DOREEN LUKANDWA

Head of Marketing & Customer Success at Beyonic Uganda

Beyonic makes last-mile digital payments in emerging markets easy, freeing our clients to focus on making their businesses and communities thrive. Doreen has over 10 years' experience in the financial services sector in Africa, being part of the team that launched MTN Mobile Money and other Digital Financial Service projects in Uganda.

ESTHER KARWERA

Head of Business Development at Akorion Company Ltd

Akorion is an agtech company that integrates ICT in the delivery of production and marketing services to farmers, and value chain digitization to agribusinesses that work with farmers. Since its inception in 2015, Akorion has established a network of over 42,000 farmers across Uganda.

NICHOLAS KAMANZI

Head of Payments and Shop at SafeBoda

SafeBoda is building a super app for people living in African cities that covers the element of transport, food, e-commerce and payments. Nick has co-founded a few startups such as Yoza and SulaPay that failed but helped him learn a lot about the market.

BART CORNILLE

Institutional Development expert-TTE project at Enabel Uganda

Enabel is the Belgian development agency with a mission to implement and coordinate the Belgian international development policy. Bart is responsible for digital transformation under the Digital for Development (D4D) project and supporting the digital ecosystem. He co-founded BongoHive in 2011, a technology and innovation firm located in Zambia, and another hub based in Antwerp, Belgium.

CHRISTINE MASIIKA

Digital Forensics Analyst at Applied Principles Consulting

Applied Principles Consulting a renowned Ugandan firm, an IT Security and Digital Forensics with a footprint in South Africa, Ghana and Kenya. Christine is an Information Security enthusiast with a growing passion within the field of digital forensics, with certification in CHFI and is currently pursuing a course in Encase forensics.

Uganda's demographic and geographic composition prescribes these interest groups; those living in rural areas, women and the youth. 71.5% of the population reside in the rural areas with their livelihoods predominantly dependent on agriculture. Women who account for 51% of the population and for more than half of the labour force in agriculture live in rural areas[1]. 78% of the population are below the age of 30, with the median age at 15.7 years making it one of the youngest countries in the world[2].

There are however, a number of shortcomings fuelled by a myriad of socio-economic factors such as limited access to financial services; low productivity in the agriculture sector; poor infrastructure and social services such as education, quality healthcare and power; the gender gap; a significant informal sector in the rural areas; low financial literacy as well as the digital divide.

However, the increasing rate of digitization has the potential to drive economic development and social prosperity. The United Nations Capital Development Fund (UNCDF) is on a mission to build an inclusive digital economy towards inclusion and leaving no one behind and have identified the fundamental elements to achieving this goal include; digital infrastructure, skills, policy and innovation.

71.5% Reside in the rural areas | **51%** Are women | **78%** Below 30yrs old

[1] https://blogs.worldbank.org/voices/leveling-field-women-farmers-uganda
[2] https://www.weforum.org/agenda/2016/05/the-world-s-10-youngest-countries-are-all-in-africa/
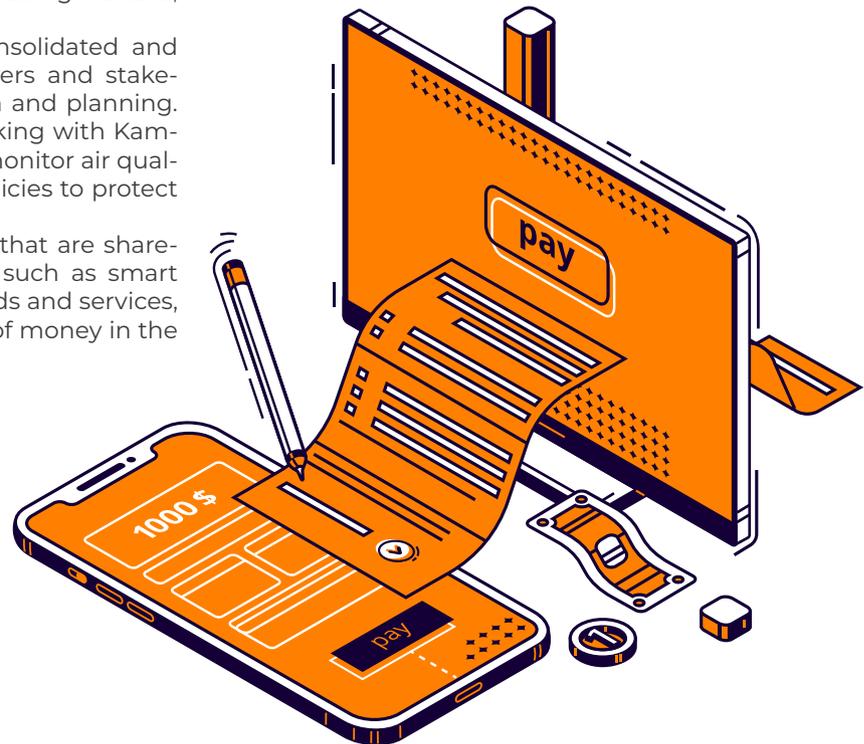
So, what is the digital economy in the local context?

The digital economy is basically a worldwide network of activities and commercial transactions enabled by technology that influence how we interact on a social and economic level. It involves multiple layers namely; governance, application, data and foundation layer on which platforms are created.

- **Governance layer:** The government is currently creating e-government services to improve public service delivery and collaborations to foster the economy.
- **Application layer:** Facilitates connection between the different players such as startups, MSME entrepreneurs, innovators and software developers sharing resources across various industries such as Agriculture, Entertainment, Health and Retail.
- **Data layer:** This is where data is consolidated and made accessible to the relevant players and stakeholders to improve resource allocation and planning. One example is the AirQo project working with Kampala City Council Authority (KCCA) to monitor air quality to inform development relevant policies to protect the environment[3].
- **Foundation layer:** Creating platforms that are shareable by the players in the industries such as smart logistics to allow for movement of goods and services, digital payments to facilitate the flow of money in the economy.

In addition to these layers, enabling elements such as political stability, physical and digital infrastructure in the form of efficient road and rail transport, and the internet respectively with the emerging global market trends are accelerating the digital economy and digital transformation.

At this stage of digitization in Africa, governments and the private sector must act with more intention and grit, through establishing safety nets where different innovations can be tested before scaling them to reach as many people as possible.

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3 https://www.softpower.ug/makerere-launches-project-to-ease-air-quality-assessment-in-uganda/
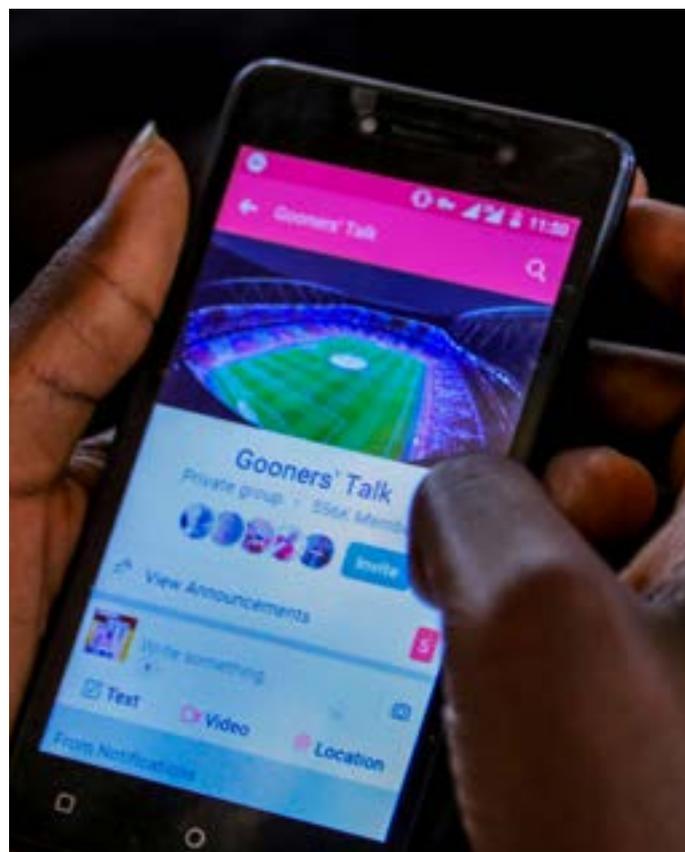
The evolution of the innovation ecosystem

It goes without saying that there are still a number of misconceptions about innovation and technology especially around managing the expectations of the entrepreneurs and organisations. Failure is part of the process and has not yet been fully embraced as most people think that they will get it right the first time!

Additionally, from a global perspective, the limited recognition of mobile money as an innovation originating from the African continent by leveraging mobile phone penetration and telecommunications networks to address the age old challenge of financial inclusion. Uganda is one of the leading markets globally in regards to mobile money usage with over 40% of the population having a mobile money account[4]. The GSMA, argues that for every 10% increase in phone penetration in poor countries, productivity improves by more than four percentage points, and that a doubling in mobile-data usage increases annual growth in GDP per person by half a percentage point[5].

Roughly about 7 years ago, Uganda began to witness the beginnings of her innovation ecosystem. It started off with a number of innovation competitions organised telecommunication companies e.g. MTN, Orange and Uganda Communications Commission (UCC) that often rewarded the best ideas with prize money. However, this created competition driven entrepreneurs who shelved their ideas in preparation for the next event.

In due time, hubs across Kampala began to spring up as young innovators and startups sought co-working space to work on their ideas. On a global scale, startups like Facebook inspired communities to form and develop technology driven solutions addressing challenges in sectors such as Agriculture, Healthcare and Finance. In 2018, Global System for Mobile Association (GSMA) Ecosystem Accelerator Program cited these hubs as the "Backbone of Africa's tech ecosystem" reporting about 16 active innovation hubs in Uganda[6].

During the recent years, startups have started raising investment from various sources such as the Ministry of ICT and National Guidance under the National ICT Initiatives Support Programme (NIISP), Entrepreneurship Programs e.g. Tony Elumelu Foundation, Founders Factory, Start-up Bootcamp and Venture Capital (VC). In 2019, Uganda raised $38 million across four rounds of sourcing from Seed to Growth[7].

4 http://finclusion.org/country/africa/uganda.html#dataAtAGlance
5 https://www.gsma.com/publicpolicy/wp-content/uploads/2012/11/gsma-deloitte-impact-mobile-telephony-economic-growth.pdf
6 https://www.gsma.com/mobilefordevelopment/blog/618-active-tech-hubs-the-backbone-of-africas-tech-ecosystem/
7 https://partechpartners.com/documents/12/2020.01_Partech_Africa_-_2019_Africa_Tech_VC_Report_FINAL.pdf

Drivers that have influenced the evolution

The digital economy has undergone tremendous evolution over the years, with the inclusion of digital payments, platforms for the agricultural value chain and most recently platforms such as SafeBoda and RocketHealth have emerged to ease life through convenience. People are generally adapting to the trend of digitization as the **new normal.**

Some of the factors that have influenced this transformation are;

1. **Refinement in the value proposition (why):** If people do not understand why they need to adopt then they will not change. Therefore, the proposition has been strengthened and people are more inclined to use it. For example, merchants have a reason to join e-commerce platforms as they can access more customers and grow their revenues. Additionally, farmers have taken up the use of (smart) phones to order for inputs and recently, request for credit.

2. **Refinement of the business model (how):**
   - Various channels have been created by service providers to increase access to services. For example agency banking where banks ride on existing infrastructure to simultaneously deliver their offerings to larger numbers and value to agents in the form of commission.
   - Utilization of data to create value for the end users for example credit scoring for farmers to access financial services.

3. **Increased collaboration in the ecosystem (who):** The increased collaboration between players in the financial services sector including telecommunications companies, banks and Fintechs has enabled the scale of financial and digital inclusion.

...with the inclusion of digital payments, platforms for the agricultural value chain and most recently platforms such as SafeBoda and RocketHealth have emerged to ease life through convenience.

Promising opportunity spaces this pandemic created for the digital economy

Small and Medium Enterprises (SMEs) are embracing digital to ensure business continuity and offer their services. For example, SafeBoda customized its platform to cater for businesses to list their products during the lockdown.

Additionally, the demand for essential services from SMEs has increased the number of transactions thus more appetite for digital transactions. In response to this, Beyonic has waived fees for outgoing payments thus attracting new customers like the next door duuka during this period.

Businesses are starting to think differently about distribution channels to deliver items to consumers and innovators are thinking through how they need to develop such a solution. A number of interventions should now focus on Maslow's Hierarchy needs, addressing pain points for the Bottom of the Pyramid i.e.Relief, Healthcare, Education and Food.

Before COVID, it was very difficult to build partnerships especially with reputable brands back in Business to Business (B2B). Now, Fintechs are considering more Business to Customer (B2C), through startup corporate collaboration, both parties can benefit as the latter will quickly adapt to the disruption and the former can scale easily through the B2B2C model.

Now is the time to invest in digital infrastructure and cyber security as more businesses and individuals embrace digital transformation to aid working from home, connecting with their customers and accepting payments for their goods or services.

The rise of the gig economy is another way to ensure people can remain employed. Ride hailing apps like Safe Boda and Uber have shown us that work can be structured in the ways people want. Also, as skilled people have lost jobs, this is an opportunity for SMEs to inexpensively hire talent to execute on work or business opportunities now.

Enabel Uganda, through the Teacher Training Education (TTE) set up a sandbox for experimentation within National Training Colleges (NTCs)[8]. However, they have been shut down during the lockdown. E-learning is an alternative option that has allowed for continued learning among students. There are a number of accessible and available open education resources such as WhatsApp groups, podcasts and e-books, etc. Additionally, Enabel Uganda supports people with mobile or internet data to access these resources.

The momentum of digital transformation has a lot of potential to transform various economic sectors and can be scaled across the country! However, increased digitization always comes with its fair share of risks.

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[8] https://www.enabel.be/story/titel
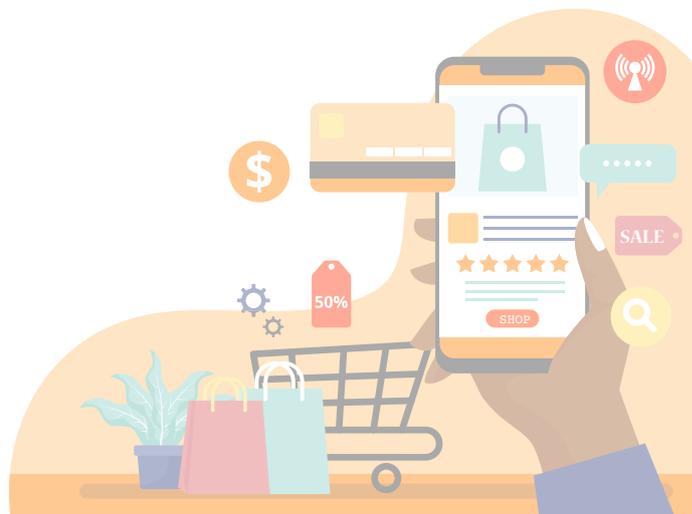
What are the risks and how can they be mitigated?

Risks

With innovation, the security aspect is different. Security is critical but few people are willing to be confronted with it. People do not like to be 'inconvenienced' by the extra layers of security.

Data breaches will be an effect of our increased adoption and dependence on digital platforms.

Also, there is a huge divide between the security enforcement and willingness for users to adapt security measures to ensure their data or information is safe.

The digital divide caused by limited access and affordability of the internet.

Internet connection is intermittent across most parts of the country.

Mitigation

Companies should allocate monetary resources for security since they are all susceptible to the risks online. Now, more than ever there is an immense exchange of information taking place now.

Data protection remains critical and there should be awareness about how user data is being utilised through all these digital platforms.

It is critical to bridge the access gap through collaboration from various development agencies, government and innovation/ technology hubs to develop the infrastructure for all so that there is equality for all.

In the meantime, there are some frugal techniques that have to be used in urban or peri urban areas. For example, taking advantage of a good connection to download the resources and access the materials when offline.

The case for corporate innovation

With the extended lockdown, a number of businesses especially in the private sector will have to consider corporate innovation approaches to remain relevant in the post COVID era. Corporate innovation is the continuous improvement of processes, integration of people and technology in an organization with the aim of having a competitive advantage in a dynamic market. There are two models of Corporate Innovation: Closed Innovation and Open Innovation.

Simply put, open innovation is a more **outside in** approach where external ideas and technologies are brought into the firm's own innovation process. There are various models including through[9];
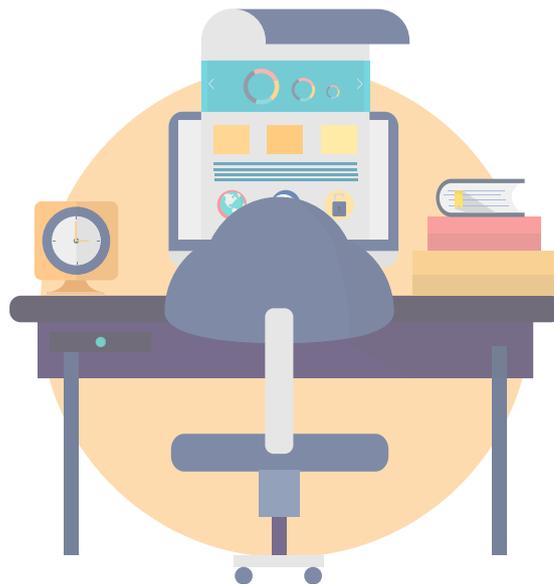
1. **Innovation Outpost:** dedicated units where the ecosystem can plug into the innovation culture and where they can appreciate the importance and value of digital transformation and quickly respond to market pressures with a low capital investment.
2. **External Innovation Accelerators:** short term programs targeted at startups developing solutions that address defined sector or organization challenges with the aim of absorbing those that are fit for the organisation/business.

This pandemic presents a window for businesses to work with startups to bounce back from this disruption and unlock other opportunities.
Taking an open minded approach to learn on the go is critical to creating sustainable solutions and achieving the desired outcome.

Taking this approach will require a number of **capabilities, resources** and **Key Performance Indicators (KPIs)** to assess its viability. Some of these will include but are not limited to the following;

- Diverse skill sets that cut across different industries to quickly adapt to the market dynamics, to complement weaknesses in teams and to reduce the turnaround time. Young innovators have exceptional technical skills but limited industry knowledge which can be obtained through training and mentorship by seasoned professionals.
- Understand the local socio-economic context and customize interventions in policies or regulations that account for the gender gap, different cultures and languages, etc.
- The need to manage the cost of operations. There is some bias that many Fintechs can afford and yet the cost of scale is high, which might hinder their progress. Thus, collaboration for cost sharing comes into play.
- Process development and optimization is fundamental to running a successful partnership.
- Factoring in security and accountability at inception is important in establishing this alliance.

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[9] https://www.plugandplaytechcenter.com/resources/6-corporate-innovation-models-modern-corporation/

"In every crisis, there is an opportunity" - Chinese proverb. This is it for Uganda, for Africa. There is a huge opportunity for digital transformation and a platform for huge mindset change.

It has been a great learning experience creating the new Safeboda shop, adaptability to the needs of the market has been key. Similarly, this is going to be the best time for startups to showcase their solutions. Every startup needs to put in all the hours to be better and do better. People have shifted their mindsets to accept digital transformation.

It is important to focus on solving a problem and it should be geared towards answering the question **WHY?** And then **WHO?** And then **HOW?**
· For SafeBoda, the core customer is the BODA RIDER and they have created an enabling environment for the rider to deliver on their service.
· For agriculture, ensuring what the FARMER needs and how the seller in the market can sell their produce is key. Also understand the HOW.
It is also important to refine your offerings, shift your model in line with the needs of the market and continuously improve. Therein lies the opportunity to scale for instance Safeboda shifted their model from people transportation to cargo transportation.
Around cost management, COLLABORATE to cut down on costs and get mileage to scale.

If i can't access your product or service online today, I do not know how sustainable it will be in the next few months or years. Convenience to access these products/services through digital platforms is going to be key.

This is the right time to implement the digital solutions we have for so long thought about. The current COVID situation has provided the opportunity for these digital solutions to thrive.

A From a commercialization perspective, what model works?

It depends on the strategy, the market to access and which business model works for you i.e. Business to Business (B2B) works best for licensing models or Fast Moving Consumer Goods (FMCG) or Business to Consumer (B2C) where you charge a customer monthly. These business models can be refined along the way to determine what solutions work. Considering today's fast paced world, strategy changes with the market and industry trends or global events - such as the current pandemic.

It is important to appreciate the following components;
1. Delivery channels: What is your route to market? Is it through;
   - Third party: factor in commission
   - Direct: it will be cheaper to charge
2. What matters most to you? Is it Value (charge premium) or Volume (numbers you are selling)?
3. What problem are you solving? How big is your end user market (impact)?

4. Glance at your operations to evaluate how heavy they are going to be,
   - Technology: Will you use a platform? If so, what platform to use?
   - People: The backend of your business is your employees. What capabilities will you hire? How many people will you need internally?
5. Pricing strategy:
   - Return on Investment (RoI): How long will it take to recover initial costs? How will you keep your employees incentivized?
   - Understand your market: Who are your different customer segments.
6. Understand the scaling strategy: Will you focus on one product and move on to the next or till you sell multiple products?

B What empirical facts or evidence shows that entrepreneurship or digital startups play a role in accelerating the digital economy?

The current Digital for Development (D4D) project has developed a policy brief documenting their findings from research on this topic.

C How do we get these services beyond Kampala?

You build them to scale outside. If there is a need, develop to scale beyond.

The Innovation Village

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