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This report on the start-up ecosystem in Uganda captures some of the work of the GSMA National Dialogues in Uganda. Special appreciation goes to the following individuals and their respective organisations for their valuable insights:

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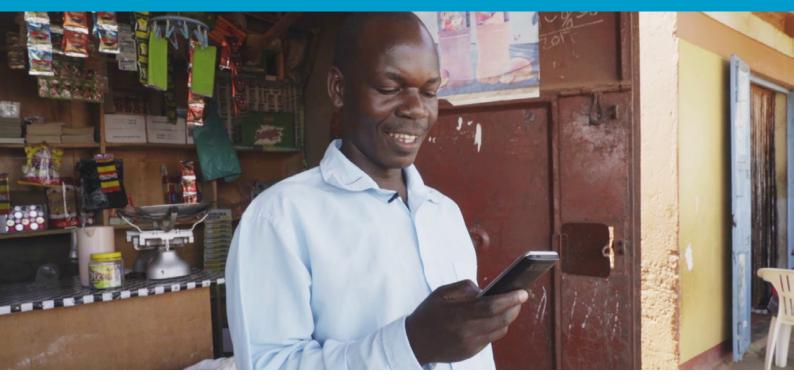
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## **Executive summary**



With 20.5 million mobile subscribers representing 45 per cent of the population<sup>1</sup>, mobile has become the primary form of connectivity in Uganda. The ubiquity of mobile has made it the technology of choice for individuals seeking greater interconnectedness, superseding other communication methods. As in the rest of Africa, mobile phones in Uganda have evolved from simple communication tools to service delivery platforms that are transforming lives with innovative applications and services.

Across Uganda, start-ups are seizing the opportunity provided by mobile technology to offer fresh thinking and potential solutions to many of the country's endemic challenges.

From financial inclusion to eHealth and market access, mobile-enabled start-ups are solving critical challenges for businesses, government and civil society, stimulating economic growth and supporting economic and social prosperity. At the same time, policies and regulations are being developed to drive the use of digital technology to achieve national and regional development goals, and are recognising the key role entrepreneurs play in developing innovative products and services.

Although there have been some successes, technology start-ups in Uganda continue to face barriers, such as slow internet speed and a lack of critical business skills, resources, expertise and support to launch, grow and scale their offerings.



Drawing on primary research, including an online survey and stakeholder interviews with mobile operators, start-ups and government representatives, this report examines the role of mobile in the tech start-up ecosystem in Uganda and reviews the policy environment in which start-ups operate. To conclude, **the report identifies four areas in which concerted action can help overcome the barriers Ugandan start-ups face in launching, scaling and expanding internationally:** 

## 1. Developing an enabling business environment

Ugandan start-ups agree that although reforms to improve the ease of doing business have been helpful, entrepreneurs still face challenges, such as regulation that increases the costs and complexity of starting and running a business. Improving the rules and regulations governing start-ups are key for companies to set up, grow, mature and expand into international markets. This could involve developing supportive company registration rules to facilitate the incorporation process, and creating a conducive policy environment, for example, through the development of regulatory sandboxes.

## 2. Improving access to funding

Funding remains a critical resource for stimulating entrepreneurship and economic growth. Increased availability of local and international funding has allowed start-ups to access resources from a wide range of stakeholders at different stages of development. However, the amount of funding available to Ugandan start-ups is not sufficient to allow them to scale and contribute more effectively to national development objectives. Initiatives to facilitate more funding for tech start-ups in Uganda should rely on data and evidence to target the stage in a start-up's lifecycle where need is greatest and where outcome is likely to produce the highest development impact for the country. This should be complemented by appropriate incentives, policies and regulation to encourage both international and national funders to invest in Ugandan start-ups.

## 3. Supporting the development of critical business skills

Many start-ups lack the critical business skills required to grow a sustainable business. Learning and development initiatives designed to build business acumen and entrepreneurial skills, such as business incubators or mentorship schemes, are needed to help start-ups realise their strategic goals. Greater collaboration among key stakeholders, including established companies, incubators, start-ups and investors, can also encourage learning, boost competence and provide more opportunities for mentorship.

## 4. Enabling affordable access to mobile and mobile internet services

Start-ups identified affordable and reliable access to mobile and mobile internet services as key challenges affecting their success. Limited access to these critical resources reduces entrepreneurs' ability to create new services, improve existing public services and produce content tailored to local markets. Key policy measures will be needed to address barriers to mobile internet access and use. These could include assigning sufficient amounts of spectrum in a timely and reasonable manner including coverage bands (such as the 700Mhz band) and reviewing sector-specific taxes on mobile-enabled services, including the social media tax and mobile money transaction tax, both of which increase the cost of services for start-ups.

## The role of mobile in the start-up ecosystem



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With 20.5 million mobile subscribers representing 45 per cent of the population, mobile is the primary form of connectivity in Uganda.<sup>2</sup> Over half of all mobile subscribers use mobile internet services, and by March 2020, there were nearly 11 million mobile internet connections in Uganda — a penetration rate of 24 per cent compared to less than one per cent for fixed-line internet connections.<sup>3</sup> Smartphone adoption is also on the rise — the number of smartphone connections has quadrupled over the last four years and now represents over a third of all mobile connections.

The ubiquity of mobile technology, which allows start-ups to reach more segments of the population, and its low barriers to entry, has made it the choice of technology for Uganda's burgeoning entrepreneurs looking to develop innovative business models that bring in new thinking and solutions that have the potential to address many of the country's endemic challenges. Local tech hub, Innovation Village, estimates that four in five tech start-ups in Uganda use one or more mobile platforms in their solutions<sup>4</sup> to create and distribute locally relevant content and services across the country.

## **Box 1: XENO**

XENO is an online investment advisory start-up. Launched in 2017, XENO uses artificial intelligence (AI) to help people plan, save and invest their money in a diversified investment portfolio. The start-up's platform takes into account a user's personal circumstances, financial goals and risk tolerance to automatically devise a recommended investment portfolio. XENO recently partnered with MTN Uganda to make professional investment advice and management available to its subscribers. Through this USSD based service, which is available to all MTN Uganda customers, users can set up an investment account, choose a financial goal, deposit funds and monitor the growth of their investments.

https://myxeno.com/

**Ugandan entrepreneurs are using mobile technology to reduce business costs.** For example, taxi ride hailing companies have reported how using app-based services have helped cut transaction costs and introduce efficiencies by automating dispatch and improving communication between drivers, fleet operators and passengers.

Tech entrepreneurs are also leveraging data from mobile apps to access robust analytics on consumer behaviour, which can then be used to create tailored solutions that better meet the needs of users. Access to consumer preferences is influencing how start-ups develop their products and services.

## **Box 2: Safeboda**

Launched in Kampala in 2015, Safeboda is an app-based, on-demand transport service that connects passengers with motorcycle taxi drivers. This system, which automatically connects users with nearby drivers, increases the utilisation of otherwise idle assets (e.g. during quieter mid-week or afternoon periods) by converting idle car and driver assets from non-use to use, generating more income for drivers and reducing the cost per ride for customers.

https://safeboda.com/ng/

<sup>2.</sup> GSMA Intelligence, Q1 2020

<sup>3.</sup> Ibid

<sup>4.</sup> GSMA Intelligence (2019), <u>Uganda: Driving inclusive socio-economic progress through mobile-enabled digital transformation</u>.



## Collaboration between technology start-ups and mobile operators is key to fostering innovation.

Collaboration can benefit both sides, helping mobile operators to enter and create new markets, and start-ups to develop their products and scale. Mobile operators can solve route-to-market challenges for start-ups by providing the platform, customer relationships and resources to scale their mobile-enabled innovation. In Uganda, tech hubs and innovators are benefiting from greater collaboration with mobile operators, which has helped accelerate

the development of their new content and services. For example, MTN Uganda is providing access to its Mobile Money Access Programming Interface (API), which is enabling entrepreneurs to develop innovative financial and transactional applications that enhance financial inclusion by offering payment options tailored to local needs. Entrepreneurs are also able to leverage the 10 million clients registered to use MTN's mobile money service.<sup>5</sup>

## **Box 3: Ensibuuko**

Ensibuuko, in collaboration with Airtel and MTN, has created a niche business-to-business (B2B) product aimed primarily at Savings and Credit Cooperative Organizations (SAACOs) and Village Savings and Loan Associations (VSLAs), which provide savings and credit to financially underserved populations. Ensibuuko's core product is a technology management and information software, designed to help SAACOs better serve their members by storing digitised, easily accessible financial records on the cloud. This helps SACCOs gain better insights into their data, manage transactions and credit efficiently and make data-driven decisions. Ensibuuko works with 50 SAACOs (six of which have been on-boarded as of June 2019) and 277,966 end users have benefited from Ensibuuko's service through their respective SACCOs and VSLAs.

https://ensibuuko.com/

Mobile operators have also been instrumental in promoting start-ups. In July 2019, MTN Uganda launched its Start-up Program,<sup>6</sup> which will provide early-stage start-ups with up to UGX 1 billion

(\$260,000) over three years. Meanwhile, Airtel Uganda produces My Hustle, an online series that features entrepreneurs running small and medium enterprises (SMEs) powered by the internet and mobile money.<sup>7</sup>

## **Box 4: GSMA Innovation Fund for Rural Connectivity**

The GSMA's Connected Society Innovation Fund for Rural Connectivity is supporting innovative ways of deploying mobile broadband networks in rural areas, with a view to demonstrate commercially sustainable models that can be scaled and replicated in similar environments. A £330,000 grant has been provided to MTN Uganda and iSAT Africa, who are working in partnership to test and evaluate their innovative new mobile internet connectivity solution for unconnected rural communities.

https://www.gsma.com/mobilefordevelopment/gsma-innovation-fund-rural-connectivity/

<sup>5.</sup> For more information, see: <a href="https://www.mtn.co.ug/service/open-api/">https://www.mtn.co.ug/service/open-api/</a>

<sup>6.</sup> For more information, see: <a href="https://www.opportunitiesforafricans.com/mtn-startup-program-2019/">https://www.opportunitiesforafricans.com/mtn-startup-program-2019/</a>

<sup>7.</sup> For more information, see: <a href="https://webappyafrica.com/airtelhustle/">https://webappyafrica.com/airtelhustle/</a>



## **The policy environment for tech start-ups in Uganda**

Leveraging mobile technology to deliver innovative products and services requires an enabling policy environment that encourages entrepreneurs to take risks, empowers them to innovate and facilitates the use of digital technology across all sectors. Creating more enabling regional and national policy frameworks requires understanding the environment in which start-ups operate and the opportunities available to them.

Government bodies are increasingly recognising the role that mobile and digital technology can play in accelerating socio-economic change and driving inclusive and sustainable economic growth. This is reflected by a variety of public sector policies and initiatives that have promoted digital entrepreneurship.

The National Development Plan (NDP), led by the National Planning Authority (NPA) is a key framework that has provided a unique opportunity to lay the foundation for an enabling policy environment for tech start-ups in Uganda. The NDPs have been created as a vehicle to operationalise the Government's "Vision 2040: A Transformed Ugandan Society from a Peasant to a Modern and Prosperous Country within 30 Years"8, which aims to see Uganda become a competitive uppermiddle-income country in the next two decades. Vision 2040 will see the release of six five-year National Development Plans (NDPs) to guide its implementation. Now in its 2nd iteration, the NDP has sought to increase entrepreneurship through increased skills development and the creation of development oriented policies designed to encourage entrepreneurial activity.9 The third NDP (NDP III) is due to be launched in 2020. Though previous NDPs

have acknowledged the role that science, technology and innovation (STI) can play in the Ugandan economy, NDPIII will need to explicitly incorporate mobile in NDP III planning to ensure entrepreneurs are able to use mobile-enabled solutions to accelerate progress across the NDP priority areas.<sup>10</sup>

The inclusion of entrepreneurs in this key development strategy shows appetite to embrace digital innovation and start-up culture. This emphasis is encouraging more action from national organisations looking to leverage entrepreneurs to foster innovation. Some notable initiatives include:

- The National ICT Initiatives Support Programme (NIISP) was established by the Government of Uganda in 2017 and managed by the Ministry of Information Communication Technology & National Guidance (ICT & NG). Designed to facilitate the creation of an ICT innovation ecosystem in Uganda and a marketplace for innovative digital products,<sup>11</sup> funds are available to support ICT innovators and mobile app developers. NIISP supported 60 innovators in 2019 with grants of up to UGX 100 million (approximately \$27,000 per innovator) and 12 in 2018 with grants totalling UGX 2.5 billion (\$695,000).
- The Uganda Retirement Benefits Regulatory
  Authority and the Ministry of Finance, Planning
  and Economic Development run the National
  Social Security Fund (NSSF), a national savings
  scheme mandated by the government to provide
  social security services to Ugandan workers. In
  partnership with the Makerere University Business
  School (MUBS) Incubation Centre, the NSSF

<sup>8.</sup> For more information, see: <a href="https://www.gou.go.ug/content/uganda-vision-2040">https://www.gou.go.ug/content/uganda-vision-2040</a>.

<sup>9.</sup> Government of Uganda (2015), Second National Development Plan (NDPII) 2015/16 - 2019/20.

<sup>10.</sup> GSMA (2019), <u>Uganda: Driving inclusive socio-economic progress through mobile-enabled digital transformation.</u>

<sup>11.</sup> For more information, see: <a href="http://niisp.ict.go.ug/">http://niisp.ict.go.ug/</a>



launched its Hi-Innovator initiative<sup>12</sup> in July 2019 to provide funding to businesses with the potential to be profitable, sustainable and drive positive social change. Ten businesses will be supported during the project's initial roll out with funding of up to UGX 74 million each (approximately \$20,000). In November 2019, the NSSF made a funding commitment of UGX 443 million (\$120,000) to six Ugandan start-ups.

- In 2019, the Government of Uganda provided UGX 30 billion (\$8,100,000) to Makerere University under the Research and Innovations Fund (RIF). The funds will be used to support highimpact research and innovation that will inform national development priorities. This follows the Presidential Initiative on Science and Technology (S&T) in 2015, which promoted innovation by inspiring creativity in young people and enhancing the development of science and research in Uganda. Up until 2015, start-ups at Makerere University's Faculty of Technology accessed funds through the Presidential Innovations Fund for the Faculty of Technology programme: UGX 25 billion (\$6.5 million) over five years with UGX 5 billion (\$1.3 million)<sup>13</sup> for 10 projects, including the Vehicle Design Project, Solar Technologies Project and Industrial Parks Project.
- The Uganda Registration Services Bureau (URSB) has deployed a network of Technology and Innovation Support Centres (TISCs) throughout the country to support the growth of the innovation ecosystem. The TISC is a programme supported and facilitated by the World Intellectual Property Organization (WIPO) and aims to provide innovators with access to local, highquality technology information and intellectual property-related services. URSB also helps inventors maximise their potential by creating. protecting and managing their intellectual property rights. As of December 2019, there were over 27 TISC host institutions. 14 Recognising their important role in developing local solutions for the country, the Ugandan Government has committed to set up five regional hubs across the country.

- The National Information Technology Authority-Uganda (NITA-U) has identified business process outsourcing (BPO) as a key sector to enhance economic growth and reduce youth unemployment in the country.<sup>15</sup> BPO incubation centres have been set up and provide free power, fast internet, business support and training to its resident BPO companies, many of which are start-ups.
- The NITA-U IT Certification framework, signed in 2016, aims to standardise the planning, acquisition, implementation, delivery, support and maintenance of IT equipment and services. This will ensure IT use throughout Uganda is of uniform quality, adequate and reliable. The certification framework enhances and supports the operations of start-ups by strengthening tech solutions and preventing the introduction of sub-standard solutions in the market. The certification scheme also supports marketisation and monetisation, helping to connect start-ups to new markets.

Regional policy frameworks are increasingly recognising the role of mobile and digital technology in accelerating socio-economic change and driving inclusive and sustainable **economic growth**. For example, the African Union's Agenda 2063: The Africa We Want, 16 which serves as the continent's strategic framework, recognises entrepreneurs' ability to contribute to economic growth and aims to implement strategies which will see STI driven entrepreneurship in Agenda 2063 priority areas, such as agriculture and an STI skills driven revolution, contribute to 1% GDP. Frameworks such as this have influenced the national policy landscape in Uganda. For instance, NDPII recognises the importance of ensuring that projects implemented in country are in line with national development obligations as well as East African Regional Integration and African Agenda 2063 development commitments.<sup>17</sup> More details on other regional frameworks can be found in the Annex.

<sup>12.</sup> For information, see: <a href="https://hi-innovator.ug/">https://hi-innovator.ug/</a>

<sup>13.</sup> For more information, see: <a href="https://www.statehouse.go.ug/presidential-initiatives/science-and-technology">https://www.statehouse.go.ug/presidential-initiatives/science-and-technology</a>

<sup>14.</sup> New Vision (2020), "How URSB has supported Uganda's innovation".

<sup>15.</sup> NITA-U (2014), Enhancing Uganda's Competitiveness in Information Technology Enabled Services - Business Process Outsourcing.

<sup>16.</sup> African Union (2013), Agenda 2063: The Africa we want.

<sup>17.</sup> Government of Uganda (2015), Second National Development Plan (NDPII) 2015/16 - 2019/20

## **Challenges facing tech start-ups in Uganda**

Uganda has a vibrant tech start-up ecosystem that is playing an increasingly important role in supporting the development of innovative products and services that meet the needs of the population and contribute to national development. According to the Global Entrepreneurship Monitor (GEM) 2015, Uganda has some of the "highest entrepreneurial rates in sub-Saharan Africa, mostly represented in the 1.8 million informal firms". 18 Incubators and accelerators create opportunities for start-ups to partner with established businesses and create thriving ecosystems of creativity and enterprise. Tech hubs are springing up across Uganda, providing spaces for start-ups to develop and test their ideas and solutions. The number of tech hubs is rising, from 12 in 2016 to 16 in 2018,<sup>19</sup> and include the National Software Incubation Centre at Makerere University, Innovation Village, Resilient Africa Network and National ICT Hub (under development with investment from the Ministry of ICT).

Positive policies and ecosystem growth abound, start-ups still face challenges in accessing mobile broadband to deliver their services and operational bottlenecks which reduce their chances of success. The lack of an enabling business environment, limited access to funding, lack of critical business skills and opportunities, and challenges accessing affordable mobile and mobile internet services, are all limiting the ability of tech start-ups in Uganda to launch, scale and expand internationally.

## Lack of an enabling business environment

Uganda ranks 116th out of 190 economies in the World Bank's Ease of Doing Business (EoDB) 2020 (See Figure 1),<sup>20</sup> a sign of the challenges it faces compared to other countries in the region. In Uganda, laws governing business competition are designed for large companies, which means start-ups must go through the same registration processes as large companies. The complexity of business regulation and policies, for example, business start-up procedures (See Table 1), and compliance requirements for tax policies, are all major challenges for tech start-ups. Most cannot dedicate resources to ensure compliance, nor can they access business

advisory services, which are in low supply, hard to access and expensive.

Protection for intellectual property rights are also insufficient for young and often vulnerable innovators and entrepreneurs who build solutions on mobile platforms. <sup>21</sup> The Uganda Registration Services Bureau (URSB) Technology and Innovation Support Centres are supporting the enforcement of intellectual property rights, but demand and uptake of this service is low, largely due to the expenses associated with patenting.



Table 1

## Starting a business in Uganda: Procedures, time and costs

	Procedures	Time to complete	Fee
1.	Submit the Name Reservation Form to the assessment window of the URSB and obtain the bank payment slip	1 day	UGX 20,000 (\$5) + UGX 2,200 (\$0.58) bank fee
2.	Pay the name reservation fees at the bank	1 day	Included in previous procedure
3.	Reserve the company name	1 day	No charge
4.	Obtain the payment slip for the registration fee and the stamp duty from the URSB	1 day	No charge
5.	Pay the registration fees at a designated bank	1 day	No charge
6.	File the registration documents at the Office of the Registrar and obtain the Certificate of Incorporation	3–5 business days	Fee schedule for company registration:  - Registration fees: 1% of share capital for companies exceeding UGX 5,000,000 (\$1,300) of capital  - Stamp duty: 0.5% of share capital  - Stamp duty on Memorandum and Articles of Association: UGX 35,000 (\$9)  - Filing fees: UGX 25,000 (\$6)  - Filing form A3: UGX 20,000 (\$5)  - Filing form A9: UGX 20,000 (\$5)
7.	Obtain a Tax Identification Number (TIN) and register for taxes at the Uganda Revenue Authority	4-6 business days	No charge
8.	Receive inspection of the business premises by the Uganda Revenue Authority (URA)	1 day	No charge
9.	Obtain trading licence	4 days	No charge
10.	Receive inspection of the business premises by the licensing officer and obtain the assessment form	1 day	No charge
11.	Pay the licence fee at the bank	1 day	UGX 210,000 (\$55)
12.	Register with the National Social Security Fund (NSSF)	2 days	No charge
13.	Make a company seal	1 day	UGX 225,000 (\$58)

Source: The World Bank (2020), *Doing Business 2020: Economy Profile Uganda*.

Figure 1

## **Rankings on Doing Business Topics**







Economies are ranked on their ease of doing business, from 1-190. A high ease of doing business ranking means the regulatory environment is more conducive to the starting and operation of a local firm. The rankings are determined by sorting the aggregate scores on 10 topics, each consisting of several indicators, giving equal weight to each topic.

The ease of doing business score helps assess the absolute level of regulatory performance over time. An economy's ease of doing business score is reflected on a scale from 0 to 100, where 0 represents the lowest and 100 represents the best performance. For example, an ease of doing business score of 75 in *Doing Business 2019* means an economy was 25 percentage points away from the best regulatory performance constructed across all economies and across time.

Source: The World Bank (2020), <u>Doing Business 2020: Economy Profile Uganda</u>.

## **Limited access to funding**

Limited access to funding was identified as a major barrier in our interviews. Organisations such as the GSMA have provided grants to start-ups like Ensibuuko through its Innovation Fund,<sup>22</sup> but tech start-ups pointed to the challenges of raising funds for research and innovation from the government and private sector. Obtaining funding requires a start-up to conduct a rigorous analysis of its business model, market potential and changing operating environment. Entrepreneurs without access to this information or the required expertise to gather these crucial insights are unable to submit convincing funding applications. In some cases, entrepreneurs can raise initial seed capital through informal means

(such as family and friends) or other channels, such as competitions. Though helpful, these sources of finance are usually either limited in amount or short term and cannot support the long-term development of an entrepreneur's product or business.

Once start-ups reach a certain level of maturity, venture capital (VC) companies are often willing to make relatively big investments. However, there are fewer mid-sized funding options, perhaps because this level of investment still requires significant due diligence, making them less commercially attractive. This funding gap increases the chances of failure for start-ups with high potential.



## **Lack of critical business skills**

Start-ups often lack the commercial knowledge and experience required to build a business, leaving many vulnerable to failure. Business skills are extremely important for digital entrepreneurship, from the ability to identify and attract the talent needed to deliver innovation, to having the skills to identify new technology-enabled business opportunities and bring them to fruition.

Lack of critical business skills is at the root of most of the challenges start-ups encounter when engaging with large established companies, including mobile operators. Some key skills deficits identified by the GSMA<sup>23</sup> include difficulties understanding key trends in the industry, the specific challenges of the market in which they operate and identifying and involving the right stakeholders at the company level to pitch to.

Despite the growing number of incubators and accelerators, which offer vital support during the start-up phase, many Ugandan entrepreneurs lack access to these opportunities. Services are located primarily in urban centres, which are out of reach for thousands of rural entrepreneurs. Limited opportunities for hands-on learning means that many entrepreneurs do not have a clear path to developing the skills they need to build and manage their business successfully. Access to professional and affordable business advisory services (e.g. lawyers, accountants, consultants) remains elusive for early-stage businesses. Even when they have sufficient funding, start-ups tend to neglect business skills and training programmes.

## Challenges in accessing affordable mobile and mobile internet services

With a score of 40, Uganda lags behind its regional peers in several key indicators and the aggregate score of the GSMA Mobile Connectivity Index,<sup>24</sup> which measures the performance of 163 countries around the world against four key enablers of mobile internet adoption. Although infrastructure has improved over the last three years, supply-side barriers that affect internet speeds, and demand-side barriers of affordability continue to limit mobile internet adoption.

Affordability remains a major issue. In July 2018, the Government of Uganda introduced two new excise taxes specifically targeted at mobile services — a one percent excise tax on all mobile money transactions and a UGX 200 (\$0.05) per user per day of access on over-the-top services (OTTs). This has since been reduced to 0.5 per cent and applies to withdrawal transactions only. In 2018, the excise duty rate on mobile money services was increased from 10 per cent to 15 per cent. Because of these taxes, at least five million internet users had cancelled their internet connections by February 2019.<sup>25</sup>

The amount and total value of transactions have also declined as many Ugandans still find mobile

money services too expensive, especially for large transactions. Large-value transaction customers, typically those with higher incomes, have opted to use banking services instead as the tax does not apply. Low-income Ugandans, who primarily make small-value transactions, are unable to access banking services and have been forced to look for cheaper, informal alternatives. The new levies on transactions have had a major impact on businesses that use mobile money payments, as their customers can no longer afford to send money through mobile money agents. They have also limited the ability of tech start-ups to reach a wider customer base, such as low-income consumers.

Quality of service (download speeds) has also been cited by entrepreneurs as a barrier to developing, testing and rolling out their mobile apps. Low internet speeds also affect demand for products and services as it prevents users from accessing the services start-ups provide. Improving the coverage and capacity of mobile networks requires a policy and regulatory framework that is clear, proportionate, technology-neutral and predictable to encourage investments. This framework should assign sufficient amounts of spectrum in a timely and reasonable manner

<sup>23.</sup> GSMA (2017), Opening Doors: A Start-Up's Guide to Working With Mobile Operators in Emerging Markets.

<sup>24.</sup> For the full Index, see: <a href="http://www.mobileconnectivityindex.com/">http://www.mobileconnectivityindex.com/</a>

<sup>25.</sup> A4AI (2019), Who wins? Who loses? Understanding women's experiences of social media taxation in East and Southern Africa.

<sup>26.</sup> Ibid.

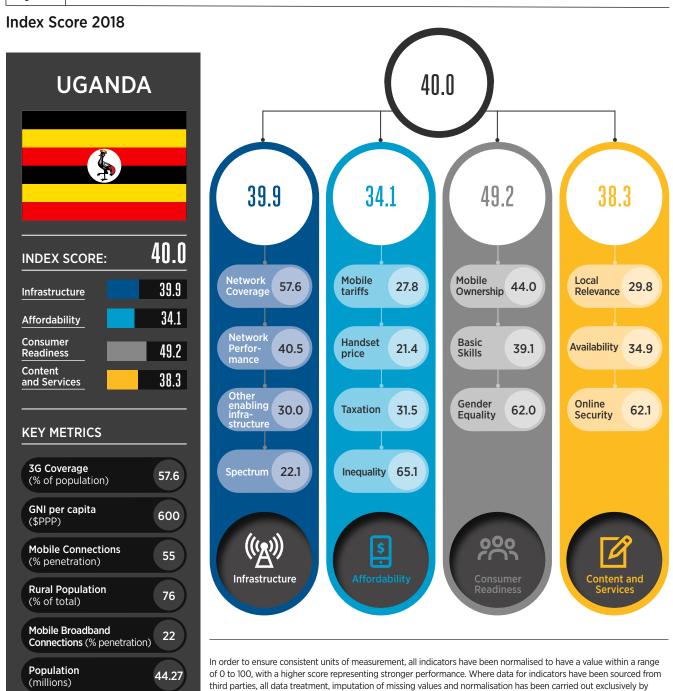
<sup>27.</sup> GSMA Mobile Money, 2020

<sup>28.</sup> A4AI (2019), Who wins? Who loses? Understanding women's experiences of social media taxation in East and Southern Africa.

including coverage bands (such as the 700Mhz band); ensure that spectrum prices are not inflated and look for trade-offs between reduced spectrum fees and carefully considered wider coverage obligations; and adopt spectrum licensing conditions which incentivise heavy network investment. In addition, this

framework should provide non-discriminatory and timely access to public infrastructure, especially in rural areas; and simplify and streamline the planning approval process for new base stations to incentivise and speed-up deployments.

Figure 2



GSMA Intelligence.

## **04 Conclusions and recommendations**



Start-ups in Uganda are making breakthroughs with mobile technology and playing a critical role in achieving national development goals. However, the tech start-up ecosystem remains characterised by high failure rates due to the lack of an enabling business environment, limited access to funding, lack of critical business skills and opportunities, and challenges in accessing affordable mobile devices and mobile internet services. Mobile operators are addressing these challenges by providing funding, and sharing technology and market knowledge.

Policymakers have a particularly important role to play in supporting the development of digital entrepreneurship and the growth of Uganda's tech start-up ecosystem. While the country has made important progress in creating policies that foster innovation and encourage entrepreneurship, more needs to be done. Solving the critical challenges in Uganda's tech start-up ecosystem will require broad stakeholder engagement and collaboration to understand the barriers start-ups face and identifying the roles each stakeholder can play in fostering innovation. The challenge will be to match policy commitments to digital technology and entrepreneurship with financial resources; to encourage the various actors in the start-up ecosystem to interact and learn from each other to spur innovation; and to adapt policies to the business models and needs of start-ups.



Recommendations for immediate government action include:

## **Developing an enabling business environment**

- Develop more nuanced legislation that differentiates between large organisations and SMEs to reduce the complexity of the registration process, the time and bureaucracy associated with regulatory compliance and the costs associated with starting and running a business.
- Support the development of different types of intellectual property, such as trademarks, patents and copyrights, so that all organisations, regardless of budget or capacity, can protect their ideas and inventions.
- Work with regulators and key ecosystem actors to determine the best way to address the regulatory
  challenges affecting start-ups. This could be through regulatory sandboxes that allow live, time-bound testing
  of innovations under a regulator's oversight, or a test-and-learn approach to try out new ideas under ad hoc
  conditions in a live environment.

## Improving access to funding

- Conduct research to understand the most appropriate types of funding needed by local start-ups.
- Provide incentives that encourage local and international investors to invest in start-up businesses and reduce
  the associated risks. This could include financial incentives, such as grants or loans, infrastructure development
  guarantees or government-implemented policies designed to encourage and empower investors to work in a
  particular market, or to promote expansion into a new territory or region.

## Supporting the development of critical business skills and opportunities

- Ensure that academic curricula covers critical business skills effectively.
- Encourage start-ups to prioritise entrepreneurial and business skills training for relevant team members.
- Support the development of relevant platforms, such as incubators, hubs and mentoring schemes, that encourage collaboration and partnerships between tech start-ups and private sector players and facilitate access to proprietary assets, market knowledge and technology in ways that help the ecosystem grow.

### **Enabling affordable access to mobile and mobile internet services**

- Accelerate the assignment of spectrum in the 700 MHz band and ensure that sufficient amounts of the right spectrum are available at the right time.
- Review sector-specific taxes on mobile-enabled services, including the social media tax and mobile money
  transaction tax, which increase the cost of using mobile technology. This is especially crucial during crises like
  COVID-19 when mobile technology is being deployed to share critical information and facilitate continued
  access to essential goods and services.
- Provide incentives to stimulate roll out in rural areas, such as tax breaks on imported equipment for rural network deployment.
- Consider subsidising mobile operators' operating expenditure for running network sites in rural areas.
- Work with mobile operators to implement national roaming. This will ensure seamless connectivity, provide choice for consumers and help avoid the expensive duplication of network infrastructure.



# Annex The regional policy landscape for start-ups in Uganda

Regional policy frameworks are increasingly recognising the important role of mobile and digital technology in accelerating socio-economic change and driving inclusive and sustainable economic growth. These regional frameworks have been influencing the national policy landscape in Uganda. The following policy initiatives are worth highlighting.

Organisation	Policy document	Relevant targets
African Union	"Agenda 2063: The Africa We Want" provides a strategic framework for achieving inclusive and sustainable development in Africa. There are seven aspirations, several of which recognise the ability of entrepreneurs to contribute to economic growth. Each aspiration has a list of goals and priority areas with targets that will help to achieve the list of goals. Uganda has integrated Agenda 2063 into its national vision documents.	Aspiration 1: A prosperous Africa based on inclusive growth and sustainable development.  Goal 4: Transformed Economies and Job Creation Target: At least 1% of GDP is allocated to science, technology and innovation (STI) research.  Aspiration 2: An integrated continent, politically united and based on the ideals of pan-Africanism and vision of Africa's renaissance.  Goal 10: World Class Infrastructure Criss-Crosses Africa Target: Attain 100% mobile penetration by 2020 and promote mobile value-added applications across a range of industries.  Aspiration 6: An Africa whose development is people driven, relying on the potential of the African people, particularly its women and youth, and caring for children. Goal 18: Engaged and Empowered Youth and Children Target: Youth business start-ups, including female youth in all business start-ups, is at least 15%.  Progress: A 2020 progress <sup>30</sup> report on the framework's implementation shows that Uganda scored 23%, 39% and 33% on Aspirations 1, 2 and 6, respectively. The country has recorded 0% performance on both "Engaged and Empowered Youth and Children" and "Transformed Economies and Jobs". It is faring better on "World Class Infrastructure Criss-Crosses Africa" with a performance score of 16%.

<sup>29.</sup> The African Union Commission (2015), Agenda 2063: The Africa We Want. First ten-year implementation plan 2014-2023.

<sup>30.</sup> The African Union Commission (2020), First continental report on the implementation of Agenda 2063.

Organisation	Policy document	Relevant targets
African Union	The Digital Transformation Strategy for Africa 2020–2030 (DTSA 2030) <sup>31</sup>	The strategy proposes several initiatives to support startups, including improved access to funding, the creation of national start-up strategies and start-up laws, the development of training programmes to increase digital skills and the adoption of cost-efficient solutions to address local issues (agriculture, health, administration).  The strategy notably includes a 2030 objective to extend the usage and coverage of mobile broadband services and ensure that all Africans have access to at least (6 MB/second) of internet priced at no more than \$0.01 per MB; locally produced smart devices that cost less than \$100; and basic e-services and content, at least 30% of which is developed and hosted in Africa.
World Bank	Connecting Africa Through Broadband: A Strategy for Doubling Connectivity by 2021 and Reaching Universal Access by 2030 <sup>32</sup>	Under the Digital Economy for Africa (DE4A) initiative (sometimes called a "digital moonshot for Africa"), the World Bank Group is supporting the African Union's Digital Transformation Strategy for Africa (2020-2030).  The DE4A initiative has five foundational pillars — digital infrastructure, digital financial services, digital platforms, digital entrepreneurship and digital skills — with the objective to digitally enable every African individual, business and government by 2030.  The World Bank Group has also set up a multi-stakeholder consultation group and the Broadband Commission created a Working Group to drive this process called "Working Group on Broadband for All: A 'Digital Infrastructure Moonshot' for Africa".  In October 2019, the Working Group published its findings and recommendations for a roadmap to help countries and development actors coordinate, accelerate and prioritise their efforts to help achieve the SDGs by improving digital infrastructure in Africa.  A key policy recommendation to encourage digital entrepreneurship focuses on "Improving the business environment and facilitating access to finance and business support services to boost digitally enabled entrepreneurship and partnerships between African and European industry".
African Union	African Continental Trade Agreement (AfCTA)	The AfCTA is expected to play a key role in boosting the start-up ecosystem in Africa. Set to be the world's largest free trade area, AfCTA will accelerate intra-African trade and boost Africa's trading position in the global market by strengthening Africa's common voice and policy space in global trade negotiations. Once trading begins in July 2020, start-ups can expect to benefit from free movement of business travellers and capital, and a single continental market for goods and services.

African Union (2019), The draft digital transformation strategy for Africa.
 The Broadband Commission for Sustainable Development (2019), Connecting Africa Through Broadband: A Strategy for Doubling Connectivity by 2021 and Reaching Universal Access by 2030.



Policy document	Relevant targets
"New Africa-Europe Digital Economy Partnership: Accelerating the Achievement of the Sustainable Development Goals" 33	The European Union-African Union Digital Economy Task Force (EU-AU DETF) provides a platform for partnerships between the private sector, donors, international organisations, financial institutions and civil society based on a shared understanding of how an already fast-evolving digital transformation in Africa can achieve cross-border integration and bring benefits to all citizens. Focus areas for the task force are connectivity, eSkills, digital entrepreneurship and eServices. Policy recommendations and actions for these areas have been outlined in the taskforce's report, "Accelerating the Achievement of the Sustainable Development Goals", which articulates its long-term vision of an inclusive digital economy and society in which every citizen— notably women and young people—has the opportunity to participate in the digital world.  Key policy recommendations to encourage digital entrepreneurship are as follows:  Adapt the local regulatory framework to the digital economy at all levels of the value chain;  An enabling ecosystem that includes advisory services to stimulate entrepreneurship for digital enterprises, including micro, small and medium-sized enterprises (MSMEs), start-ups and social enterprises;  Facilitate access to finance and funding mechanisms for digital enterprises of all sizes;  Facilitate digital skills development across all sectors of the economy that use technology; and  Apply open-source consultation tools and methodologies to co-create policy and co-design regulations to cover new business areas.
East African Community Science and Technology Commission Strategic Plan 2017/18–2021/22 <sup>34</sup>	The East African Community (EAC) has also set up institutions, such as the East African Science and Technology Commission (EASTECO), to promote cooperation in the development of science and technology in the EAC. Facilitating the development of MSMEs, promoting local entrepreneurs, and increasing internet and mobile broadband are at the core of EASTECO's vision.
	"New Africa-Europe Digital Economy Partnership: Accelerating the Achievement of the Sustainable Development Goals"33  East African Community Science and Technology Commission

 <sup>33.</sup> AU-EU Digital Economy Taskforce (2019), New Africa-Europe Digital Economy Partnership. Accelerating the Achievement of the Sustainable Development Goals
 34. East African Community (2016), East African Community Science and Technology Commission Strategic Plan 2017/18-2021/22.

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