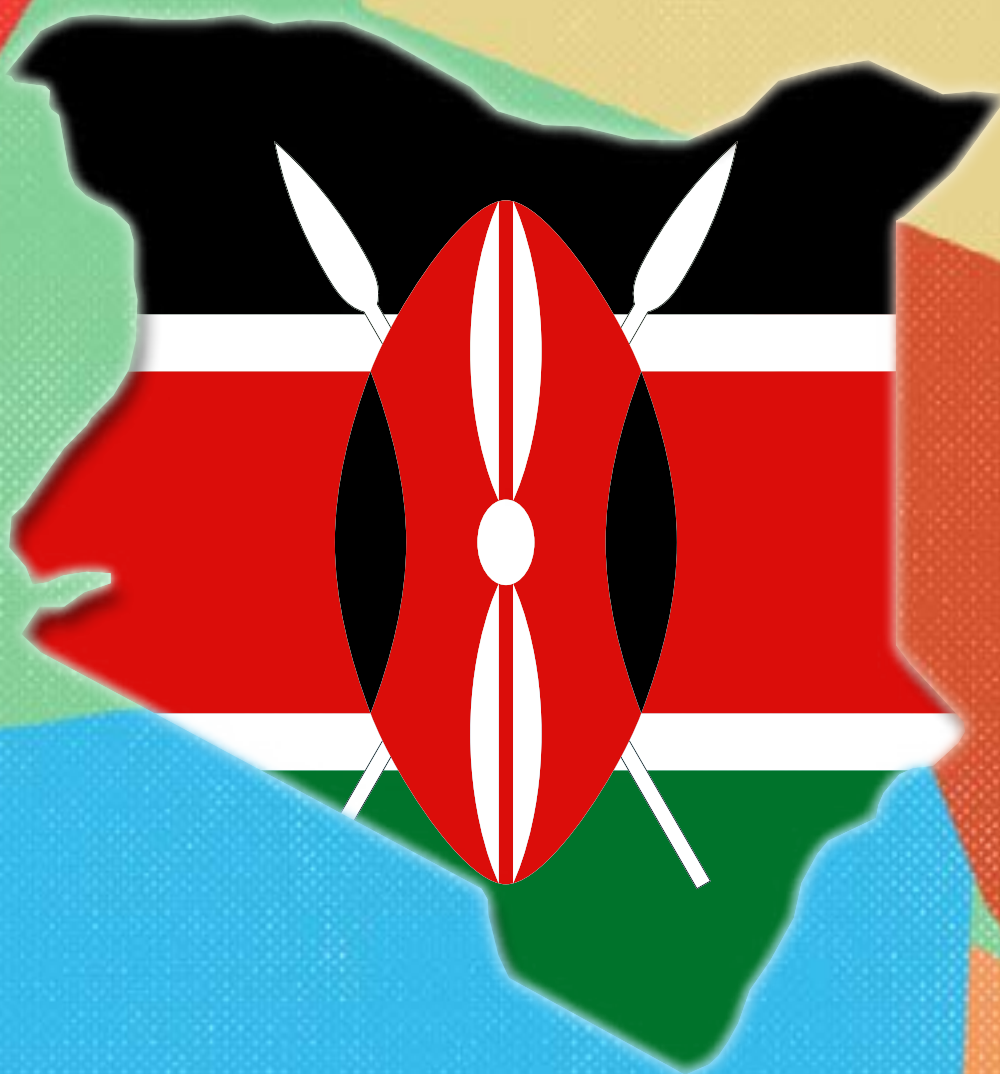


# LONDA 2023

DIGITAL RIGHTS AND INCLUSION IN AFRICA REPORT



KENYA

---

Published in April 2024

Report produced by Paradigm Initiative

This publication may be reproduced for non-commercial use in any form provided due credit is given to the publishers, and the work is presented without any distortion.

**Copyright © 2024 Paradigm Initiative**

374 Borno Way, Yaba, Lagos, Nigeria

Email: [media@paradigmhq.org](mailto:media@paradigmhq.org)

[www.paradigmhq.org](http://www.paradigmhq.org)

2



# CREDITS

**Country Report:**  
Miriam Wanjiru

**Editorial Team:**  
'Gbenga Sesan  
Nnenna Paul-Ugochukwu  
Thobekile Matimbe

**Translators:**  
Paper Bag Africa

**Copy Editor:**  
Sabine Matsheka

**Design & Layout:**  
Kenneth Oyeniya



# Kenya

## EXECUTIVE SUMMARY

This Londa report provides an overview of the country's digital landscape, key developments in data protection and cybersecurity, emerging technologies, the status of digital inclusion and the Universal Service Fund (USF). The author primarily employed a mixed methodology with desk reviews of existing laws, policies, and regulations related to the digital landscape and conducted key informant interviews (KIIs) specifically for the Universal Service Fund (USF) section to gather insights from relevant stakeholders. The report begins by highlighting the internet penetration rate in Kenya, which ranks among the top in Africa. It also gives an overview of existing laws and regulations enacted by the Government of Kenya (GoK) to protect personal data and enhance cybersecurity. The report further indicates persistent challenges in Kenya's digital landscape. Some of these include a lack of awareness among citizens about their data privacy rights and persistent cyber threats, as evidenced by numerous cyberattacks and data breaches. The author also highlights Kenya's efforts in embracing emerging technologies such as artificial intelligence (AI) and blockchain, with notable applications in education, healthcare, agriculture, and financial services. However, the regulatory framework for these technologies is still evolving, presenting both opportunities and challenges.

Furthermore, the report emphasises that while efforts have been made to promote digital inclusion, significant gender disparities persist, particularly in internet access and digital literacy. The Universal Service Fund is seen to continue playing a crucial role in bridging the digital divide by funding initiatives to increase ICT access and connectivity, particularly in underserved communities. The report concludes with actionable recommendations such as the development of comprehensive governance frameworks for AI and supportive regulations, advocating for regulations that protect women from online harassment and cyberbullying; Awareness creation on data privacy issues, and supporting digital literacy programs for persons with disabilities to enhance accessibility and usage.

# Introduction

Kenya is an East African country with a population of 54.56 million. The population is predominantly youthful, with 39.6% of its total population aged between 18 and 35 years.<sup>375</sup> Celebrating 20 years of free primary education in 2023, Kenya has a literacy rate of 82.9%. The youth (15–24 years) have a literacy rate of 88.7%.<sup>376</sup> English and Kiswahili are the two official languages in Kenya, where most people speak Kiswahili. According to the Kenya National Bureau of Statistics (KNBS) Economic Survey of 2023, released on May 3, 2023, Kenya's GDP is USD 86.5 billion, while the current GDP per capita is USD 1722.62.<sup>377</sup> Kenya is a leading regional hub in technology, with a steady growth curve in crucial sectors like ICT, transport, and agriculture, among others. Investment in Information Communication Technology (ICT), for instance, recorded a growth rate of 14% in the year ended 2023.<sup>378</sup> Further, in the year 2023, internet users in Kenya exceeded 19 million, with an estimated 35.30% internet penetration rate.<sup>379</sup> Between January and March 2023, there was a 20.4% rise in data consumption, credited to increased internet use among Kenyans.<sup>380</sup> Additionally, local demand for internet grew in Kenya by 19.6% to 9.6 million Gigabytes per second (Gbps) compared to 8.1 million Gigabytes per second (Gbps) in 2022.<sup>381</sup> The United Nations, in its recent e-Government Survey, ranks Kenya among the top 15 countries in Africa that have embraced digital uptake due to increased investment in digital infrastructure and the provision of government services online.<sup>382</sup> In terms of democracy, Kenya is governed by a constitution promulgated in 2010, with regular elections and fairly stable politics. While the 2010 Constitution clipped the powers of the Executive branch and improved the oversight role of parliament, corruption still undermines the legislature's independence. In practice, the parliament remains subservient to the President. The Kenyan judiciary is generally considered to be independent, and the courts have demonstrated this through a series of high-profile rulings in recent years, some against the wishes of the ruling government.<sup>383</sup> Kenya remains a liberal democracy with one of the continent's most independent and vibrant media. Subsequently, in contrast to several other nations on the continent, Kenya stands out for its absence of internet shutdowns during elections or other significant political events.

375 Datareportal 'Digital Kenya:2023' (2023) <https://www.datareportal.com/report/digital-2023-kenya> (accessed on 05th December, 2023).

376 World Bank 'Literacy Rates, Adult (% of People ages 15 and above)' (2023) <https://data.worldbank.org/indicator/SE.ADT.LITR.MA.ZX?end=2022&locations=KE&start=2022&view=bar> (accessed on 05th December 2023).

377 KNBS 'Economic Survey 2023' (2023) <https://www.knbs.or.ke/publications/> (accessed on 04th December, 2023).

378 Communications Authority 'Kenyan Mobile Sector Records Growth in Revenue and Investments' (2023) <https://www.ca.go.ke/kenyan-mobile-sector-records-growth-revenue-and-investments> (accessed on 19 December 2023).

379 Statista 'Internet - Kenya' (2023) <https://fr.statista.com/outlook/co/digital-connectivity-indicators/internet/kenya> (accessed on 19 December 2023).

380 KBC 'Kenya's Internet Capacity up 20pc on Heavy Data Use' (2023) <https://www.kbc.co.ke/kenyas-internet-capacity-up-20pc-on-heavy-data-use/> (accessed on 13 December 2023).

381 Nation 'Kenyans Dump 800,000 Feature Phones in a Year' (2023) <https://nation.africa/kenya/business/technology/kenyans-dump-800-000-feature-phones-in-a-year-4368968> (accessed on 19 December 2023).

382 United Nations 'UN E-Government Survey 2022' (2022) <https://desapublications.un.org/sites/default/files/publications/2022-09/Web%20version%20E-Government%202022.pdf> (accessed on 18 December, 2023).

383 Freedom House 'Kenya: Freedom on the Net in 2023' (2023) <https://freedomhouse.org/country/kenya/freedom-net/2023> (accessed on 06 December 2023).



# Country Analysis

## Data Protection and Cybersecurity

### Legal and Policy Landscape

There are several laws and rules in Kenya that protect personal information. These include the Data Protection Act (2019), the Data Protection (General) Regulations (2021), and the Data Protection (Complaints Handling Procedure and Enforcement) Regulations (2021). Other laws and regulations include the Consumer Protection Act 2021 and Article 31(c) and (d) of the Constitution of Kenya (2010), which pertain to the right to privacy. The Data Protection Act (2019) is the primary law on data protection and came into force on November 25, 2021. Its objectives are to regulate the processing of data, to protect the privacy of individuals, to establish legal and institutional mechanisms to protect personal data, and to provide data subjects with remedies to protect their personal data from processing that is not in accordance with the act.<sup>384</sup> The Data Protection (General) Regulations (2021) serve to clarify some of the more procedural aspects of the aspirations contained in the Data Protection Act.<sup>385</sup> Data Protection (Complaints Handling Procedure and Enforcement) Regulations (2021) provide for the modes through which data subjects may submit their complaints to the Office of Data Protection Commissioner (ODPC).<sup>386</sup> These laws and policies are enforced by the Office of Data Protection Commission, the Communications Authority of Kenya (CA), and the courts.

Most of the laws and policies on data protection listed above are also concerned with cybersecurity. In addition, the Computer Misuse and Cybercrime Act (2018) defines cybercrimes, establishes penalties for their commission, and outlines the roles and responsibilities of various stakeholders in cybersecurity;<sup>387</sup> the National ICT Policy Guidelines (2020) provides a framework for the development and implementation of ICT policies and strategies in Kenya;<sup>388</sup> the National Cybersecurity Strategy 2022-2027 further outlines the government's vision and objectives for cybersecurity in Kenya and emphasises the need for a multi-agency approach to cybersecurity.<sup>389</sup>

### Data Infringement and Human Rights Gaps

The courts frequently handle many data infringement cases from the public and private sectors. The courts in Kenya have proven to be important enforcers of the laws and continue to provide a breath of fresh air on the issue that has long been pressing. Despite the positive news from the courts, there have still been major cases that caused public outcry in 2023. For instance, the operations of a cryptocurrency project by OpenAI Worldcoin were suspended due to data security concerns. In August, the CA raised concerns about the security and storage of the collected data, the monetary

384 Data Protection Act, 2019 (Act No. 24 of 2019).

385 Oraro Advocates 'Data Protection the Coming into force of various Data Protection Regulations and What You Need to Know' (2023) <https://www.oraro.co.ke/data-protection-the-coming-into-force-of-various-data-protection-regulations-and-what-you-need-to-know/> (accessed on 06 December 2023).

386 Oraro Advocates 'Data Protection the Coming into force of various Data Protection Regulations and What You Need to Know' (2023) <https://www.oraro.co.ke/data-protection-the-coming-into-force-of-various-data-protection-regulations-and-what-you-need-to-know/> (accessed on 06 December 2023).

387 Computer Misuse and Cybercrimes Act, 2018 (Act No. 4 of 2018).

388 The National ICT Policy of 2019.

389 National Cybersecurity Strategy, 2022 - 2027.

reward in exchange for consumer data, consumer protection around cryptocurrency and ICT, inadequate framework regulating data in private hands, and gaps in cybersecurity safeguards and standards.<sup>390</sup> Additionally, the Kenyan legislative committee demanded that the businesses’ “physical presence in Kenya be suspended until there is a legal framework for regulation of virtual assets and virtual service providers.”<sup>391</sup> Despite the physical ban, Kenyans can still access WorldCoin via the internet. Media reports indicate that the American-based company may resume operations in 2024 after complying with government regulations.<sup>392</sup>

This demonstrates a general lack of awareness among Kenyans about their data privacy rights and a need for greater public education and awareness-raising efforts to empower citizens to take control of their personal data. A recent study by the Kenya National Commission on Human Rights found that many Kenyan citizens were unaware of the extent to which their personal information was being collected and processed by various organisations and expressed concern about the possibility of their information being used for unintended purposes or being accessed by unauthorised parties.

Additionally, in July 2023, the eCitizen platform (an online government services provider) was hacked, affecting 5000 government services.<sup>393</sup> According to a report released by the CA in October 2023, Kenya recorded 860 million cyberattacks in 2023, making Kenya among the top three targeted countries in Africa, behind Nigeria and South Africa. During the three months between July and September 2023, the National Kenya Computer Incident Response Team – Coordination Centre (National KE-CIRT/CC) detected 7,514,964 malware threat attempts targeting critical infrastructure service providers.

## Digital IDs

In 2023, the Kenyan government announced a new digital identity card that would replace second-generation IDs. Known as the Maisha card, the third-generation ID system was designed to enhance efficiency in the registration of births and deaths. This ID system uses a unique personal identifier that is assigned to a child at birth, used as a school number and subsequently as a national ID when they turn 18. This number will also serve as the National Social Security Fund’s (NSSF), National Health Insurance Fund’s (NHIF), driver’s licence number, and, upon death, the death certificate’s number.<sup>394</sup> Critics have argued that lack of transparency, inadequate authentication measures and absence of adequate procedural and legal safeguards in the implementation of the Maisha Card could adversely affect citizens’ access to essential national documents. They have also raised concerns about the lack of extensive public participation involving the public, civil society, and other stakeholders as provided in the law.<sup>395</sup>

On December 5, 2023, the High Court sitting in Nairobi stopped the government from rolling out the new digital IDs, also known as Maisha Number, after Katiba Institute challenged the process, arguing that there is no legal basis for the rollout. The lobby group argued that other than a lack of

390 Communications Authority of Kenya (2023) ‘CA and Data Commissioner Warn Kenyans Over Worldcoin’ <https://www.ca.go.ke/ca-and-data-commissioner-warn-kenyans-over-worldcoin> (accessed 18 December 2023).

391 Reuters ‘Kenya Legislative Panel Urges shutdown of Worldcoins Crypto Project within the Country’ (2023) <https://www.reuters.com/technology/kenya-panel-urges-shutdown-worldcoins-crypto-project-within-country-2023-10-02/> (accessed on 06 December 2023).

392 Citizen Digital ‘Worldcoin In Talks With Gov’t To Resume Kenya Operations’ (2023) <https://www.citizen.digital/tech/worldcoin-in-talks-with-govt-to-resume-kenya-operations-n333180> (accessed on 14 December 2023).

393 Business Daily Africa ‘Demystifying Data Protection and Privacy in Kenya’ (2023) <https://www.businessdailyafrica.com/bd/opinion-analysis/columnists/demystifying-data-protection-and-privacy-in-kenya--4422084> (accessed on 06 December 2023).

394 The Star ‘What the Unique Personal Identifier Entails’ (2023) <https://www.the-star.co.ke/news/realtime/2023-09-28-explainer-what-the-unique-personal-identifier-entails/> (accessed on 05 December 2023).

395 Nation ‘Lobby Group Threatens Legal Action over Maisha Namba’ (2023) <https://nation.africa/kenya/news/lobby-group-threatens-legal-action-over-maisha-namba-4369134> (accessed on 05 December 2023).

a legal basis for the rollout, there was no adequate data protection impact assessment or extensive public participation from the public and other stakeholders.<sup>396</sup>

This was not the first time Kenyan courts have ruled against the rollout of Digital IDs. In 2020, there was a similar outcry about the Huduma Number, which was supposed to serve as an identification card. The National Integrated Identity Management System (NIIMS) conducted its registration. The High Court ruled in November 2020 that the government's \$100 million+ Huduma Namba rollout violated the Data Protection Act. In their lawsuit, the Katiba Institute and legal expert Yash Pal Ghai argued that it was unlawful for the government to introduce the Huduma Cards before conducting a data protection impact assessment.<sup>397</sup>

## Development in ICT and Emerging Technologies

### Artificial Intelligence

Artificial intelligence (AI) is the simulation of human intelligence processes by computer systems to perform tasks through learning, language translation, self-correction, visual perception, and reasoning.<sup>398</sup> AI has become an integral lynchpin in the digital and modern world, globally shaping various aspects of human life. In Kenya, there has been an active search for AI-related information in 2023, showing people's interest in transformational technology. Compared to 2022, Kenya has had a remarkable 270% increase in AI searches and a 400% overall increase since 2017.<sup>399</sup> The country is ranked fifth in Africa and ninetyeth globally on AI readiness, with an estimated thirteen billion investments in the last 10 years.<sup>400</sup>

AI is used in various processes pivotal to human prowess and existence. These include agriculture, education, manufacturing, telecommunication, financial services, and healthcare. For instance, the Eneza Education and M-Shule projects, founded in Kenya, provide students with individualised learning opportunities in the education sector.<sup>401</sup> In healthcare, there are two-Kenyan owned AI-powered tools: Ilara Health, an AI-powered tool which analyses medical pictures to enable the early identification and treatment of diseases, and Totohealth, a mobile health app which uses AI to inform parents about their children's health.<sup>402</sup> The Kenya Revenue Authority also uses AI for tax return and filling automation, predictive analytics and forecasting, auditing, and monitoring tax compliance.<sup>403</sup>

The government, through the Ministry of Information, Communications, and the Digital Economy, engages in artificial intelligence through its operations and policy directives. Other major private players include The United Nations Educational, Scientific and Cultural Organisation (UNESCO), HUAWEI, and the Microsoft Africa Research Institute (MARI) in Nairobi, Kenya, which, among other

396 Nation 'High Court Puts the Brakes on Kindiki's Plan to Introduce Maisha Namba' (2023) <https://nation.africa/kenya/news/high-court-puts-the-brakes-on-kindiki-s-plan-to-introduce-maisha-namba-4454474> (accessed on 05 December 2023).

397 Business Daily Africa 'High Court Declares Huduma Namba Illegal' (2022) <https://www.businessdailyafrica.com/bd/news/high-court-declares-huduma-namba-illegal--3582926> (accessed on 05 December 2023).

398 A. Joiner 'Artificial Intelligence. Emerging Library Technologies' (2018) <https://sci-hub.se/https://doi.org/10.1016/B978-0-08-102253-5.00002-2> (accessed on 13 December 2023).

399 Citizen Digital 'Search interest for Artificial Intelligence hits all-time high in Kenya' (2023) <https://www.citizen.digital/tech/search-interest-for-artificial-intelligence-hits-all-time-high-in-kenya-n327585> (accessed on 13 December 2023).

400 Business Daily 'Kenya ranked fifth in Africa on AI readiness' (2023) <https://www.businessdailyafrica.com/bd/economy/kenya-ranked-fifth-in-africa-on-ai-readiness--4113928> (accessed on 13 December 2023).

401 Fintech Association of Kenya 'A Comprehensive Application and Use Cases of AI' (2023) <https://www.linkedin.com/pulse/comprehensive-application-use-cases-ai-fintech-association-of-kenya> (accessed on 13 December 2023).

402 Fintech Association of Kenya 'A Comprehensive Application and Use Cases of AI' (2023)

403 Kenya Revenue Authority 'Digital transformation: The emerging use of Artificial intelligence' (2023) <https://www.kra.go.ke/news-center/blog/1997-digital-transformation-the-emerging-use-of-artificial-intelligence> (accessed on 13 December 2023).



roles, offer training on AI technology as well as understanding, building, and deploying innovative cloud and AI technologies.<sup>404,405</sup>

Although Kenya currently lacks a stand-alone law or policy governing AI, some applicable laws and policies affect AI use. In particular, the Data Protection Act (2019) regulates personal data collection, use, and storage.<sup>406</sup> The Computer Misuse and Cybercrimes Act of 2018 provides a framework for dealing with digital platform offences. Third, the Copyright Act, Cap 130 of Kenya, focuses on copyright and related rights, infringement and enforcement, exceptions, collective management of copyright, and administrative issues. The Kenya National Artificial Intelligence and Data Analytics Policy of 2019 promotes the development and use of AI and data analytics to ensure they are used ethically and responsibly.<sup>407</sup> The Kenya Robotics and Artificial Intelligence Society Bill, 2023, seeks to regulate the robotics and AI industry through research and development, training, and education and promote the use of robotics and artificial intelligence for social and economic development.<sup>408</sup> Some actors in Kenya's tech sector, however, oppose the proposed bill, arguing that it would stifle innovation and put off investors.<sup>409</sup>

AI has positive implications for humanity; however, it may be misused, and existing gaps in regulation may be exploited with potential human rights concerns in various domains. For instance, Samasource Impact Sourcing, Inc. (formerly Sama), an American company headquartered in San Francisco with offices in several African countries, fired 200 Kenyan content moderators after their contract with OpenAI was completed. The workers complained of psychological abuse due to the nature of the work, which involved reading and reviewing graphic content. The workers earned as little as \$1.32 and \$2 per hour, which is less than a third of California's \$7.25 minimum wage.<sup>410</sup> The fired workers filed a petition to the Kenyan government to investigate exploitative working conditions for contractors reviewing the content which powers artificial intelligence programmes.<sup>411</sup>

Additionally. It is crucial to note the gap in AI copyright recognition, especially with creatives and authors having moral, legal, and ethical questions about intellectual property protection.<sup>412</sup> AI also adversely impacts human rights in Kenya through algorithm bias that can perpetuate existing inequalities and discrimination.<sup>413</sup> Also, AI adoption could lead to job losses due to automation and serve as a tool for surveillance, infringing upon individual privacy rights.

---

404 UNESCO 'UNESCO and Huawei 2023 Training on Artificial Intelligence Technology for University Lecturers in the Eastern African Region Closing Ceremony' (2023) <https://www.unesco.org/en/articles/unesco-and-huawei-2023-training-artificial-intelligence-technology-university-lecturers-eastern> (accessed on 13 December 2023).

405 Microsoft 'Microsoft Africa Research Institute (MARI)' (2023) <https://www.microsoft.com/en-us/research/group/microsoft-africa-research-institute-mari/> (accessed on 13 December 2023).

406 Tech Policy 'Kenya Must Update its Regulatory Frameworks to Keep Pace with AI' (2023) <https://www.techpolicy.press/kenya-must-update-its-regulatory-frameworks-to-keep-pace-with-ai/> (accessed on 13 December 2023).

407 ISP.Page 'Kenya's AI Policies and Regulations: Balancing Innovation and Ethics' (2023) <https://isp.page/news/kenyas-ai-policies-and-regulations-balancing-innovation-and-ethics/#gsc.tab=0> (accessed on 13 December 2023).

408 African Women in Technology 'Proposed Legislation for the Establishment of the Kenya Robotics and Artificial Intelligence Society Bill, 2023' (2023) <https://www.africanwomenintech.com/proposed-legislation-for-the-establishment-of-the-kenya-robotics-and-artificial-intelligence-society-bill-2023/> (accessed on 13 December 2023).

409 SEMAFOR 'Kenya's Tech Industry is fighting AI Regulation Plans' (2023) [https://www.semafor.com/article/12/05/2023/kenya-ai-regulation?utm\\_source=nowshare&utm\\_medium=africa&utm\\_campaign=semaforstory#c](https://www.semafor.com/article/12/05/2023/kenya-ai-regulation?utm_source=nowshare&utm_medium=africa&utm_campaign=semaforstory#c) (accessed on 13 December 2023).

410 Quarts 'OpenAI underpaid 200 Kenyans to perfect ChatGPT—then sacked them' (2023) <https://qz.com/open-ai-underpaid-200-kenyans-to-perfect-chatgpt-1850005025> (accessed on 13 December 2023).

411 The Guardian 'It's Destroyed Me Completely': Kenyan Moderators Decry Toll of Training of AI Models' (2023) <https://www.theguardian.com/technology/2023/aug/02/ai-chatbot-training-human-toll-content-moderator-meta-openai> (accessed on 13 December 2023).

412 The Platform 'Machine-Led Copyright in Kenya and the Place of Artificial Intelligence in Intellectual Property' (2023) <https://theplatform.co.ke/machine-led-copyright-in-kenya-and-the-place-of-artificial-intelligence-in-intellectual-property/> (accessed on 13 December 2023).

413 E. Kalya 'The Art of AI in Kenya: Nurturing Innovation, Policy, and Ethical Progress' (2023) <https://www.linkedin.com/pulse/art-ai-kenya-nurturing-innovation-policy-ethical-edward-kip-kalya> (accessed on 13 December 2023).

## Blockchain Technologies

Blockchain is a distributed ledger architecture with a database of transaction records often linked cryptographically and maintained by a global network of computers.<sup>414</sup> Kenya has a high cryptocurrency adoption rate and ranks fifth globally in peer-to-peer exchange, with over six million cryptocurrency owners.<sup>415</sup> Kenya holds over \$1.5 billion worth of Bitcoin (2.3% of GDP), indicating acceptance.<sup>416</sup> The growing use of digital currencies in Kenya is attributed to increased internet access and low crypto exchange charges.

Kenya has been a pioneering African country in adopting and embracing cryptocurrencies in recent years, with Bitcoin dominating the conversation. Some Kenyans have leveraged Bitcoin as a method of wealth generation in this constantly changing digital world.<sup>417</sup> Another cryptocurrency, Kotani Pay, is a technology stack that enables blockchain protocols, DApps, and blockchain fintech companies in Kenya to integrate seamlessly into the local payment channels.<sup>418</sup> In the agricultural sector, Etherisc provides about 7,000 Kenyan farmers with blockchain-based parametric insurance platforms that protect the farmers' livelihoods.<sup>419</sup>

Currently, there are no specific laws or regulations governing the use of blockchain technology in Kenya. Nevertheless, the Central Bank of Kenya (CBK) regulates cryptocurrencies through Kenya's Money Remittance regulations. Cryptocurrency companies must acquire licensing from Kenyan authorities to offer transmission services within Kenya. There is also the National Payments Systems Act (2011), where the CBK regulates cryptocurrency by overseeing payment service providers and ensuring that platforms are safe for investors.<sup>420</sup> Notably, the parliamentary committee presided over by Molo Member of Parliament Kimani Kuria, has approved the proposal to amend the Capital Markets Act, Cap 485 to include digital currencies in the definition of securities. The amendment aims to regulate the trading of cryptocurrencies and guard against the proceeds of crime and terrorism financing.<sup>421</sup> The Kenya Revenue Authority (KRA), the other governmental player, has introduced a digital service tax on cryptocurrency transactions. Traders are now subject to income taxes at a rate of 1.5%. The KRA has also expressed plans to establish a unique tax agency for cryptocurrency tax collection.<sup>27</sup>

Despite its instrumental features, such as immutability and cryptography, blockchain has its share of violations. For instance, Kenyan authorities have raised an alarm over the growing use of digital currencies, warning of possible money laundering and terrorism financing risks from cryptocurrency trading.<sup>422</sup> Moreover, the Kenyan government passed the Digital Assets Tax into law (an amendment to Kenya's Financial Act 2023), mandating crypto users to pay a 3% tax anytime they exchange or transfer a digital asset.<sup>423</sup> Consequently, centralised exchanges such as Binance could be the

414 B. Shrimali, & B. Patel 'Blockchain State-of-the-Art: Architecture, Use Cases, Consensus, Challenges, and Opportunities' (2021) <https://www.sciencedirect.com/science/article/pii/S131915782100207X> (accessed on 13 December 2023).

415 MMW Advocates 'Kenya's Conflicted Stance on Cryptocurrency: A Regulatory Puzzle' (2023) <https://mmw.legal/kenyas-conflicted-stance-on-cryptocurrency-a-regulatory-puzzle/> (accessed on 13 December 2023).

416 East African 'How New Technologies are driving Financial Inclusion in Kenya' (2023) <https://www.theeastafrican.co.ke/tea/sponsored/how-new-technologies-are-driving-financial-inclusion-in-kenya-4360016> (accessed on 13 December 2023).

417 Star 'Bitcoin Trading in Kenya: A Road to Financial Freedom' (2023) <https://www.the-star.co.ke/business/2023-09-01-bitcoin-trading-in-kenya-a-road-to-financial-freedom/> (accessed on 13 December 2023).

418 Kotani Pay <https://kotanipay.com/> (accessed on 13 December 2023).

419 Medium 'Etherisc protects another 700 Kenyan farmers as Part of the Lemonade Crypto Climate Coalition' (2023) <https://blog.etherisc.com/etherisc-protects-another-7-000-kenyan-farmers-as-part-of-the-lemonade-crypto-climate-coalition-e169eca3d-6bc> (accessed on 13 December 2023).

420 Freeman Law 'Kenya and Cryptocurrency' (2022) <https://freemanlaw.com/cryptocurrency/kenya/> (accessed on 13 December 2023).

421 Cryptonews 'Kenya's capital markets bill defining crypto assets as securities progresses in parliament' (2023) <https://cryptonews.com/news/kenyas-capital-markets-bill-defining-crypto-assets-as-securities-progresses-in-parliament.htm> (accessed on 13 December 2023).

422 East African 'Alert over Crypto use in Money Laundering' (2023) <https://www.theeastafrican.co.ke/tea/science-health/alert-over-crypto-use-in-money-laundering-4362574> (accessed on 13 December 2023).

423 Mariblock 'Kenya's Digital Asset Tax: Death Knell for Crypto Adoption' (2023) <https://www.mariblock.com/>

most hit, leading to a shift from centralised exchanges to decentralised ones beyond the reach of Kenyan government monitoring.

It is essential to underscore that the Kenyan government exhibited laxity in implementing the existing laws. The government allowed WorldCoin's marketing operations, including using public premises such as Kenyatta International Conference Centre (KICC) as retinal scanning points, without assurance of legal authorisation. This way, it contributed to the Worldcoin controversy by failing to ensure that any interference with personal information was per Kenyan laws.<sup>424</sup>

Blockchain technology impacts Kenya in diverse ways. Blockchain funding and commitment to Web3 technologies and digital currencies is poised to recalibrate the technological and financial landscape, paving the way for unprecedented financial inclusion and digital revolution in Kenya.<sup>425</sup> For instance, the Venom Foundation, which supports the acceleration of global Web3 projects, partnered with the Kenyan government in 2023 to create a blockchain hub in Africa. The hub will be of benefit to Kenya by increasing innovation in crucial sectors like financial services, logistics, agriculture, small and medium enterprises, and international trade by working together.<sup>426</sup>

Furthermore, the rise of digital payments in Kenya has impacted crypto adoption by laying the foundation for a digital-savvy population with established trust and familiarity, as evident in digital payment systems like M-Pesa.<sup>427</sup> To address the relatively high cost of healthcare, multiple Kenyan mobile applications have been developed for users to pay for medical services by selling their data through blockchain technology.

Blockchain technology operations in Kenya have had cases of potential breaches of human rights and related concerns. For instance, the WorldCoin controversy placed Kenya in the eye of a digital storm of data trafficking.<sup>428</sup> This emerged after more than 350,000 Kenyans sold their irises to the company, exposing the dangers of emerging digital technology. Despite the violations and human rights concerns, various professionals and technology experts believe blockchain can enhance societal and economic development. For instance, the widespread corruption in handling public funds can be tamed with blockchain technology and its Trust protocol, which can transform transactions into a dynamic ledger, offering real-time recording and a comprehensive history of assets and relationships.<sup>429</sup> Furthermore, blockchain-based networks can enable small-scale farmers to access global markets, enhance precision agriculture, and foster transparency, accountability, and traceability, ensuring that Kenya's agricultural produce maintains high quality and reliability.<sup>430</sup>

---

is-the-kenyan-government-moving-to-tax-crypto-into-oblivion/ (accessed on 13 December 2023).

424 African Legal Studies 'Lessons from Kenyan Government's Response to Worldcoin Biometric Crypto Project' (2023) <https://africanlegalstudies.blog/2023/09/22/lessons-from-kenyan-governments-response-to-worldcoin-biometric-crypto-project/> (accessed on 13 December 2023).

425 Citizen Digital 'Kenya Leads the way in Blockchain Adoption and Digital Innovation Report' (2023) <https://www.citizen.digital/tech/kenya-leads-the-way-in-blockchain-adoption-and-digital-innovation-report-n322300> (accessed on 13 December 2023).

426 S. Bhardwaj 'Venom Foundation and Kenya Unite to build a thriving blockchain and Web3 ecosystem' (2023) <https://www.forbesindia.com/article/cryptocurrency/venom-foundation-and-kenya-unite-to-build-a-thriving-blockchain-and-web3-ecosystem/84887/1> (accessed on 13 December 2023).

427 Star 'Riding the digital wave: Cryptocurrency adoption in Kenya's emerging markets' <https://www.the-star.co.ke/news/2023-08-01-riding-the-digital-wave-cryptocurrency-adoption-in-kenyas-emerging-markets/> (accessed on 13 December 2023).

428 Amnesty International 'Protect Kenyans from Digital Data Trafficking' (2023) <https://www.amnestykenya.org/protect-kenyans-from-digital-data-trafficking/> (accessed on 13 December 2023).

429 Nation 'Use Blockchain to Fight Graft' (2023) <https://nation.africa/kenya/blogs-opinion/blogs/use-blockchain-to-fight-graft-4449098> (accessed on 14 December 2023).

430 Business Daily 'Adopt Blockchain in Kenya Agriculture' (2023) <https://www.businessdailyafrica.com/bd/opinion-analysis/columnists/adopt-blockchain-in-kenya-agriculture--4308532> (accessed on 14 December 2023).

## Digital Inclusion

### Gender and ICT

While there is an abject need for more comprehensive legislation to bridge the digital gender gap, there are two important policies on digital rights and inclusion: the Computer Misuse and Cybercrime Act 2018 which aims to address technology-facilitated gender-based violence, including the sharing of intimate images, cyberbullying, and online harassment, and the National Digital Inclusion Strategy 2022-2032 seeks to reduce the cost of access to ICT, increase digital literacy and skills, and promote the use of ICT for socioeconomic development.

According to the Mobile Gender Gap Report 2023 published by the Global Association for Mobile Network Operators, GSMA, only 39% of Kenyan women and 59% of men have access to the internet. The report shows that 88% of Kenyan women own mobile phones, compared to 94% of men.<sup>431</sup> The issue of women's lack of access to digital resources disproportionately affects women and girls with low literacy or low income and those living in rural areas.

A recent study titled "Kenya's Digital Economy: A People's Perspective" found that only 35% of women use advanced digital services compared to 54% of men. It attributed the huge gap to discrimination, harmful social norms, the education divide, geography, and a lack of motivation. These factors create significant barriers for women to fully engage in Kenya's digital economy.<sup>432</sup> It is important to note that the continuous underrepresentation of women in the digital space has negative ramifications for Kenya's digital developmental goals. This is due to a lack of access to digital resources, which limits women's opportunities for economic empowerment and social inclusion opportunities.

A 2023 report by the Kenya ICT Action Network (KICTAnet) highlighted that the most prevalent cases of Online Gender-Based Violence (OGBV) include receiving abusive messages, false posts on social media, sexual harassment, sharing of personal information, digital manipulation of images, and identity theft. The report highlighted a worrying trend of the rise of OGBV in rural areas in Kenya. Another interesting finding from the study was that female friends, alongside male friends and unknown attackers, were among the top three sources of online attacks. It was seen that these attacks mainly occurred across Facebook, Whatsapp and Instagram, which are all owned by one company, Meta.<sup>433</sup> In addition, another report by the African Development Bank indicates that women are 27 times more likely to be harassed online than men. The report suggests that up to 70% of women have endured cyber violence. It further indicates that at least one in every five Kenyan women has experienced cyberbullying.<sup>434</sup>

Both of these reports shed light on the pervasive online harassment that Kenyan women face, thus discouraging their digital participation and undermining their ability to benefit equally from digital services.

## 12

### Digital inclusion for Persons with Disabilities

Kenya is making tremendous steps towards ensuring that some laws and policies foster digital

431 The Mobile Gender Gap Report (2023) [https://www.gsma.com/r/gender-gap/?utm\\_source=website&utm\\_medium=blog&utm\\_campaign=gender-gap-2023](https://www.gsma.com/r/gender-gap/?utm_source=website&utm_medium=blog&utm_campaign=gender-gap-2023) (Accessed on 21 January 2024).

432 The Gendered Challenges of e-Governance in Kenya (2023) <https://genderit.org/feminist-talk/gendered-challenges-e-governance-kenya> (Accessed on 21 January 2024).

433 Unmasking The Trolls - Research on Online V3 (2023) <https://www.kictanet.or.ke/mdocs-posts/unmasking-the-trolls-research-on-online-gender-based-violence-in-kenya/> (accessed on 20 Jan 2024)

434 Women 27 times more likely to be cyberbullied than men - report (2023) <https://www.the-star.co.ke/news/realtime/2023-02-28-women-27-times-more-likely-to-be-cyberbullied-than-men-report/> (Accessed on 21 January 2024).

inclusion for persons with disabilities (PwDs). In particular, the National ICT Policy of 2019 requires the government to ensure that persons with disabilities have complete access to ICT services.<sup>435</sup> At the same time, there is the National ICT Policy Guidelines of 2020, seeking to provide an all-inclusive ICT environment that enhances equality and accessibility to persons with disabilities (PwDs).<sup>436</sup> To enhance digital inclusion for PwDs, the Kenyan government gazetted a new standard in May 2022, ensuring that public and private sector digital products and services are accessible to PwDs.<sup>437</sup> Most importantly, there is the Persons with Disabilities Bill of 2023, which seeks to ensure that every PwD has the right to access information and communication and impart information and ideas electronically.<sup>438</sup>

Digital inclusion transcends accessibility, as it is a fundamental human right. Unfortunately, according to the Friedrich Naumann Stiftung Foundation, the high cost of data in Kenya excludes lower-income Kenyans (the majority) from benefiting from the digital economy.<sup>439</sup> There is also a marked under-inclusion of persons with disabilities in the development of digital platforms where their input would be valuable in developing usable products for persons with disabilities.<sup>440</sup> PwDs continue to experience difficulty using web-based technologies or accessing digital information services, despite the specific tenets laid out in the National ICT Policy.<sup>441</sup> Indeed, most of these violations are avoidable if the policy frameworks and guidelines regarding digital inclusion for PwDs are fulfilled.

## Review of the Universal Service Fund

To support the implementation of Kenya's 2022-2026 USF Strategic Plan, several legal and policy documents have been developed, amended, or adopted. These include the Kenya Information and Communications Act, The (Universal Access and Services) Regulations 2010, Public Procurement and Asset Disposal Act, 2015, Public Procurement and Asset Disposal Regulations, 2020, Universal Service Fund (USF) Operating Manual, 2022, and The Public Finance Management Act, 2012. As such, the implementation of the USF in Kenya undergoes an annual audit by the Office of the Auditor General, complying with the requirements of the Kenya Information and Communications Act and the Public Finance Management Act, 2012.

Financed through mandatory contributions from the Government, grants and donations, the USF is designed to support the development of policies and programmes that seek to close the digital gap and increase internet connectivity. In Kenya, the USF continues to fund various initiatives that contribute to enhancing ICT access and connectivity. Some of these projects include the Cellular Mobile Network Infrastructure and Services Project, National Digital Superhighway Project, Digitization and Dissemination of Agricultural Content, Kenya Education Cloud Open Resource Portal, and Content Development and Provision of Devices for Learners with Special Needs. Among these, the Digitization and Dissemination of Agricultural Content and Content Development and

435 Vellum Kenya 'Kenya ICT Policy 2019 Highlights' (2020) <https://vellum.co.ke/kenya-ict-policy-2019-highlights/> (accessed on 14 December 2023).

436 inABLE 'Digital Accessibility Gap Analysis Report for Kenya 2021' (2022) [https://inable.org/wp-content/uploads/2023/09/A11Y\\_6-SEPT-2023\\_-DIGITAL-ACCESSIBILITY-GAP-ANALYSIS-BY-inABLE\\_2022.pdf](https://inable.org/wp-content/uploads/2023/09/A11Y_6-SEPT-2023_-DIGITAL-ACCESSIBILITY-GAP-ANALYSIS-BY-inABLE_2022.pdf) (accessed on 14 December 2023).

437 Standard 'How Kenya's ICT Accessibility Standards can create more inclusive workplaces' (2023) <https://www.standard-media.co.ke/sports/opinion/article/2001486658/how-kenyas-ict-accessibility-standards-can-create-more-inclusive-workplaces> (accessed on 14 December 2023).

438 The Persons with Disabilities Bill, 2023.

439 Friedrich Naumann Stiftung 'From mobile money to digital cash' (2023) <https://shop.freiheit.org/#!/Publikation/1418> (accessed on 18 December, 2023).

440 KICTANET 'Digital Divides and Inclusion: How are Things?' (2023) <https://www.kictanet.or.ke/digital-divides-and-inclusion-how-are-things/> (accessed on 14 December 2023).

441 Digwatch 'Promoting digital inclusion for persons with disabilities – Kenya's progress' (2023) <https://dig.watch/updates/promoting-digital-inclusion-for-persons-with-disabilities-kenyas-progress> (accessed on 14 December 2023).



Provision of Devices for Learners with Special Needs specifically target women and people living with disabilities in underprivileged communities.

The first phase of USF implementation successfully provided mobile connectivity to 78 sub-locations in 15 counties.<sup>442</sup> Consequently, the second phase has made substantial progress. The Cellular Mobile Network Infrastructure and Services to the unserved and underserved sub-locations has connected 51 sub-locations out of the 101 targeted sub-locations, marking a significant milestone in bridging the digital divide. However, despite these successes, the implementation of the USF has not been one without challenges. The destruction of telecommunications masts, lack of electricity in target areas, and difficult terrain hindered proper implementation of the fund's objectives in 2023.<sup>443</sup>

---

442 Paradigm Initiative 'LONDA Country Report - Kenya' (2022) <https://paradigmhq.org/londa-22/> (accessed on 21 January 2024).

443 Broadband connectivity for schools in Kenya funded by the Universal Service Fund – Assessment report (2023) <https://www.itu.int/hub/publication/d-pref-ef-bb-conn-2023/> (Accessed on 15 January 2024).

# ▶ Conclusion & Recommendations

## Conclusion

In conclusion, this Londa report on Kenya's digital landscape highlights significant progress and persistent challenges in the country's journey towards a more inclusive and secure digital future. Kenya has made remarkable strides in digital infrastructure development, with high internet penetration rates and a sprouting tech sector. However, challenges such as data privacy concerns, cybersecurity threats, gender disparities in digital access, and barriers to inclusion for persons with disabilities remain prevalent.

In light of these gaps and concerns, the following recommendations have been proposed for consideration.

## Recommendations

---

### Government

- » Ensure a well-functioning digital infrastructure and adequate digital literacy before rolling out AI and blockchain-enabled registries.
- » Formulate a governance framework led by the Ministry of ICT that fosters regular audits and feedback loops for AI operations in the country.
- » Develop clear and comprehensive supportive frameworks to support the Data Protection Act, aligned with emerging technologies.
- » Formulate comprehensive gendered legislation and policies on data protection, cybersecurity and Online Gender-Based Violence.
- » Enforce regulations that protect women from online harassment and cyberbullying.

### Civil Society

- » Advocate for regulations that protect women from online harassment and cyberbullying.
- » Advocate for a multisectoral approach to address human rights concerns related to AI exploitation involving government agencies, civil societies, and technological companies.
- » Increase awareness and education regarding personal data privacy issues.
- » Collaborate with the government, industry, and other stakeholders to address challenges and opportunities presented by big data and personal information privacy.
- » Advocate for the creation of online spaces for women and girls, including people with disabilities on digital platforms, with accessible

---

and transparent reporting and complaint procedures.

- » Promote a change in societal attitude towards people with disabilities to achieve digital inclusion for young PWDs in Kenya.
- » Advocate for the inclusion of PWDs in policy-making processes to enhance their understanding and contribute to bridging the digital gap.

---

### **Private Sector**

- » Develop clear and comprehensive institutional policies for data protection aligned with emerging technologies.
- » Create partnerships between the government, private sector, and nonprofits to provide affordable internet and digital services and products to women.
- » Collaborate with the government, industry, and other stakeholders to address challenges and opportunities presented by big data and personal information privacy.
- » Create online spaces for women and girls on digital platforms with accessible and transparent reporting and complaint procedures.
- » Ensure blockchain technology features an immutable, decentralised, and tamper-proof ledger to address and curb human rights violations.

---

### **Academia**

- » Conduct systematic and dynamic assessments of the negative impacts AI possesses on algorithm bias and privacy concerns.
  - » Support digital literacy programmes for PWDs to enhance accessibility and usage.
-



[www.paradigmhq.org](http://www.paradigmhq.org)

Copyright © 2024