The digital ecosystem in Nigeria and the AfCFTA Digital Trade Protocol

Raising awareness and strategising implementation

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Supporting Investment and Trade in Africa (SITA)
Key messages

By promoting intra-African digital trade, the Digital Trade Protocol (DTP) will open up new market opportunities for businesses in Nigeria.

Lack of sufficient domestic regulations in Nigeria to boost digital trade and economy, with overall low satisfaction in the private sector for the current digital ecosystem.

Lack of awareness in the private sector about the potential impact of the DTP on their businesses.

Low levels of understanding in the private sector on cybersecurity and payment gateway systems.

Potential impact on GDP, employment, and exports through implementation of the DTP and increased digital penetration in Nigeria, (based on an extrapolation exercise):
11.7%-12.8% expected rise in GDP
15.4% to 40.9% expected rise in employment
16.9% to 59.8% expected rise in exports.

Adoption of the DTP and proliferation of digital trade can increase diversification, protect Nigeria against oil market volatility, and support inclusive growth.

Urgent need to enhance digital skills, broadband networks, data privacy, consumer protection and online payment systems through targeted policies and awareness and capacity-building interventions.

Proposed policy changes should include a comprehensive, detailed, and measurable digital trade framework for Nigeria that can aligned to the DTP, cross-African collaboration on regulatory practices to promote e-commerce, and increased public-private collaboration.
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# Contents

Acknowledgements .................................................................................................................. 4  
Acronyms ................................................................................................................................. 6  
Background ............................................................................................................................... 7  
1 Methodological approach ..................................................................................................... 8  
2 Nigeria’s current digital ecosystem ..................................................................................... 9  
3 Current ICT performance .................................................................................................... 11  
4 Experience of the public and private sectors .................................................................... 12  
5 Prospective impact of the AfCFTA Protocol on Digital Trade ........................................ 14  
6 Policy recommendations ..................................................................................................... 16  
References ................................................................................................................................. 18
# Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AfCFTA</td>
<td>African Continental Free Trade Area</td>
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<td>DTP</td>
<td>Digital Trade Protocol</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>ICT</td>
<td>Information, Communication, and Technology</td>
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<td>MSMEs</td>
<td>Medium, small and micro enterprises</td>
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<tr>
<td>R&amp;D</td>
<td>Research and development</td>
</tr>
<tr>
<td>UNCITRAL</td>
<td>United Nations Commission on International Trade Law</td>
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<td>UNECA</td>
<td>United Nations Economic Commission for Africa</td>
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<td>WIPO</td>
<td>World Intellectual Property Organisation</td>
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Background

The African Continental Free Trade Area (AfCFTA), creating a single market for goods and services across the African continent, presents a groundbreaking opportunity for digital trade, especially with the anticipated adoption of the AfCFTA Protocol on Digital trade.

Nigeria, as one of the largest economies in Africa, is well-positioned to become a digital economy powerhouse due to its large market and growing digital trade ecosystem. This has the potential to transform the way business is done in Africa and help small and medium-sized enterprises (SMEs) access new markets.

However, significant challenges and barriers, ranging from knowledge gaps and capacity limitations to infrastructure in the evolving digital ecosystem in Nigeria, stand on the path of reception of digital trade protocol for the continent. These challenges will consequentially hinder effective implementation once the protocol is adopted in Nigeria.

This research explores the current state of preparedness of the digital trade ecosystem in Nigeria within the AfCFTA Digital Trade Protocol (DTP), by reviewing the following:

- The size of the digital economy (including domestic, trade, etc.)
- Current digital and ICT infrastructure
- Stock of existing regulations and policies
- Level of knowledge about the AfCFTA and its DTP
- Proposed impact of the AfCFTA DTP
- Digital trade barriers and key challenges

This review process led to the development of actionable recommendations to assist the private sector and businesses, including e-commerce platforms, startups, fintechs, software developers and data science and management firms. These recommendations will be key to the effective reception of the digital trade protocol when adopted and its implementation in Nigeria.
1 Methodological approach

This policy brief is based on an ODI publication titled, "Advancing implementation of the AfCFTA Protocol on Digital Trade in Nigeria" which generated actionable policy recommendations to increase Nigeria’s digital preparedness to adopt the DTP. This was based on the following methodological steps:

The in-depth interviews captured the experiences of Nigerian stakeholders with representation from the public sector, private sector and non-governmental organisations. In particular, it assessed their awareness level of the AfCFTA DTP, identified the challenges of digital trade in Nigeria, evaluated the potential impact on digital trade and gauged the readiness of stakeholders to leverage the opportunities and benefits of trading under AfCFTA DTP.

Finally, we also conducted a causal chain analysis to calculate the potential impact of the AfCFTA DTP on the Nigerian economy. This estimation is based on two approaches. The first assesses the potential direct benefit in participating in a regional trade agreement (RTA) that includes e-commerce. This can be used to estimate GDP, export and employment impacts. The second uses indirect impacts to estimate the effects of increased digitalisation rates. The two are then combined to provide an overall impact estimate. The initial basis for this analysis is that the inclusion of e-commerce chapters in RTAs significantly boosts trade for both high-income and emerging economies by approximately 10% and 15% respectively (Lemma, 2024).
2 Nigeria’s current digital ecosystem

Nigeria has emerged as one of Africa’s most dynamic and promising destinations for digital-related investment in recent years. With a youthful population, rapidly expanding connectivity, and a burgeoning tech startup ecosystem, Nigeria’s digital economy holds immense potential to drive inclusive development and foster entrepreneurship (World Bank, 2019). This digital economy encompasses diverse sectors and activities, from e-commerce, fintech and digital payments to telecommunication services, software development and digital content creation. Startups and tech hubs in Lagos, Abuja and Port Harcourt are driving innovation, attracting multinational tech giants to this strategic market on the continent.

The Nigerian government has articulated a vision for leveraging digital technologies to enhance productivity, improve service delivery and create new economic opportunities for its citizens. Initiatives such as the National Digital Economy Policy and Strategy (2019) underscore the government’s commitment to fostering an enabling environment for digital innovation, investment and entrepreneurship.

Two decades ago, the Nigerian government took a momentous step towards liberalising the telecommunication sector which proved to be a turning point in its economic trajectory. In fact, between 2017 and 2023, the number of internet users grew by 26%, with an overall internet penetration rate of 55% and mobile subscription coverage of 87%. This had a direct impact on the extent of digital trade through increased access to online services and e-commerce platforms (Jumia, Konga). The government has also implemented several policies aimed at fostering the growth of digital trade and the overall digital economy, promoting innovation and leveraging digital technologies to drive development (Figure 1).

Figure 1 National policies to promote digital trade

**Source:** Agarwal, et al. (2024)
However, Nigeria continues to be one of the continent’s most restrictive countries due to the high prevalence and heterogeneity in regulations on digital trade. Illustratively, Nigeria has implemented 52 restrictive policies (UNECA, 2023) in the form of digital trade tariffs and regulation of online sales and financial transactions. This impacts intra- and extra-regional exports of ICT goods and digitally enabled services, placing Nigeria below the median shares of these goods and services in total exports when benchmarked against other countries on the continent. Moreover, the country also faces major challenges in terms of applied tariff rate, operational stability for businesses, quality of regulations and institutions, and lack of R&D output (WIPO, 2023).

Other challenges that act as barriers to digital trade and digitalisation of the Nigerian economy include the incomplete application of the UNCITRAL Model Law on Electronic Records (2017), serious gaps in the implementation of cross-border paperless trade in terms of e-exchange of certificates of origin, customs declarations, and certificates.

Addressing these fundamental gaps – digital infrastructure and the regulatory and business environment – is crucial to ensure Nigeria can improve its competitiveness and readiness to implement the AfCFTA Protocol on Digital Trade.
3 Current ICT performance

Nigeria’s digital infrastructure has improved considerably, with fixed broadband subscribers increasing from 5% to 19% of the total population between 2008 and 2021. During the same period, exports of ICT services witnessed an upward trend due to the sector’s expansion and relevant policy changes, while imports exhibited pronounced volatility due to increased dependence in 2014, followed by a sharp decline up until 2019 due to increased domestic production. For exports and imports of ICT goods, the shares remain low and have declined over the same period.

Domestically, this trend is reversed as the share of the ICT sector in Nigeria’s GDP grew from 8.1% to 10.3% between 2020 and 2022, with the sector’s value rising by 27% to reach US$ 55.4 billion (constant 2015 US$; 2020-2022). A similar trend can be seen in a 48% growth in productivity of ICT workers (measured in terms of constant 2015 US$, ILO) between 2020 and 2022 that also remained considerably higher than total worker productivity in Nigeria (US$ 173,162 vs US$7,335 in 2022).
4 Experiences of the public and private sectors

Stakeholder engagements with the public and private sector were conducted to capture the experiences of Nigerian stakeholders and assess their awareness level of the AfCFTA DTP, identify the challenges of digital trade in Nigeria, evaluate the potential impact on digital trade and gauge their readiness to leverage the opportunities and benefits of trading under AfCFTA DTP.

<table>
<thead>
<tr>
<th>Question/ topic</th>
<th>Share of affirmative responses (%)</th>
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<tbody>
<tr>
<td>Do you feel the current digital infrastructure in Nigeria is sufficient to support digital trade?</td>
<td>17</td>
</tr>
<tr>
<td>Is there enough availability of skilled labour to support digital trade in Nigeria?</td>
<td>17</td>
</tr>
<tr>
<td>Are you satisfied with the government’s role in driving growth of the digital economy?</td>
<td>67</td>
</tr>
<tr>
<td>Are you aware about the AfCFTA NAC? (public sector)</td>
<td>100</td>
</tr>
<tr>
<td>Were you involved in DTP negotiations by Nigeria? (public sector)</td>
<td>17</td>
</tr>
<tr>
<td>Do you have knowledge about the contents of the DTP? (public sector vs private sector)</td>
<td></td>
</tr>
<tr>
<td>Data localisation</td>
<td>66 vs 50</td>
</tr>
<tr>
<td>Payments gateway</td>
<td>66 vs 50</td>
</tr>
<tr>
<td>Data privacy</td>
<td>66 vs 70</td>
</tr>
<tr>
<td>Consumer protection</td>
<td>67 vs 60</td>
</tr>
<tr>
<td>Cybersecurity</td>
<td>66 vs 50</td>
</tr>
<tr>
<td>Verification and authorisation processes</td>
<td>50 vs 50</td>
</tr>
<tr>
<td>Was your organisation involved in negotiations of the DTP by Nigeria? (private sector)</td>
<td>20</td>
</tr>
<tr>
<td>Does your firm have an e-commerce website? (private sector)</td>
<td>70</td>
</tr>
<tr>
<td>Are you aware about AfCFTA DTP? (private sector)</td>
<td>20</td>
</tr>
<tr>
<td>Do you feel your organisation ready for DTP implementation in Nigeria? (private sector)</td>
<td>60</td>
</tr>
</tbody>
</table>

Source: Agarwal, et al. (2024)
In addition to these responses, stakeholders also identified several barriers to digital trade that reiterate those found in literature and international statistics. These include poor infrastructure, inadequate regulations, high e-transaction fees, currency conversion fees, lack of market access, inadequate electricity supply, restrictions on data flow, lack of critical digital skills and unreliable internet access.

However, the private sector also acknowledged that the government and other public sector institutions already aid them in accessing the domestic digital ecosystem, albeit insufficiently. Such assistance includes measures to address gaps in capacity building, infrastructural development, privacy enhancement and development of knowledge and skills. However, about 66% of the respondents believed that the current rules and regulations were insufficient to boost Nigeria’s digital trade competitiveness and exports.
5 Prospective impact of the AfCFTA Digital Trade Protocol

The AfCFTA Digital Trade Protocol (DTP) is a landmark initiative with the potential to redefine the economic landscape of Africa and foster a more integrated and digitally inclusive continent. Nigeria is uniquely positioned to capitalise on the opportunities digital trade presents, thereby driving innovation, enhancing trade efficiency and promoting sustainable economic growth.

After reviewing the literature, given the current position of Nigeria, and using economic modelling techniques developed in Lemma (2024), the following estimations can be made about the impact of the implementation of the AfCFTA DTP:

- Nigeria’s GDP per capita could grow by at least 11.7%
- GDP might grow by at least 15% to at most 16.9%
- Exports could increase by at least 15% (approx. US$ 79 billion)
- Employment could rise by at least 10.9 million

As Nigeria engages with the Protocol, enhancing the nation’s digitalisation such as boosting internet accessibility, is a crucial complementary effort. National reforms aiming to deepen participation in the digital economy could amplify the growth impacts already expected from joining a digital trade regional agreement (IMF, 2023).

Estimations show that a 10% enhancement in digital penetration could potentially:

- Boost employment by almost 300,000 workers
- Increase exports by at least US$138 million to about US$3 billion
- Augment the Nigerian GDP by approximately US$10.7 million to US$1.6 billion

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1 These estimates are approximate and show potential impact on Nigeria’s economy. As mentioned the estimates emerged from an extrapolation activity that calculated the average impact of signing an RTA with an e-commerce provision. Further gap analysis on the specific provisions of the AfCFTA DTP and the current digital ecosystem of Nigeria will need to be conducted to get proper estimates. This analysis also uses evidence from high-income and emerging economies that are party to an RTA with e-commerce chapters or provisions. No impact analysis to determine the impact of the AfCFTA DTP on Nigeria was conducted by the author.
These projections highlight the vast economic benefits of advancing digitalisation, particularly when combined with active participation in digital trade agreements at the regional level. It also underlines the importance of digital and trade policy reforms in stimulating economic growth, creating employment opportunities and enhancing export capabilities in Nigeria.
6 Policy recommendations

To fully harness the benefits of the AfCFTA DTP and realise the opportunities it offers, Nigeria’s public and private sectors need a robust implementation strategy that would also improve domestic regulations and unlock growth in GDP, employment and digital trade. This strategy can be based on the following twelve broad policy recommendations:

1 **Digital trade policy review and development**: Review existing government policies (Nigerian National Broadband Plan, the National Digital Economy Policy and Strategy and the Nigerian Data Protection Regulation) to effectively support Protocol implementation in Nigeria, establish national digital laws and develop a comprehensive and measurable digital trade framework to enhance the level of internalisation of the Protocol.

2 **Inter-ministerial collaboration**: Promote collaboration among various ministries on Protocol implementation to avoid data silos and information sharing.

3 **Regulatory reforms**: Align the domestic regulatory environment with international best practices and involve regulatory agencies in policy formulation. Address bottlenecks that hinder digital trade and establish a transparent and legal framework to protect sellers and consumers.

4 **Role of National Action Committees**: Identify markets for Nigerian digital goods and services based on comparative advantage and continental demand.

5 **Pan-African collaboration**: Avoid information silos. Foster interoperable regulatory practices, payment gateways and Africa e-commerce tax.

6 **Capacity-building**: Strengthen the capacity of relevant regulatory bodies, the public sector and businesses, and increase digital trade adoption among MSMEs. Support e-commerce by providing digital tools.

7 **Infrastructure and investment**: Address infrastructure deficits (broadband, electricity), increase investments in digital literacy (aid Three Million Technical Talent programme launched in 2023) and cybersecurity, and leverage the size of the domestic market to increase knowledge and technology transfer.

8 **Create an environment for innovation**: Establish digital platforms to increase the participation of firms. Create and enforce intellectual property rights, copyrights and trademark laws.
9 **Facilitate e-commerce**: Increase market access for Nigerian goods and services, reduce transaction costs, harmonise e-invoicing practices and revise data localisation restrictions

10 **Private sector engagement**: Involve the private sector in identifying gaps in access to finance, human capital, skills and research. Provide support on gathering market intelligence, e-authentication and fiscal assistance to make the transition.

11 **Female empowerment**: Prioritise female empowerment under the AfCFTA Protocol, including encouraging the participation of women entrepreneurs in digital trade and increasing digital literacy.

12 **Cybersecurity and data protection**: Improve awareness and understanding of cybersecurity measures and establish a national regulatory framework for data management, governance and privacy.

By implementing these recommendations, Nigeria can position itself as a leader in digital trade within the AfCFTA framework, driving economic growth, creating jobs and fostering innovation in the digital economy.
References


