

**The KENYA INSTITUTE for PUBLIC  
POLICY RESEARCH and ANALYSIS**

*Thinking Policy Together*

# **POLICY PERSPECTIVES ON THE DIGITALIZED ECONOMY**

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**Date:** *Monday, October 3, 2022*

# Outline

- Status of digital economy
- Coverage - digital connectivity
- Usage of digital technologies
- Emerging issues
- Digital economy drivers
- Policy and legislative frameworks

# Status of digital economy (The Network Readiness Index 2021)

Country	Ranking	Index value
Netherlands	1	82.06
South Africa	70	48.88
Mauritius	71	48.34
Kenya	84	45.18
Ghana	96	40.86
Rwanda	101	38.65
Botswana	102	38.03
Nigeria	103	37.51
Tanzania	107	35.83
Namibia	109	35.66
Zambia	112	33.93

# Status of digital economy – ranking of pillars

Country	Overall ranking	Technology	People	Governance	Impact
Netherlands	1	3	7	2	3
South Africa	70	63	70	51	103
Mauritius	71	79	87	58	72
Kenya	84	83	83	59	106
Ghana	96	103	98	74	102
Rwanda	101	107	103	86	100
Botswana	102	91	99	101	115
Nigeria	103	100	91	105	111
Tanzania	107	109	116	83	114
Namibia	109	104	102	104	116
Zambia	112	114	106	99	120

# Drivers of digital transformation

- Enabling environment
- Policy and regulatory framework
- Digital infrastructure
- Digital skills and human capital
- Digital innovation and entrepreneurship

# Coverage – digital connectivity (ITU 2021)

Region	4G (%)	3G (%)	2G (%)
World	88	7	
Africa	49	33	7
Arab states	70	25	
Asia and Pacific	96		
CIS	91		
Europe	99		
Americas	92		
Developed	99		
Developing	85		

# Cost of connectivity – (% of GNI per capita)

Region	Fixed broadband	Mobile broadband data only
World	2.8	1.2
Africa	18.6	4.4
Arab State	3.1	1.0
Asia and Pacific	3.0	1.3
Europe	1.3	0.6
Americas	4.7	2.3
Developed	1.2	0.6
Developing	4.4	2.0
LDCs	20.1	6.1

# Closing the digital infrastructure gap

- Attract more investment to expand and upgrade digital infrastructure
- Ensure adequate energy provision
- Digital platforms
- Data centers
- Infrastructure sharing
- Universal service fund to provide for underserved
- Affordable devices

# Usage of internet (ITU 2021)

Region	Individual using internet (%)	Female using internet (%)	Male using internet (%)	Youth using internet (%)	Other individual using internet (%)	Urban using internet (%)	Rural using internet (%)
World	63	57	62	71	57	76	39
Africa	33	24	35	40	27	50	15
Arab States	66	56	68	73	60	76	42
Asia and Pacific	61	54	59	72	53	75	39
CIS	82	79	81	91	78	85	69
Europe	87	83	87	97	83	87	80
Americas	81	79	78	92	77	83	60
Developing	57	50	57	67	51	72	34
LDCs	27	19	31	34	22	47	13

# Digital Skills Readiness (Wiley, 2021)

Country	Rank	Value range 0-10
Singapore	1	7.8
Mauritius	55	5.0
Kenya	70	4.8
Rwanda	80	4.5
South Africa	84	4.4
Botswana	86	4.2
Ghana	95	3.9
Namibia	97	3.8
Uganda	100	3.7
Zambia	101	3.6
Senegal	102	3.6

# Closing the usage gap

- Digital literacy
- Provide for unlimited broadband access
- Zero rate critical services including e-government, education and health sites
- Data protection laws
- Digital rights, online security and safety
- Digital skills

# Emerging issues-cyber security index

Region	Rank	Value (%)
USA	1	100
Tanzania	37	90.58
Ghana	43	86.69
Nigeria	47	84.76
Kenya	51	81.70
Benin	56	80.06
Rwanda	57	79.95
South Africa	59	78.46
Uganda	72	69.98
Zambia	73	68.88

# Emerging issue – e waste

Region	E-waste generated (mt/kg per capita)	E-waste documented to be collected and properly cycled
World	53.6mt/7.3kg per capita	17.4%/9.3mt
Africa	2.9mt/2.5kg per capita	0.9%/0.03mt
Europe	12.0mt/16.2kg per capita	42.5%/5.1mt
Oceania	0.7mt/16.1kg per capita	8.8%/0.06mt
Asia	24.9mt/5.6kg per capita	11.7%/2.9mt
Americas	13.1mt/13.3kg per capita	9.4%/1.2mt

# Sector to drive digital economy

- Digital industry/manufacturing
- Digital trade and financial services
- Digital government
- Digital education
- Digital health
- Digital agriculture

# Enabling policy and legislative framework

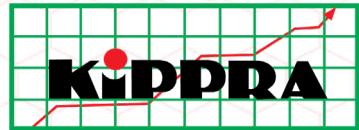
- Flexible, incentive-based and market driven
- Coherent policy framework
- Embrace Interoperability – mobile money interoperability
- Digital innovation
- Innovation fund
- Digital entrepreneurship
- Technology parks and incubation hub
- Data

# THANK YOU

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For your Attention

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