



WCAPS

WOMEN OF COLOR ADVANCING PEACE,  
SECURITY, AND CONFLICT TRANSFORMATION

22<sup>nd</sup> Annual AfrICANDO 2021  
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## Session IV: Cyber Security, E-Commerce and E-Learning

### “The Importance of Cybersecurity Policies for African Trade & Transportation”

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Cybersecurity and Emerging Technologies Working Group



# CYBERSECURITY IN AFRICA



## The Global Cybersecurity Index

- A composite index of 25 indicators to benchmark country commitment against the 5 pillars of the Global Cybersecurity Agenda (GCA)

Source: [International Telecommunication Union, Global Cybersecurity Index \(GCI\) 2018, page 8](#)

### Legal

Cybercrime legislation  
Cybersecurity regulation  
Containment/curbing of spam legislation



### Technical Measures

CERT/CIRT/CSIRT  
Standards Implementation Framework  
Standardization Body  
Technical mechanisms and capabilities deployed to address Spam  
Use of cloud for cybersecurity purpose  
Child Online Protection mechanisms



### Organizational Measures

National Cybersecurity Strategy  
Responsible Agency  
Cybersecurity Metrics



### Capacity Building Measures

Public awareness campaigns  
Framework for the certification and accreditation of cybersecurity professionals  
Professional training courses in cybersecurity  
Educational programs or academic curricular in cybersecurity  
Cybersecurity R&D programs  
Incentive mechanisms



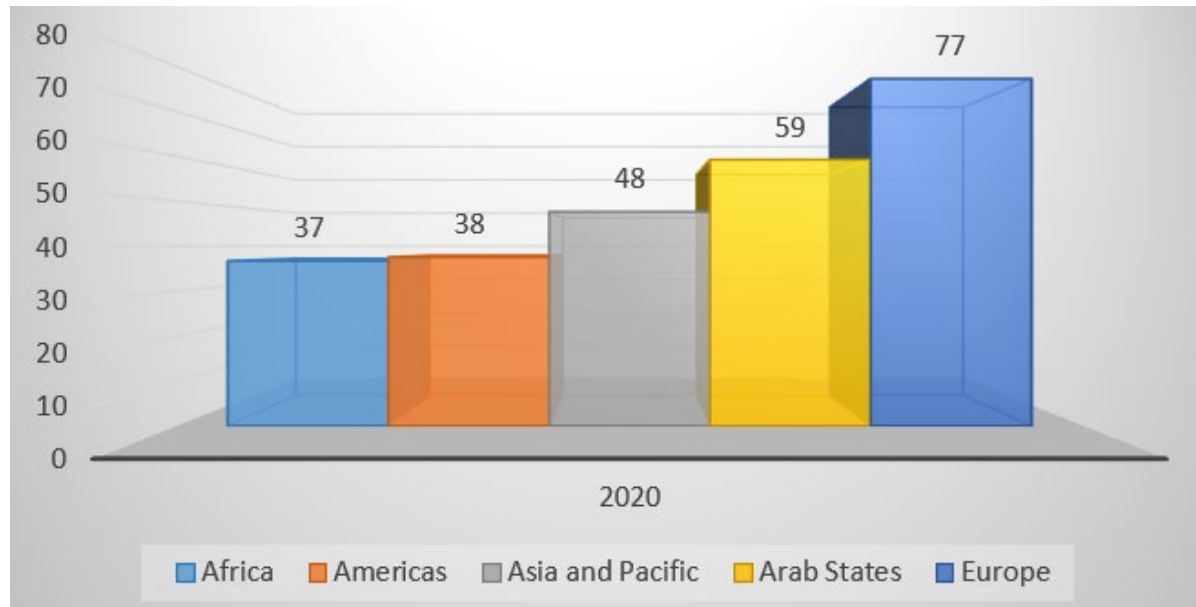
### Cooperation Measures

Bilateral agreements  
Multilateral agreements  
Participation in international fora/associations  
Public-Private Partnerships  
Inter-agency/intra-agency partnerships  
Best Practices

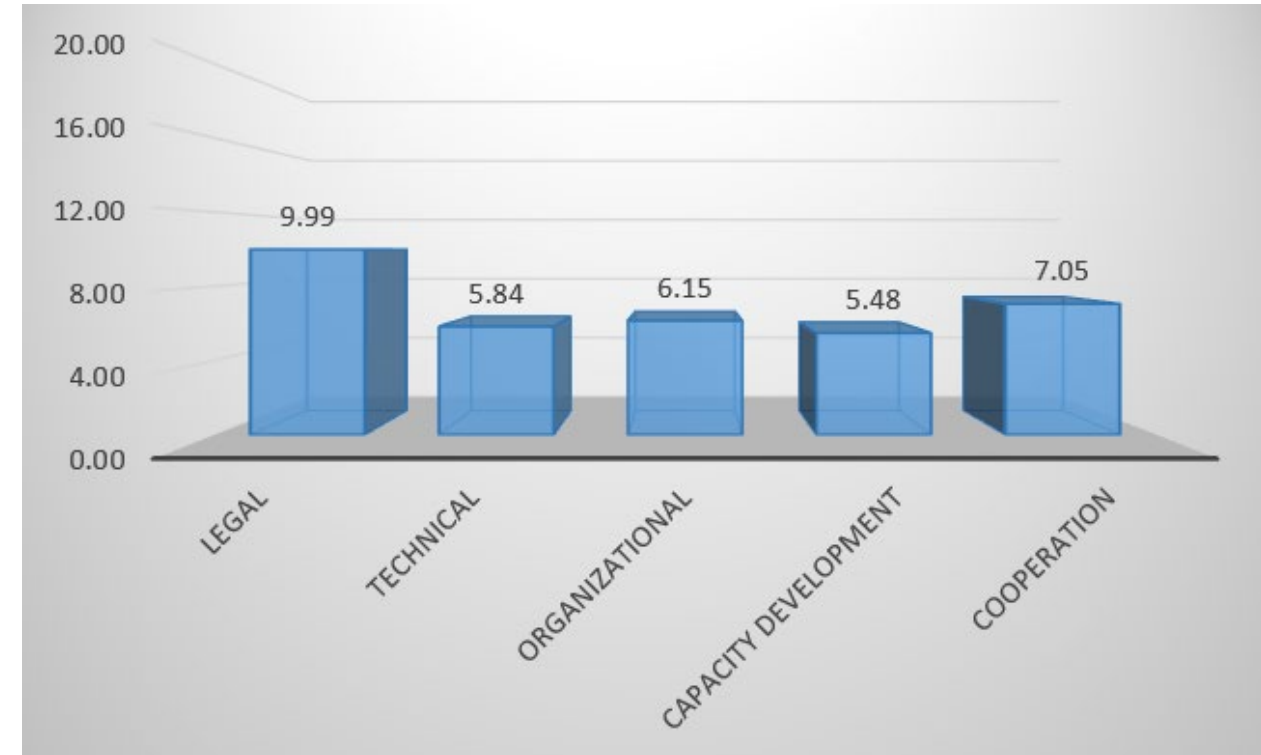




# The Global Cybersecurity Index (2020)



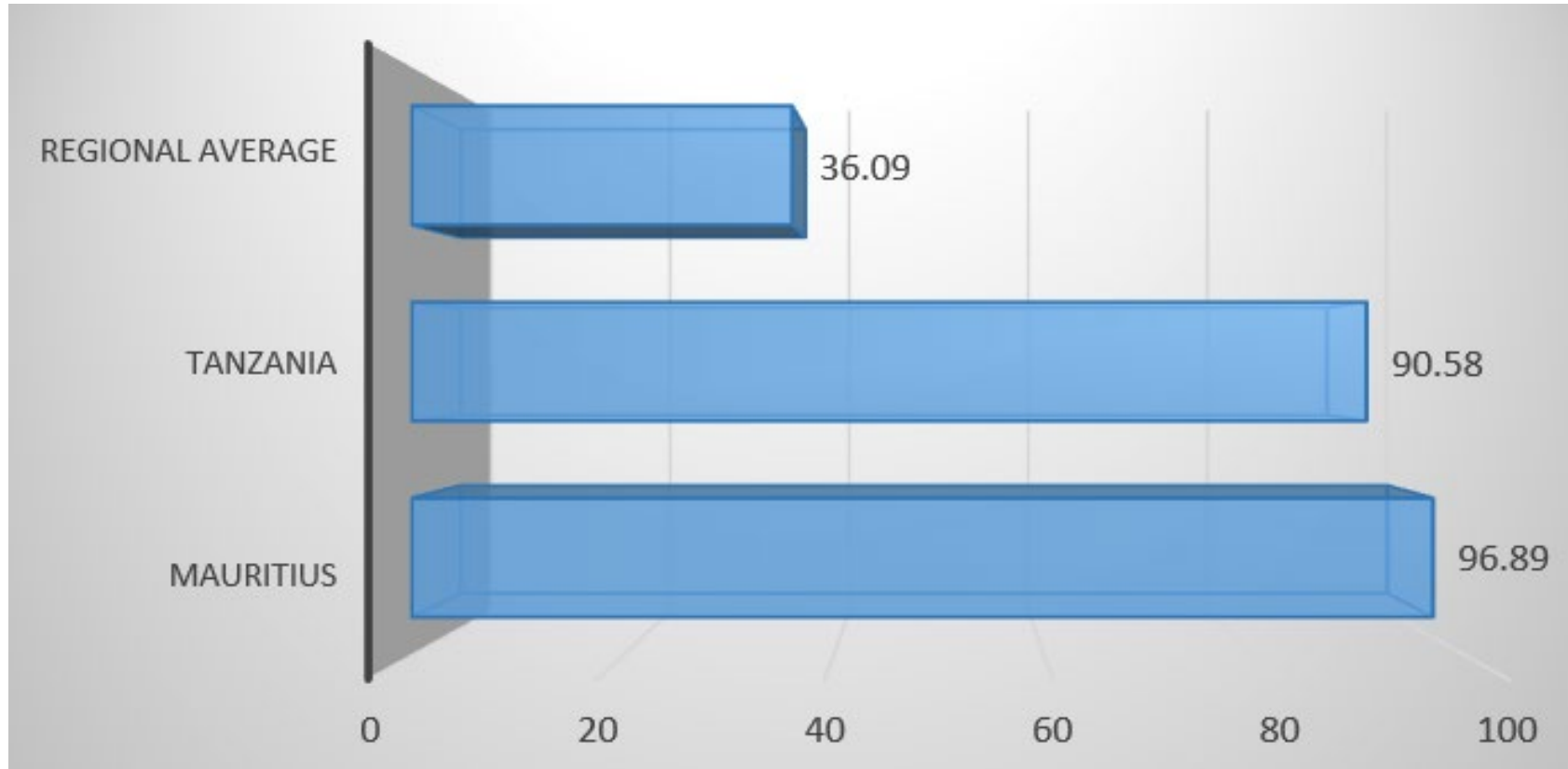
Regional average GCI scores



Africa's average scores per pillar  
(out of 20 points)



# Top GCI Performers/Model Countries



GCI scores by country



# IMPACT TO ECONOMIES



# Cyber Attacks that Crippled a Nation

(or more)



[BBC: Briton who knocked Liberia offline with cyber attack jailed \(2016 event\)](#)



[Wired: The Untold Story of NotPetya, the Most Devastating Cyberattack in History \(2017 event\)](#)



[Bloomberg: Cyber Attack Harms Key African Port Network Hitting Citrus, Cars \(2021 event\)](#)





# POLICY RECOMMENDATIONS



# Cybersecurity

- Develop and institute cybersecurity and privacy laws, regulations, policies, strategies, response plans
- Conduct annual cybersecurity assessments
- Secure internet-connected devices/systems
- Increase infrastructure resiliency
- Capacity-building, training, and education
- Develop national Computer Emergency Response Team (CERT) and a cybersecurity agency/department



Source: The Brookings Institution, [Cybersecurity in Africa: Securing businesses with a local approach with global standards](#) (June 4, 2018)



# Trade

- Participate in Trade exchange efforts and work with cybersecurity businesses with a cultural understanding of Africa landscape
  - Critical to have a partner who understands cultural landscape, challenges, opportunities, etc
- Update multilateral and bilateral trade agreements to include strong IP, privacy, and cybersecurity protections
- Engage in digitization efforts via African Union forums for scaling investments and resources, strengthening coordination, and regulating sectors
- Ratify the African Union Convention on Cybersecurity and Personal Data Protection (Malabo Convention)
- Protocol on Cybersecurity in International Arbitration
  - Important to protect Intellectual Property (IP) and sensitive commercial information during arbitration/court proceedings



# Missing Clauses: Digital Provisions in African Trade Agreements

- The following matrix compares digital clauses across 6 trade agreements that sub-Saharan African countries are signatories.

Source: [Center for Strategic & International Studies \(CSIS\), Digital Africa: Leveling Up through Governance and Trade](#)

	INTELLECTUAL PROPERTY (IP) PROTECTION <i>Legal rights that creators have over their works, inventions, technological developments, etc. Examples of IP protection include patents, trademarks, copyrights, and trade secrets.</i>	DATA PROTECTION <i>The process of protecting individuals' personal information. Measures to secure data include data encryption, masking, erasure, and backup.</i>	CYBERSECURITY <i>Protection against criminal use or manipulation of cyberspace, including breaches known as "cyberattacks."</i>
<b>The Cotonou Agreement</b> (between the European Union and the African, Caribbean and Pacific Group of States) (2000)	<b>Present</b> The Cotonou Agreement's Article 46 recognizes the need to protect negotiating parties' intellectual, industrial, and commercial property rights, but stops short of establishing unique clauses to govern such property. Instead, the Cotonou Agreement points to adherence to the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) and the WTO's Agreement and the Convention on Biological Diversity.	<b>Absent</b>	<b>Absent</b>
<b>EU-EAC Economic Partnership Agreement</b> (2014)	<b>Absent</b> The EU-EAC EPA, however, contains a clause dictating that negotiations on IP (and other issues) are to be concluded within five years of the EPA's start date. Any subsequent negotiations (post-2014) have not materialized in an agreement that details IP protection.	<b>Absent</b>	<b>Absent</b>
<b>AfCFTA Agreement (and Annexes)</b> (Phase I negotiations 2018)	<b>Absent</b> (To be included in Phase II negotiations of the AfCFTA Agreement.)	<b>Absent</b> (To be included in Phase II negotiations of the AfCFTA Agreement.)  Phase I negotiations mention data protection one time in passing, calling on member states to comply with laws that protect the privacy of individuals with regard to the processing of personal data.	<b>Absent</b> (To be included in Phase II negotiations of the AfCFTA Agreement.)
<b>UK-Kenya Economic Partnership Agreement</b> (2020)	<b>Present</b> The UK-Kenya EPA contains brief language noting that the clause on IP is replicated from the EU-EAC EPA.	<b>Absent</b>	<b>Absent</b>
<b>U.S.-Kenya FTA Negotiation Principles</b> (2020)	<b>Present</b> The U.S.-Kenya FTA Negotiation Principles identify IP as a key issue for discussion, and call on the United States to provide capacity building and technical assistance to the Kenyan government so that it can fully implement the provisions on IP once they are in place.	<b>Absent</b>	<b>Absent</b>
<b>UK-Ghana Interim Trade Partnership Agreement</b> (2021)	<b>Absent</b>	<b>Absent</b>	<b>Absent</b>

Source: Author analysis of above trade agreements (AfCFTA Agreement and Annexes; UK-Ghana Interim Trade Partnership Agreement; UK-Kenya Economic Partnership Agreement; EU-EAC Economic Partnership Agreement; The Cotonou Agreement (between the European Union and the African, Caribbean and Pacific Group of States); U.S.-Kenya FTA Negotiation Principles).



# Trade Visit Exchanges

## CASE STUDY\*:



**ACCESS AFRICA**

- South Africa is a frequent target by cyber-criminals
- In 2019, SA experienced a 20% increase in digital banking incidents
- Through US Trade and Development Agency (USTDA) Access Africa program, SA regulators and bank representatives met with US cybersecurity firms
- The exchange fostered stronger connections and information sharing

\* [https://ustda.gov/success\\_story/cybersecurity-for-south-africa/](https://ustda.gov/success_story/cybersecurity-for-south-africa/)



# REFERENCES & RESOURCES:

1. [Cybersecurity in Africa: Securing businesses with a local approach with global standards](#)
2. [How African states can improve their cybersecurity](#)
3. [Digital Africa: Leveling Up through Governance and Trade](#)
4. [Africa's Evolving Cyber Threats](#)
5. [Maritime cyber security: Getting Africa ready](#)
6. [Cybercrime, A barrier to Africa's thriving digital economy](#)
7. [Africa: Implementation of Cybersecurity and Data Protection Law Urgent Across Continent](#)
8. [Protocol on Cybersecurity in International Arbitration \(2020\)](#)
9. [International Telecommunication Union, Global Cybersecurity Index \(GCI\) 2018, page 8](#)
10. [Access Africa](#)
11. [Prosper Africa](#)



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