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POLICY BRIEF

Digital and Data Policies for Promoting Secure & Inclusive Digital Economy

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Executive Summary

Digital economy is a double-edged sword for the bottom of the pyramid (BoP). By presenting digital tools and services, it presents great opportunity to empower those excluded in the traditional economy due to challenges of cultural bias, mobility restrictions, security, time limitations and even overcome disabilities. On the other hand, exclusion from the digital economy condemns BoP out of their human and digital rights in economic pursuits denying them an opportunity to contribute to self and national development. This Policy Brief seeks to inspire a conversation to focus on those at the bottom of the pyramid specifically women, youth, and People with Disabilities (PWDs) and underscore strategies to empower them to meaningfully participate and thrive in the digital economy. This Policy Brief acknowledge the existing national policies and strategies in this regard but notes that the wholistic approach fails to adequately capture and address the unique features of these stakeholders posing a risk for deeper exclusion.

To deeply understand the challenges for the BoP, extensive literature review was undertaken to identify and isolate features and capacities, the opportunities, and threats in the digital economy, enabling digital policies and strategies and frameworks to leverage national, regional, and global actors in the cyberspace to grow digital economy. Operations in the digital space poses risks impacting on trust and confidence on the highly vulnerable group and thus measures on confidence building were reviewed. Analysis of this extensive material form the basis of this Policy Brief.

The findings are unequivocal. Digital economy is a great promise to not only overcome exclusion for women, youth and PWDs from the traditional labour markets and economy but also participate in equal footing and contribute to national development. This is in line with **Leave No One Behind** by UN Sustainable Development Goals 2030.

In the special case of women, digital economy opens a new space for inclusion to earn a living overcoming exclusion in traditional labour markets which excluded women on account of cultural bias, mobility restrictions, security, and time limitations. Additionally, through the possibility of teleworking and flexible working schedules, digital economy opens a new world for women in Kenya. Equally, the digital economy presents new opportunities for the youth opening huge external as well as internal digital markets to serve Small & Medium Enterprises among others. For PWDs – those with impaired hearing, visual, cognitive, mobility, speech, or neural functions now have emerging opportunities in several areas with new jobs. The digital space also presents digital tools to competitively work with others without disabilities, provide flexible and low barriers to entry to self-employment and can work remotely and thus overcome challenge of mobility, and with the digital tools also overcome sight, and hearing among others. This is the path Kenya must take to create frameworks that harness this benefit and ensure no one is left behind.

The challenges are equally daunting – age old cultural practices that manifest in inequalities from basic connectivity and access to digital tools and services, invisibility in national policy design formulation, online bullying, and lack of skills and digital corruption. These challenges threaten to lock out BoP out of the digital economy and must be addressed now. Constitution of Kenya lays a firm foundation for digital rights to build an empowering environment for the BoP and ensure Leave No One Behind motto is realized.

The Policy Brief identifies actions and stakeholders to empower BoP. Key among the stakeholders is the Ministry responsible for ICT, ICT regulatory authority, women, youth and PWD groups Civil Society, service providers for a collaborative and collective approach to address the challenges.

A QUEST FOR DIGITAL ECONOMY FOR THE BOTTOM OF THE PYRAMID

This paper delineates stakeholders in the digital economy ecosystem and addresses the unique situation of the quest for a Kenyan consumer at the Bottom of the Pyramid (BoP) to meaningfully participate and thrive in a digital economy. The fast-evolving digital transformation is radically impacting economic and social lifestyles and those cut out of the digital transformation journey are disconnected from economic and social enjoyment of life threatening basic human rights. This is a matter of urgency for those in the BoP to empower them in this journey to thrive in a digital economy which can only be safeguarded by digital/internet rights. This journey recognises other stakeholders in the ecosystem which include government, various categories of private sector, the internet technical community, business as well as the civil society. The focus on the BoP is to explore a pathway into the digital economy to empower them exploit the benefits and thrive. This pathway poses challenges. This Policy Brief sets out a framework to address policy challenges and propose solutions.

BoP – POSITIONING THE STAKEHOLDER

To understand the digital economy consumer, this Brief unpacks the consumer from a diversity of features. On one hand, the consumer has various roles - for sustainability includes producer, exporter and innovator and can organize into consumer groups. Variously, this consumer at social level can be categorised on gender, age (youth) and persons with disabilities. In terms of digital engagement to thrive in the digital economy, the same include those connected, unconnected, quality of digital device and the different levels of digital literacy. The economic status and geographic location are variously rural or urban.

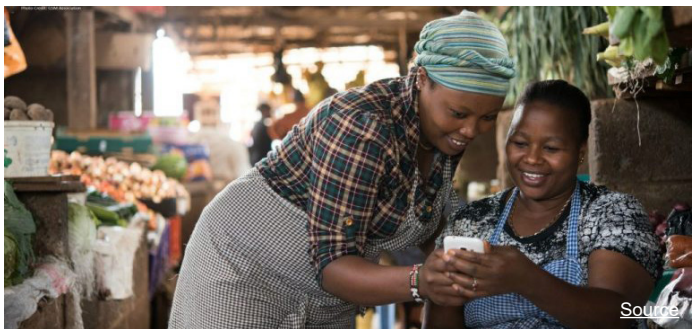
The overriding principle guiding this paper is the United Nations call to **Leave No One Behind**[1] and in local national Kenyan parlance hitchhiking *Wanjiku* into the digital economy but recognizing that the default architecture of the digital economy is global and local realities competes with the global best.

In a bid to unpack the consumers and their challenges, this paper reviews the position and readiness of different consumers to address and bring out specific challenges to the respective segment.

1 Microsoft Word - 2018-Inob.docx (un.org)

DIGITAL ECONOMY OPPORTUNITY FOR WOMEN

In the special case of women, World Bank[2] reckon huge opportunity as digital economy deepens. It holds great promise for women with unique opportunities presented by the digital space. Importantly, digital economy opens a new space for inclusion to earn a living overcoming exclusion in traditional labour markets which excluded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2 Empowering Women through Jobs in the Digital Economy (worldbank.org)

women on account of cultural bias, mobility restrictions, security of women and time limitations. Additionally, through the possibility of remote working or teleworking and possibility of the flexible working schedules, digital economy opens a new world for women in Kenya.

There are challenges that however must be overcome. This includes unequal access to Internet where women are less connected, lower digital literacy and often lack of role models.

The quest through digital transformation presents challenge women in several areas in particular data, online discrimination, visibility, and security.

Data on women in the digital economy sets out how they participate equally in this space. Firstly, several studies e.g. After Access Study (Gillwald & Mothobi, 2018) in 10 African countries including Kenya illustrate the need to capture gender disaggregated data to delineate women access to the internet and therefore inclusion. The desegregated data defines ICT usage patterns, family level dynamics and financial control of access costs to the internet. General data as currently captured does not bring out the unique challenges women face as they engage in digital economy and therefore inadequately equipped to inform policy formulation.

It is imperative to capture demographic data on employees in the digital economy notably on hiring, firing, and wages. In the case of women doing business in the digital economy this will provide indicators for entrepreneurship, how digitally intensive they are including access to venture funds.

Gender discrimination in digital space is real and the human side must be considered else society is lost in the numbers. The manifestation is sexual harassment, gender based cyberviolence, discrimination in access to training and lower pay. Online safety for women is paramount and can be occasioned by misuse of data by government and private sector leading to lack of trust, privacy, and security concerns.

Additionally, exclusion of the those digitally marginalised and thus not captured is a blind spot on those not online who are invisible and use of big data excludes this category. Finally, the lack of tools in Kenya for processing big data ends up in developed countries as raw data. The outcome may not reflect the correct position since some people do not reveal their identity.

Offline bullying is an offence but online is not yet tracked. This brings out risk for women in digital economy driven by biases and discrimination which has both long and short-term implications for women in the digital economy.

The design of the digital economy is at the root of the problem women are excluded, consequently, it is imperative to engage increasingly more women in technology design and thus creating awareness on potential blind spot for women embedded in technology. This should not be a token inclusion and experiences reveal that no less than 30% in high level position are needed to give diverse voices in the design or policy level teams (Sey, 2021). Arguments that there are not enough women in the pipeline are not true and it is feasible that the space is not welcoming. In this respect it is necessary to understand why women take other programmes that would not predispose them to be full partners to the digital economy.

Youth in the digital economy

Like the case of women, the digital economy presents new opportunities for the youth opening huge external as well as internal digital markets to serve SMEs among others[3]. The international markets especially on outsourcing is growing at 15% annually.
There are barriers to surmount on both demand and supply side of this huge and expanding market. The demand side include capability of the youth, access to digital infrastructure and networks to create opportunities while on the supply side include knowledge and trust of the youth to work with[4].


Source

The youth also need support systems on Intellectual Property, social security systems for gig workers and skills development.

3 Youth and the digital economy in Africa (africaportal.org)

4 Op cit

Persons With Disabilities (PwDs)


Source

Work by International Labour Organisation contends that digital economy presents opportunities for PWDs – those with impaired hearing, visual, cognitive, mobility, speech, or neural functions in a several areas with new jobs (Olney & Donoso, 2021). The digital space also presents digital tools to competitively work with others without disabilities, provide flexible and low barriers to entry to self-employment and can work remotely and thus overcome challenge of mobility, and with the digital tools also overcome sight, and hearing among others. Strategies for an inclusive digital economy must include ensuring access with specific guidelines, promoting skills, digital employment, and importantly facilitate collection of disaggregated data on PWDs and the nature of the disability. The products and services in the digital space should be developed considering disability challenges.

Small & Medium Enterprises (SME) – the entry point to digital economy for BoP

Consumers in this category can also be producers in the digital space and SMEs is a route of choice. SMEs make up to 80% of the African economy and employ 70% of the population. This is increasingly the way out due to the fact they are now largely connected and the digital platforms the way to go. The challenge for them however is logistics which continues to be the greatest barrier to digital economy. Another challenge is the framework for cross border data sharing thus requiring an SME to understand multiple jurisdictions where it wants to undertake digital trade.

Understanding the BoP features

A landmark demand side research by (Koyama, et al., 2021), titled Kenya's Digital Economy: A Peoples Perspective presents the key attributes of the BoP level digital economy potential entrant and the use of digital services which include:

- high awareness on the benefit of a digital ID with 45% reporting that they anticipate Huduma Namba[5] will make it easier to access and use digital services.

Among the digital service users, the study defined two categories basic and advanced users. The basic digital service user reported were 22% with 3% non-users. Other features include:

- 85% in rural areas and with lower than primary education
- 45% have disabilities
- 44% older people across all geographies
- 37% adult farmers/homemakers
- 95% have access to basic phone
- 54% cannot pay for connection
- 69% no access to the Internet
- 71 % allowed less time than other family members
- 69% need help to use

For advanced digital users there is a clear gender disparity with 35% women against 54% men. Another area of gender disparity is the hard-to-reach female farmers. 52% had no access to the Internet and 54% reported they need help to use digital services compared with 37% of all Kenyans.

In a quest to hitchhike into the digital economy the journey is slow. According to the study:

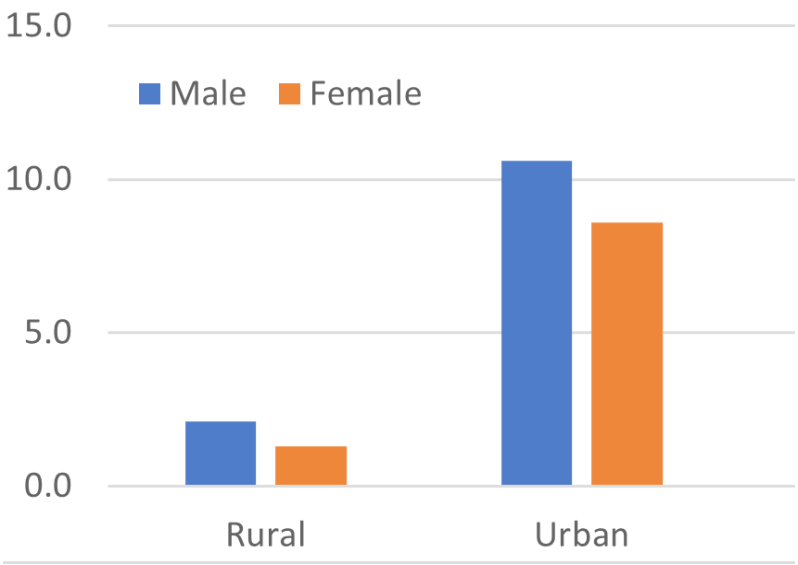
- 13% of all Kenyans have used e-commerce platforms to buy or sell products
- 30% of Kenyans report a rise in incomes as result of using digital services
- 44% self-employed/business owners use digital services to support their businesses
- 15-18% use advanced digital services for business

The digital economy BoP faces barriers that need to be addressed namely:

- 40% of e-commerce platform users faced challenges due to lack of a national addressing system and thus delivery of the products bought online
- 29% of Kenyans reported experiencing fraud
- 35% report facing cyber harassment when using digital service (Koyama, et al., 2021)

The low participation in the digital economy is in line with the Kenya National Bureau of Statistics finding in its 2018 Population Census which illustrates marginalisation for those in the rural areas and importantly women is illustrated in Fig. 1.

Fig. 1: % of Kenyans that searched/bought goods/services online



Source: (Kenya National Bureau of Statistics, 2019)

These barriers are a challenge to the BoP consumer.

5 Huduma Namba – Huduma namba kwa huduma bora – proposed national digital ID

Enabling frameworks for an expanding digital economy – local, regional and global

Digital space default architecture is global and thus the digital economy seamlessly spans local, regional, and global. Kenya's effort has then to be seen as part of the global effort to expand the digital economy space and bring these benefits to its citizens.

Kenya government continues to promote the opportunities in the digital space and specifically the digital economy as part of the digital transformation journey. The Kenya Digital Economy Blueprint (Republic of Kenya, 2018) is the framework which seeks to impact a wide reach and according to the Minister responsible for the sector, the Blueprint has been developed with every Kenyan in mind, from the rural to urban centres, '*mama mbogas*[6]', to masons, to accountants, and to traders. The Blueprint's mission is to propel the nation to a state where every citizen, enterprise and organisation has digital access and the capability to participate and thrive in the digital economy. The Blueprint is founded on five pillars namely:

- Digital Government: digital services and platforms to enable service delivery
- Digital Business: market place for digital trade, financial services, and content
- Infrastructure: affordable, accessible, resilient, and reliable infrastructure
- Innovation-Driven Entrepreneurship: ecosystem that supports innovation
- Digital Skills and Values: digitally skilled workforce

The Blueprint is forward looking and developed as a template for Africa through Smart Africa Alliance setting the pace towards a digital economy future. It however lacks an implementation framework and no targets have been developed.

At the regional level, World Bank launched the East Africa Single Digital Market (SDM) initiative (World Bank, 2018) in 2018 to support the region to become a more integrated and dynamic digital investment, innovation, and growth hub. This is in recognition that countries in the region are too small to succeed in the digital economy in isolation. The Initiative proposed a framework of a single connectivity market, a single data market and a single online market for the six East Africa Community countries. The expected impact over a 5-year period from launch was to generate up to a US$ 2.6 billion boost in GDP and 4.5 million new jobs and strongly benefit those at the bottom of the pyramid. The initiative was to chaperone the region to the much larger and growing digital economy which in 2016, was worth US$ 11.5 trillion, or 15.5 percent of global GDP and expected to reach 25% in less than a decade, far outpacing the growth of the 'traditional' economy. East African countries were capturing only a tiny fraction of these benefits and this Initiative was intended as a tool to capture an increasingly bigger share and create opportunity for citizens in the region. Unfortunately, by 2021 SDM has not taken off.

Digital Transformation Strategy for Africa 2020-2030 (African Union, 2020) is an ambitious strategy by African Union to move African continent into the digital economy. Its vision is an integrated and inclusive digital society and economy that improves the quality of life of Africa's citizens, strengthening the existing economic sector, enabling its diversification and development, and ensuring continental ownership with Africa as a producer and not only a consumer in the global economy. A specific objective of the Strategy is to contribute to a digital economy through building a secure single digital market in Africa by 2030 where free movement of persons, services and capital is ensured, and individuals and businesses can seamlessly access and engage in online activities in line with Africa's Continental Free Trade Area.

Following its launch, support has come from among others the World Bank through Digital Economy

6 Local vegetable seller often in the streets

for Africa (DE4A) Initiative[7] and European Commission through Digital Economy Task Force (DETF)[8]. DE4A supports the realisation for every individual, business, and government in Africa to be digitally enabled by 2030 while DETF sets the framework for EU support for the digital transformation of Africa towards the creation of an African single digital market. These efforts among others seek to deepen the digital economy in Africa.

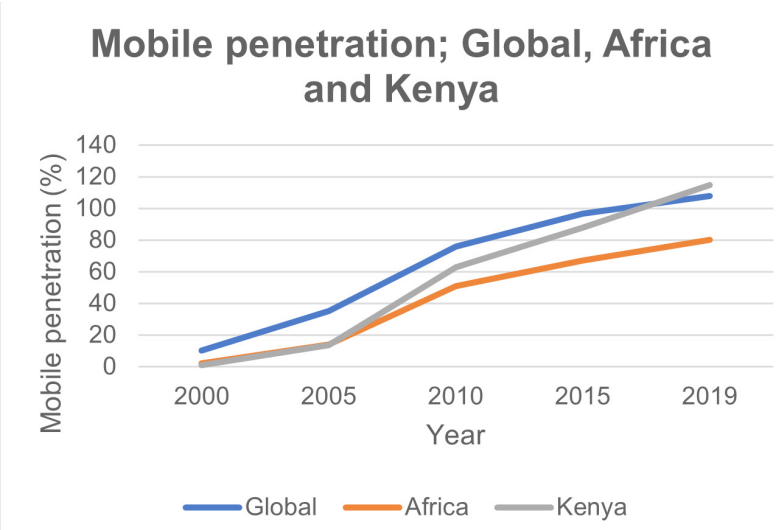
At global level, **Leave no one Behind**[9] is a clarion call to action by United Nations to lift the most disadvantaged - women, rural poor towards Sustainable Development Goals. It shapes the UN agencies development activities.

Research work by (United Nations Conference on Trade and Development (UNCTAD), 2019) illustrate a huge contribution of the global digital economy ranging between 5.5% to 15.5% GDP. Africa contribution into the global digital economy was noted to be however very low. This is the opportunity the BoP in Kenya must target to take.

Building a National Digital Infrastructure for a Digital Economy

Kenya continues to create an enabling environment for a digital economy in several fronts. Digital infrastructure as a foundation is propelled by policy developments and a clear strategy to ensure nationwide distribution on high quality broadband on optic fibre and wireless mobile. Various supply side indicators illustrate this and has been growing at first pace as indicated in the Fig. 2. Guided by the iteration of the second National Broadband Strategy for 2018-2023, digital infrastructure is on its way to reach almost all parts of the country. The strategy while emphasising (Communications Authority of Kenya, 2018) on the need for universal broadband, launched a foundation for the realisation new applications using Artificial Intelligence (AI) and its supporting technologies; Internet of Things (IoT), blockchain, cloud computing and data analytics running on high speed 5G networks in support of digital economy among other applications (Communications Authority of Kenya, 2018).

Fig. 2: Rapid digital infrastructure growth



Considering the citizens connected, the greatest challenge for the growth of digital economy is on the demand side as illustrated by (Koyama, et al., 2021) and (Kenya National Bureau of Statistics, 2019) indicated earlier. This is by way of low penetration of consumer end devices among the poor e.g., smartphones, digital literacy, awareness, and affordability for high speed always-on connectivity among disadvantaged segments of the society.

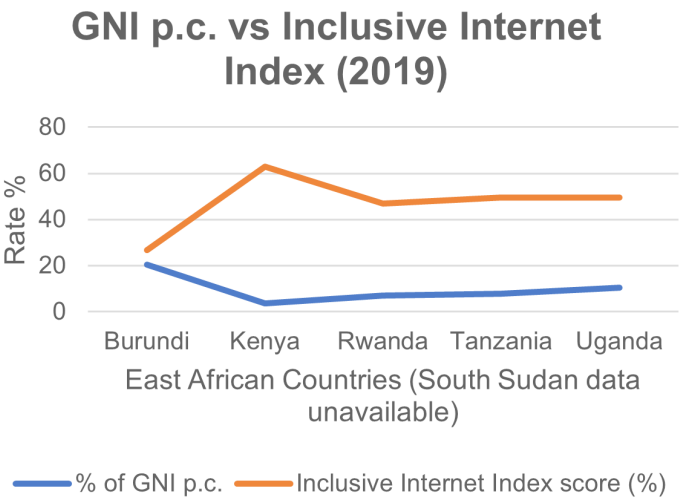
Source: ITU, CA, Statista

A key consideration is meaningful connectivity (Alliance for Affordable Internet, 2019). Meaningful connectivity calls for affordable broadband – no more that 2% GNP for 2GB of data, high speed connectivity, and appropriate device for internet in this case a smartphone. In the quest to ensure all citizens are connected, CA has a universal service mandate and is driving a universal service initiative to reach all citizens with at least 3G connectivity.

7 Digital Economy for Africa Initiative (worldbank.org)
8 New Africa-Europe Digital Economy Partnership - report of the EU-AU Digital Economy Task Force | Shaping Europe's digital future (europa.eu)
9 Microsoft Word - 2018-Inob.docx (un.org)

Inclusivity as measured by the inclusivity index[10] is a benchmark of national inclusion by indicators on availability, affordability, readiness, and relevance and Kenya while leading in the region has some way to go to address the challenges cited above as illustrated in Fig. 3.

Fig. 3: inclusivity in cyberspace



Source: ITU and The Economist Intelligence Unit

Data for digital economy

Data is the oil for digital economy running on the digital infrastructure aided by internet. This data is the tool for digital economy there are unique challenges to ensure its access and usage.

Kenya has enacted legislation on personal data protection which operationalises the Bill of Rights (The Republic of Kenya, 2010). The Kenyan approach is viewed as data localisation and need to be balanced with its application in digital economy and in particular cross border data flows. A bigger context is the data Kenya needs is outside its control for use. Kenya needs to develop a data policy to define its interest in a data driven digital economy and a tool to engage in the emerging conversation on cyberspace domain.

Securing the cyberspace for digital economy

Increasing exposure to cyberspace in a quest of the digital economy exposes the user to cybersecurity. This is increasingly impacting on safety and security of users in different ways.

Cybercriminals in particular target individuals to gain access to personal and confidential information and most often obtain money or other assets. An often-used strategy is through identity theft with tools that include malware software that infiltrates devices and networks to gather information about a person. Another approach is phishing which is intended to trick users into providing personal or confidential information to an imposter site or application. These criminal attacks create insecurity and deter internet use and consequently use of digital economy.

Cyber hygiene practices driven by multiple internet stakeholders – government, private sector, technical community, and civil society organisations addressing the end-user are necessary to reduce the impact such attacks and create confidence. Initiatives include training in schools/universities, raise public awareness campaigns and user guidelines.

As indicated earlier, internet and the digital economy is cross jurisdictional and therefore efforts to ensure security span from local to global. The security frameworks are complementary at national e.g., Computer Incidence Response Teams based on national strategy and regional by

10 The Inclusive Internet Index (eiu.com)

Intergovernmental organizations. Kenya launched a National Cybersecurity Strategy (Ministry of Information Communication and Technology, 2014) and in 2017 launched the National Kenya Computer Incident Response Team – Coordination Centre (National KE-CIRT/CC)[11], a multi-agency collaboration framework responsible for the national coordination of cyber security as well as Kenya's national point of contact on cyber security matters.

At regional level, African Union launched **African Union Convention on Cyber Security and Personal Data Protection in 2014 (Malabo Convention)**[12] to establish a framework for cybersecurity in Africa through electronic transactions, protection of personal data, promotion of cyber security, e-governance and combating cybercrime. This Convention has yet to be ratified by enough members for its entry into force.

While the cybersecurity definition is still evolving, it touches many facets namely core infrastructure, data flowing through the network, devices connected, safety of internet users and cybercrime on the users.

The focus is the end user as they encounter security issues resulting in lack of trust.

Addressing manipulation of BoP in the digital economy – digital corruption

In addition to security challenges threatening active participation of the BoP in the digital economy, there are other challenges that must be confronted from a collaborative and collective perspective; network neutrality issues, power and information asymmetry against the BoP, institutional infrastructure that can be manipulated against the BoP which all amounts to digital corruption.

The internet inventors were and continue to be motivated by a free space with low or no entry barriers where one can express and develop to the best of the self in all their endeavours. Internet was therefore envisaged as a framework for equality of access that one can use any device and share or access information in equal measure with others. Emerging trends have spawned opportunity for creating inequalities on the use of internet by operators treating traffic differently on various characteristics technical, commercial etc. It would be a catastrophe for BoP already excluded in the traditional economy to encounter what amounts to discrimination by gatekeepers on account of their traffic characteristics, destination among others. Network neutrality is a goal that Kenya should continue to embrace and promote and working with African countries and likeminded community of nations in the quest of equality on the internet.

Even as Kenya seeks to expand the digital economy space, it is noteworthy that developed countries have amassed huge data and information assets. Access to these assets is defined by corporate entities or nations that assembled the assets in the first place and therefore BoP will continually be disadvantaged by lack of access and awareness. It is time to engage in the global conversation on data or parts of data considered as global public good (United Nations, 2019). Even amid this potential conversation, Kenya must enhance its capacity to exploit such data assets for the BoP.

Finally, lack of adequate institutional infrastructure; weak policy, legal and administrative structures; and lack of awareness on the existing legislative and regulatory framework lessens confidence in digital economic system and ultimately poses huge risks to BoP, who are vulnerable.

11 KE-CIRT – Communications Authority of Kenya
12 African Union Convention on Cyber Security and Personal Data Protection | African Union (au.int)

Enabling Internet governance principles for a Digital economy for the Kenyan BoP

Table 1 illustrates the continuing journey that Kenya continues to make in the quest to the usher and empower a BoP into a digital economy. The BoP is not to be bystander but a successful participant and thriving in the digital economy. The fast-evolving digital transformation that undergirds the digital economy threatens to lock out those not able to thrive in the digital economy. To bring the BoP on board, it is mandatory that the internet as a foundation is available and accessible to all citizens for applications with security and privacy online. UN IGF Internet Principles & Rights Charter (Internet Rights & Principles Coalition, 2019) provides a foundation through internet governance principles. Table 1 isolates digital Rights that are foundational for thriving digital economy for the BoP and sets out how The Constitution of Kenya Bill of Rights creates the space for the realisation of thee Digital Rights. Implementation of the Constitutional mandate is through policy and legal instruments as mapped in the table.

Table 1: Localising digital rights to Bill of Rights

UN IGF Internet Principles & Rights Charter		**Constitution of Kenya Bill of Rights**		**Universal Declaration of Human Rights**	**Kenyan ICT enabling framework**	
No.	Digital Right	Article	Detail	Article No.	Policy/Strategy	Legal/regulatory
1,2	Equality and non-discrimination, digital inclusion, freedom of choice of system	27	Equality and freedom from discrimination	2	The National ICT Policy Guidelines 2020 National Broadband Strategy 2018-2023	Kenya Information and Communciations Act 1998 [Rev 2020]
3	Liberty and security on internet, protection against cybercrime	29	Freedom and security of the person	3	National Cybersecurity Strategy 2014	Computer Misuse & Cybercrime Act 2018
8,9	Privacy and digital data protection	31	Privacy	12		Data Protection Act 2019
5	Freedom of expression and access to information on the internet, media	33	Freedom of expression	19		Kenya Information and Communciations Act 1998 [Rev 2020]
		34	Freedom of media			
		35	Access to information		The National ICT Policy Guidelines 2020	
11	Intellectual property, copyright, knowledge commons	40	Protection of right to property	27		
14	Economic activity on the internet	43	Economic and social rights	23	Kenya Digital Economy Blueprint Distributed Ledgers Technology and Artificial Intelligence Taskforce	Finance Act – Digital Market place
16	Consumer protection on the internet	46	Consumer rights			Consumer Protection Act 2012
Inclusivity – special stakeholders						
1,2	Equality of access Gender equality	27	Equality and freedom from discrimination (women)	2, 3		Kenya Information and Communications Act 1998 [Rev 2020]
1,13	Accessibility, availability, affordability	54	Persons with disabilities.	2		
1, 2	Equality of access	55	Youth	2		
1,11	Cultural diversity	56	Minorities and marginalised groups.	2, 27		
1,17	Relevant online content	57	Older members of society	25		

Conclusion

The Kenyan digital space is relatively well endowed through near universal digital infrastructure coverage and availability of innovative digital tools and services for active and thriving participation in the digital economy compared to many in other parts of the continent. Forward looking and innovative ICT policies and strategies have laid a firm foundation to support a growing digital economy.

This emerging digital economy presents digital tools and opportunities that can help BoP stakeholders – women, youth and PWDs now excluded in the traditional economy to meaningfully participate and thrive as equal partners in self and national development. In equal measure however, significant barriers on the demand side threaten a catastrophic exclusion of the BoP entry in the digital economy. These barriers are exacerbated by the exclusion of these stakeholders – women, youth and PwDs in the design of policies and strategies for opportunities in digital economy. The national data indicators and compilation is not desegregated to support affirmative policy formulation to address the unique challenges.

It's time to Leave No One Behind in line with the clarion call of UN Sustainable Development Goals 2030 and Constitution of Kenya rights on economic pursuits to sharply focus of the disadvantaged stakeholders – women, youth and PWDs now excluded. This is a collective and collaborative multi-stakeholder effort to handhold them to digital economy, eliminate barriers, create trust and confidence, and importantly work with regional and global actors to expand the digital economy.

Recommendations that follow seek to initiate a conversation of empowering BoP to engage and thrive in a digital economy.

Findings and recommendations

1. Ministry responsible for ICT to review and operationalize frameworks that identify bottom of the pyramid participation in the digital economy to help them to earn a living overcoming exclusion in the traditional labour markets and ensure they are not locked out in the emerging digital transformation journey. Specific frameworks include the Kenya Digital Economy Blueprint, Kenya Information and Communications Act 1998.
2. Communications Authority of Kenya to develop indicators of digital economy and disaggregate to capture demographic data and unique challenges women face as they engage in the digital economy to inform policy makers on inclusive and secure policy formulation. Other data to be captured include PWDs. This data is a basis to inform policy that targets marginalised segments of our society who are currently invisible.
3. Ministry of ICT and Ministry of Interior to review and update Cybersecurity Strategy 2014 to incorporate the challenges of bottom of the pyramid. This should be preceded with a National Cyberspace Policy and Strategy which sets the framework on Kenya's interest in Cyberspace thus set the framework for digital economy and securing the digital the space. In this regard, operationalize Computer Misuse & Cybercrime Act 2018 and Kenya Information & Communications Act 1998 in respect to punish offenders in digital economy including cyberbullying.
4. Fully involve women in the design of the digital economy which wasn't designed with them in mind. This calls for a multistakeholder approach inspired by Constitutional reference on gender equality of over 30% in public institutions but now focus into the emerging cyberspace domain.
5. Ministry responsible for Youth to design support systems for youth to develop their knowledge around policy and regulations and develop social security systems for gig workers.
6. Communications Authority of Kenya to enhance PWDs access to digital tools that will ensure they are included in the digital economy and can provide competitive services and products despite any challenges caused by their disability.
7. In the implementation of universal service Communications Authority to target women access to internet – devices, usage and affordability.
8. Ministry of ICT to develop an implementation framework and targets for digital economy through Kenya's National digital economy Blueprint.
9. Communications Authority of Kenya to spearhead awareness on cyber hygiene practices for end users to reduce cyber-attacks, create confidence and enhance trust in the digital economy.
10. Ministry of ICT to spearhead government engagement to create a larger seamless digital economy. Support the realisation of the East Africa Single Digital Market Initiative and ratify Malabo Convention.
11. Data Protection Authority to engage multistakeholder conversation on cross border data flows and support for SMEs who lack capacity to conform to external markets. This conversation should be broader than personal data to ensure that Kenya can harness full value of data resources in the digital economy. In this regard, Kenya should; 1) develop a national data policy/strategy and, 2) engage in international data governance debate on global institutional data frameworks being led by UN Secretary General. Key areas can be – Is data a public good? Developed countries have harnessed data which locks out developing countries is the use of the data entrenching inequalities in digital economy.

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