Digital transformation

INTERNET USAGE

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Connectivity
Why Uganda is offline

While urban centres such as Kampala boast of increasing smartphone penetration and mobile money usage, rural and low-income communities continue to face structural barriers that limit internet access.



Over 70 per cent of Ugandans are still offline. Many Ugandans, especially older adults and those in rural communities, lack the training to navigate online platforms safely. PHOTO/MICHAEL KAKUMIRIZI

According to a Global System for Mobile Communications Association (GSMA) report, Uganda could connect 4 million more citizens to the internet, create 1.79 million new jobs, and generate Shs14.6 trillion in additional economic value by 2030 if correct steps are taken to increase connectivity. GSMA is a global industry organisation that brings together over 750 mobile operators and 400+ companies in the mobile ecosystem.

The report, released in November 2025, outlines how policy action can accelerate inclusive growth and ensure every Ugandan benefits from the digital economy envisioned in the National Development Plan IV (NDP IV) and the Digital Uganda Vision 2040 (DUV).

According to Uganda's Digital Transformation Roadmap, the ICT industry contributes 9 percent to the national Gross Domestic Product (GDP), employs over 2.3 million Ugandans.

GSMA analysis shows that Uganda has 96 percent 4G population coverage and 11.46 million unique mobile internet users, equivalent to 22 percent of the total population and 48 percent of adults.

Despite great progress witnessed, three in four Ugandans who live within mobile broadband coverage still do not use it. This is due to the high cost of entry-level smartphones, an unreliable energy supply, sector taxes that affect affordability, and limited digital skills. The report shows over 70 per cent of Ugandans are still offline.

Currently, an entry-level smartphone costs between $38 (Shs132,000) and $39 (Shs136,000), accounting for about 39 percent of GDP per capita and nearly 96 percent of the income of the poorest 40 percent of Ugandans. About 35 percent of that price is due to taxes, making devices unaffordable for many.

Over the past five years, smartphone penetration more than doubled, SIM connections surged, and national data traffic nearly quadrupled, which would mean an economy fully shifting to the new media. But while urban centres such as Kampala boast of increasing smartphone penetration and mobile money usage, rural and low-income communities continue to face structural barriers that limit internet access.

For many Ugandans, the internet remains expensive relative to average incomes. The cost of smartphones, data bundles and reliable electricity create a layered affordability challenge. Even when network coverage exists, the cost of staying connected daily or monthly is prohibitive for many households that prioritise food, school fees and healthcare.

Electricity access also plays a crucial role. In areas without reliable power, charging devices become an obstacle, further discouraging consistent internet use.

Beyond infrastructure and cost, digital skills remain a major barrier. Many Ugandans, especially older adults and those in rural communities, lack the training to navigate online platforms safely and effectively.

Uganda has also experienced periods of internet shutdowns and social media restrictions, particularly during election cycles. Such disruptions not only reduce trust in digital platforms but also affect businesses that rely on online communication and e-commerce.

Temporary restrictions can have lasting effects, especially for small enterprises attempting to build digital customer bases.

Youth unemployment also influences connectivity levels. Without stable income, many young people struggle to afford smartphones or consistent data subscriptions, even though they are often the most digitally inclined demographic.

Over the past five years, the cost per GB fell from above Shs5,000 around 2020 to about Shs2,000 currently. The price of entry-level smartphones also fell to under Shs150,000, supported by more budget-friendly flexible payment options, which led to an increase in smartphone adoption in recent years.

Coverage versus usage

Although 96 percent of Uganda's population has broadband access, internet usage remains low, but uneven between urban residents and the rural population, who form the majority of low-income groups. Considerable internet access is still a monopoly of only a handful of urban dwellers who are the heavy users, and are responsible for the rise in internet traffic, from just 71.5 million GBs to 268.8 million GBs by September 2025. But many households still struggle to afford consistent data usage due to the high costs.

Key takeaways

- GSMA survey proposes the removal of the 12 percent excise levy on data services and a review of taxes on digital financial transactions, including the 0.5 percent duty on mobile money withdrawals, to support a more integrated digital financial ecosystem.
- The GSMA survey also recommends exempting telecom equipment and services supporting advanced technologies such as 4G and 5G from the 18% VAT on imported services, taxes that can indirectly raise the price of software and even entry-level smartphones.
- GSMA estimates entry-level smartphones cost less than Shs150,000 in Uganda, but taxation accounts for roughly 35 percent of that cost. The price, the report notes, is equivalent to about 39 percent of monthly GDP per capita.

Rising usage, rising spend, but who is online?

Elijah Junior Lubangakene, a pharmacy student at Kampala International University in Ishaka, Bushenyi, says he only buys data when it is vital. He says it is too expensive to stay online using mobile data, especially when there are competing demands.

"I buy data only when I have online lectures and cannot make it to the university, and when I want to check on important information while away from the university. I rarely use the internet during the holidays, only a couple of times a week to keep updated," he says.

Lubangakene laments that while it is hard to study without the Internet, it is still too expensive to stay online.

"You need to check online sources for more information, collaborate with fellow students, and watch tutorials, which is very expensive on mobile internet," he adds.

The Uganda Communications Commission executive director Mr Nyombi Thembo, has previously said the high cost of mobile data and internet access in Uganda is a real concern. He said the regulator was working on ways to address affordability issues for users, including reduction of taxes on entry level smartphones to make devices. He says data was costly due to partially low uptake of technology like smartphones.

As of September 2025, the cost per GB of data went down from over Shs5,000 in 2020 to approximately Shs2,000 and average monthly data usage per person rose from 500MB in 2020 to 5.4GB, while average monthly spend on mobile data rose from an estimated Shs3,800 in 2020 to over Shs10,000 by 2025. Yet this growth is driven by an emerging urban advantage in the digital economy.

The 2023/24 National Labour Force Survey reported that nearly 50 per cent of rural workers earn less than Shs200,000, which makes them prioritise essential expenses such as food, transportation, and school fees. As a result, many ration bundles, wait for promotions, restrict usage to messaging and social media, postpone or ignore internet expenses. This is exacerbated by limited digital skills and ignorance in the rural population, leaving the broader internet underused. This is because bundles appear cheaper but remain costly relative to household incomes.

Active subscriptions and the definition problem

According to the Uganda Communications Commission, the regulator, active internet subscriptions peaked at 25.7 million in 2022 under the 30-day definition of active users, with monthly spend averaging Shs4,177, before dropping sharply under the stricter 90-day usage definitions to 16 million in 2023, it later rose to 19.5 million in 2024 under the same definition. By 2025, only about 17 million subscribers qualified as active internet users under the 30-day definition, despite widespread device ownership.

However, Michael Niyitegeka, the executive director of Refactory Uganda, changes in how "active" is defined, as 30-day versus 90-day activity thresholds, do not necessarily reflect the number of people using the internet daily, which may be far lower. The underlying issue remains affordability: while bundles may appear cheaper on paper, their cost is still high relative to household incomes.

The UCC explains that the cost of internet in the country depends on many factors, which include the number of internet subscribers using data daily. It asserts that there is low penetration of smartphones and data devices, which affects the unit cost of data. The more the smartphones, the more the usage and the lower the cost of data.

Niyitegeka says telecoms need to recover their investments, and that depends on the buying ability of users. He further adds that the majority of the population in Uganda is youth who are either in school or categorised under Not in Employment, Education, or Training (NEET), which further deepens the gap between internet users and those offline.

Remove taxes, make devices affordable

The cost of the internet is heavily determined by the tax and cost structure around internet services and devices. The GSMA survey, Uganda Digital Economy report, proposed a redesigned system that determines affordability through tax policies that encourage connectivity rather than punish

Stable income

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