

Digitalisation, Health, and Participation

A BRIEF ON KENYA

Country Context

Kenya, sometimes called the 'Silicon Savannah', is a leader in the digital transformation in East Africa, exemplified by rapid technological advancements and widespread digital innovation across many sectors.

The country's population is increasingly adopting digital tools, and Data Reportal's statistics places Kenya's internet penetration at 92%.¹ This growth is partly fuelled by government infrastructure² and by a large network of entrepreneurs, start-ups and innovation hubs.³

With most of the country's population connected to the internet, the government of Kenya is actively utilising digital platforms, including digitalisation of government services, to enhance and streamline service delivery. Mobile devices account for 72% of Kenya's web traffic in a mobile-centric digital environment.⁴ The mobile money platform M-PESA has also rapidly expanded access to financial services and micro-investment.⁵

However, while the surge in internet penetration and mobile ownership looks promising for the country's digital revolution, disparities persist in digital access. At the same time, digitalisation creates new risks and challenges, including to human rights, and these require reflection and action.⁶

This brief summarises findings on gender, equity, and human rights in digital health governance by the Digital Health and Rights Project, drawing in part on findings from a participatory action research study that focuses on the needs of young women, people living with HIV, and young adult key populations. The brief will address the following thematic areas:

- (i) Multiple digital divides
- (ii) Young adult experiences from previous research
- (iii) Digital health governance

Based on this, we offer policy recommendations and share plans for future research.

¹ Data Reportal (2023). Digital data report: Kenya, web page: <https://datareportal.com/reports/digital-2023-kenya>

² Ndulu, B., Stuart, E., Dercon, S., and Knaack, P. (2023). Digital transformation: lessons from seven developing countries. United Kingdom: Oxford University Press.

³ GIZ (2023). Digital Transformation Center Kenya promotes digital transformation. [Internet]. [cited 2023 October 21] Web page: <https://www.giz.de/en/worldwide/134205.html>

⁴ Natalie, C. (2023). Web traffic by device in Kenya 2023. Statista: The Statistics Portal, web page: <https://www.statista.com/statistics/1312186/web-traffic-by-device-in-kenya/>

⁵ Ndulu, B., Stuart, E., Dercon, S., and Knaack, P. (2023). Digital transformation: lessons from seven developing countries.

⁶ Davis, Kpodo, Pham, et al., (2023). "Digital health and human rights of young adults in Ghana, Kenya and Vietnam: A qualitative participatory action research study" *BMJ Global Health*

Multiple digital divides

An estimated one-third of the global population (2.6 billion) were offline in 2023.⁷ While more than 90% of people in high-income countries (HICs) used the internet in 2023, 51% of those in low- and middle-income countries (LMICs) had access to the internet.⁸



Similar to other countries in East Africa, Kenya faces a digital divide with unequal access to tools, broadband and skills needed to access welfare services.⁹ In particular, there is still much to be done to address the rural-urban internet usage divide, though the ratio of the percentage of usage between rural and urban areas has seen a notable decrease from 2.3 to 1.8 between the year 2022 and 2023.¹⁰ Thus, the rural-urban divide continues to hinder progress towards an inclusive digital economy.¹¹ In addition, there is a significant digital divide for the urban poor living in informal settlements.¹²

While Kenya's internet gender parity score is improving, the *Mobile Gender Gap Report* by the Global System for Mobile Association (GSMA) emphasised some nuances in differential access to mobile phones among women and men in Kenya.¹³ In 2022, the gender gap in mobile ownership was just 6%, but closer examination reveals that while 51% of men owned smartphones, only 38% of women did. The gender gap was narrower for basic phones (men 26%, women 29%) and feature phones (men 10%, women 11%).¹⁴ The gender gap in mobile internet adoption was 34% (men 59%, women 39%), showing that while both men and women own phones, men were more likely to have smart phones and thus, access to internet. The GSMA study

⁷ International Telecommunications Union (ITU) (2023). Population of global offline continues steady decline to 2.6 billion people in 2023: Accelerating progress is key in race toward universal and meaningful connectivity. Press release: <https://www.itu.int/en/mediacentre/Pages/PR-2023-09-12-universal-and-meaningful-connectivity-by-2030.aspx#:~:text=The%20number%20of%20people%20worldwide,global%20population%20unconnected%20in%202023>

⁸ ITU (2023a). Measuring digital development: facts and figures. <https://www.itu.int/en/ITU-D/Statistics/Pages/facts/default.aspx>.

⁹ Ibid., ITU (2023).

¹⁰ ITU (2023b). Digital gender parity is still a distant prospect in regions with low Internet use. Web page: <https://www.itu.int/itu-d/reports/statistics/2023/10/10/f23-the-gender-digital-divide/>

¹¹ Lusweti, S.W. and Omieno, K.K (2023). Using I-hubs for bridging the gap of digital divide in rural Kenya [Internet]. [cited 2024 Jan 21]. Web page: <https://journalubpkarawang.ac.id/index.php/bit-cs/article/view/5165>

¹² Kioko, H and Hati B (2023). Unearthing the digital divide among the urban poor in Kenya's informal settlements – NuvoNi Centre for Innovation Research [Internet]. [cited 2024 Jan 24]. Web page <https://nuvoniresearch.org/unearthing-the-digital-divide-among-the-urban-poor-in-kenyas-informal-settlements/>

¹³ GSMA (2023). The mobile gender gap report 2023. : https://www.gsma.com/r/gender-gap/?utm_source=website&utm_medium=blog&utm_campaign=gender-gap-2023.

¹⁴ GSMA (2023). Mobile gender gap report 2023.

identified lack of affordability, literacy, and digital skills as major obstacles for women. As discussed below, our previous study found this impacted on access to health information and services for women.

Nonetheless, there are specific government initiatives aimed at addressing these digital divides. The Kenyan government has proactively launched programme to narrow the digital gender gap. As of September 2023, the Ajira Digital programme has provided digital skills to over 350,000 young Kenyans, with 53% of the beneficiaries being women. The initiative has evolved into "AjiraforShe," with a renewed focus on empowering young women^{15,16}. Under this initiative, the government aims to achieve a 70% participation rate by young women, specifically targeting those from marginalised communities and refugee camps.

Globally
there were

**259
million**

more men ♂



than women ♀
online in 2023

Gender gap
in mobile
internet adoption

34% ♂ 59%
♀ 39%



¹⁵ Lawi, J. (2023). State betting on Ajira programme to bridge digital gender divide. Web page: <https://www.the-star.co.ke/business/kenya/2023-08-26-state-betting-on-ajira-programme-to-bridge-digital-gender-divide/>

¹⁶ Tasmima, I. (2023). Ajira drive now targets more women in plan to bridge digital divide. *The Star*, 26 August. Web page: <https://www.standardmedia.co.ke/health/business/article/2001480179/ajira-drive-now-targets-more-women-in-plan-to-bridge-digital-divide>

Impact on Young Adults: Findings from our previous research

In 2021-2022, the Digital Health and Rights Project, led by KELIN, a human rights organisation in Kenya, investigated the empirical effects of the digital transformation of health for diverse young adults, and found significant benefits and harms.¹⁷

This study was conducted within the frame of a transnational participatory action research in Bangladesh, Colombia, Ghana, Kenya and Vietnam, including young researchers based in national Non-Governmental Organisations (NGOs) and universities. In Kenya, researchers conducted 8 focus group discussions (four in Nairobi and four in Kisumu) with a total of 71 participants. In addition, they interviewed United Nations (UN) officials, private sector leaders, government officials, civil society and community leaders.

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Young adults in Kenya reported predominantly using Google, social media, and social chat groups for health information. While many said they were reluctant to go to formal health clinics to seek information and advice on sexual and reproductive health (SRH) and HIV due to fears of stigma and moral judgement by health care workers, they emphasised reliance on trusted peer networks, and the role of social media health champions. Women reported they were more likely to seek health information online than their male counterparts, and that digital access empowered them to share information with peers and older female relatives. Study participants also described their roles as micro-influencers and digital health champions on social media; and benefited from access to influential social media spaces for SRH information such as *Love Matters Kenya*, a Facebook page with

1.8 million followers. However, the research also underscored profound disparities in access to digital health resources. These disparities were shaped by structural factors, including gender, economic resources, rural-urban divides, education, disability, sexual orientation, gender identity, religious and cultural norms, and more.

Young adults also disclosed harms linked to seeking health information online including cyberbullying, data mining and anxieties about surveillance, especially for young people living with HIV, key populations, and young women seeking information on SRH or access to safe medical abortion.¹⁸ Private sector interviews pointed to concerns about weak protection of health data, especially evident during the Covid-19 pandemic.¹⁹ In a 2023 study by KELIN on the impact of HIV index testing on access to SRH services among young women and girls, study participants indicated that health care providers needed to be trained in data privacy and security, and a need for more robust privacy and confidentiality protections, for instance through encryption.²⁰ A 2018 study by KELIN and the Key Populations Consortium showed key populations mobilising to block government use of biometrics in health research, out of similar concerns.²¹

Young people called for government to consult them in the governance of digital technologies, and called for training in their rights under Kenyan laws and policies.

In most of the government offices, you find that people who are 60 years, 50 years old plus, are the ones speaking on behalf of young people. They don't know what we want. They assume they know what we want.

¹⁷ DHRPC (2022). *Digital health and rights of young adults in Ghana, Vietnam, Kenya: final project report*. Graduate Institute. https://repository.graduateinstitute.ch/record/300591?_ga=2.99187678.1735834843.1682602161-345088509.1672743223&v=pdf

¹⁸ Davis, Kpodo, Pham et al., (2023). Digital health and human rights.

¹⁹ Ibid.

²⁰ KELIN (2023). Impact of HIV index testing on access to sexual and reproductive health (SRH) services for young women and girls in Kenya: A participatory action research study. Research report. Available at: <https://www.kelinkkenya.org/wp-content/uploads/2023/04/HIV-Index-Testing-Research.pdf>

²¹ Davis, S. & Malache, A. (2018). "Everyone said no": key populations and biometrics in Kenya. Health and rights journal. Journal blog: <https://www.hhrjournal.org/2018/07/everyone-said-no-key-populations-and-biometrics-in-kenya/>

Digital health governance in Kenya: An overview

The legal and policy framework on digital health was fragmented until the 2023 passage of Kenya's *Digital Health Act, 2023* (Act 15).

Prior to this, there were five specific policies and standards that guided digital health: (i) *Kenya National eHealth Strategy* (2011) (ii) *Kenya National eHealth Policy* (2016-2030); (iii) *Kenya Standards and Guidelines for mHealth Systems* (2017); (iv) *Health Information Policy* (2014-2030); and (v) *Health Sector ICT Standards and Guidelines* (2013).²² These policies are complemented by core legal frameworks such as: (i) the *Data Protection Act* (2019); (ii) *Kenya Information and Communications Act* (1998); the *Science, Technology, and Innovation Act* (2013); the *Computer Misuse and Cybercrimes Act* (2018); and the *ICT Policy* (2019).

The enactment of the *Digital Health Act, 2023* (Act 15) aimed to address this fragmentation, by providing a framework for the provision of digital health services, establishing a comprehensive integrated digital health information system, and instituting a Digital Health Agency (DHA).²³ The Act operates together with other statutory laws (*The Social Health Insurance Act of 2023, Facilities Improvement Financing Act of 2023 and the Primary Healthcare Act 2023*) to promote Universal Health Coverage. The Act improves on earlier regulation by making provision for community engagement, accessibility, and inclusion for vulnerable communities. Nonetheless, apart from funding for the DHA, it fails to provide a clear pathway for the funding of other initiatives mentioned in the Act. This may have consequences for addressing the challenges detailed above.

Additionally, while the Act seeks to address issues of data protection and privacy, ongoing government surveillance continues to be a concern for diverse populations and civil society groups.²⁴ In 2020, the Universal Periodic Review of Kenya's human rights situation urged the government to ensure judicial oversight and respect for privacy in any surveillance and profiling of citizens; and recommended revision of the draft data protection bill in line with international human rights standards.

In 2022, a new National Digital Master Plan (2022-2032) was designed to strategically propel Kenya's digital transformation and economic growth in a decade.²⁵ The plan focuses on digital infrastructure, digital government, digital economy, and digital society, emphasising the coordination of ICT resources, interoperability of systems, and cost reduction through efficient implementation, while also outlining a governance framework. The plan aligns with the DHA, but the extent to which marginalised communities will participate in its design, implementation and assessment requires further research. Similar concerns attach to a planned new *AI Governance Framework* under development in cooperation with German and EU partners.²⁶

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²² DHRPC (2022). *Digital health and rights of young adults in Ghana, Vietnam, Kenya*.

²³ Digital Health Act, 2023 (Act 15).

²⁴ Bhalla, N. (2024). Kenya rights groups say move to block phone fraud is surveillance. [Internet] [cited 2023 December 27]. Web page: <https://www.context.news/surveillance/kenya-rights-groups-say-move-to-block-phone-fraud-is-surveillance>

²⁵ Kenya Digital Master Plan (2022-2032). <https://cms.icta.go.ke/sites/default/files/2022-04/Kenya%20Digital%20Masterplan%202022-2032%20Online%20Version.pdf>

²⁶ Begovic, B. (2024). Kenya launches project to develop national AI strategy in collaboration with German and EU partners. DigWatch. Web page: https://dig.watch/updates/kenya-launches-project-to-develop-national-ai-strategy-in-collaboration-with-german-and-eu-partners?utm_source=DiploMail&utm_campaign=c2db59ccf6-EMAIL_CAMPAIGN_2024_04_12_01_00&utm_medium=email&utm_term=0_4510155485-c2db59ccf6-%5BLIST_EMAIL_ID%5D

Further research: The Future of Human Rights in the Digital Age

In 2023-26, the *Future of Human Rights in the Digital Age* study will build on previous findings, using a participatory approach, to explore the future of human rights in the digital age, and the role played by diverse grass-roots communities in LMICs in shaping that future.

The study in Colombia, Ghana, Kenya, and Vietnam engages national community and civil society researchers, and focuses on three thematic areas:

- (i) Digital literacy and empowerment: Exploring the kinds of literacy that young people and communities need to engage effectively in digital governance.
- (ii) Political determinants of digital health: Understanding the impact of digital health laws and policies on young adults and key populations.
- (iii) Meaningful youth participation in digital governance: Investigating the right to meaningful participation in digital health governance, and the extent to which diverse actors can collaborate to promote human rights in the use of data and digital technologies.



To promote a fairer digital future and incorporate grass-roots evidence and perspectives into global policies and practices, the study adopts a pedagogical approach that empowers young people to become both learners and researchers. Accordingly, the project has established a Community Advisory Team (CAT) in Kenya, with young adults from previous research, health advocates, and human rights advocates represented. The CAT advises on the research, leads national dissemination and advocacy plans, and participates in digital empowerment training. In addition, they elect a representative to our global steering committee. By engaging the community as partners, the approach provides a platform to address issues that directly affect their lives.²⁷

Recommendations

- The government of Kenya should work with civil society organisations (CSOs), youth associations and communities to enhance transparency and inclusive decision making. Government can benefit from the expertise of CSOs in assessing varying levels of participation in digital governance among young adults and other marginalised populations with a view to improving meaningful participation.
- The United Nations, regional bodies such as the African Union and other global health agencies should support the Kenyan government to strengthen data protection regulation and implementation.
- Donors such as the World Bank and Global Fund should focus on interventions that prioritise human rights education and digital literacy training for young adults and marginalised populations in Kenya.

²⁷ DHRPC, and Davis S.L.M. (2022). Towards digital justice: participatory action research in global digital health. *BMJ Global Health* 2022;7:e009351. Available online: <https://gh.bmj.com/content/7/5/e009351.info>

Conclusion

Kenya continues to grapple with significant digital divides across gender, rural-urban landscapes, refugee communities, and education. Efforts by NGOs, governmental initiatives, and digital empowerment programmes aim to bridge these gaps. The Digital Health Act, 2023 (Act 15) and ongoing legislative proposals underscore the country's commitment to digital governance and healthcare digitalisation. Nonetheless, persistent challenges, including socio-economic factors, gender inequalities, criminalisation of key populations, and infrastructure limitations, call for continued research and comprehensive strategies to ensure digital inclusivity and equitable access for all. For instance, proposed new legislation targeting the LGBTQI+ community will undermine digital inclusion and access to health services.²⁸ The current study will address these challenges from the ground-up by engaging affected stakeholders.



²⁸ Byaruhanga, C. (2023). LGBT rights in Africa: Will Kenya be the latest to pass anti-gay law?. BBC News, July 18. <https://www.bbc.co.uk/news/world-africa-66079603>

About the Digital Health and Rights Project

The Digital Health and Rights Project (DHRP) consortium brings together international social scientists, human rights lawyers, health advocates, and networks of people living with HIV, to conduct research and advocate for rights-based digital governance in Colombia, Ghana, Kenya, Vietnam, and globally.

warwick.ac.uk/fac/cross_fac/cim/research/digital-health-rights/consortium

The Kenya Legal & Ethical Issues Network on HIV and AIDS (KELIN) is a consortium member of the DHRP and leads on research and advocacy for the Future of Human Rights in the Digital Age Study in Kenya.

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