries as well as Angola, the Comoros, Egypt, Madagascar, Mauritius, Morocco, Mozambique and the Seychelles. MFN, most favoured nation.

Source: WTO data on MFN tariffs, drawing from products within the Information Technology Agreement.

The CPTPP is arguably the most comprehensive plurilateral agreement with an e-commerce chapter. The Trans-Pacific Partnership (TPP) (also known as the Trans-Pacific Partnership Agreement) was a proposed trade agreement between Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, Vietnam and the US that was signed on 4 February 2016 but was not ratified as required and did not come into effect. After the US withdrew from TPP in 2017, the remaining countries negotiated the CPTPP, which incorporates most of the provisions of the TPP and which entered into force on 30 December 2018. It covers measures that can broadly be classified as facilitating trade (electronic authentication and electronic signatures and paperless trading, etc.), cross-border data flows, as well as the related issues of ensuring online consumer protection and data privacy. Another issue that the agreement tackles is the location of computing facilities.

Most recently, at the 3rd RCEP Summit in Bangkok on 4 November 2019, 15⁶ out of the 16 participating countries announced the conclusion of all 20 chapters of the RCEP Agreement, with Chapter 12 of the Agreement focused on e-commerce.⁷ The Agreement contains a chapter

with provisions on facilitating e-commerce trade and rules on consumer protection and personal information protection. However, the RCEP chapter on e-commerce is notably not subject to the dispute settlement mechanism of the Agreement, effectively rendering its content no more than an unenforceable 'best endeavour', but nevertheless establishing influential commonalities in perspectives.

Another plurilateral agreement is the Trade in Services Agreement, which focuses on the liberalisation of services – including ICT and telecommunication services – between 23 WTO members, although negotiations there have stalled since 2016.

The USMCA came into effect in July 2020. Modernising the 25-year-old NAFTA agreement, this new agreement between the US, Canada and Mexico introduced new regulations for e-commerce. In terms of cross-border trade, the USMCA prohibits custom duties on electronically transmitted products such as software, music, video games and so on, and imposes more stringent regulations to protect intellectual property. Most importantly for Canada and Mexico, the agreement raises the de minimis threshold (i.e. the minimum value of imported shipments that consumers can purchase

6 Australia, Brunei Darussalam, Cambodia, Indonesia, Japan, the Republic of Korea, the Lao People's Democratic Republic, Malaysia, Myanmar, New Zealand, the Philippines, Singapore, Thailand and Viet Nam.

7 This is with the exception of India, which announced its withdrawal from RCEP in 2019.

online without paying import duties and taxes), in an attempt to facilitate cross-border trade. It also limits the civil liability of online platforms for third-party content, a provision that US negotiators have been looking to incorporate into their bilateral negotiations with Kenya.

Other recent developments include the conclusion in January 2020 of negotiations on the Digital Economy Partnership Agreement between Chile, New Zealand and Singapore. This agreement has faced criticism for not addressing existing challenges and issues in TPP and CPTPP related to countering the dominance of large tech companies and for failing to close the digital trade divide between developing and developed countries (Kelsey, 2020). In August 2020, the Australia–Singapore Digital Economy Agreement⁸ was signed, which upgrades the digital trade arrangements between the two countries under the CPTPP and now includes rules on cross-border data transfers (including for financial firms), the removal of data localisation requirements, more protection for source code, and so on.

3.3 Scope of e-commerce issues at the WTO

Beyond the GATT 1994 itself, various multilateral agreements are of relevance to e-commerce issues (Wu, 2017). The Agreement on Technical Barriers to Trade (TBT) governs technical regulations and standards pertaining to governing telecommunications and broadband networks, interoperability and portability standards across carriers and networks, regulations on encryption and security, privacy regulations, data storage regulations, and so forth. Other agreements that are also of relevance include the Agreement on Customs Licensing, the Agreement on Import Licensing Procedure, and the Agreement on Sanitary and Phytosanitary (SPS) Measures (for electronic phytosanitary certification, for example). In addition, the legal disciplines and obligations found in the

TRIPS Agreement also impact digital trade, since e-commerce platforms and digital services trade often implicates IPRs (for example, usage rights defined through the copyright regime are implicated when music or audiovisual services are traded via the internet). Again, the TRIPS Agreement is technology-neutral and extends to IPRs embedded in digital form.

The African Group's position has been to not negotiate e-commerce rules at the WTO. Given the different levels of development and the digital divide, African trade ministers have argued that it would be premature for African countries to engage in multilateral rules on e-commerce (Kanth, 2017).

At the 11th WTO Ministerial Conference in Buenos Aires in 2017, 71 members signed a Joint Statement on E-commerce announcing their intent to 'initiate exploratory work together toward future WTO negotiations on trade-related aspects of electronic commerce' (WTO, 2017b). Coordinated by Australia, Japan and Singapore, this Joint Statement Initiative (JSI) included developed countries, economies in transition and developing countries, as well as two LDCs (Cambodia and Myanmar) (Garcia-Israel and Grollier, 2019). However, Nigeria was the only African country to sign the 2017 Joint Statement (WTO, 2017b). In Phase 2 of these discussions (ongoing since January 2019), the US joined about a dozen WTO members – including China, the EU, Japan, Singapore and Brazil – to submit proposals on e-commerce at the WTO. In June 2019, G20 leaders launched the 'Osaka Track' to formulate rules on trade-related aspects of e-commerce in the WTO. After the 2019 Joint Statement was released, Benin, Saudi Arabia, Kenya, Côte d'Ivoire, Cameroon, Philippines and Indonesia also joined the group, bringing its total membership to 86, including all developed countries, three LDCs (Benin, Lao PDR and Myanmar) and five WTO members from Africa as co-sponsors of the JSI (Benin, Nigeria, Côte d'Ivoire, Kenya and Cameroon) (Garcia-Israel and Grollier, 2019).

8 www.dfat.gov.au/trade/services-and-digital-trade/Pages/australia-and-singapore-digital-economy-agreement.

4 Scope and methodology

To understand how the private sector in Africa views current e-commerce proposals and potential implications of these proposals on African businesses, this study adopts the following methodology.

First, issues on e-commerce negotiations are divided into three sections: (1) data governance (privacy, security, localisation, data portability, harmonisation of data regulations across Africa); (2) digital business taxation; and (3) cross-border e-commerce trade facilitation (electronic trade, paperless trade, single windows, parcel delivery). For each area, we examine the proposals advanced by countries/country groups, the implications for the African private sector and the role of AfCFTA.

Analysis is presented using desk-based research, complemented with primary data collection – mainly from Kenya, Rwanda and Nigeria. All three countries have advanced on the digital landscape but are at different stages of digital development, which is useful for comparative analysis. For instance, Kenya, with its growing, tech-savvy ecosystem and advancements in digital payments, is classified as a ‘digital leader’ (Chakravorti and Chaturvedi, 2019). Rwanda has also been gaining digital momentum with the aim of transforming itself into a digital hub, with several notable initiatives that include Irembo (a government-to-citizen services e-portal), high mobile account usage, expanded 4G coverage across the country and improved digital skills (ibid.). Nigeria has a powerful entrepreneurial climate, with innovative ventures such as Jumia, Interswitch, Kobo360, and Andela as the outcomes. These ventures cut across education, fintech, agriculture, healthcare, logistics and travel. The country is also engaged in e-commerce negotiations at the multilateral level.

Africa is, of course, a broad continent with far greater variation in countries’ digital readiness than can be accounted for by the three above-mentioned countries used for the primary data collection. Nor can the number of interview responses be considered representative. The study is openly not comprehensive in scope but rather intended to provide a ‘dip-stick’ assessment. In doing so, it takes an (albeit small) step beyond the accumulating desk-based literature on the topic.

Data is collected through an online survey to solicit the views of the African private sector on issues related to e-commerce proposals. The questionnaire explores a range of issues related to e-commerce and company demographics, including:

- profile of companies (size, gender, age, industry, etc.);
- status of companies in terms of e-commerce engagement, type of e-commerce (B2B or B2C) or e-commerce model (marketplace, inventory, hybrid);
- major obstacles/challenges faced in selling and buying online;
- capacity to leverage and store data/regional data sharing;
- role of electronic trade facilitation in boosting e-commerce;
- percentage of sales conducted online in 2019 and 2020 to capture the effect of Covid-19;
- identification of ‘blind spots’ in e-commerce proposals.

In an initial stage, a pilot was conducted by administering the survey to, and conducting follow-up interviews with, five companies (including small and medium-sized enterprises (SMEs)) to test the validity of the questionnaire.

Figure 1 Respondents, per country

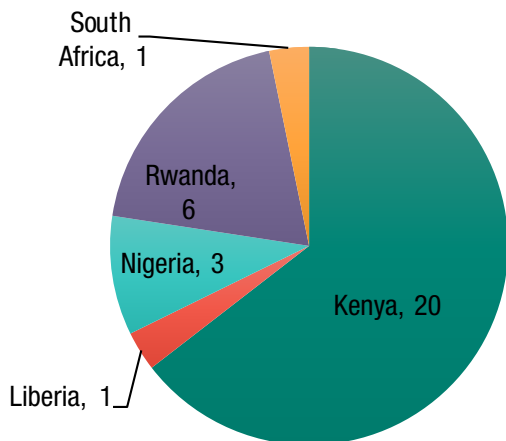


Figure 2 Respondents, per industry

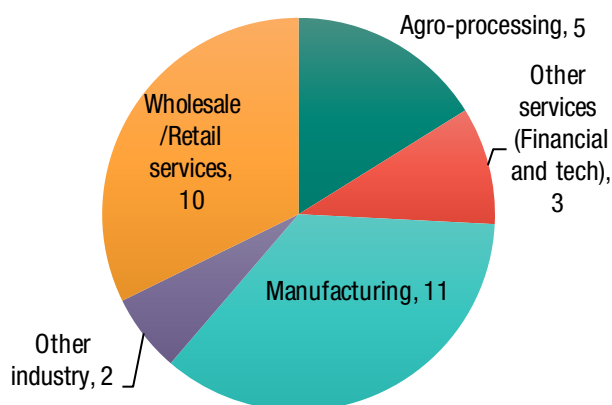


Figure 3 Share of firms, by size

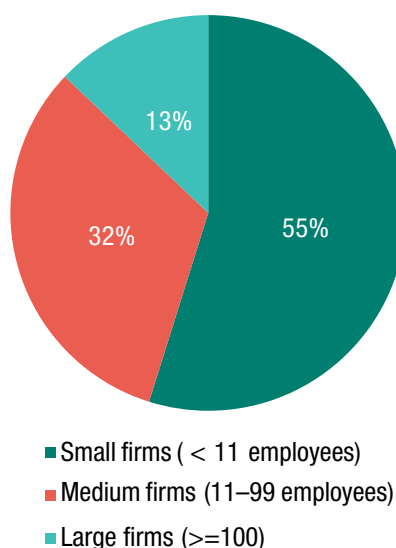
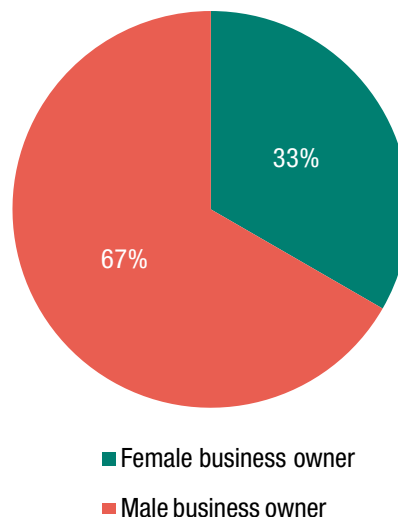


Figure 4 Share of firms, by gender of owner



Note: N = 31.

The revised questionnaire was then sent to 60 companies. Stratified sampling was used to sample firms across countries, industries and size. A total of 31 businesses responded,⁹ of which 24 are e-commerce companies. Follow-up telephone interviews were conducted with 15 companies for more detailed understanding of the key issues across different types and sizes of firms.

The distribution of respondents across countries and industries is shown in Figure 1 and Figure 2, respectively. Of the 31 firms, 29 report on number of employees. The survey includes four large firms (more than 100 employees), 10 medium-sized firms (11–99 employees)

and 15 small firms (fewer than 11 employees) (Figure 3). Findings from the survey are therefore skewed towards smaller firms, which make up almost 55% of our sample. The small firms in the sample are from the agro-processing sector, technology services providers and wholesale/retail services. As Figure 4 shows, 20 firms (67%) of the sample that reported on business ownership are male-owned enterprises, while 10 (33%) are female-owned. The average number of employees in female-owned business is 23, which is lower than the average number of employees in male-owned businesses (53).

⁹ The response rate was low due to research fatigue during Covid-19 and the sensitivity of the topic.

5 African firms' response to Covid-19: spotlight on e-commerce

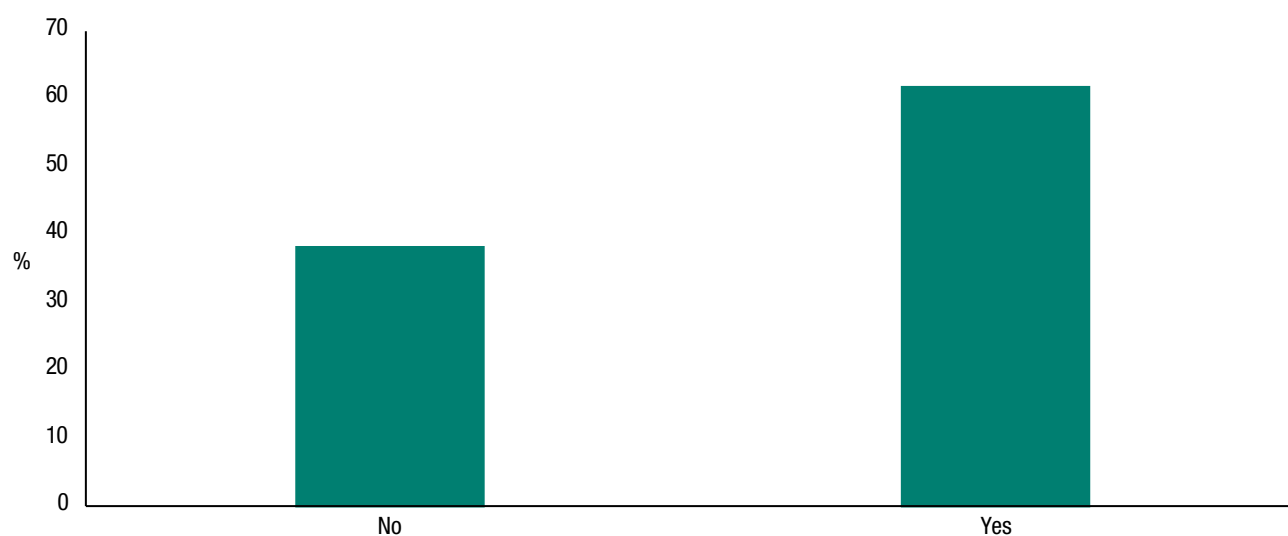
Emerging evidence suggests that the Covid-19 pandemic has directly accelerated e-commerce, with a spike in both B2B and B2C online sales, particularly in medical supplies, household essentials and food products (WTO, 2020a). Online marketplaces allow for remote purchases and delivery services that adhere to social distancing, with firms selling online through their own e-commerce-enabled websites or through third-party platforms. In addition to direct demand shocks, e-commerce has been indirectly affected by supply-side disruptions to physical retailers. For instance, it has emerged as a key pillar in African businesses' response to the pandemic across manufacturing, retail and other sectors. Using data from the World Bank's Impact of COVID Survey (World Bank, 2020) on 1,182 firms across four African countries

(Niger, Togo, Zambia and Zimbabwe), Banga and te Velde (2020) show that 266 firms (22.5%) of the sample report adopting a digital response to the pandemic (i.e. starting or increasing online business activities), mainly in the manufacturing and other services category.

The accelerating impact of Covid-19 on e-commerce in Africa has, however, revealed persisting weaknesses in the continent's digital economy that continue to frustrate e-commerce development. These include digital infrastructural deficiencies, weaknesses in postal services and capacities, cross-border trade costs and the limited update of electronic and digital payment systems (Futi and Macleod, 2020).

Our e-commerce survey reveals insights into how African firms are responding to Covid-19 through e-commerce. Out of 21 respondents,

Figure 5 Share of firms reporting an increase in e-commerce during the Covid-19 pandemic



Note: N = 21.

13 have witnessed an increase in online sales through e-commerce since the onset of the pandemic (Figure 5). The average share of online sales since Covid-19 in our sample is 43%, up from 31% in 2019. Interestingly, the average share of online sales in small firms has risen by 13 percentage points, from 49% in 2019 to 62%, during the pandemic. This aligns with a broader ECA outlook survey of 206 firms across Africa in June–July 2020, which found the setting-up of online platforms to be the top priority for companies in responding to the Covid-19 crisis (ECA, 2020).

Evidence suggests that African firms with a digital response to the pandemic are faring better than other firms in terms of adjustment of production lines, monthly sales and delivery of goods and services (Banga and te Velde, 2020). Respondents from the manufacturing and agro-processing sector in our survey also report increases in online sales during the pandemic, with some firms reporting diversification into new markets through e-commerce during Covid-19 and changes in consumer behaviour:

We are an organics manufacturer, selling up to 80% of our produce online, mostly to the local Kenyan market. During the Covid period, we sold 98% of our products online, indicating an increase of 18%. However, this went down after the lockdown was imposed (Agro-processing firm, Kenya).

We manufacture organic beauty products and currently sell through our own E-commerce website and through a third-party platform called Jipende Africa. We export to South Sudan, Middle East and Europe. Initially during the Covid lockdown, there was accelerated sales. We were doing 40% sales online, during Covid this shot to 80% (Manufacturing firm, Kenya).

During Covid, our exports have increased to new geographies. Online sales are slowly increasing as we diversify to new products as well. That was why there was a marginal increase in sales during Covid (Agro-processing firm, Kenya).

We sell coffee in the Kenyan market and also export coffee through Jumia, Amazon US, Wells Fargo. During the Covid period, our online sales increased with people buying bigger orders than ordinary; 3–4 packets instead of one (Agro-processing firm, Kenya).

On the supply side, e-commerce sales of goods have been directly affected by labour shortages, administrative and regulatory bottlenecks and quarantine conditions, and indirectly through the suspension of manufacturing activity, decreased production, and new health regulations that have led to disruptions in land, sea and cargo transportation (WTO, 2020a). Cancellation of passenger flights, typically used to transport postal shipments and other small consignments, has significantly reduced transport capacity and increased shipping prices for cross-border B2C and B2B transactions. In line with this, some respondents reported that they were unable to use e-commerce as a mitigating pathway due to closure of entire manufacturing operations and travel bans during the pandemic. This was particularly the case for luxury goods producers and those targeting tourists:

Our e-commerce customers are mainly locally in Kenya, with some exports to Europe and the United States as well. The leather industry being a luxury goods item was affected negatively during Covid. We had to close our manufacturing during that period (Leather manufacturing firm, Kenya).

We sell mainly in Rwanda through Dmhehe, the Rwandan version of Amazon. In addition we also have three stores in Rwanda. We didn't sell anything during the Covid period since our goods mainly target tourists (Wholesale/retail services firms, Rwanda).

We promote online selling of made in Africa products on our e-commerce platform, focusing currently on the Kenyan market. Covid affected our business negatively – we were unable to bring products from Uganda, Rwanda due to lockdown and travel bans (E-commerce platform, Kenya).

Border processing was taking longer during the Covid period. That was a time when drivers required to be tested at the border and wait for results for over 48 hours. This means that most goods delayed reaching their destination (Large fast-moving consumer goods company, Kenya).

Only 5% of the sales are online. Most of the customers visit our shops and make orders to ship abroad once they go back to their countries. Covid affected the retail industry heavily. In May and April, we had to send some

workers on unpaid leave. Footfall was down 90% at our retail outlets. We had to close one of our retail outlets for 6–8 weeks (Glass manufacturing firm, Kenya).

Evidence from 257 representatives of e-commerce businesses from 23 countries (mainly LDCs in Africa and Asia-Pacific) suggests that third-party online marketplaces have been more resilient to the pandemic than e-commerce companies. Nearly 60% of third-party marketplaces, which are wholly digital, report an increase in monthly sales since the outbreak of the pandemic (UNCTAD, 2020). However, only four African firms in our sample actually report selling predominantly through third-party platforms, with the majority selling through their own e-commerce-enabled websites (see Section 6.3). An earlier survey by ECA (2020) revealed that even during Covid-19, e-commerce revenues for African firms remain relatively small (around 16%), with a lower share in goods than services, largely due to problems related to poor internet connection and digital payments. Nonetheless, e-commerce has emerged as a viable and crucial pathway to mitigate economic losses from Covid-19, with e-commerce firms increasing online operations and physical retailers also switching, in part, to online sales. This makes e-commerce negotiations at plurilateral and multilateral levels all the more important for the African private sector.

6 What do e-commerce proposals mean in practical terms for business in Africa?

The plurilateral agreements and JSI negotiations at the WTO bring forward three dominant approaches to e-commerce (Singh, 2018) and three types of related ‘data realms’ or approaches to data governance (Aaronson and Leblond, 2018). The first is the ‘US approach’ of business-led development of a single global digital market, with free flows of technology and data and least possible regulation. The role of the state in this model is limited to security aspects and facilitating an enabling business environment. The US approach to data governance is self-regulation by businesses on data privacy and protection, and has used trade agreements with other countries to limit restrictions on the free flow of data across borders.

At the opposite end of the spectrum is the ‘Chinese approach’ of state-led capitalism and management of the digital space, driven by an innovative and adaptative entrepreneurial spirit. China has relied on domestic regulations to restrict cross-border data flows and limit personal data protection, to promote its data-driven economy and to ensure domestic political stability and security. With a large consumer population and relatively low data protection standards, China has created an enabling environment to develop new digital products and services, especially in AI (ibid.).

In the middle lies the EU’s approach, which is a mixed economy approach to e-commerce

whereby the public sector has an important role in building digital and data infrastructures to support e-commerce and undertake necessary regulation of the digital sector. The EU has relied on internal trade policies and domestic regulations to create a digital single market where personal data and privacy are strongly protected. It has restricted firms’ ability to move data outside the EU unless recipient countries’ data protection regimes are deemed to be ‘adequate’ by the European Commission. Recently, the EU agreed to include binding language on the free flow of data and to limit data localisation in trade agreements, but it made clear that its approach to data protection is non-negotiable.

Overall, the US approach is the most liberal in terms of digital trade, furthering the interests of mainly US-based digital giants; the Chinese approach is largely national security-driven, while the EU approach is driven by concerns and rights around data privacy. These foundational differences then seep down into sub-issues such as free data flows.

A summary of these issues is provided in Table 4. For each selected e-commerce issue, we discuss the proposals being advanced, their implications for African countries and the scope for dealing with the issue under the AfCFTA.

Table 4 E-commerce proposals: a summary

Theme	Issues	China	EU	US
Data governance	Cross-border data flows and data localisation	Sceptical about free cross-border data flows and bans on data localisation	Free data flows with some sectoral exceptions and proposes ban on data localisation	Free data flows with some sectoral exceptions and proposes ban on data localisation
	Privacy invasions by data collectors; cybersecurity	Can be applied to protect privacy <i>and</i> national security	Can be applied to protect privacy	Restrictions should be proportionate to privacy risks
	Transfer of source code	Advocates against ban on source-code sharing requirements	Not expected to make commitments	Ban on forced transfer with exceptions
Digital business taxation	Customs duties on electronic transmissions	Zero custom duties till the next WTO Ministerial Conference	Zero custom duties	Zero custom duties
	Digital services taxes		Advocates	Opposes
Cross border e-commerce and trade facilitation	Electronic trade facilitation, improvements in parcel delivery, transport costs etc., which are less controversial issues. Some controversy has emerged with the US looking to reduce its de minimis threshold for e-commerce parcel imports from China. ⁱ			

ⁱ <https://theloadstar.com/us-customs-targes-chinese-e-commerce-with-bid-to-reduce-tax-threshold/>.

6.1 Data governance

6.1.1 Cross-border data flows and data localisation

Following provisions in TPP and TiSA, the US proposal under the JSI advocates for free cross-border data flows, with few exceptions. Under this proposal companies and consumers must be able to move data as they see fit, and it calls for appropriately crafted trade rules that can combat such barriers by protecting the movement of data, subject to reasonable safeguards such as the protection of consumer data when exported (WTO, 2016a).

At the opposite end of the spectrum, China makes no commitments on free cross-border data flows. Article 37 of China’s Cybersecurity Law, effective 1 June 2017, states that operators of critical information infrastructure (CII) must pass a security assessment by government agencies before transmitting personal and other important data overseas. The Law defines CII as ‘important sectors including public telecommunication and information services, energy, transportation, water resource, finance, public services, e-government, as well as other CII that, if [they

are] damaged, lose functionality, or experience data leakage, could seriously jeopardize national security, national economy, people’s livelihood, and public interest’.

The EU approach, in the middle, advocates for free cross-border flow of data but allows member states to design their own rules, in the interest of privacy, for the cross-border transfer of personal data. In terms of African countries, Kenya and Nigeria are part of the Friends of E-commerce for Development, which are in favour of new negotiations for e-commerce, advocating that it will provide opportunities for the participation of SMEs that can access new markets through digital platforms (Dhar, 2017). However, an estimated 17 African countries impose at least some form of restriction on cross-border data flows, most frequently over personal data privacy (Deloitte, 2017).

One of the channels through which the free flow of data is operationalised is by banning requirements for ‘data localisation’, so that foreign firms collecting data in a country have the freedom to move it across borders and store it in any part of the world. The US’ proposed rule on data localisation states that ‘[c]ompanies and digital entrepreneurs relying on cloud computing

and delivering Internet-based products and services should not need to build physical infrastructure and expensive data centres in every country they seek to serve'. Such localisation requirements are argued to impose unnecessary costs and burdens on providers and consumers alike. Trade rules could help to promote access to networks and efficient data processing (WTO, 2016a). The EU's proposal (WTO, 2016b) has a similar item but elaborates on it further by going beyond server localisation: 'Building on existing WTO obligations, disciplines addressing all forms of localisation, including local presence; localisation of computer servers; and local content requirements, subject to appropriate public policy exceptions' (ibid.).

Some developing countries at the WTO – especially the Africa Group and India – have been vocal in resisting free cross-border flow of data, pointing out the need to first build national capabilities (WTO, 2017a), including thinking through data ownership frameworks, policy support for internet access, incentives for SMEs online participation and building digital infrastructure. China, Russia, Indonesia, Brazil, Panama, Nigeria and South Korea already have in place data localisation requirements for local data storage, processing, and use of local technologies, driven by security, domestic surveillance and economic reasons.

Implications for African firms

For firms looking to expand and invest, the ability to freely locate data allows them to build a global network of data by cheaply and quickly expanding into new markets and exploiting economies of scale (Meltzer, 2015). The decision to locate data centres can be based on:

- cost-efficiencies in capital – data centres are very capital intensive and require good internet infrastructure, reliable power supply and air conditioning for servers;
- geographic reasons – for instance, firms involved in high intensity cloud computing will prefer to locate close to the customer market to limit data and information delays;
- political factors – a stable political environment and low political risk is preferred;

- the legal framework of data protection, privacy and enforcement of laws in host countries.

Some studies have argued against data localisation due to the economic costs of enforcing it (Bauer et al., 2014). It can also impede the new and growing businesses that are not able to deal with raised information and data costs, potentially reducing their competitiveness. This can be associated with rising sunk costs in traditional trade models, with only the firms that are already more productive able to bear the additional costs of data localisation.

It is crucial to acknowledge the significant and persistent digital divide that exists between developing and developed countries. The majority of African countries are low- or lower-middle income economies, and there exists a significant digital divide between Africa and the rest of the world. This is true not only in terms of accessing the internet but also leveraging the internet for trading, due to poorer infrastructure and skills development (Banga and te Velde, 2018). It is argued that data localisation policies in African countries encourage foreign firms to set up data centres locally, which can bring in foreign investment, skill development and improvements in the tech capacity of African firms through clustering, as well as the development of a national internet industry that can encourage catching up (Castro and McQuinn, 2015). A ban on data localisation could reduce opportunities for African firms to 'catch up' (Foster and Azmeh, 2020). Global production is becoming increasingly digitalised and based on a 'data thread' connecting different stages of production, and is thus likely to be more concentrated in developed economies with advanced capital centres, skilled labour and research and development (R&D) facilities. African firms need to develop local capabilities in collecting, processing and using this data for their economic advantage.

However, putting data localisation policies in place without the development of local data infrastructure can impede the growth of African firms. To meet specific development objectives, it is critical that data localisation policies – if they are to be instituted – are accompanied by

complementary efforts to improve local data storage and processing capacity. Our survey revealed that out of 31 African firms, 29 are collecting online sales data, with 61% of the respondents (19 firms) storing their data on the cloud and 38% (12 firms) on local data servers within their country (Figure 6). Out of 31 firms, 22 report having the capacity to analyse and process sales data within their firm, five firms are not sure about their capacity, and four firms report having no capacity to analyse the data. The majority of surveyed firms would have to adjust their data storage policies in response to data localisation policies, if they were to be implemented in their countries.

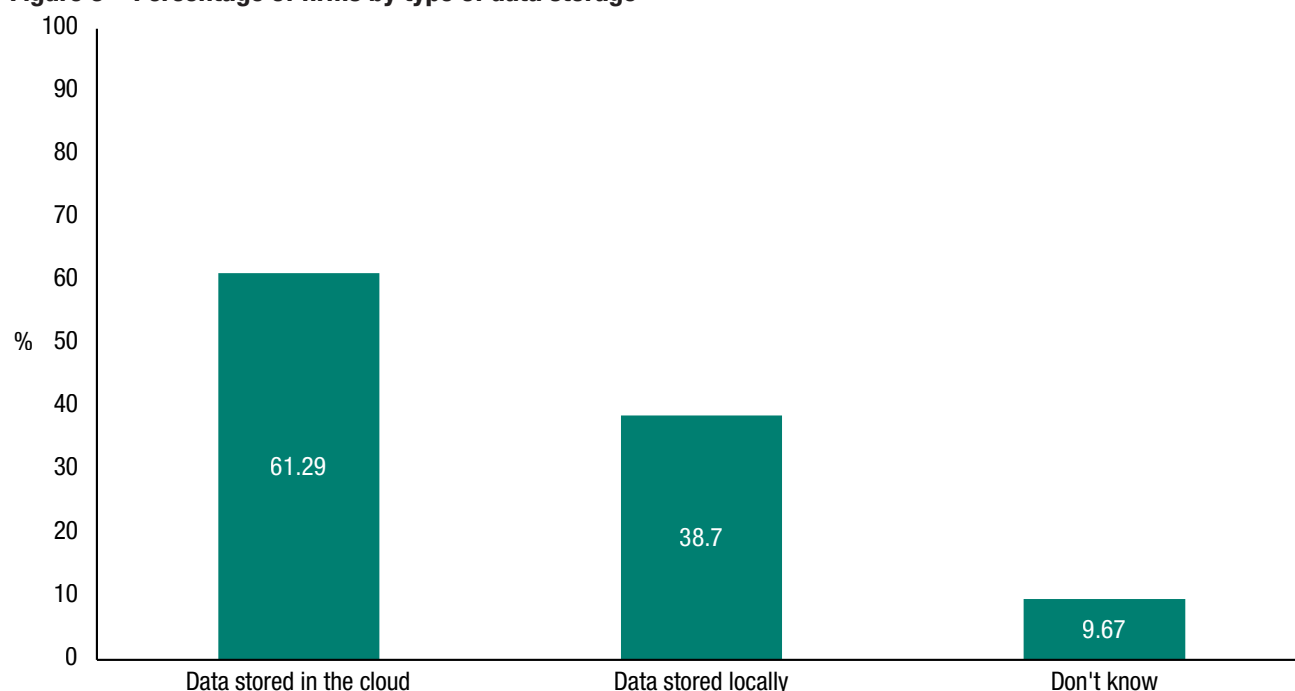
All 31 firms express an interest in selling on a regional platform, with 28 firms wanting access to digital intelligence generated by platforms using the data provided by the private sector, and 19 firms expressing the need for intra-REC data sharing to boost e-commerce. The interviews with the firms also clearly reveal that respondents want to build capacity for data sorting and analysing and want to understand the terms and conditions of data sharing. There are concerns regarding data privacy and accuracy, particularly in the case of a regional data-sharing platform, assumed to be run by governments:

Most governments in Africa have company's data that are disjointed, incomplete or totally manual. Having accurate company data can help customers trust the online seller, however this data is either unavailable or the process of obtaining it is not clear (Agro-processing firm, Kenya).

We collect data internally but are not able to use the data much to establish patterns. My main concern in data sharing is privacy and protecting our competitive advantage (Leather manufacturing firm, Kenya).

Interestingly, when we look across countries, we find that of the three firms in Nigeria, the two that sell using own website store their data locally, while the one firm that sells via a third-party platform stores its data on the cloud. Of the 20 firms in Kenya, 13 store data on the cloud, while two out of the six firms in Rwanda store data on the cloud. Across firm size, we find that all large firms in the sample (N = 4) have the capacity to analyse and process their data internally and want access to a regional e-commerce platform. Of the 15 small firms, all

Figure 6 Percentage of firms by type of data storage



Note: N = 31. The categories shown are not mutually exclusive and so percentages total more than 100.
Source: Survey (2020).

want to sell on a regional platform but five firms are not sure about intra-REC data sharing, 10 store their data on the cloud, five firms report storing data locally (of which two also store on the cloud) and three firms are not sure about data storage. All five small firms which store their data locally sell through their own e-commerce website. Of the 10 medium-sized firms, six store data on the cloud and four store it locally. Overall, in the sample, 19 firms report storing on the cloud, of which 10 are small, six are medium-sized and three are large. Eight of these firms report harmonisation of data standards and privacy laws as a critical regulation for boosting intra-REC e-commerce. Of the 12 firms that store their data locally, five do not have the capacity to analyse and process the data internally.

Among female-owned enterprises, 50% of respondents want intra-REC data sharing, while other 50% either do not want it or are not sure about it. Among male-owned enterprises, 70% want intra-REC data sharing.

Opportunities within the AfCFTA

The AU Digital Transformation Strategy (AUDTS) highlights that a very large share of the IT content consumed in Africa currently comes from outside the continent, and that data centres are the type of digital infrastructure that will allow the development of a local digital industry. Therefore, Africa needs Tier III and Tier IV data centre infrastructure designed to host mission critical servers and computer systems, with fully redundant subsystems.¹⁰ Policies to attract this infrastructure on the continent could result in cost savings on international connectivity and a latency decrease that would deliver a better application performance. The second concern identified by AUDTS is the respect for data sovereignty.

Data localisation is not a single policy, but rather a spectrum; countries can differ in terms of the type and strength of restrictions regarding data. Ferracane (2017) identifies four levels of classification: (1) no restrictions by law; (2) a requirement for local storage of data (restrictions

requiring a local copy of data to be automatically saved if the data were to be transferred across borders); (3) requirement of local storage and processing (in addition to local storage, processing of data is added to the requirement of cross-border flow of data – i.e. local data centres are used to process the data, but the data can still be sent abroad to the company’s headquarters); and (4) a ban on the transfer of data.

Currently in Africa, 17 countries have some form of restrictions related to data privacy (Deloitte, 2017), but only Nigeria has an established data localisation law requiring local storage of consumer, government and subscriptions data, as well as local processing of sales data and ATM transactions data. While Kenya does not currently have a national data protection authority, there is draft legislation in the Senate, the Data Protection Bill 2018, that aims to establish such an authority. This bill bears some similarities to the United Kingdom’s Data Protection Act 2018, which incorporates and supplements the provisions of General Data Protection Regulation (GDPR). It embraces the basic principles of data protection: the necessity of collecting information, the right of subjects to access information, and the duty to ensure that the information is updated, complete and correct (Okal, 2017). Rwanda’s 2017 Data Revolution Policy states that Rwanda has exclusive sovereignty over national data, but it includes a provision for hosting data on the cloud or in a collocated environment in data centres within or outside the country, under agreed terms and governed by Rwanda.

The AfCFTA’s e-commerce protocol could provide a common and harmonising framework to govern data localisation policies between African countries, and parameters around their governance. Sector-specific policies on data could be developed within the AfCFTA if countries want to retain policy space to require that data pertaining to critical information – e.g. the defence sector, finance or health – be stored and processed locally, while sector-specific data can be exchanged with licensed entities that offer

¹⁰ Data centre tiers are a common way of classifying data centre infrastructures in a consistent way, with tier 1 having the simplest infrastructure and tier 4 the most complex (see <https://irontree.co.za/understanding-data-centre-tiers-in-south-africa/>).

‘adequate’ protection and privacy of data (as in the EU’s GDPR) for market access.

If countries do want to retain policy space for data localisation policies – and decide to institute such policies – it is important to put in place accompanying measures that lower the cost of data storage investments by foreign firms (e.g. subsidies on electricity rates or tax holidays), improve infrastructure (e.g. internet connectivity, installation of air-conditioning or securing reliable power supply) and strengthen data security (e.g. strict cyber-security laws). Without these complementary measures, data localisation policies may amount to little. Two African cities emerging as growing markets for data centres are Johannesburg and Nairobi. In fact, they both feature in the 15 least expensive market for building data centres, according to the Data Centre Cost Index (2020).¹¹ Overall, it is estimated that the African data centre market will exceed \$3 billion by 2025, growing at a compound annual growth rate of over 12% (Turner & Townsend, n.d.).

The AfCFTA can also address disparities in enforcement of data protection rules across countries. In several African countries, such as Angola, Cape Verde, Madagascar, Mali and South Africa, there has been minimal data protection enforcement and activity. In Ghana and Mauritius, the data protection authority has enforced data protection rules through action taken or fines issued for non-compliance with relevant personal data protection legislation (Deloitte, 2017).

6.1.2 Personal data protection, privacy and cyber-security

Personal data protection forms a contentious issue in e-commerce negotiations. The US position in part reflects the commercial interests of its most important digital firms (Amazon, Apple, Facebook, Google, etc.) in using personal characteristics to match advertisers with potential buyers. For similar reasons, it promotes compatibility between different privacy regimes and among WTO members. The EU proposal, on

the other hand, strongly holds that commitments on data flows should not take precedence over the protection of privacy. Personal data protection and privacy are fundamental rights, and countries may adopt the safeguards they deem appropriate to protect personal data and privacy, including the adoption and application of rules for international data transfers. The EU has a single set of privacy and data protection rules for all companies operating in the union through GDPR (and its predecessor, the Data Protection Directive). China sides with the EU on privacy issues in its WTO proposals, arguing that necessary and appropriate measures can be implemented to protect privacy, but with a focus on security. China’s Information Security Technology Act (2018) specifies that the cross-border transfer of personal information must undergo a security assessment by cyber-security agencies and relevant departments under the State Council.

Implications for African firms

In many African economies, domestic policies on data protection are still not present. For instance, according to the UNCTAD Global Cyberlaw Tracker (UNCTAD, n.d.a), only 27 African countries out of 54 currently have a formal legislation on data protection and privacy, nine have draft legislation, and 13 countries have no legislation yet. With regards to cybercrime, only 39 Africa countries have a formal legislation, two have draft legislation and 12 have no legislation. African countries are therefore lagging in terms of data regulatory infrastructure, which can be understood as the collection of data, the classification of data into personal/non-personal or sensitive/non-sensitive, and the processing and use of data as a tool for increasing competitiveness and market share.

Issues of cyber-security and spam are complex technical issues currently being debated across different forums. The uneven level of data protection and fragmented frameworks across countries leaves privacy and trust on a slippery slope. According to the Global

11 See www.turnerandtownsend.com/en/perspectives/data-centre-cost-index-2020/. The cost model individually assesses six key capital costs related to data centres for 40 countries: shell and core; equipment; construction labour; construction materials; preliminary costs/general conditions and general requirements; and margins/profit.

Cybersecurity Index from the International Telecommunication Union (ITU), 50 African countries are in the ‘initiating’ and ‘maturing’ stage of cyber-security development and only two are considered to be ‘leading’, which largely demonstrates the vulnerability of the continent to a wide-scale attack. According to Serianu’s Africa Cybersecurity Report, cybercrime cost the continent over \$3.5 billion in 2017. In 2018, annual losses for Nigeria due to cybercrime were estimated at \$649 million, and \$210 million for Kenya. Across industries, the highest cybercrime costs are in banking and financial services sectors (23%), followed by government services (19%) and e-commerce (16%).

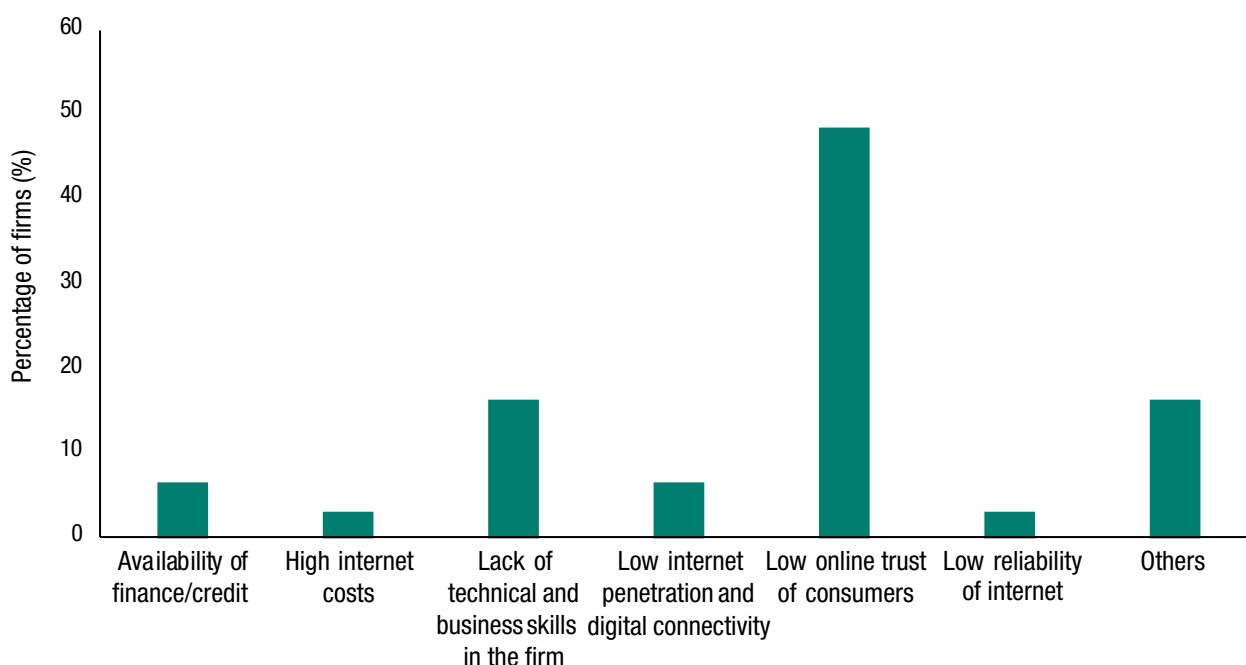
In our survey, low online trust of consumers – due to concerns regarding data privacy, cybercrime and a lack of dispute resolution mechanisms – emerged as a key obstacle constraining local e-commerce (Figure 7). This holds true for both male- and female-owned enterprises, and it is particularly a problem for small firms (60% of small firms in the sample

rank low online trust as a primary obstacle constraining local e-commerce). Respondents reveal that the younger populations have higher online trust are using e-commerce platforms more, but they have low purchasing power. Older African generations have greater purchasing power but do not trust digital platforms.

Internet penetration and costs is no longer an issue. Low online trust is the key issue now; buyers are sceptical about the quality of the goods they will receive mostly because there is no proper dispute resolution when you receive the wrong item or if the item does not meet your specification (Wholesale/retail services firm, Kenya).

Consumer protection is still very low. Firms with a local presence like Jumia will succeed (Agro-processing firm, Kenya).

Figure 7 Top challenges constraining e-commerce



Note: N = 31. Other reasons include high costs of shipping, difficulty in connecting website with online payment platforms, lack of internet access of clients, lack of web developers to make customised and affordable e-commerce websites for small business (e.g with M-Pesa integration and other locally tailored services).

Source: Survey (2020).

Interview data from micro, small and medium-sized enterprises (MSMEs) – mostly women-owned – further reveals that development of e-commerce related websites, their maintenance and repair at reasonable rates and enabling the connection of these website with online payment solutions, such as integration with M-Pesa, is limited but needed.

Opportunities within the AfCFTA

Africa's delay in implementing personal data protection, data privacy and cybersecurity regulations could prove be an advantage for harmonisation. Establishing common principles and frameworks for African countries in these areas through the AfCFTA could help ensure a relatively harmonised regulatory regime for African firms before divergent regulations become entrenched. Basic principles on data protection and cyber-security are already established in the African Union Convention on Cyber Security and Personal Data Protection. Article 14(6)(a) of the Convention prohibits the transfer of personal data to non-member states unless 'the state ensures an adequate level of protection of the privacy, freedom, and fundamental rights of persons whose data are being or are likely to be processed'. Some African countries have comparable provisions on cross-border data transfer, including South Africa's Protection of Personal Information Act 2013, the Mauritius Data Protection Act 2017, Kenya's Data Protection Bill 2018 and Nigeria's recently signed NITDA Data Protection Regulation 2019. However, only 11 countries have signed the Convention.

Recognising the importance of harmonisation of data protection and privacy frameworks across African countries, to facilitate e-commerce, the AUDTS aimed to bring the Convention on Cyber Security and Personal Data Protection into force by 2020 and for all members states to adopt a complete set of legislation covering e-transactions, data

protection and privacy, cybercrime and consumer protection. However, as of June 2020, only eight countries had ratified the convention (AU, 2020b).

Some efforts have been made to harmonise ICT regulations at regional level. The EAC has a regional framework for cyber laws (2010) and on electronic transactions (2014). The EAC Framework for Cyberlaws recommends that each member state develop a regulatory regime for data protection, but it makes no specific recommendations on selection of the law (UNCTAD, 2016).

UNECA et al. (2019) hold that African governments are not faced with a lack of information/knowledge on data protection issues, but rather other hurdles. The absence of a regulator, even in countries that have data protection laws, points to insufficient resources as one of the causes for the sub-optimal regulatory landscape (*ibid.*).

The AfCFTA e-commerce protocol can build on these principles of enabling free movement of data consistent with member states' interest in protecting privacy and ensuring security, supporting a single global internet, cooperation on cybersecurity, protection of personal information of consumer and protection against fraud, and defining commonly agreed-upon principles and rules. Although it lacks a specific protocol on cross-border data transfer, the AfCFTA clearly sees the importance of protection of personal data and exalts it to an exception to doing trade. Under Article 15(c)(ii) of the Protocol on Trade in Services of the AfCFTA, protection of 'privacy of individuals in relation to the processing and dissemination of personal data and the protection of confidentiality of individual records and accounts' is an exception to restraint on trade. The AfCFTA can further provide a common and harmonising framework for data protection, which can help build online consumer trust in African economies and facilitate B2C e-commerce.

6.1.3 Source-code sharing requirements, intellectual property and tech transfer

To address concerns articulated by US companies in China (USTR, 2018), the US's proposal at the WTO on source-code sharing¹² states that '[r]equirements that make market access contingent on forced transfers of technology inhibit the development of ecommerce and a flourishing digital economy. Trade rules may be developed to prohibit requirements on companies to transfer technology, production processes, or other proprietary information' (WTO, 2016a). A number of countries have also proposed new rules with restrictions on the disclosure and transfer of, and access to, source code¹³ similar to those in the TPP and Trade in Services Agreement (TISA), apparently without even the TPP or TISA exceptions (Third World Network, 2017). The US proposal, for instance, holds that '[i]nnovators should not have to hand over their source code or proprietary algorithms to their competitors or a regulator that will then pass them along to a state-owned enterprise'. The EU also proposes a ban on requirements for source-code sharing but lists different exceptions to those in the US proposal. The US advocates exceptions to complying with regulatory decisions without causing the owner to lose the trade secret status of its software, while the EU lists three situations in which forced disclosure of source code is permitted: (1) to remedy a violation of competition law; (2) to protect and enforce intellectual property rights; and (3) to address security concerns.

Implications for African firms

A ban on requirements for source-code sharing implies that a country into which an African business expands would be prevented from requiring that business to give the government

details of its source code. This also means that competitors investing in an African country of a particular business cannot be forced by their government to hand over source code.

While it is important for African firms to attract foreign investment in ICT/IT services and R&D, it is also important to enable these foreign investments to result in positive technology and skill spillovers to the host firm. Historically, developing country firms have used tech transfer from developed country firms and reverse engineering as tools to develop faster. This is particularly important as production becomes more digitalised – with goods such as cars, pacemakers and kettles increasingly containing software, a ban on requiring transfers of source code will prevent technology transfer to African firms where the technology contains source code. This could make it more difficult for African firms to reverse engineer digital products since, in addition to hardware, reverse engineering of digital products requires 'extracting software system information from source code' (Afreximbank, 2019).

This proposed e-commerce rule in the JSI also does not include any exceptions or special and differential treatment for developing countries or LDCs. Technology transfer needs to be encouraged, rather than discouraged, in order to bridge the digital divide. Furthermore, such a rule would undermine a commitment already taken by WTO members in the GATS Annex on Telecommunications to provide technology transfer to LDCs to support the development of their telecommunications infrastructure. Article 6d of the Annex says that '[m]embers shall give special consideration to opportunities for the least-developed countries to encourage foreign suppliers of telecommunications services to assist in the transfer of technology, training and other

12 Source codes are the basic instructions written into a software programme in human-readable text language. The computer translates the source code written by programmers into machine language using combinations of binary digits. Hence the source code is a basic tool that can assist a person to decode the language of a software program and/or replicate the program.

13 'Disclosure' of source code is presumably to the public (or even one other company), for example requiring the source code to be made public by, say, putting it online. 'Transfer' of source code could be from a foreign investor to a local company. 'Access' to source code could include by government regulators who need to check that it is not risky for financial regulation, violating environmental laws, etc.

activities that support the development of their telecommunications infrastructure and expansion of their telecommunications services trade’.

In the past, local content rules had been a way for firms to benefit from technology transfer. Since requiring local products as inputs is no longer allowed for WTO member countries (except LDCs; see above), firms may instead wish to require technology transfer directly (something which is still allowed by TRIMS), but this would be restricted by the proposal if it is accepted (Third World Network, 2017). In addition to being TRIMS+, the proposed source-code rule requires stronger intellectual property protection than the rules in the WTO’s Agreement on TRIPS, so it is also TRIPS+.¹⁴

African governments may also at times require access to source code from foreign firms for effective regulation in areas of taxation, competition law, technology transfer and government procurement, which could help protect domestic African industries against unfair practices. For such regulatory purposes, any restrictions on source-code sharing – if they are agreed to – should provide for, at a minimum, exceptions for public regulatory or security purposes.

The Volkswagen emissions scandal – where Volkswagen used software to ‘cheat’ the emissions test for its cars, which then emitted up to 40 times the legal limit of pollutants when driven in the real world – is an example of where access to source code might have prevented corporate cheating (OWINS, 2017). Disclosure of the source code for software may also be necessary for security reasons at times, and for developing coding skills. New software can be created, tailored to local preferences and sensitivities, and even adapted for use in local languages when there is the disclosure of source code. This is therefore a major element

in supporting African suppliers to enter into domestic/regional or international e-commerce.

However, source-code sharing requirements can discourage foreign firms from investing. Here, important lessons can be learnt from China, which requires some international firms to transfer technology in exchange for market access. For example, in some cases the transfer of source code is a condition for selling to the Chinese government or gaining the relevant licenses to trade in the country. A number of foreign companies are engaging with Chinese companies in technology transfer.¹⁵ Not only can such requirements strengthen data security, but they can also increase technology transfer from foreign to domestic firms and facilitate reverse engineering (Hobday, 2005). Should African countries develop such policies, however, they might be wise to account for their relative market size compared to China in terms of being able to encourage such an exchange of ‘market access for technological transfer’.

Opportunities within the AfCFTA

For smaller economies that do not have enough market power to negotiate access to source code for market access, regional or continental strategies – such as the AfCFTA – can be useful, but this will require harmonised policies on data protection and privacy. Closely linked to technology transfer issues are policies on intellectual property. The African regulatory intellectual property regime is currently characterised by fragmentation, weak institutions and a relatively low adherence to rules, with a wide disparity in national legal frameworks, monitoring and enforcement capacities across African countries (Blakeney and Mengistie, 2011; Ferguson and Schneider, 2015). There are also major issues with the enforcement of intellectual property rules related to trade in

14 This is because Art 39 TRIPS20 only requires WTO members to allow the trade secret/confidential information owner to sue someone who obtains/uses it in a dishonest commercial manner.

15 For instance, IBM has shared certain intellectual property and parts of source code to China. Microsoft has opened a subsidiary in China called the Microsoft Open Tech Shanghai, which participates in existing open source and open standard efforts and also collaborates with the community to encourage open source develops in China. Intel has entered into a strategic research and development alliance with China’s Huawei technologies that focuses on servers, data storage and data centres and cloud technologies. Oracle is discussing partnership with a number of Chinese companies on data centres to support cloud services in China.

illicit, substandard and counterfeit products in African countries.

At REC level, only the Common Market for Eastern and Southern Africa (COMESA) currently has a regional IPR policy.¹⁶ Efforts are underway at regional level to assist EAC member states to implement the TRIPS Agreement with a view to promoting copyright and cultural industries, traditional knowledge, geographical indications and technology transfer (UNECA et al., 2019). However, the current IPR framework within EAC has been identified as hindering the fight against counterfeits, as the IPRs are country-specific and there is no mutual recognition of IPR within the region (since there is no regional policy on IP).

The AfCFTA provides an opportunity to advance a continental approach to a balanced IP rights system that responds to the aspirations under Agenda 2063 (the continent's strategic framework for achieving inclusive and stable development). Regional institutions like the African Regional Intellectual Property Organization and the Pan-African Intellectual Property Organization provide for regional cooperation in the management of IPs as Phase II negotiations of the AfCFTA begin, but a continental regulatory body could help to harmonise regulation and implementation of policies (Africa Growth Initiative, 2020).

However, membership by 44 African Union member states of the WTO has a significant influence on how an AfCFTA Protocol on Intellectual Property Rights might be designed. The TRIPS Agreement does not provide exceptions to regional preferential trade agreements established after its coming into force (WTO, 1994) (such as the AfCFTA) from providing better treatment to the nationals of the members of those agreements (UNECA et al., 2019). This means that, unlike other AfCFTA Protocols, the benefits of an IP Rights Protocol must be extended to all WTO member states. Moreover, African countries have different levels of obligations in IP treaties beyond the WTO, including participation in multilateral IP treaties and commitments arising from bilateral trade agreements. UNECA et al. (2019) conclude

that it may be more feasible and realistic to achieve regional economic integration in IP rights, including through: (1) arrangements for regional cooperation and sharing of experiences on IP rights in general; (2) regional filing systems, usually for patents but also for trademarks and industrial designs; and (3) development of one substantial law, or unification of laws, for members of a regional organisation.

Negotiations on technology transfer and IPR have become all the more important now, as countries combat Covid-19. The pandemic has exposed Africa's vulnerabilities in the health and pharmaceutical sector. Globally, the EU, Japan and the US are the leading pharmaceutical R&D economies, while China and India are major active pharmaceutical ingredient (API) producers (Palmer, 2020), particularly for generic drugs. African countries are largely net importers of medical and pharmaceutical products, with Africa importing 94% of its pharmaceuticals in total – mainly from the EU, India and Switzerland and China (Banga et al., 2020). Local production remains weak on the continent. Africa has roughly 375 drug-makers, almost all of them drug product manufacturers that purchase APIs from Indian and Chinese manufacturers and formulate them into finished drugs (Conway et al., 2019). Around 100 manufacturers in sub-Saharan Africa are limited to packaging, that is, purchasing pills and other finished drugs in bulk and repackaging them into consumer-facing packs (ibid.).

Some regions have good potential to leverage intra-regional trade in pharmaceuticals during the pandemic. COMESA, for instance, exported pharmaceuticals amounting to \$442.53 million in 2018, with intra-COMESA exports constituting 32% of its total exports (COMESA, 2020). Freer movement of essential goods in the region (linked to phase I negotiations); supporting innovation, research and development and technology transfer (linked to phase II negotiations around IP); and implementation of digital trade facilitation and e-commerce (phase III negotiations) will help enhance the production of pharmaceuticals and boost intra-regional trade during the pandemic.

16 www.ip-watch.org/weblog/wp-content/uploads/2013/05/Comesa-IP-policy-May-2013.pdf.

6.2 Digital business taxation

Digitalisation of businesses has once again put the spotlight on taxation models. Digital businesses have distinct features that make them more competitive than their non-digital counterparts. These digital businesses can have a heavy reliance on intangible assets and data, which enables them to create value through activities closely linked with a jurisdiction without needing to establish a physical presence there. Indeed, many digital business models do not require a physical presence in countries where they sell, reaching customers through remote sales and service platforms instead. This ‘remote’ participation in the domestic economy enabled by digital means, without a taxable physical presence, is often seen as the key issue in the digital tax debate (BEPS, 2019). Global digital firms can easily transfer their intangible assets (e.g. data or intellectual property) across tax jurisdictions, exacerbating tax-base erosion. This has rendered existing international taxation frameworks, based on physical presence, less effective.

Taxing digital services firms where their activities are based rather than where they declare their headquarters to be – i.e. taxing where value is created – can help in redistributing rents and increasing government revenues (*ibid.*). However, the US has strongly opposed such digital services taxation (Fleming et al., 2020); 90% of the market capitalisation of the world’s 70 largest Big Tech companies accrues to the US and China, with the EU’s share a mere 4% and Africa and Latin America together accounting for 1% (UNCTAD, 2019).

International negotiations over a common tax framework for the digital economy have mostly been driven by the Organisation for Economic Cooperation and Development (OECD)/G20 group. After the US pulled out of those negotiations in June 2020 citing lack of progress, several G20 members and other countries proceeded to adopt digital services taxes. These taxes typically involve a levy of 2–3% on the revenue of companies providing specified online services (such as advertising and intermediation services in the French case), usually with a threshold on global revenues above which the tax is applicable (€750 million in the French

case). The US Trade Representative, which deems large US companies like Amazon and Facebook to be the principal target of such taxes, has since launched Section 301 (of the US Trade Act of 1974 on unfair foreign trade practices) investigations into the taxes on digital services adopted by, among others, Austria, Brazil, the Czech Republic, the EU, India, Indonesia, Italy, Spain, Turkey and the UK. The proliferation of digital services taxes among developed and developing countries emphasises the growing recognition of the significant influence, power and market capitalisation of Big Tech firms.

In trade negotiations, the specific digital taxation focus has been on ‘digital customs duties’ and principles around most-favoured nation (MFN) and national treatment. A ban on custom duties is one of the most common provisions found in PTAs with digital trade rules (Burri and Polanco, 2020). The US, Chinese, and EU JSI proposals include an extension of the WTO temporary moratorium on customs duties on electronic transmissions, but their positions, as well as those of other members, vary as to whether it should be made permanent. For instance, under the JSI on e-commerce, the EU proposed that ‘[m]embers shall not impose customs duties on electronic transmissions, which include the transmitted content’ (WTO, 2019a). The US and others use similar language, while the Chinese proposal advocated zero tariffs until the 12th WTO Ministerial Meeting (MC12). Following on from the TPP provision, the US and the Japanese proposals at the WTO seek to extend the principles of MFN treatment on digital products (WTO, 2016a). The US proposal calls for ‘Prohibiting Digital Customs Duties: The complete prohibition on customs duties on digital products ...’ for ‘Securing Basic Non-Discrimination Principles: Fundamental non-discrimination principles are at the core of the global trading system for goods and services. However, India and South Africa’s communication at the WTO of March 2020 (WTO, 2020b) expresses concerns over the scope of the moratorium and the tariff revenue losses due to the moratorium, as well as the consequent implications on industrialisation, including digital industrialisation for developing countries.

With the failure to generate an international consensus on corporate taxation rules for Big Tech companies, several countries have shifted to indirect taxes such as value added tax (VAT) on goods and services sold in the digital marketplace. But practical challenges related to mobilising VAT from remote sellers still remain (IMF, 2019). For their part, African tax administrations must exercise caution that new digital economy taxation instruments are sufficiently well-targeted so as to raise revenue without disproportionately constraining the growth and development of Africa's own digital economy and its tech champions.

6.2.1 Implications for African firms

While European and Asian countries are focused on taxing value, African countries have limited their focus to targeting the consumers of the digital economy (Latif, 2020). Examples include a 0.5% transaction tax to access social media in Uganda and license fees for online content creators in Tanzania.

In terms of non-discriminatory treatment, 'goods' that are transmitted online currently refer to books, music, videos, software. However, as technology improves, many more physical goods will be transmitted digitally. This would mean that more and more non-agricultural market access (NAMA) tariff lines will be made duty-free through these rules, which threatens to disregard members' GATT and GATS schedules (South Centre and ATPC, 2017). For instance, while some African countries have put limitations in GATS on architectural service suppliers, under these new rules the domestic markets would be completely open (*ibid.*).

Those in favour of the moratorium on customs duties on digital transmissions argue that it already exists in practice and that making it permanent has important implications for policy certainty and business decisions, such as incentivising investments in additive manufacturing technologies and allowing for the import of cheap, electronically transmittable inputs into other manufacturing processes (WTO, 2018). However, Banga (2017) notes that as more products are developed that can ostensibly fall within the category of electronic transmissions, this could mean that industrial

goods that would previously have been subject to tariffs could automatically become duty-free once a version is available that can be transmitted electronically. This would threaten local suppliers in African countries, which are still at a nascent stage in the development of their digital industry. UNCTAD (2019) estimates an overall tariff revenue loss to WTO LDCs of \$1.5 billion, and a loss of around \$2.6 billion for sub-Saharan countries. *tralac* (2019) produces estimates of the digital trade of ET in three of Africa's leading economies – Kenya, Nigeria and South Africa – which in turn permits an estimation of the tariff and indirect tax revenue forgone. It finds that Kenya and Nigeria, with more limited customs revenue bases, forgo a greater proportion of their total customs revenue, while South Africa, with a greater assumed proportion of ET trade digitalised, forgoes a greater proportion of total tax revenue.

6.2.2 Opportunities within the AfCFTA

Given the nature of the challenges and the currently fragmented solutions across African countries, a continental approach to taxing the digital economy needs to be based on cooperation and specific principles for taxing transactions. There needs to be certainty in how a tax applies, effective tax administration and a balanced approach to taxation which offers a reliable revenue stream to the government but at the same time does not discourage economic growth and efficiency in African firms. Harmonisation of rules for taxation emerged as the most critical regulation out of our survey responses in African countries.

The AfCFTA can provide a framework for applying indirect tax to digitally traded goods, including by using new internationally recognised methods to ensure a level playing field among local and foreign suppliers and to bolster revenue (see Box 1). South Africa's approach towards digital taxation can be evaluated in the context of the AfCFTA. A review of taxation in the digital economy by the Davis Committee concluded that the pre-existing South African tax law provided an opportunity for foreign e-commerce suppliers to avoid taxation and, in so doing, deny South Africa tax revenue and create unfair competition to resident suppliers who had to pay taxes

Box 1 Taxes on electronic transmissions/intangibles (including digital products)

- 1. New laws have been framed to tax imports of digital products and services in Australia and New Zealand.** In July 2017, the Australian government introduced a Goods and Service Tax (GST) on imports of digital products and services. Under this law, supplies to Australian consumers of digital products and services from non-Australian suppliers are to be charged GST, provided these supplies are above 75,000 Australian dollars. This includes supplies from non-Australian electronic distribution platforms, and implies that non-Australian suppliers (of digital products or services) have to register for GST electronically. From 2018 onwards, this will apply to B2C as well as to B2B businesses. New Zealand changed its GST law in 2016. Under this law, all supplies of remote services and intangibles carried out by suppliers outside New Zealand are subjected to GST. Suppliers outside New Zealand need to register for GST if the total value of supplies exceeds 60,000 NZ dollars. Unlike Australia, GST is imposed only on B2C businesses; like Australia, electronic platforms are also liable to pay GST.
- 2. The EU has also initiated a two-stage process for taxing the intangible imports of goods and services (mainly online) from outside the EU.** The first stage was implemented in 2015 whereby VAT obligations covered all companies outside EU carrying out cross-border online sales of goods and services to final consumers within EU, in line with the principle of taxation in the destination member state. The second stage, known as the ‘VAT e-commerce package’, will enter into force in 2021.
- 3. The Indonesian government amended its law in 2018,** bringing electronic transmissions into the ambit of customs duties. Regulation 17, which provided a new Chapter 99 covering intangible goods (i.e., software and other digital products) that were previously not covered under Indonesia’s tariff system, became effective from March 2018.
- 4. In 2017, India also initiated compulsory registration** under GST for foreign companies providing online information database access and retrieval (OIDAR) services.

Source: WTO (2019b).

(Davis Tax Committee, 2014). In response to the recommendations made by the Davis Committee, South Africa amended its VAT Act in 2014 to better capture the digital economy and foreign and local digital suppliers. The amendments require foreign suppliers of e-commerce services such as music, e-books, internet games, electronic betting and software, among others, to register as VAT vendors and account for output tax provided their turnover in South Africa meets the threshold of one million rand.

Requirements on data localisation have emerged as another potential way to ensure enterprises with real interests but only a virtual presence in each country can be made to pay taxes that reflect the revenues of the economic activities they undertake within these countries (Mayer, 2018). Removing data localisation practices may make it easier for firms to avoid

paying local taxes, though this issue requires further investigation (Lemma, 2017). As discussed in the data governance section, this needs a careful assessment of the benefits versus the costs of local data storage.

A number of uncertainties have clearly emerged during the plurilateral negotiations around the coverage of the WTO moratorium on customs duties on electronic transmissions, including application of duties to the transmission or the content of the transmission if the moratorium were absent (Wunsch-Vincent, 2006), treatment of electronic transmissions as goods and services (discussed in Chapter 2), and whether electronic transmission, including its content, can be considered to be ‘like’ its physical counterpart. African countries may want to undertake capacity-building on understanding these issues before entering into negotiations and

take into account the relative value of the type of import that the tariff is disincentivising. More clarity is needed on the moratorium, its coverage and revenue implications. Accordingly, members should conduct a deeper assessment of the revenue aspect of the zero customs duty rule and analyse its influence on the ability of developing and least developed countries to adopt digital technology. Some countries have started to explore ‘how’ these tariffs can be imposed – Indonesia, for instance, introduced a specific tariff line in 2018 for electronically transmitted content, laying the ground for enacting tariffs on electronically transmitted films, e-books and software (Cory, 2019; Buditomo, 2019).

6.3 Cross-border e-commerce and trade facilitation

While e-commerce and cross-border digital trade is opening up new opportunities for development, these are neither automatic nor homogenous across countries and types of firms. For instance, the 2017 UNCTAD B2C E-commerce Index, which measures sellers’ web presence and internet access by consumers (secure internet servers), delivery and payment systems, shows a direct correlation between the income level of a country and its rank in the index, indicating that countries favouring free data flows have mature e-commerce markets. The JSI framework explores the interplay between policies for cross-border e-commerce and trade facilitation, with an emphasis on paperless trade and digital trade facilitation and logistics. Topics covered include paperless trading/electronic trade administration documents, electronic transferrable records, customs procedures, improvements to trade policies, enhanced trade facilitation, de minimis, single-window data exchange and system interoperability, electronic availability of trade-related information, use

of technology for the release and clearance of goods, and logistics services (Ismail, 2020)

Below, we discuss some emerging findings from the survey on these issues and related implications for African firms.

6.3.1 Facilitating participation on regional e-commerce platforms

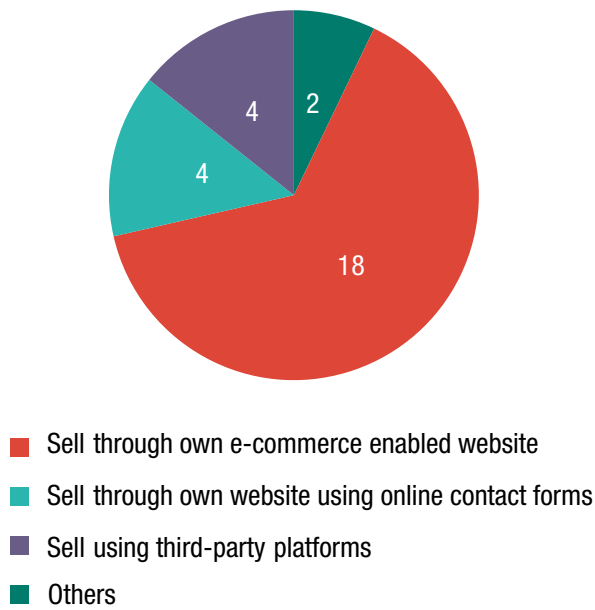
Findings from the International Trade Centre’s (ITC) 2017 survey of MSMEs (ITC, 2017) highlight two important challenges for firms to link into e-commerce platforms: (1) concentration in the markets for e-commerce platforms, e-payment solutions and cross-border delivery services; and (2) the cost of membership fees for cross-border e-commerce platforms, particularly for African companies. In addition to, or in place of, membership fees, some e-commerce platforms charge a relatively high commission on sales conducted through the platform.

Our survey confirms that commission fees charged by third-party e-commerce platforms are a key obstacle to selling on these platforms. The most common e-commerce model in our survey is selling through own e-commerce-enabled website, with 18 out of 28 respondents reporting using this model for online sales (Figure 8). Only four firms predominantly use third-party platforms. Overall, 13 firms in our survey conduct both B2B e-commerce and B2C e-commerce, while 11 firms are only engaged in B2C e-commerce (Figure 9). Of the 14 firms that report on destination of online exports, four firms export online to EAC countries only, while 10 report online exports to economies outside Africa (with Europe and US emerging as the main destinations).¹⁷

Firm interviews suggest that African third-party platforms such as Jumia charge commission of between 10% and 15% on product sales, in addition to transport and

17 The importance of global rule-making differs across African countries and sectors. For instance, the majority of the cross-border trade in Africa in ICT companies is intra-regional, making global rule-making premature in this sector (ITC, 2019). ITC’s survey of 57 ICT companies in Uganda shows that only 33% of them export outside of Africa; the majority of companies supply to African countries, predominantly intra-regionally with the EAC to Kenya and Rwanda (ITC, 2019). Moreover, ICT exports are mainly B2B, rather than B2C, with client referral still the most dominant way of gaining visibility across borders, followed by company websites. E-commerce platforms are still used by very few companies to reach new clients.

Figure 8 Respondents by type of e-commerce models (number of firms)

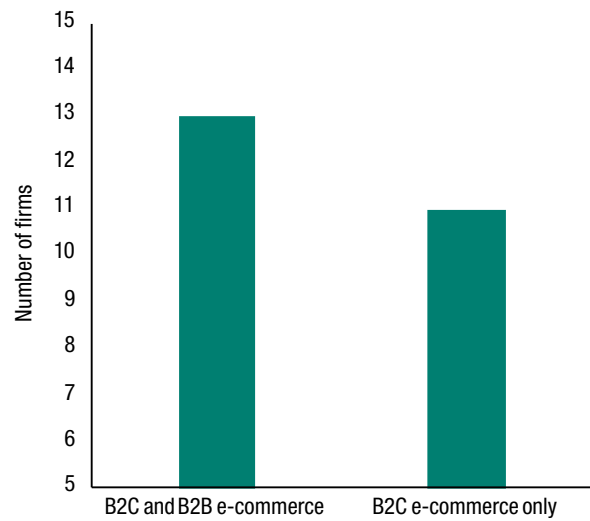


taxes, which pushes up the price of products for African sellers and makes their products uncompetitive. In 2020, global platforms such as the Apple App Store and Google Play charged a 30% commission on apps and in-app purchases, while Uber charged their drivers 25% and Amazon charged, on average, a 15% referral fee. Sellers of luxury products in particular prefer selling through their own e-commerce websites; customers of these products prefer to test samples before buying and firms are unable to meet the inventory requirements of third-party platforms, particularly for handmade products.

We have a physical store and an online shop on Jumia and Farmsyde platforms. The model we follow is marketplace for others and inventory model for our own site. Jumia charges a flat 15% plus transport and tax. This means we have to price the product a little low in order for the product to be competitive and the prices to be similar to our shop (Organic products retailer, Kenya).

We pay 12% to Jumia in addition to transport and taxes. We also host our own marketplace for organic products and charge customers a commission of

Figure 9 Respondents by end user of e-commerce



between 3% to 8% for listing products. We spend up to \$600 to advertise products using Facebook and Google and drive customers to our e-commerce site. Most other retailers also advertise on Facebook and Google to increase traffic to their website (Manufacturing firm, Kenya).

We try to promote online selling of made in Africa products. Currently our focus is on the Kenyan market. Our commission rates vary depending on the product type. We take a 10–15% commission (E-commerce platform, Kenya)

Interestingly, all firms that report selling through third-party e-commerce platforms are male-owned enterprises, while women-owned firms sell through their own websites (either through an e-commerce-enabled website or orders using online contact forms). Lower participation of women sellers on third-party e-commerce platforms could, in part, be explained by lower access to credit and finance to meet the higher commissions charged by these platforms, information asymmetries and training gaps.

6.3.2 Boosting intra-regional e-commerce

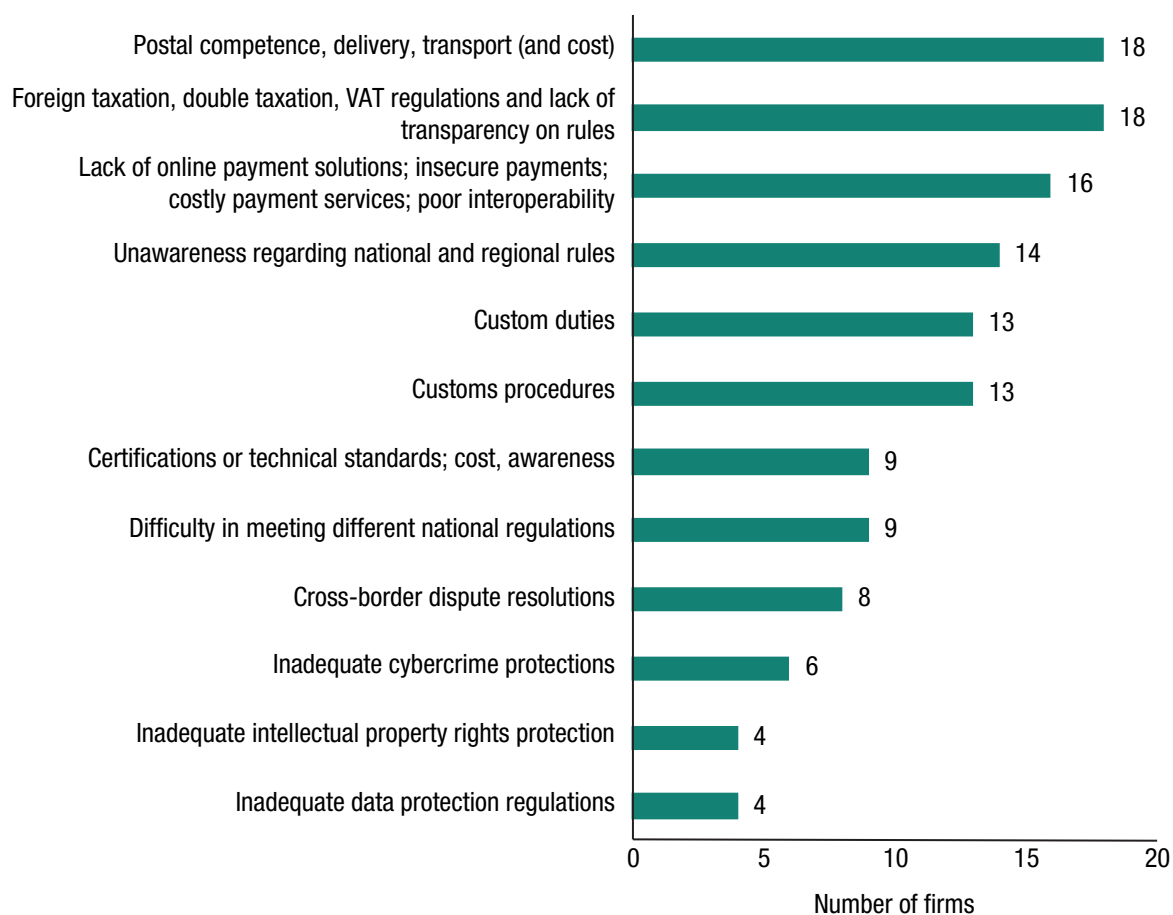
Survey findings suggest that the top five challenges to cross-border e-commerce are: (1) postal competence, delivery and transport costs; (2) tax issues (foreign taxation, double taxation, VAT regulations); (3) lack of reliable payment solutions; (4) lack of awareness of national and regional rules; and (5) custom duties and custom procedures (Figure 10). Challenges vary according to industry – for financial and technology services, for example, online consumer trust and dispute resolution are more important challenges.

Differences also emerge across firm size. For the large firms in our sample, foreign taxation and lack of online payment solutions emerge as the top obstacles (cited by three of the four large firms), while none of them mentions inadequate IPR as an obstacle. For both medium-sized and small firms, postal competence, delivery

and transport and foreign taxation emerge as the most common issues for cross-border e-commerce. Lack of awareness of regional and national rules is also a common problem for medium-sized firms. None of the 14 small firms mentions inadequate data protection as a problem. No significant differences are observed across gender of business owner, with male- and female-owned enterprises in the sample reporting similar challenges to cross-border e-commerce.

The firm interviews clearly reveal logistics, parcel delivery and transport costs as key obstacles to cross-border e-commerce (cited by 18 respondents in their top five e-commerce challenges for online exports). Transport is either unavailable or, when available, unreliable or expensive. Most goods are imported and exported through non-formal channels using a network of buses, which are cheaper and enable faster delivery of parcels than courier services.

Figure 10 Top obstacles in conducting cross-border e-commerce



Source: Survey (2020).

However, this comes at the cost of disjointed logistics, with firms able to sell online only in towns where the bus companies have an office.

An e-commerce platform in Kenya highlights the reliance on bus companies for importing products and for last-mile delivery:

Courier companies such as G4S are expensive and tend to consolidate all the goods before sending, meaning that orders in high volumes need to be placed before goods are sent. This leads to delay in parcel receipt. Most traders therefore use bus companies. We use buses to bring products from Kampala and Kigali. Since the packages are of different sizes, the rates are negotiable (with bus companies that act as couriers). This is an informal way of transporting goods from other countries in a more affordable manner, avoiding the customs authorities. Within the country we pay 200 ksh [\$2] to transport the parcels within the bus routes (E-commerce platform, Kenya).

We have to ship our products using a disjointed logistics solution which is a network of cross-country Kenyan bus company called Modern Coast. This means that our products only reach the towns in which the bus companies have an office. As a result, we are unable to sell to Northern Tanzania, Northern and Western Uganda and many other places (Organics manufacturing firm, Kenya).

We are aware of the rates. Within the COMESA region the tax rate is 16%. When we send goods to Zambia, we use a bus service through Dar es Salaam. The bus companies charge a small amount as conveyance fees across the borders. This avoids the border issues with customs that make it difficult to get goods across. Customs authorities mostly raise issues

on undervaluing of goods (Coffee exporter, Kenya).

Lack of a proper national physical addressing system was raised as an obstacle to e-commerce by a number of respondents in Kenya. The addressing system in cities in Nairobi is such that the delivery operator needs to call the buyer for directions. However, calls often go unanswered, leading to failed deliveries and charges being imposed on the seller. Some resellers find this unfair and have stopped selling on third-party platforms. Interviews with Jumia agents revealed that if a buyer has five failed deliveries, their pay-on-delivery button is disabled and they will need to pre-pay using mobile money or a card for the order to be accepted. Some online marketplaces report that 30–40% of products ordered are returned because delivery services cannot find the address.

We sell locally designed fashion products through our own website. The biggest logistical challenge is the lack of a home addressing system. We try to maintain good records for each customer so we know where to deliver the next time (Fashion retailer, Kenya).

Transport costs are also a problem, with high shipping costs. A coffee exporter reports that ‘transport cost is expensive locally; to deliver an 800 ksh [\$8] packet of coffee means the end user has to pay 1,100 ksh [\$11] because of transport. This makes the product expensive in a market where the disposable income is very low.’ As per another coffee exporter reported, ‘shipping to south Africa is as much as shipping to the US. It costs more than \$2,000 for a truck to send coffee to Tanzania. This is in addition to the costly and lengthy customs and other agency clearance (SPS rules).’

Foreign taxation, lack of clear custom procedures and duties, and unawareness of rules also emerge as important obstacles to cross-border e-commerce. Firm interviews reveal that certification for export to international markets is expensive and firms struggle to understand the rules around this. These problems are

inter-related, with one problem compounding the other. This was evident in an interview with a leather manufacturing firm in Kenya:

We sent a leather bag to Tanzania which cost \$150. The customer was asked to pay duty of the same value as the bag cost. We were not aware of this and had to ask customers to be aware of tax rules in their countries. In another case, we accepted an order from a customer in Nigeria for a leather bag. We later discovered that Nigeria does not allow imports of leather products from Kenya. We had to resort to informal channels; someone had to travel with the bag from Kenya to Nigeria to make it appear that the bag was being used for travelling (Leather manufacturing firm, Kenya).

Another leather exporter in Kenya reported that '[t]he duty on leather product exports to South Africa is \$50, which inflates the cost of the product so much. Taxes are not so clear for leather products. We need more high-quality vendors. More people will trust to buy online if what they are buying is of high quality.'

The problem of taxation was echoed by an agro-processing firm in Kenya as well as respondents from Rwanda:

Customs authorities mostly raise issues on undervaluing of goods. Once we get the License, SPS and certificate of origin, a physical verification is done. Import valuation is still an issue with customs authorities claiming the goods are undervalued. They have a database of how much coffee costs. They therefore may impose higher taxes if they suspect that the product is undervalued (Agro-processing firm, Kenya).

We mainly export to the US. For small shipments, below (less than \$500), paying taxes is relatively simply – we have to purchase a tax form for \$3.

But if the shipment is more than \$500 worth, then we have to involve a customs agent in Rwanda, who then charges a commission for the shipment, increasing the cost by up to \$200. It also takes a week longer to process. The process of paying taxes and custom duties is not straightforward (Manufacturing firm, Rwanda).

Unawareness of regional rules emerged as a point of frustration for most respondents. A Kenyan-based organic cleaning agent's manufacturer was asked to pay import duty for packaging material (glass jars) manufactured in Tanzania even though the EAC is a single customs territory. The rules are therefore unclear making traders use informal channels to access markets outside Kenya.

Firm interviews revealed interesting insights on online payment systems. Most customers opt for 'cash on delivery' when using Jumia due to low online trust. Lack of reliable online payment systems is constraining cross-border e-commerce, but this depends on how firms have built their e-commerce websites. According to a speciality coffee producer in Kenya, there are a number of payment providers locally in Kenya. However, if the website is hosted by international sites, such as Wix, their APIs may not integrate into the website. Some local payment providers such as Equitel and Pespal therefore do not work on internationally hosted websites. Those payment providers that operate on international hosted websites are foreign (such as Paypal) and charge high commission. Moreover, efficiency and accessibility to consumers has become particularly difficult during the Covid-19 pandemic if the payment provider is not local:

These are things people should know about first-hand before they sign up with a local payment provider (Coffee exporter, Kenya).

It has been difficult to overcome the unfriendly policies and regulations. Local fintech startups do not get enough support from the government (Payment solutions provider, Nigeria).

Some of the items we export to Uganda are not made in Kenya. Even though we paid taxes while importing them into Kenya. We are forced to pay more taxes when they cross into Uganda. The EAC single customs territory does not work in practice. The standards are also not harmonised. We send goods to Kim Fay Uganda that are certified by the Kenya bureau of Standards. These have to be certified once again in Uganda. For most products, there is no harmonisation of standards (FMCG producer, Kenya).

In line with the above discussion, there is a clear and strong need expressed by the African private sector for harmonisation of regulations across countries (Figure 11). Harmonised laws for taxation were ranked by the highest number of firms (17) as a critical regulation for boosting intra-REC e-commerce, followed by consumer protection regulations for building digital trust, harmonised laws on electronic trade and digital signatures, and harmonised data standards and privacy laws.

Looking further across firm size, we note that for large firms, consumer protection regulations and harmonisation of data standards and privacy laws rank highly among critical regulations for boosting intra-EAC trade. For small and

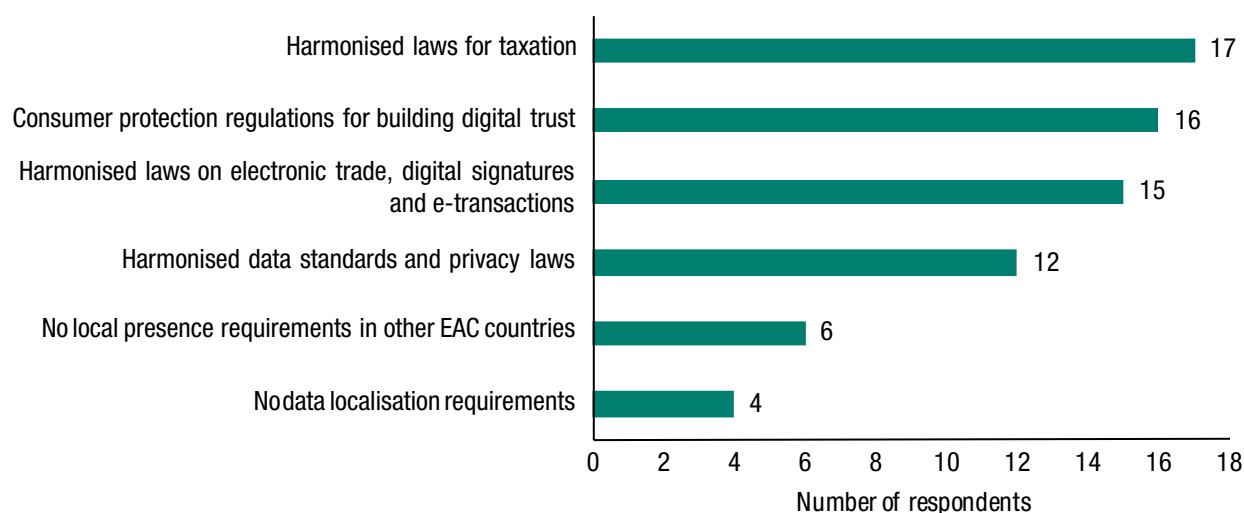
medium-sized firms, harmonised laws on e-trade emerge as an important regulation.

6.3.3 Electronic trade facilitation

Harmonised laws on electronic trade and digital signatures also emerged as a critical area for intra-regional e-commerce (Figure 11). Collaboration on electronic trade facilitation – through paperless trade, e-signatures and digital authentication – is a less contentious issue, with nearly half of RTAs including measures on promoting e-certification and e-signatures under e-commerce provision, focusing on their mutual recognition and interoperability (Wu, 2017).

E-transaction laws guarantee legal equivalence between paper-based and electronic forms of exchange. Many countries that have such laws were influenced by the legislative standards prepared by the United Nations Commission on International Trade Law, including its model law on electronic commerce (1996), model law on electronic signature (2001) and the convention on the use of electronic communications in international contracts. According to the UNCTAD Global Cyberlaw Tracker 2020, only 33 out of 54 African countries have a formal e-transaction legislation, six have a draft legislation and six have no legislation (UNCTAD, n.d.b). Among the key principles advanced by this category of laws are technology neutrality, non-discrimination of electronic communications

Figure 11 Regulations critical for boosting e-commerce with EAC countries



Source: Survey (2020).

and functional equivalence. The adoption of e-transaction laws also generally requires a national certification authority.

A particular challenge of cross-border e-commerce is the absence in most e-transaction laws of reference to the international aspects of e-commerce such as choice of law, which is one of the potential areas of conflict. One regional grouping that has sought to address some of these implications is the EAC, which developed an electronic transaction bill (2014) to promote electronic transactions. In addition to this bill, EAC states adopted e-transaction policy recommendations to be domesticated through the development of regulatory frameworks (EACO, 2017).

6.3.4 Opportunities within the AfCFTA

Facilitating a regional dialogue in Africa to open opportunities to cross border e-commerce trade is key. The AU Digital Transformation Strategy 2020–2030 (2020) identifies the AfCFTA negotiations as a unique platform to discuss harmonisation and the reduction of the regulatory burden on cross-border services trade and e-commerce in the continent. ICT services are part of the priority sectors adopted by the AU, with AUDTS promoting intra-African integration in digital trade to achieve wider participation by enterprises in national, regional and international e-commerce (especially cross-border). In line with this, AUDTS proposes:

- reducing barriers to cross-border digital trade and market access by supporting Africa's efforts to establish a continental digital single market, in line with the AfCFTA aim to remove legal and technical barriers to trade;
- developing an enabling regulatory framework for e-commerce at the continental level, including common rules for consumer protection;
- allowing regional and continental integration of African data markets through open standards, while taking into account that security and regular upgrading of these tools must be guaranteed;
- developing and improving the regulatory environment for financial and payment services, including supporting mobile money;
- addressing issues relating to parcel delivery and propose solutions based on regional cooperation and supporting eco-system initiatives that tackle the issue of lack of physical addresses.

An e-commerce-related challenge that the AfCFTA could address to boost cross-border trade is the requirement of a local presence imposed by many markets in Africa to provide services. Jumia, for instance, has had to incorporate and set up offices in each country of operation. This is an expensive requirement, implying that only businesses with significant capital can scale e-commerce across the continent. A survey of Ugandan ICT companies, for instance, suggests that local presence requirements imposed by Rwanda (one of the main exporting destinations), along with requirements on the nationality of foreign affiliates, restricted cross-border services trade (ITC, 2019). Several regional blocks have made progress on facilitating cross-border e-commerce that the AfCFTA e-commerce negotiations can draw on to ensure coherency (see Box 2).

When considering which laws to adopt in the area of electronic trade facilitation, the AfCFTA can explore options going beyond electronic signatures to incorporate other important contractual terms, such as time and place of dispatch and receipt, acknowledgment of receipt, party location and use of automated message systems (UNECA et al., 2019). Two broad options can be considered: one is technology-neutral, while the other specifies which types of signature technologies are acceptable. For example, ECOWAS opted to enact technology-specific legislation based on key public infrastructure. Other issues around electronic trade facilitation within the remit of the e-commerce protocol in the AfCFTA include the banning of unsolicited commercial electronic messages, ensuring validity of electronic contracts and protecting online consumers from fraud.

Box 2 Regional efforts to facilitate cross-border e-commerce within Africa

- The **Southern African Development Community (SADC)** has developed a comprehensive regional strategy on the back of most of its members having developed national ICT strategies. Key pillars of this strategy include components of national e-commerce strategies, legislation, national and sub-regional infrastructure, skills development, payment solutions (the SADC Integrated Regional Electronic Settlement System) and data collection.
- **COMESA** has also made good progress with the adoption of the Digital Free Trade Area (DFTA), which aims to use ICT to improve efficiency in cross-border trade through development of e-trade (a platform for online trade, an e-payment gateway and mobile apps for small-scale cross-border traders), e-logistics (or the use of ICT to improve logistics) and e-legislation (legislation which allows countries in the region to carry out e-transactions and e-payments). It also has a COMESA Regional Payment and Settlement System.
- The **EAC** has developed an Electronic Transaction Bill (2014) to promote electronic transactions. In addition to this bill, EAC states adopted e-transactions policy recommendations to be domesticated through the development of regulatory frameworks. The EAC partner states are at varying stages of introducing new or strengthening existing national ID systems. Kenya, Rwanda and Uganda already recognise each other's national ID as a valid document in lieu of a passport, which can facilitate digital trade.

Source: UNECA et al. (2019).

7 Conclusions and recommendations

An important gap exists in the literature on e-commerce and development in terms of considerations and implications for African businesses. To address the gap, this paper presents a summary of e-commerce proposals put forward in PTAs and their implications for African businesses. The analysis in this paper is based on primary data collected through a survey of 31 businesses in Africa, complemented with 15 firm interviews. The sample primarily includes firms from Kenya, Rwanda and Nigeria across different sectors and sizes, and includes both male- and female-owned enterprises.

A number of important findings emerge from the paper, which can help shape policy-making in the context of the e-commerce negotiations in Phase 3 of the AfCFTA:

- There is a need for more nuanced analysis of e-commerce in the context of developing countries, which applies to the breadth of e-commerce, the types of models emerging and their implications. More clarity is needed on the classification of digital products and the revenue implications of these classifications for developing countries. In global negotiations, the definition of e-commerce also appears to be too narrow and discounts the role of C2C e-commerce in developing countries, which is conducted through virtual marketplaces on social media platforms. There is need for more investment in building data and the research knowledge base for e-commerce in Africa.
- E-commerce between African countries continues to be constrained by non-tariff barriers and traditional challenges to cross-border trade. Our firm-level survey reveals that the top five challenges to cross-border e-commerce are: (1) postal competence, delivery and transport costs; (2) issues around taxation (foreign taxation, double taxation, VAT regulations); (3) lack of reliable payment solutions; (4) unawareness of national and regional rules; and (5) custom duties and custom procedures. While it is beyond the scope of the e-commerce protocol to directly address the infrastructural challenges that affect cross-border e-commerce within Africa, it is important for the protocol to identify, coordinate and boost initiatives/institutions that work to reduce the challenges associated with cross-border e-commerce (Ogo, 2020). Both supply- and demand-side challenges need to be addressed in order to leverage intra-regional e-commerce at scale in Africa.
- On the supply side, there is a need to promote participation of African firms on third-party e-commerce platforms. Most businesses state that commission on e-commerce platforms such as Jumia ranges from 10–15% and can go as high as 30–40% for some fast-moving accessories, which discourages African businesses from linking onto e-commerce platforms. Improvements in logistics, physical addressing and last-mile delivery to customers is also key. The cost of logistics is high, making it difficult to ship goods across borders. As a result, most small sellers use bus companies, which tend to have courier arm where the rates are more favourable than larger cross-border courier companies. Sending goods via bus companies (i.e. through informal channels) means the sellers do not pay taxes but delivery is limited to existing bus routes. Reliability of the post and delivery networks also needs to be improved, potentially through PPP models. Digital

solutions can be leveraged to mitigate some of these challenges – for instance, digitalisation of corridors and digital addressing systems can address some of the challenges related to infrastructure and customs. Some African countries are making progress on this front – in Ghana, for example, apps such as GhanaPostGPS¹⁸ and SnooCODE use technology to map addresses digitally.

- To address demand-side challenges to e-commerce, there is a need to increase awareness of national and regional rules on taxation, custom duties and procedures. Most sellers do not know what products are barred from which countries. Customs procedures vary from product to product. For the coffee industry, the guidelines are clear and so are the steps for how to obtain the paperwork. For other sectors, however, the rules are not so clear. In some cases, sellers need the services of a clearing agent in order to complete the paperwork. There is also a need to increase transparency and clarity regarding taxes. The East African Community, for instance, needs to gazette most of the products and the tax rates that apply. Regular wrangling and political issues between the EAC countries is affecting supply chains. The ever-changing customs rules make it difficult to move goods across borders. Due to political differences, borders are sometimes closed or goods delayed for long durations. And finally, taxes are not predictable, which makes sellers avoid them altogether.
- The firm-level survey reveals that all firms that report selling through third-party e-commerce platforms are male-owned, while women-owned firms sell through their own websites (either via an e-commerce-enabled website or using online order forms). Lower participation of women sellers on third-party e-commerce platforms could, in part, be explained by lower availability of infrastructure to women, higher financial constraints, lower ICT skills, interest in and perceived relevance of ICT and other socio-cultural and institutional contexts (Sey and Hafkin, 2019). Closing the gender digital divide in terms of access to cross-border e-commerce is crucial. Dialogue between policy-makers, the private sector and civil society on how to empower women in the digital economy should be encouraged at all levels, especially in developing countries. Targeted investment in cross-border apps that promote gender inclusion, such as Sauti, needs to be prioritised. Interview data from MSMEs (mostly women-owned) further reveals that the development of e-commerce related websites, their maintenance and repair at reasonable rates, as well as enabling the connection of these website with online payment solutions such M-Pesa, is limited but needed. At present, 44 PTAs include targeted provisions to facilitate e-commerce use by SMEs (Burri and Polanco, 2020). The AfCFTA can follow suit and provide specific provisions to address challenges faced by MSMEs and women in e-commerce uptake. The cooperation provisions for the e-commerce protocol could include digital training and capacity-building for women to help close the gender digital divide. There could also be a role for Aid for Trade in supporting digital literacy and capacity-building particularly for women.
- Almost all firms communicated the need for the development of a regional e-commerce platform. Such platforms can help connect smaller suppliers to larger firms, especially for regional value chains, and facilitate regional linkages for MSMEs and women. However, there was a mixed reaction to intra-regional data sharing; this is thought to be run by governments and there are concerns regarding data privacy and how up to date and accurate the information would be. There is a clear need to support initiatives for building private sector capacity for data processing and analysis.
- Among African firms in our sample (which was skewed to small firms), consumer protection emerged as a significant obstacle to undertaking e-commerce – more so than other issues such as data localisation or protection. There is a need to provide

18 <https://ghanapostgps.com/>.

information on authentic online sellers and to strengthen consumer digital trust. One way of doing this is through an e-commerce ‘trustmark’ – an electronic commerce badge, image or logo displayed on a website to indicate that the business has been shown to be trustworthy by the issuing organisation. This would provide surety for the customer and an alternative dispute resolution service both within countries and across borders. South Africa, for example, uses a trustmark based on the European Safe.Shop system (Biz Community, 2019). Trustmarks can also be provided for payment providers, but local trustmark providers are limited.

- Closely linked to the issue of consumer protection is competition policy. As African countries enter into the AfCFTA, it is worth noting that Africa’s consumer protection and competition regime remains patchy and incomplete. According to the UNCTAD Global Cyberlaw Tracker (UNCTAD, n.d.c), only 25 out of 54 African countries have online consumer protection legislation in action, and only 23 African countries have competition laws in place as well as competition authorities to enforce those laws (UNECA et al., 2019). These competition issues are particularly relevant to e-commerce – internet and related services markets are characterised by only partial competition or monopoly in up to 28 African countries (Futi and Macleod, 2020). It is crucial that the AfCFTA Protocol on Competition addresses standard competition issues such as anti-competitive agreements, cartels, abuse of dominance, and merger control, but also extends to competition challenges within the context of an increasingly digitalised economy, such as use of artificial intelligence, data fusion, app-based transactions, algorithmic business intelligence and other digital platforms (UNECA et al., 2019). The AfCFTA provides an important opportunity for a coordinated approach to competition policy across relevant national authorities (such as information regulators

and competition commissions) on a range of related issues, including personal data protection, data privacy and data security.

- Another issue is rules of origin, which are key to e-commerce when selling across borders. The issue is whether goods are 100% locally made, imported from a non-AU country, or assembled by a local manufacturer from non-African-made components. Rules of origin are important in determining whether a product can carry the ‘Made in Africa’ label (Tempest et al., 2020).
- Increasing inter-operability in payment solutions, particularly cross-border payment systems, is important for boosting intra-regional trade in Africa. Some progress is already underway on this, with AUDTS (2020–2030) recognising the importance and relevance of digital financial services within AfCFTA to facilitate greater intra-African trade. Digital regional payments systems have also emerged that reduce the cost and time associated with cross-border trade, such as the COMESA Regional Payment and Settlement System and the East African Payments System. At continent level, AfDB has launched a Pan-African Payment and Settlement System (PAPSS) to allow payments for goods and services, which was designed in partnership with the AU is intended to be the first digital payment system across the entire continent.
- Overall, the AfCFTA e-commerce protocol can provide a useful common and guiding framework for taxes, data protection and privacy policies, and stronger enforcement, which can help build online consumer trust in African economies and facilitate B2C e-commerce. More broadly, the AfCFTA should look towards the development of a continental digital industrial policy (Foster and Azmeh, 2020) as part of its wider industrial policy agenda, which would facilitate economies in becoming part of complex production networks.

References

- Aaronson, S.A. and Leblond, P. (2018) 'Another digital divide: the rise of data realms and its implications for the WTO' *Journal of International Economic Law* 21(2): 245–272.
- Afreximbank (2019) *African trade in a digital world*. African Trade Report 2019. Cairo: African Export–Import Bank (https://s3-eu-west-1.amazonaws.com/demo2.opus.ee/afrexim/African-Trade-Report_2019.pdf).
- Africa Growth Initiative (2020) 'Bolstering Africa's role in the global economy' in *Foresight Africa: Top Priorities for the continent 2020-2030*. Washington DC: Brookings.
- Antimiani, A. and Cernat, L. (2018) 'Liberalizing global trade in mode 5 services: How much is it worth?' *Journal of World Trade* 52(1).
- AU – African Union (2020a) *The digital transformation strategy for Africa (2020–2030)*. Addis Ababa: AU (<https://au.int/en/documents/20200518/digital-transformation-strategy-africa-2020-2030>).
- AU (2020b) 'African Union convention on cyber security and personal data protection' (<https://au.int/sites/default/files/treaties/29560-sl-AFRICAN%20UNION%20CONVENTION%20ON%20CYBER%20SECURITY%20AND%20PERSONAL%20DATA%20PROTECTION.pdf>).
- Azmeh, S. and Foster, C. (2016) *The TPP and the digital trade agenda: digital industrial policy and Silicon Valley's influence on new trade agreements*. International Development Working Paper No. 16-175. London: London School of Economics and Political Science.
- Banga, R. (2017) *Rising product digitalisation and losing trade competitiveness*. Geneva: UNCTAD (<https://unctad.org/webflyer/rising-product-digitalisation-and-losing-trade-competitiveness>).
- Banga, K. and te Velde, D.W. (2018) *Digitalisation and the future of manufacturing in Africa*. London: Overseas Development Institute.
- Banga, K. and te Velde, D.W. (2020) *Covid-19 and disruption of the digital economy; evidence from low and middle-income countries*. Digital Pathways at Oxford Paper No. 7. Oxford: Blavatnik School of Government, University of Oxford.
- Banga, K., Keane, J., Mendez-Parra, M. et al. (2020) *Africa trade and Covid-19: the supply chain dimension*. Working Paper 586. London: ODI (www.odi.org/publications/17248-africa-trade-and-covid-19-supply-chain-dimension).
- Bauer, M., Lee-Makiyama, H., Van der Marel, E. and Vershelde, B. (2014) *The costs of data localisation: friendly fire on economic recovery*. ECIPE Occasional Paper No. 3/2014. Belgium: European Centre for International Political Economy (<https://ecipe.org/publications/dataloc/>).
- BEPS – Base Erosion and Profit Shifting Project (2019) *Addressing the tax challenges of the digitalisation of the economy*. Paris: OECD (www.oecd.org/tax/beps/public-consultation-document-addressing-the-tax-challenges-of-the-digitalisation-of-the-economy.pdf).
- Biz Community (2019) 'EPSA launches Africa's first e-commerce Trustmark'. Biz Community, 24 Oct (www.bizcommunity.com/Article/196/394/197067.html).
- Blakeney, M. and Mengistie, G. (2011) 'Intellectual property and economic development in sub-Saharan Africa' *The Journal of World Intellectual Property* 14(3–4): 238–264.
- Buditomo, R. (2019) 'What we should know about duties on intangible goods'. Baker McKenzie Insight, 25 February (www.bakermckenzie.com/en/insight/publications/2019/02/what-should-we-know).
- Burri, M and Polanco, R. (2020) 'Digital trade provisions in preferential trade agreements: introducing a new dataset' *Journal of International Economic Law* 23: 1–34.

-
- Castro, D. and McQuinn, A. (2015) *Cross-border data flows enable growth in all industries*. Washington DC: ITIF (www2.itif.org/2015-cross-border-data-flows.pdf).
- Cernat, L. and Kutlina-Dimitrova, Z. (2014) 'Thinking in a box: a mode 5 approach to service trade' *Journal of World Trade* 48: 1109.
- Chakravorti, B. and Chaturvedi, R.S. (2019) 'Research: how technology could promote growth in 6 African countries' *Harvard Business Review*, 4 December (<https://hbr.org/2019/12/research-how-technology-could-promote-growth-in-6-african-countries>).
- COMESA – Common Market for Eastern and Southern Africa (2020) *How COMESA can mitigate negative effects of Covid19 pandemic on trade*. Nairobi: COMESA.
- Conway, M., Holt, T., Sabow, A. and Sun, I.Y. (2019) 'Should sub-Saharan Africa make its own drugs?' McKinsey & Company, 10 January (www.mckinsey.com/industries/public-sector/our-insights/should-sub-saharan-africa-make-its-own-drugs).
- Cory, N. (2019) *The ten worst digital protectionism and innovation mercantilist policies of 2018*. Washington DC: Information Technology and Innovation Foundation (<https://itif.org/publications/2019/01/28/ten-worst-digital-protectionism-and-innovation-mercantilist-policies-2018>).
- Davis Tax Committee (2014) *Second interim report on base erosion and profit shifting (Beps) in South Africa*. South Africa: Davis Tax Committee (https://www.taxcom.org.za/docs/New_Folder3/2%20BEPS%20Final%20Report%20-%20Introductory%20Report.pdf).
- Deloitte (2017) *Privacy is paramount: personal data protection in Africa*. Johannesburg: Deloitte (www2.deloitte.com/content/dam/Deloitte/za/Documents/risk/za_Privacy_is_Paramount-Personal_Data_Protection_in_Africa.pdf).
- Dhar, V. (2017) 'Should we regulate digital platforms?' *Big Data* 5(4): 277–278.
- Digital Trade Tracker (n.d.) 'USMCA'. Webpage (<https://digitaltradetracker.org/usmca/>).
- EACO – East African Communication Organisation (2017) *EACO model policy on electronic transactions*. Kigali: East African Communication Organisation (www.eaco.int/admin/docs/publications/EAC%20MODEL%20POLICY%20ON%20ELECTRONIC%20TRANSACTIONS.pdf).
- ECA – Economic Commission for Africa (2020) *Insights on African businesses' reactions and outlook to COVID-19*. Addis Ababa: United Nations Economic Commission for Africa (www.uneca.org/archive/sites/default/files/PublicationFiles/eca-iec_survey_covid-19_africa_english_final_v2.2.pdf).
- ECA (forthcoming) 'Imperative for expediting AfCFTA negotiations on e-commerce'.
- Ferguson, V. and Schneider, M. (2015) 'Enforcement of intellectual property rights in Africa' *Journal of Intellectual Property Law and Practice* 10(4): 269–279.
- Ferracane, M. (2017) *Restrictions on cross-border data flows: a taxonomy*. ECIPE Working Paper No. 1/2017. Belgium: European Centre for International Political Economy (<https://ssrn.com/abstract=3089956>).
- Fleming, S., Brunsdon, J., Giles, C., and Politi, J. (2020) 'US upends global digital tax plans after pulling out of talks with Europe'. *Financial Times*, 17 June (www.ft.com/content/1ac26225-c5dc-48fa-84bd-b61e1f4a3d94).
- Foster, C. and Azmeh, S. (2020) 'Latecomer economies and national digital policy: an industrial policy perspective' *The Journal of Development Studies* 56(7): 1247–1262.
- Futi, G. and Macleod, J. (2020) 'Covid-19 impact on e-commerce and policies for recovery'. Virtual presentation for African Union E-Commerce Week 2020.
- Garcia-Israel, K. and Grollier, J. (2019) *Electronic commerce joint statement: issues in the negotiations phase*. Geneva: CUTS International (www.cuts-geneva.org/pdf/1906-Note-RRN-E-Commerce%20Joint%20Statement1.pdf).
- Grollier, J. and Simon, M. (2020) *E-commerce: what have small developing countries prioritised in trade agreements?* CUTS Briefing Paper. Geneva: CUTS International (www.cuts-geneva.org/pdf/eAfCFTA-2005-BP-E-Commerce_Provisions_in_Trade_Agreements.pdf).

- Hobday, M. (2005) 'Firm-level innovation models: perspectives on research in developed and developing countries' *Technology Analysis & Strategic Management* 17(2): 121–146.
- IMF – International Monetary Fund (2019) *Corporate taxation in the global economy*. IMF Policy Paper 19/007. Washington DC: IMF.
- Ismail, Y. (2020) *E-commerce in the World Trade Organization: history and latest developments in the negotiations under the Joint Statement*. Geneva: IISD and CUTS International (www.iisd.org/system/files/publications/e-commerce-world-trade-organization-.pdf).
- ITC – International Trade Centre (2017) *New pathways to e-commerce: a global MSME competitiveness survey*. Geneva: International Trade Centre.
- ITC (2019) *Firms characteristics and obstacles to ICT services trade*. Geneva: International Trade Centre (www.intracen.org/uploadedFiles/intracenorg/Content/Redesign/Projects/NTF4/Firms%20characteristics%20and%20obstacles%20to%20ICT%20services%20trade.pdf).
- Kanth, D.R. (2017) 'African Group will not negotiate e-commerce rules at WTO'. Webpage. *Third World Economics*, No. 67, 16–31 August (www.twn.my/title2/twe/2017/647/2.htm).
- Kelsey, J. (2020) 'DEPA lacks added value'. East Asia Forum, 10 April (www.eastasiaforum.org/2020/04/10/depa-lacks-added-value/).
- Latif, L. (2020) "The evolving thunder": the challenges around imposing the digital tax in developing African countries' *International Journal of Digital Technology & Economy* 4(1): 34–50.
- Lemma, A. (2017) *E-commerce: the implications of current WTO negotiations for economic transformation in developing countries*. London: Supporting Economic Transformation (www.odi.org/publications/10994-implications-current-wto-negotiations-economic-transformation-developing-countries).
- Mayer, J. (2018) *Digitalization and industrialization: friends or foes?* Research Paper 25. Geneva: UNCTAD (<https://unctad.org/webflyer/digitalization-and-industrialization-friends-or-foes>).
- Meltzer, J.P. (2015) *A new digital trade agenda E15 Initiative*. Geneva: International Centre for Trade and Sustainable Development and World Economic Forum (www.e15initiative.org/).
- Ogo, I. (2020) 'An agenda for the AfCFTA Protocol on E-Commerce'. *tralacBlog*, 25 June (www.tralac.org/blog/article/14692-an-agenda-for-the-afcfta-protocol-on-e-commerce.html).
- Okal, J. (2017) 'Kenya ICT law 2016: year in review'. *techweez*, 6 January (<https://techweez.com/2017/01/06/kenya-ict-law-2016-year-review/>).
- OWINS – Our World is not for Sale (2017) *Some preliminary implications of WTO source code proposal*. MC11 Briefing Paper (https://ourworldisnotforsale.net/2017/TWN_Source_code.pdf).
- Palmer, E. (2020) 'Concern for drug shortages grows as Covid-19 outbreak drags on'. *Fierce Pharma*, 14 February (www.fiercepharma.com/manufacturing/concern-for-drug-shortages-grows-as-covid-19-outbreak-drags).
- Sey, A. and Hafkin, N. (eds) (2019) *Taking stock: data and evidence on gender digital equality*. Tokyo: United Nations University.
- Singh, P.J. (2018) *Digital industrialisation in developing countries: a review of the business and policy landscape*. Delhi: IT for Change.
- South Centre and ATPC – African Trade Policy Centre (2017) *The WTO's discussions on electronic commerce*. Geneva: South Centre (www.southcentre.int/wp-content/uploads/2017/01/AN_TDP_2017_2_The-WTO's-Discussions-on-Electronic-Commerce_EN-1.pdf).
- Tempest, A., Grobbelaar, N., Shipalana, P. and Matema, T. (2020) 'Renewed urgency to implement the African Continental Free Trade Area: how can Africa prepare now?' SAIIA Opinion & Analysis, 21 April (<https://saiia.org.za/research/renewed-urgency-to-implement-the-african-continental-free-trade-area-how-can-africa-prepare-for-a-post-covid-19-world/>).
- Third World Network (2017) *Some preliminary implications of WTO source code proposal*. Briefing. Penang: Third World Network (<https://twn.my/MC11/briefings/BP4.pdf>).

-
- tralac (2019) *Finding African solutions for the taxation of digital trade*. Stellenbosch, South Africa: tralac (www.tralac.org/blog/article/14349-finding-african-solutions-for-the-taxation-of-digital-trade.html).
- Turner & Townsend (n.d.) 'Data centres in Africa'. Webpage. (www.turnerandtowntsend.com/en/perspectives/data-centre-cost-index-2020/data-centres-in-africa/).
- UNCTAD – United Nations Conference on Trade and Development (2016) *Data protection regulations and international data flows: implications for trade and development*. New York and Geneva: UNCTAD (https://unctad.org/system/files/official-document/dtlstict2016d1_en.pdf).
- UNCTAD (2019) *Growing Trade in electronic transmissions: implications for the South*. Research Paper No. 29. New York and Geneva: UNCTAD (https://ourworldisnotforsale.net/2019/ser-rp-2019d1_en.pdf).
- UNCTAD (2020) *Covid-19 and e-commerce. Impact on businesses and policy responses*. New York and Geneva: UNCTAD (https://unctad.org/system/files/official-document/dtlstictinf2020d2_en.pdf).
- UNCTAD (n.d.a) 'Summary of Adoption of E-Commerce Legislation Worldwide'. Webpage. (<https://unctad.org/topic/ecommerce-and-digital-economy/ecommerce-law-reform/summary-adoption-e-commerce-legislation-worldwide>).
- UNCTAD (n.d.b) 'E-transactions legislation worldwide'. Webpage (<https://unctad.org/page/e-transactions-legislation-worldwide>).
- UNCTAD (n.d.c) 'Online consumer protection legislation worldwide'. Webpage (<https://unctad.org/page/online-consumer-protection-legislation-worldwide>).
- UNECA, African Union, African Development Bank and UNCTAD (2019). *Next steps for the African Continental Free Trade Area*. United Nations Economic Commission for Africa, African Union, African Development Bank and United Nations Conference on Trade and Development (www.tralac.org/documents/resources/africa/2898-assessing-regional-integration-in-africa-ix-une-cauc-afdb-unctad-july-2019/file.html).
- USTR – United States Trade Representative (2018) 'Findings of the investigation into China's acts, policies, and practices related to technology transfer, intellectual property, and innovation under Section 301 of the Trade Act of 1974'. (<https://ustr.gov/sites/default/files/Section%20301%20FINAL.PDF>).
- Willemyns, I. (2020) 'Addressing digital services in PTAs: only convergence in the 11th Hour?' in R.T. Hoffmann and M. Krajewski (eds) *Coherence and divergence in services trade law*. Berlin: Springer.
- World Bank (2020) *Impact of Covid survey*. Washington DC: World Bank (www.enterprisesurveys.org/en/covid-19).
- WTO – World Trade Organization (1994) 'Part 1 – General provisions and basic principles'. TRIPS Agreement, Article 4(d) (www.wto.org/english/docs_e/legal_e/27-trips_03_e.htm).
- WTO (1998) *Work programme on electronic commerce*. Geneva: WTO (<https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/WT/L/274.pdf&Open=True>).
- WTO (2003) *Work programme on electronic commerce*. WT/GC/W/497 (https://docs.wto.org/dol2fe/Pages/FE_Search/FE_S_S009-DP.aspx?language=E&CatalogueIdList=93382,102538,56745,8056,6668,69256,40475,23411,19400,21093&CurrentCatalogueIdIndex=4&FullTextHash=&HasEnglishRecord=True&HasFrenchRecord=True&HasSpanishRecord=True).
- WTO (2013) *Electronic commerce, development and small, medium-sized enterprises*. Background Note by the Secretariat. WT/COMTD/W/193.
- WTO (2016a) *Work programme on electronic commerce: non-paper from the United States*. JOB/GC/94.
- WTO (2016b) *Work programme on electronic commerce: trade policy, the WTO and the digital economy*. JOB/GC97/Rev.1.
- WTO (2017a) *Draft ministerial decision on electronic commerce*. Communication, 20 November (docs.wto.org/dol2fe/Pages/FE_Search/FE_S_S009-DP.aspx?language=E&CatalogueIdList=240318).

-
- WTO (2017b) *Joint statement on electronic commerce*. WT/MIN(17)/60 (<https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/WT/MIN17/60.pdf&Open=True>).
- WTO (2018) General Council Meeting. WT/GC/M/173.
- WTO (2019a) *Joint statement on electronic commerce: EU proposal for WTO disciplines and commitments relating to electronic commerce*. INF/ECOM/22 (https://trade.ec.europa.eu/doclib/docs/2019/may/tradoc_157880.pdf).
- WTO (2019b) *Work programme on electronic commerce: the e-commerce moratorium and implications for developing countries*. Communication, 3 June.
- WTO (2020a) *E-commerce, trade and the Covid-19 pandemic*. Information Note. Geneva: WTO (www.wto.org/english/tratop_e/covid19_e/ecommerce_report_e.pdf).
- WTO (2020b) *Work programme on electronic commerce: the e-commerce moratorium: scope and impact*. Communication from India and South Africa, 10 March (https://docs.wto.org/dol2fe/Pages/FE_Search/FE_S_S009-DP.aspx?language=E&CatalogueIdList=264789%2C264692%2C263985%2C262610%2C262031%2C261632%2C261432%2C261434%2C259951%2C259601&CurrentCatalogueIdIndex=4&FullTextHash=&HasEnglishRecord=True&HasFrenchRecord=True&HasSpanishRecord=True).
- Wu, M. (2017) *Digital trade-related provisions in regional trade agreements: existing models and lessons for the multilateral trade system*. RTA Exchange paper. Geneva: ICTSD and Washington DC: IDB.
- Wunsch-Vincent, S. (2006) *The WTO, the internet and trade in digital products: EC-US perspectives*. Oxford: Hart Publishing.



**Evidence.
Ideas.
Change.**

ODI is an independent, global think tank, working for a sustainable and peaceful world in which every person thrives. We harness the power of evidence and ideas through research and partnership to confront challenges, develop solutions, and create change.

ODI
203 Blackfriars Road
London SE1 8NJ

+44 (0)20 7922 0300
info@odi.org

odi.org
odi.org/facebook
odi.org/twitter