



THE TONY ELUMELU  
FOUNDATION



European  
Commission



# The Future of Technology and Innovation in Nigeria



# Foreword

With an estimated population of 211 million in 2021 and 400+ million by 2050, Nigeria is the most populated country in Africa with over 60% of the population under the age of 25. Nigeria is also Africa's leading economy with a wealth of natural resources as well as a thriving entrepreneurial culture and creative industries. Yet, the country is confronted with numerous political, socio-economic, environmental, and security challenges. It is hence the objective of the EU-Nigeria partnership to make the most of the country's endowments and contribute to overcome the obstacles.

Following extensive consultations, with both, government and non-government stakeholders, our new multi-annual programme for Nigeria, announced at the occasion of European Commission Executive Vice President, Margrethe Vestager, visit to the country in February 2022, is founded on three flagships:

- (i) digital and green transition for youth employment;
- (ii) (ii) stability, peace and security;
- (iii) (iii) and achieving the demographic dividend. These flagships are mutually reinforcing and intend to stimulate a "virtual circle" of transition to a stable, prosperous future for the Nigerian youth.

In particular, in line with the European Green Deal and the EU Global Gateway strategy, our objective is to accompany Nigeria on its path towards a more digital and greener economy while creating smart jobs for young Nigerians. As illustrated by the successful mission of Vice President Vestager, when a "digital package" was presented to the Nigerian counterparts, aligning the first African economy and demography and the EU's digital and climate change' goals is of key geopolitical importance. The Global Gateway strategy, encompassing

the digital, climate, energy, transport, but also human development objectives, such as health, education and research is the EU's response to addressing these objectives. The digital and green transitions must be seen as having not only long-term, but also immediate benefits, particularly in providing employment for the youth, thereby contributing to stabilisation. This is why digital solutions will feature prominently in all our and the broader "Team Europe" projects in Nigeria, implemented by the EU, the EU Member States and Development Finance Institutions. Notably, they will support the innovation and youth employment initiatives, and concentrate on two key sectors with significant jobs' and growth creation potential, agriculture and renewable energy.

We look forward to implementing our new programme in Nigeria with our government counterparts, as well as other key stakeholders, such as the Tony Elumelu Foundation, and many other private sector and civil society organisations.



**Cecile Tassin-Pelzer**

Head of Cooperation  
European Union Delegation to  
Nigeria and ECOWAS

# Introduction

As Nigeria continues to concentrate on becoming a non-oil-focused economy, the role of technology in achieving this cannot be overlooked. With the many technological advancements, the world has seen in the past decade, our lives have become infinitely easier; we now have at our disposal, more tools to accomplish our goals, work from home, and outsource some very menial tasks while shaping the future of work. Financial technologies such as USSD, E-payment features and products, two-factor authentication and the likes have made transactions infinitely safer and secure in Nigeria.

As the population of Nigeria's youth continues to increase exponentially, with an estimated population of **213 million**, this number is set to double by 2050 and as such thinking of the intersection of technology and how it will secure the future of our youth is increasingly important. What is the potential for a child in a rural community to get access to the internet and electronic devices that exposes them to the world beyond the familiar?

Through our work at the Tony Elumelu Foundation, we are currently empowering young African entrepreneurs with access to funding, mentorship, coaching and access to networks. Through an entrepreneurship training programme that happens on our digital platform, TEFConnect, young aspiring entrepreneurs can network and learn from each other on the different ways to build successful businesses and the skills needed to do this.

Recognizing that this is not enough, the Foundation is constantly working to expand partnerships that will continue to democratize opportunities for young Africans. UNICEF estimates that there are 759 million young people between the ages of 15-24 who are not connected at home.

Following the policy roundtable held by the Tony Elumelu Foundation in collaboration with the European Union, we convened key sector players to share their insights on the future of technology in Nigeria and they shared their insights below.



**Ifeyinwa Ugochukwu**

CEO, The Tony Elumelu Foundation



## Christian Keller

### African Founders

The ecosystem has become more professional and more African: When I started with Jumia, it was a few Western investors that rolled out Western business models with Western management. Now, there is great investment, varied initiatives, and African solutions. And the potential is great: the spirit of entrepreneurship, of living your dream is highly present in Africa. Out of all the ventures we started at African Founders, the most African ones survived. Such as Wakanda Market, bringing the market to the phone. Or Wakanda CRM, powerful and simple to use in the African environment.

The biggest trend I see, however, is the self-empowerment of the young generation. See how EndSARS started with a small group of people expressing frustration on social

media and how it transformed into a movement supported by the whole of Nigeria. A new paradigm of organisation that yet has to see the limelight. Yet, social media as we know it has its limitations in supporting this with its tendency for hate speech and limited privacy. Therefore, we want to create a social network based on positive values. One that brings out the best version of oneself. Think of it like this: Any community can join Wakanda. As soon as you want your community to grow beyond a certain size, you need to commit to dialogue when things get heated. Facilitated dialogue in cooperation with nni, a dialogue institute originating from South Africa. Responsible Freedom of Speech. Making Every Voice Heard. That's the story of Wakanda.





## Adriano Mauro

### Prototipi

Prototipi is an SME based in Lagos, in Nigeria, with staff in Johannesburg in South Africa, Dubai in the UAE and Udine in Italy focused on technology and knowledge transfer. To do so we collaborate with Digital Innovation Hubs, research centers, and industries in Europe and in Africa.

Nigeria has shown high level of digital readiness, also thanks to the youth entrepreneurial mindset, resilience and ingenuity. The country is becoming the destination for Africa's Promising Tech Startups: African startups attracted \$5.2 billion in venture capital last year, and that West Africa – led by Nigeria – accounted for the largest share of investments. Nevertheless, the country's economy does not have a linear growth. Rather it experiences fluctuations and imbalance which hamper the efforts made by innovators, more exposed to economy's crisis, such as inflation spikes. Reliable and affordable is another challenge for innovators, especially in remote areas.

Finally, innovators face a shortage of digitally skilled talents. Last but not least, innovators often don't have an international network to leverage on, limiting therefore their opportunities to:

- (i) overcome some of the local hurdles
- (ii) foresee upcoming trends
- (iii) develop synergies

This is why Prototipi decided to set up offices in different ecosystems and why it is heavily involved in the Horizon 2020 and now Horizon Europe projects, funded by the European Commission. These projects give us the

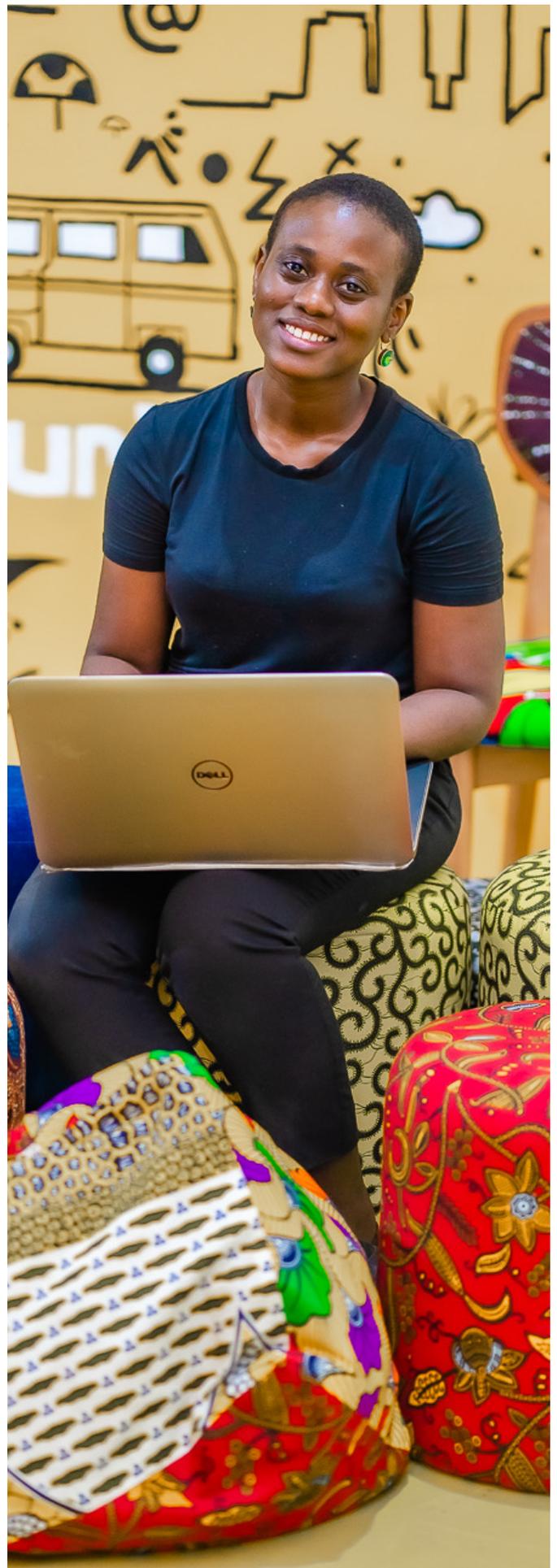
opportunity to:

- i. To be ahead of our competitors, thanks to these research and innovation projects we are embedded in an innovation ecosystem, we're exposed to concepts, solutions and cutting-edge technologies which will be in the market in 5-10 years
- ii. To collaborate with exceptional partners in Europe and in Africa, create a network of collaboration with academic, research centers and industries. Foster long-term relationships across markets and industries which of course can also turn into business opportunities beyond the EC funded projects
- iii. To pilot and test innovative solutions in the African context, paving the way to market exploitation
- iv. To share experiences, challenges, and opportunities with partners across Africa and this helps us to shorten the time to market and to adopt alternative solutions
- v. Give our staff the opportunity to grow, learning from peers and in some cases being guided by senior experienced partners
- vi. And finally, the funding support allows us to engage local talents in our team dedicated to the projects

So, to summarize: the Horizon projects represent an opportunity for Prototipi to grow and maintain its competitive advantage in a very dynamic and ever-changing market.

Prototipi is currently involved in DIGILOGIC ([www.digilogic.africa](http://www.digilogic.africa)) and the main goal of the project is to foster the collaboration between Digital Innovation Hubs in Europe and Africa, support the innovators collaboration and promote African young innovators with a focus on smart logistics solutions.

We're kicking off "RURALITIES" a Horizon Europe project involving European and Africa Partners which will propose to ideate, implement, futureproof, validate and deliver and ecosystem-enhancing and climate action driven expertise and learning framework via real-scale practicing in 7 simplified rural socio-ecological systems. Prototipi will be implementing the Nigerian living lab and contribute to the dissemination and local stakeholders' engagement.





## **Akosa Onyebuchi**

### Chief Information Officer, UBA

Our Transformation journey from inside out: As soon as we were able to upgrade our core banking systems about a decade ago, we created a systemic propensity for rapid transformation. Inherent in our upgrade was the capability for undisruptive growth and extensibility.

Our core banking systems amongst other things gave us the leverage to extend itself to our customers through our middleware and our channels.

Our digital inclusive customers evolved from retail, limited to our internet banking and mobile at the time to corporate/SME customers with a growing demand of direct system to system integration, which made our corporate banking platform very successful across our subsidiaries of operation in Africa.

Approaching things from a first principles perspective, we embraced Service Oriented Architecture as one of the first banks in our region and industry to successfully do so, because we understood that channels (the platform to serve our customers) will evolve and emerge. We were right, we reused and extended APIs to enhance our mobile, internet and USSD channels and then gave birth to Leo, which became a digital persona and embodiment of automated service across of key social media platforms starting from Facebook, which became another “first” in the industry of our operations.

Since we needed to evolve at a velocity necessary to gain industry leadership, after a few milestones in our transformation journey, we realized that digital transformation is

Business as Usual. In reimagining the bank, we have now implemented an Open Digital Banking platform as a self-disruptive strategy, championing disruptive innovation to re-invent our customer engagement channels and create new ones. We also built a smart process platform – a paperless initiative that has been instituted as a proponent of digital culture and reduced the carbon footprint of the bank as a by-product.

Working with SME’s has taught us a lot – their empowerment is our success. Our Bank as A Service initiative led us to implement and Open Banking platform to further democratize our services and empower financial technology companies towards a collaborate venture of financial success.

Here we are now, having tilted our transaction indices to 90% digital and 10% in-branch, at 25 million customers and oscillating at top 3 banks across all our digital channels on our way to digital dominance, and at the forefront of disruptive payment intermediation and numerous awards and accolades, your milage might vary.

After having gain experience in volatile, disruptive, and high business demand environments, we know for sure that the success is not in adopting technology, but in transcending it.

We have learnt that all systems are built to fail and become obsolete, unintentionally but eventually. This is because they are built on a premise, therefore the most important aspect is not in absolute availability, but in predictability and evolution, and therein lies your digital transformation.



#AFRICAN  
ENTREPRENEURS

THE TOWN GROUP  
FOUNDATION



## Obong Idiong

### CEO Africa Prudential

In Nigeria and Africa as a whole, the recent emergence of technology-driven business and economical solutions has brought about a total reorientation of structures, education syllabuses, economic policies, and a lot more. Ease of usage, user-friendliness and an aid to the everyday daunting and complicated tasks through process automation and innovation, are the reasons why these digital solutions are the order of the day and a new trend in Africa.

The Covid-19 Pandemic brought about an inevitable culture shift or change into reliance on digital platforms. Technology has been for a long time forecasted to impact heavily on the traditional mode of business operations. Covid-19 only caught us all unaware, and fast tracked the projected shift. Technological innovations are now facilitating expanded knowledge sharing and online trainings to support business growth.

Intentional investments in innovation and technology, helps breed a more efficient African operational ecosystem. Here at Africa Prudential (AP), we have built solutions not just for the end-user (consumers), but also for the industries we operate in, inherently, our competitors also benefitting. This promotes healthy partnerships, and overall growth for Nigeria, hence Africa simultaneously. We at AP tend to look beyond the surface level, but a wholistic view of problems or gaps within the financial and event management ecosystem. A product of ours that has such coverage is our capital market solution called INVEARN. On this platform, investors have seamless access to their registrars, and all their portfolio of assets or investments across the market. The seamless

onboarding process on INVEARN, solves the market wide problem of incomplete KYC/mandate of investors in the capital market. This further helps resolve inability to map unpaid dividends to its owners, hence the ability to claim your e-dividends market wide, is also available on INVEARN. Buying and selling of investor assets, connecting you to brokers, is another add-on we have on INVEARN.

With solutions like INVEARN, and a lot more Africa prudential has to offer, we are ensuring we continually tackle the root cause of problems and solve them permanently, rather than proffering solutions in phases, according to what's in front of us. This is achieved through constant gathering of first-hand research, insights, information and knowledge. A combination of these in conjunction with innovative solutions through digital technology, brings about a sustainable and competitive market with products consistently thriving through constant innovation, through digital technology means.

Furthermore, we see benefits such as easier access to market penetration. Technology innovations is also expanding the access to market for businesses beyond their physical location. Businesses can now build virtual stalls and leverage the improvement in logistics technology to reach the global markets without physical traditional trade barriers. Social media presence and marketing has been of massive help to organisations at large.

The effectiveness of digitally inclined solutions has also led to Improved turnaround time for businesses and organisations at large.

Turnaround time across various businesses and sectors has improved leading to increased productivity and business growth. For instance, financial reporting can be automated to achieve faster financial account generation, doctors can rely on data analytics to achieve more effective diagnostics and treatment of patients, and so much more.

Technology-driven innovation has also brought about increased collaboration. Africa Prudential worked with Tony Elumelu Foundation (TEF), to build a viable solution that connects entrepreneurs across 54 African countries to collaborate and share resources to enhance their businesses. Also, with technology, systems have been integrated to bring different services together, leveraging on Application Programming Interface (API) technology to deliver value to users and achieve growth.

Another evidence of Fintech dominance is Nigeria's largest telecommunications provider, MTN, recently receiving a final approval from the central bank of Nigeria to operate a Payment Service Bank (PSB). Following the approval, MTN now offer virtually all the services offered by commercial banks including deposits, payments, issuing of debit and credit cards, and remittance services within Nigeria. A senior executive of the company further explained that the intention is to give people who do not have bank accounts or even ATM cards, the opportunity to be able to perform banking services from the comfort of their rural environments, leveraging on the size of their coverage of over 70 million people.

With all that's been said, there is a need to also identify the challenges that also come with innovative digital solutions. Firstly, the transition phase from the traditional or 'comfortable' way of operations for many, has been a process a lot are yet to get accustomed with. As I mentioned, it is a process, meaning it is not an immediate adoption and might take some time or some stages. Not all are tech-savvy, so a lot of people, whether young or older generation, depending on their privileged exposure, have to be trained repeatedly on basic Information technology usage, before any advanced knowledge can be introduced. This hinders to speed of adoption and efficiency levels of these innovative ideas or solutions. The

will and enthusiasm to learn and adopt new skills, and the insight as to how beneficial this skill acquisition is to you as an individual, is the only factor that can speed up this necessary process.

Furthermore, Capital investments and its inevitable effect on unemployment, is a factor we cannot neglect. Based on the upward trajectory of tech-embedded solutions, a lot of nations, organisations, etc have seen the benefits of making that initial capital investment into these digital solutions, and then train a few people to maintain or ensure proper usage and expertise of these applications, features, or AI. This in a long run, cuts costs of labour and wages for these firms, and the economy at large. Unfortunately, this benefit breeds increase in unemployment, as those whose jobs have been replaced by these AI's and features of capital investments, might have to be let go.

The impact of this can only be curbed or reduced if individuals on their own, decide to indulge in some self-development, and train themselves to be relevant and required in the tech-space, and project-management expertise thereabout.

The afore-mentioned possible drawbacks and a few more are all factors that must be considered. Nonetheless, it is evident that the overall long-term benefits of an innovative tech-driven National and Africa overshadows these drawbacks, and is for the betterment of all, and an assurance of staying abreast with the changes and developments going on globally, leading to a more developed Nigeria and Africa as a whole. We definitely expect sustained growth in the Africa fintech space, with the vast investments coming into this industry.

As more young people are entering the workforce, it is crucial that opportunities that help them leverage technology and support their businesses exist. As Nigeria becomes a centre for investment and trade especially within the start-up ecosystem, the different key stakeholders must come together to share insights and ways that the ecosystem can be improved and the resources/constraints that exist to this effect.



THE TONY ELUMELU  
FOUNDATION

EMPOWERING  
AFRICAN  
ENTREPRENEURS