

# LEVERAGING INTERNET ACCESS FOR INNOVATION AND GOVERNANCE IN UGANDA



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## Executive Summary

The government is driving Uganda's digital transformation by enhancing infrastructure, fostering e-governance, and improving service delivery through a series of legislative measures. However, limited Internet access, high costs, and low digital literacy hinder the full potential of these advancements, highlighting the need for systemic policy reforms and broader support to bridge the digital divide and maximize the benefits of digital tools for governance and innovation.

Innovators in Uganda are crucial in bridging Internet access and governance by leveraging digital tools to enhance civic engagement, transparency, and accountability, exemplified by platforms like Faayo, TruGuard, and Masai Consults. Despite facing challenges such as restrictive regulations and limited resources, their efforts are reshaping governance to be more participatory and aligned with citizen needs, underscoring the need for a supportive ecosystem to further advance digital transformation.

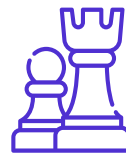


*Innovators in Uganda are crucial in bridging Internet access and governance by leveraging digital tools to enhance civic engagement, transparency, and accountability*

To foster digital innovation and improve governance in Uganda, it's essential to expand rural Internet infrastructure, enhance regulatory frameworks, and promote collaborative governance through public-

private partnerships and community-led initiatives. Additionally, developing a national innovation strategy, improving digital literacy, leveraging data for policymaking, promoting competition in telecommunications, and refining cybercrime laws will create a more inclusive and supportive environment for digital transformation.

This policy brief builds upon extensive research conducted by EML with funding from the Internet Society Foundation that investigated the potential of Internet usage in enhancing service delivery to promote transparency and accountability within Uganda Government's Ministries, Departments, and Agencies.



*Developing a national innovation strategy and improving digital literacy will create a more inclusive and supportive environment for digital transformation*

## Key Findings:

- Only 5.7% of Ugandans have Internet access, with significant urban-rural disparities.
- Innovators face high Internet costs, inadequate infrastructure, and restrictive regulations.
- Governance is hindered by low digital literacy and insufficient integration of digital tools.

## Strategic Insights:

- Expanding Internet access and enhancing digital literacy are essential for driving innovation and improving governance.
- Innovators can develop digital solutions to address local governance challenges and promote civic engagement.
- Strengthening policy frameworks to support digital innovation is critical for sustainable development.

## Recommendations:

- Invest in rural digital infrastructure, subsidize Internet costs, and provide affordable ICT equipment to bridge the digital divide and ensure inclusive access.
- Implement adaptive regulatory policies and enhance data protection to foster a supportive environment for digital innovation.
- Develop a National Innovation Strategy to Support Local Innovation Ecosystems.

## Contextual Background

The government's commitment to enhancing digital innovation and governance in Uganda, as emphasized in the National Development Plan III, is driving significant transformation in the digital landscape, with the Internet becoming increasingly vital for expanding infrastructure, fostering e-governance, and improving service delivery and socio-economic development. This transformation began with the enactment of the National Information Technology Authority-Uganda (NITA-U) Act in 2009, which established a central body to coordinate IT services and promote national standards. The subsequent introduction of the Computer Misuse Act in 2011 addressed the growing need to prevent cybercrime and protect the burgeoning digital environment. In the same year, the Electronic Transactions Act was enacted to facilitate e-commerce by providing a legal framework for electronic contracts and records, laying the groundwork for a more digitally integrated economy.



*The government's commitment to enhancing digital innovation and governance in Uganda is driving significant transformation in the digital landscape*

The Uganda Communications Act of 2013 further advanced the digital agenda by regulating the telecommunications sector to ensure fair competition and safeguard consumer rights. This was followed by the National ICT Policy of 2014 and the National Broadband Policy of 2018, which provided strategic directions for expanding digital infrastructure and access across the country. These policies were crucial in setting the stage for broader digital inclusion. The Data Protection and Privacy Act of 2019 then reinforced the government's commitment to creating a secure digital environment by establishing a framework to protect personal data.

Despite these legislative and policy efforts, Internet access in Uganda remains limited, which poses a significant challenge to fully leveraging digital tools for governance and innovation. According to the 2022 National ICT Survey by NITA-U, only 26% of the population has Internet access, with a significant divide between urban (23% access) and rural areas (5% access)<sup>1</sup>. Although digital literacy is crucial for integrating Internet access with innovation and governance, only 15% of Ugandans have basic digital skills, and just 5% possess the advanced skills necessary for effective digital engagement.



*The high costs of both Internet services and devices continue to hinder digital inclusion, preventing many Ugandans from accessing the benefits of digital tools for governance and innovation*

The high costs of both Internet services and devices continue to hinder digital inclusion, preventing many Ugandans from accessing the benefits of digital tools for governance and innovation.<sup>2</sup> The high cost of Internet services, consuming about 22% of an average Ugandan's monthly income, exacerbates this divide, particularly affecting low-income households and marginalized communities. Additionally, the affordability challenge extends to ICT equipment, with smartphone penetration at just 16% and even lower computer ownership, especially in rural areas. Furthermore, current Internet usage patterns in Uganda reveal an underutilization of its potential, with 84% of users primarily engaging in social networking, while only 17% and 20% use the Internet for business and education, respectively.<sup>3</sup>

1 <https://www.nita.go.ug/sites/default/files/2022-12/National%20ICT%20Survey%20Report%202022%20-%20Final.pdf>

2 [https://www.ubos.org/wp-content/uploads/publications/12\\_2022NSDS\\_2021\\_Final\\_Report\\_2022.pdf](https://www.ubos.org/wp-content/uploads/publications/12_2022NSDS_2021_Final_Report_2022.pdf)

3 [https://www.ubos.org/wp-content/uploads/publications/09\\_2021Uganda-National-Survey-Report-2019-2020.pdf](https://www.ubos.org/wp-content/uploads/publications/09_2021Uganda-National-Survey-Report-2019-2020.pdf)

To fully harness the potential of Internet access, a strategic shift towards utilizing digital tools for innovation, education, and governance reforms is essential. Merely expanding Internet access is not enough to cultivate a thriving ecosystem for innovation and governance. Broader systemic challenges, such as socio-economic inequalities, inconsistent policies, and inadequate infrastructure, must also be tackled. To create a more supportive environment for digital innovation, policy reforms are needed that encourage flexibility and creativity while promoting the responsible use of digital tools. Addressing these underlying barriers is crucial for unlocking the true benefits of Internet access and driving meaningful progress in Uganda.

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## Innovators as Drivers of Change in Governance

Innovators in Uganda are playing a strategic role in bridging Internet access and governance by driving digital transformation and enhancing civic engagement through innovative tools. Despite challenges like limited Internet access and low digital literacy, these innovators are fostering a culture of experimentation, supported by innovation hubs and incubators that provide resources and space for developing solutions to local governance challenges. They also facilitate collaborative governance by creating digital platforms that encourage dialogue between citizens, government, and civil society, and by forming public-private partnerships to improve service delivery.



*Innovators in Uganda are playing a strategic role in bridging Internet access and governance by driving digital transformation and enhancing civic engagement*

Additionally, innovators support evidence-based policymaking, promote transparency, and enhance accountability in governance through open data initiatives and user-friendly platforms. Among these innovations is the **Faayo platform**, which empowers citizens to assess and provide feedback on public services via WhatsApp and the web, enhancing government accountability and improving service

delivery based on real-time citizen input.

Beyond creating technology solutions, these innovators are reimagining the government-citizen relationship by making information more accessible, processes more transparent, and services more efficient. Platforms like TruGuard have revolutionized secure land transactions, reducing corruption and making property ownership more accessible, while Masai Consults has facilitated more effective citizen engagement, enabling communities to voice their concerns and hold officials accountable. These efforts are reshaping governance in Uganda, making it more participatory and aligned with the needs and aspirations of the people.

Despite these advancements, innovators face significant hurdles such as restrictive regulatory environments and limited access to resources, including funding and mentorship. Majority of innovators struggle to secure capital for scaling their solutions, there is a pressing need to build a more supportive ecosystem for digital entrepreneurship. Moreover, many innovators work in isolation during the development phase, missing out on crucial government input that could enhance collaboration and relevance.



*Despite these advancements, innovators face significant hurdles such as restrictive regulatory environments and limited access to resources*

Nevertheless, Ugandan innovators are playing a crucial role in shaping the future of governance. Their creativity and technical expertise are driving progress towards a more transparent, efficient, and equitable society. Through overcoming existing challenges and fostering better collaboration, these innovators can further advance governance and digital transformation in Uganda.

## EML's Initiatives to Drive Digital Innovation and Strengthen Governance in Uganda

With funding from the Internet Society Foundation, Evidence and Methods Lab (EML) has driven significant progress in digital transformation in Uganda by launching innovative solutions to enhance Internet usage and governance<sup>4</sup>.

The action research initiative, which focuses on improving service delivery and transparency in Ugandan Ministries, Departments, and Agencies

<sup>4</sup> <https://www.youtube.com/watch?v=QSiHiwy9kzE>

(MDAs) and District Local Governments (DLGs), has resulted in impactful innovations such as TruGaurd for secure land transactions, Masai Consults for citizen engagement, UgLIS for locating government facilities, and various e-advocacy and transparency platforms.

The process began with identifying government units that could benefit from these innovations, validating the solutions, and developing detailed rollout plans. EML provided training and support to officials and conducted pilot testing to assess the effectiveness of these innovations before broader implementation. One of the critical tools developed by EML, the **eGov Quality Analyzer**<sup>5</sup>, evaluates and improves the quality of digital services offered by government platforms, thus advancing EML's goals of enhancing public accountability and service delivery. Another is the **Faayo**<sup>6</sup> platform, which allows citizens to provide feedback on public services through WhatsApp and the web, thereby enhancing government accountability and improving service delivery based on real-time input.

Additionally, EML has established a "Training of Community Internet Champions" program to empower individuals in promoting online government services and building capacity for transparent and accountable local governance. This initiative, along with the Accountability Hub, which supports e-Gov Innovators and Internet Champions across six regions, ensures effective implementation and continuous community engagement. These efforts, including structured innovation contests and ongoing support for Internet Champions, have been pivotal in addressing the digital divide and improving public sector accountability and service delivery in Uganda.

## Challenges and Opportunities in Uganda's Digital Innovation and Governance Framework

The action research conducted by EML highlighted several limitations in Uganda's laws and policies that hinder their effectiveness in fully fostering innovation and governance.

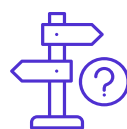
Firstly, while the National Information Technology Authority-Uganda (NITA-U) Act of 2009 established a coordinating body for IT services, its scope is limited in addressing the rapidly evolving technological landscape. The pace of digital transformation demands more agile and responsive regulatory

frameworks, but the Act has not been updated to reflect the latest trends in technology and innovation, such as artificial intelligence, blockchain, and other emerging technologies.



*Uganda's laws and policies related to digital innovation and governance have laid a foundational framework for progress*

The Computer Misuse Act of 2011 was a critical step towards addressing cybercrime, yet it has been criticized for its overly broad and vague provisions. This ambiguity has led to concerns over the potential misuse of the law to stifle freedom of expression and innovation, particularly among tech entrepreneurs and civil society actors. The law's focus on punitive measures rather than fostering a safe and conducive environment for digital innovation has been a significant limitation.



*Ambiguity has led to concerns over the potential misuse of the law to stifle freedom of expression and innovation*

The Electronic Transactions Act of 2011 facilitates e-commerce, which is vital for digital innovation, but its implementation has been slow, particularly in rural areas where digital infrastructure is lacking. Additionally, the legal framework does not sufficiently address emerging issues like digital payments, cryptocurrencies, and cross-border e-commerce, which are becoming increasingly important in the global digital economy.

The Uganda Communications Act of 2013 aims to regulate the telecommunications sector and ensure fair competition, yet the sector remains dominated by a few large players. This lack of competition has resulted in high costs for consumers and limited innovation in service delivery. The Act also lacks robust mechanisms to encourage new entrants, particularly local innovators, to participate meaningfully in the telecommunications sector.

Furthermore, the Data Protection and Privacy Act of 2019 was a positive step in safeguarding personal data, but its enforcement has been inconsistent. Many entities, especially in the public sector, still lack the necessary infrastructure and awareness to comply with the Act, leading to potential data breaches and undermining public trust in digital services. Moreover, the Act has been critiqued for not fully aligning with international best practices, which could hinder cross-border data flows and innovation.

<sup>5</sup> <https://evidenceandmethodslab.org/wp-content/uploads/2024/02/2.-Evidence-and-Methods-Lab-eGov-Quality-Analyzer.pdf>

<sup>6</sup> <https://evidenceandmethodslab.org/faayo-platform/>



Lastly, the National ICT Policy of 2014 and the National Broadband Policy of 2018 have laid out ambitious goals for expanding digital infrastructure and access. However, the implementation of these policies has been uneven, with significant disparities in Internet access between urban and rural areas. The high costs associated with Internet services and ICT devices continue to be major barriers to digital inclusion, limiting the ability of these policies to foster widespread innovation and governance improvements.

In summary, while Uganda's laws and policies provide a solid foundation for digital innovation and governance, they require significant updates, more effective enforcement, and greater focus on inclusivity and adaptability to meet the challenges and opportunities of the digital age.

## Policy Recommendations for Enhancing Digital Innovation and Governance

Based on the challenges identified, the following policy recommendations are proposed to foster a more inclusive digital environment that supports innovation and improves governance in Uganda:

**Expand Internet Infrastructure and Improve Accessibility:** Invest in rural digital infrastructure, subsidize Internet costs, and provide affordable ICT equipment to bridge the digital divide.



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**Strengthen Regulatory Frameworks to Support Innovation:** Adopt adaptive and inclusive regulatory policies, enhance data protection, and create a more supportive environment for digital innovators.

**Foster Collaborative Governance and Multi-Stakeholder Partnerships:** Promote public-private partnerships and encourage community-led digital initiatives to develop relevant and effective digital solutions.

**Develop National Innovation strategy to support Local Innovation Ecosystems:** Formulate a comprehensive national strategy that supports digital entrepreneurship and innovation. This strategy should include incentives for research and development, funding for start-ups, and support for innovation hubs across the country.

**Enhance Digital Literacy and Capacity Building:** Integrate digital literacy into the national education curriculum and implement comprehensive digital literacy campaigns targeting various demographics.

**Leverage Data and Technology for Evidence-Based Policymaking:** Develop data analytics and visualization tools, and promote open data initiatives to support informed decision-making and enhance transparency in governance.

**Promote Competition in the Telecommunications Sector:** Amend the Uganda Communications Act of 2013 to encourage greater competition within the telecommunications sector. Introduce incentives for local innovators and new entrants, reducing barriers to entry and fostering innovation.

**Clarify and Refine Cybercrime Laws:** Revise the Computer Misuse Act of 2011 to address ambiguities and ensure it balances security concerns with the protection of freedom of expression and innovation. Focus on preventive measures and creating a safe digital environment rather than solely punitive actions.

## Conclusion

Uganda stands at a pivotal moment in its digital transformation, where integrating Internet access, innovation, and governance can drive inclusive development and enhance public service delivery. To unlock this potential, it is crucial to tackle challenges such as the digital divide, high costs, low digital literacy, and restrictive regulations. Innovators play a key role in crafting digital solutions that boost civic engagement, transparency, and governance. Achieving a more inclusive digital environment and effective governance demands collaboration among all stakeholders: the government must establish a supportive policy framework, the private sector should invest in digital infrastructure and affordable services, and civil society must champion digital rights and develop community-driven solutions.



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