# Tedge Debished as Technology Business & Analyses Magazine Since 2004 DEC 2022



# Made in Africa: ONELEE Meet Africa's first humanoid robot

Uniccon's Ekwueme: Omeife has shown Africa can create sophisticated tech

**10 Things about Omeife** 



### Expand Opportunities.... Widen Creativity....Build People



## Services Qitech COMPUTE deliver high grade computer hardware QitechLAN delivers broadband Internet service across the north of Nigeria. QitechNET is delivered on Nigcomsat 1R satellite using iDirect, Highes, and Newtech on: and Newtech on: Ku band Ka band & C band

**Qitech Technologies Limited** 

No. 55, Murtala Mohammed Way, Jos, Plateau State, Nigeria. +234 808 247 7800, +234 8050498532

**Uniccon Group** is a cutting edge provider of technology solutions in Africa, with operations in STEM, Cybersecurity, E-commerce, Blockchain, ePayments, Robotics, Workflow management and Cloud computing.



UNICCON Group of Companies Lanre Shittu House 3rd Floor, Plot 1504, Cadzone B06 Mabushi Expressway, Mabushi Abuja Nigeria.

info@uniccongroup.com www.uniccongroup.com +234 9 292 9326 +234 9137160837

## Omeife brings challenges and opportunities to Africa

Africa made history with the launch December 2, 2022 in Abuja of Omeife, a humanoid robot by Uniccon Group of Companies. The human-like robot was first unveiled 10 October 2022 at GITEX GLOBAL, Dubai World Trade Centre (DWTC), UAE to announce Africa's entry into the high-skill, high-precision field of robotic engineering; the fusion of biology, behavioural science, and human neuroscience with IT.

As Jacob Biba wrote in Builtin, "humanoid robots are robots that resemble and act like humans. Typically engineered to imitate authentic human expressions, interactions and movements, these robots are often outfitted with an array of cameras, sensors and, more recently, AI and machine learning technologies."

Omeife is skilled in language, movement, navigation, and behavioural intelligence using AI and computer vision capabilities. It is a venture that opens a whole new chapter of possibilities for Africa's march into the fourth industrial revolution (4IR).

In the top 5 league of humanoid robots, the world already celebrates Sophia (designed by Hong Kong-based Hanson Robotics); Nadine (by Japanese company, Kokoro); Geminoid DK (created via collaboration between a private Japanese firm and Osaka University); Junco Chihira (created by Japan's Toshiba); and Jia Jia (China's first humanoid robot created by the University of Science and Technology research team).

Now, the world celebrates Omeife as an African achievement.

The Omeife project beckons on the continent's leaders to rework their engagement of youths and technology ventures. Everyone in Uniccon that contributed to the making of Omeife is within the youth demography - a testament to existing statistics that Africa has the youngest population globally.

There is a significant symbolism that must not be lost in those who have dared to create Omeife. They have unleashed challenges and opportunities that will shape Africa's future as embodied in millions of its youths. They have also initiated a process to signal that Africa will not be a pushover in the 4IR. Most importantly, they are putting the country's political and economic leaders to task: To take advantage of technological gains and make Africa achieve its manifest destiny of a continent with great young innovators.

Africa must seize every opportunity to overcome its challenges across sectors; leverage the window that ventures like Uniccon offers through tech-exploits like Omeife to determine what kind of future the continent deserves in the 4IR.

The launch of Omeife offers a unique opportunity at addressing every bottleneck to promote global technology from homegrown nests. Its launch should inspire that willpower to implement policies that engender not endanger entrepreneurship and innovation.

Nigeria's Vice President Yemi Osinbajo, has affirmed that Omeife is a clear indication that the youth in Nigeria are taking the bull by the horn and making giant strides in AI development and other technological advancements.

He has assured that the Nigerian government will fully support Omeife and similar development to contribute to national development.

In his own words: "Most of the robots we have are not African so we are excited to see Omeife today with African data built and looking African because this will help us to boost our technology locally and to promote our culture and values because if we say we are going to use what is built somewhere, it will be difficult for us to benefit from the artificial intelligence."

Now is the time to act; to get statutory institutions such as the Nigerian Export Promotion Council (NEPC), Nigeria Information Technology Development Agency (NITDA) and similar agencies to live up to their mandate of promoting the development and export of indigenous ventures including techcontents.

The Ugandan High Commissioner H.E. Nelson Ocheger, put it more succinctly at the launch in Abuja: "Today is a special day; a day of victory for Uniccon and a day of victory for Africa. If Nigeria can do it, Africa can do it. I challenge you to use this innovation to grow the economy of Nigeria and the economy of Africa."

Africa has a chance in Omeife to positively rework collaboration between government and private ventures. It must not lose that opportunity to sustain its march into the 4IR.

Olusegun Ohimeh Oruame Editor

Knowhow Media & Market Intelligence International Limited – KMMIIL IT Edge News. NG, eT Edge News.Com, West Africa Convergence Conference, Knowhow Natives Editorial

Editor

Olusegun Ohimeh Oruame

In-House Writers Anthony Nwosu Unom Jeremiah Oluwaseun Ajayi Marozoka Oruame

Executive Writers/Contributors @ Large Austin Okere, Founder of CWG Plc Collins Onuegbu, Founder, Signal Alliance and SASWARE Limited Mr. Abdul-Hakeem Ajijola, Founder/Executive Chairman, Consultancy Support Services

Consultancy Support Services Chukwuyere E. Izuogu, Senior Associate and Head, Abuja Office at Streamsowers & Köhn Knowhow Media & Market Intelligence International Limited – KMMIIL (with its affiliate Knowhow Media International -KMI) is a Technology Media, Research & Event Management Company. It's publishing arm has IT Edge News.NG and eT Edge News.Com on its stable; KMMIIL manages WACC, the annual West Africa technology convergence event; partners with other companies to ensure Nigeria's participation in global events such as Gitex, IT Edge News is media partner to GITEX for over 12 years.

**Chairman** Greg K Gbadamosi

**CEO** Olusegun Ohimeh Oruame

HR & Events Nwakaego Alajemba Joy Amaka Onweani Marketing Anthony Nwosu

Social Media Catherine Amaga

**Consultants - Web Managements** Ismail Mohammed Abimbola Adams

#### eTerview

Chukwudi Obinna Ekwueme: Portrait of a visionary entrepreneur

**Tedde** nev

"Omeife has shown that Africa is able to create sophisticated Technology"

Made in Africa: OMETEE Meet Africa's first humanoid robot

Consultants- Marketing Bamikole Aregbeyen

**Partners** ReachMedia PR Limited Qitech Technologies Limited

**Production** Real Designs

#### Offices

8A, Oje Imianvan Street, Julie Estate, Oregun, Ikeja, Lagos State, Nigeria

54, Murtala Muhammed Way, Jos, Plateau State

#### Contact us

Corporate – info@itedgenews.ng Editorial: editorial@itedgenews.com Phone Nos: +234 8034005006 Facebook: https://www.facebook.com/itedgenewsNg Twitter: https://twitter.com/ITEdgeNewsNg Instagram: https://instagram.com/ITedgenews Whatsapp: +234 8034005006 Website: www.itedgenews.ng

@KMMIIL, we offer:

Technology Media Services including managing your social media image/publicity, Events services, Publication and strategic media management services

#### OpEd

Is Jumia on the verge of a shock exit from Nigeria? page34 - 36

As we continue the wait for 5G services

#### TechPick

Agu Collins Agu: Unity Board Pro AloT Platform (Arduino Compatible) ready for manufacturing

page 38

#### Briefings

ALDAPCON seeks speedy passage of Nigeria's Data Protection Bill, says FG memos will drive compliance

Galaxy Backbone showcases datacenter, e-services at Communications Council in Ibadan

NCC to judiciary: Show more interest in ICT trends

In Ibadan, NITDA stresses value of collaboration to bridge digital divide

Vodacom partners tech startup to make cybersecurity more accessible to businesses

Twitter closes African office in Ghana, sack all staff

Kenya to manufacture \$41 smartphones

Innov8 launches Unity Board Lab; adopts board for capacity development, prototyping page 27 - 33

# Africa's 1<sup>st</sup> Humanoid Robot

Afra

# Made in Africa Nigeria and rest of the continent unveil Omeife in Abuja

7



Nigeria's Vice President, Yemi Osinbajo, this December in Abuja, unveiled Africa's first humanoid robot, Omeife by Uniccon Group of Companies. The launch ceremony was built around the theme: 'The future of Artificial Intelligence in the African Tech Ecosystem',

Inside the Transcorp Hilton Hotel where Omeife was unveiled at a gathering that had the diplomatic community, academics, military and public sector actors as well as private businesses, Osinbajo expressed awe at the Omeife feat and affirmed government's commitment to both support and collaborate with this and similar ventures.

"We are ready to support you and commercialize this technology. We want to see it deployed in our farms, road construction and in our classrooms. I have directed the National information technology development agency (NITDA) to partner with Uniccon for the commercialization of the Omeife technology," said Vice President Osinbajo as called for further domestication of AI to resolve various challenges across sectors.

"We are living in an exciting time of advanced technological advancement, where the science fiction of yesterday is becoming the reality in products and services of today," added Osinbajo, who was represented by the Minister of Communications and Digital Economy, Prof. Isa Ali Ibrahim Pantami, who in turn was represented by the Director General, National Information Technology Development Agency NITDA Kashifu Inuwa Abdullahi.

According to Osinbajo, the success of Omeife is a clear indication that Nigerian youths are making giant strides in Al development and other technological advancements even as he assured that the federal government was fully in support of such development as it stands to contribute to national development.

According to him, "government is working on a national data strategy to make data available for scientific use because artificial intelligence is all about data, if your data is skewed, you will get a skewed result hence we must ensure that we have the correct data and a data the fully represents our culture and values."

By 2023, the humanoid robot market is expected to be worth \$3.9 billion to grow to \$9.74 billion by 2026 a more optimistic projection is \$11 billion. The Uniccon Group is working to leverage this global market potential to improve Nigeria's and Africa's gross development product (GDP).

Humanoid robots are being utilized across sectors, medical fields, hospitality and financial services, energy including managing of power plants; education as tutors; etc. Robots

are essentially being programmed to takeover dangerous and hazardous tasks from humans because robots can work under very dangerous conditions, such as poor lighting, toxic chemicals, or tight spaces; and are capable of lifting heavy loads without injury or tiring; they are increasingly becoming the workers of the 21<sup>st</sup> century.

Humanoid robots such as Omeife are programmed to do much more intelligence-based task; have higher cognition for humanrobot interaction (HRI) and are therefore imbued with cognitive abilities necessary to support HRI for "fulfilling of necessities, capabilities, task, and demand of their human counterparts."

Omeife as a Service (OaaS) is being programmed to deliver solutions across multiple sectors allowing its software or hardware component to be deployed in the corporate service industry in similar manner in which it could be deployed in a factory environment.

"We need to encourage our indigenous African technology by encouraging our people to be digitally visible and get the data available for the artificial intelligence to use to take decisions that suit us"

"Most of the robots we have are not African so we are excited to see Omeife today with African data built and looking African because this will help us to boost our technology locally and to promote our culture and values because if we say we are going to use what is built somewhere, it will be difficult for us to benefit from the artificial intelligence," the Vice President told his audience in Abuja.

The Ugandan High Commissioner, H.E. Nelson Ocheger, spoke in a similar vein. He said: "Today is a special day; a day of victory for Uniccon and a day of victory for Africa. If Nigeria can do it, Africa can do it. I challenge you to use this innovation to grow the economy of Nigeria and the economy of Africa."

According to the Chairman/CEO, Uniccon Group of Companies, Chuks Ekwueme: Omeife as an AI is applicable to almost every area of human endeavour as it is powered with data that makes and gives it near human resemblance in terms of language, competency, movement, navigation and behaviour using AI and computer vision capabilities.

His words: "Our motivation for Omeife is that Africa has been lagging behind in technology and we keep forcing ourselves to use technology that is not designed for us hence, we came up with the initiative to bridge this technology gap in Africa and start making technology tailored to meet the needs of Africans.

"Omeife brings a lot of value in boosting security depending on the usage if it is surveillance, intelligence gathering, Roboarmy, profiling and lie detection or even in the area of sending robots to missions that are very deadly but with the humanoid in place, all these will be taken care of.

"There are products that will be rolled out from Omeife ranging

#### Omeife can speak your language!

By Lengji N. Danjuma Phd

Omeife has the ability to speak eight languages. How possible, one may ask. But it is. Advances in universal grammar birthed by Chomsky in the last century showed that language can be studied scientifically by generating basic rules of grammar which all human languages encode.

Chomsky talks about human beings endowed with an innate Language Acquisition Devise (LAD) which enables a child to acquire several languages effortlessly in spite of being exposed to inadequate and most times degenerate sentences.

Omeife's LAD is being developed. Given its potential, Omeife will be able to speak several more languages.

But it must be exposed to the natural grammar of these languages. This is one of the main tasks of the Nigerian linguists if they want Omeife to speak Nigerian languages. Expose Omeife to our languages. This will boost language documentation, revitalisation, and maintenance.

The National Language policy could not have come at a better time. Is it Tiv, Kanuri or Ngas that Omeife cannot speak? Fellow linguists, language enthusiasts, translators and interpreters over to you!

Danjuma is Associate Professor of Generative Syntax and Head of Department, Department of Linguistics and Nigerian Languages, University of Jos.

from Omeife as a service, Omeife hardware and Omeife humanoid robot which in total has market revenue worth 6.8 billion dollars across the African market and other parts of the world."

Omeife has the inbuilt ability to speak eight different languages including English, Yoruba, Hausa, Igbo, French, Arabic, Kiswahili, Pidgin, Wazobia and Afrikaans' and is positioned to provide "language as a service for businesses that need to integrate native African audiences.

The six-foot-tall female African humanoid is a multipurpose and assistance robot capable of remodeling business spaces.

A proud Ekwueme said: "Through Omeife and our projects we are happy to play a part in helping businesses and people all over Africa to achieve their fullest potential by providing access to the most innovative technologies for efficiency."

Adding: "[Omoife] identifies and tags humans through face and facial expressions, paying attention to a specific item when required. It identifies objects, knows their characteristics and also calculates positions and distances of objects it sees."

The Uniccorn Group is now focusing to commercialize the technology built for the African setting. This stage needs government and other stakeholders' support in Nigeria and across the continent, Ekwueme explained.

His words: "The challenge now is the commercialization of the technology. We need support from stakeholders not just to commercialize it but also patronage and usage. I'm calling on the government, investors, public sector and industries to see how they can partner with us."

## Chukwudi Obinna Ekwueme: Portrait of a visionary entrepreneur



In 2016, Forbes noted in 'Secrets of Success from 6 Visionary Entrepreneurs' that "successful entrepreneurship is at the core of the American Dream; and entrepreneurs who have cracked the code on success are often enmeshed in the "wow example, customer model and unique practice in culture."

Forbes could well have been inking the pathway for a new generation of visionary entrepreneurs at the heart of Nigeria's burgeoning tech-innovation sector.

One writer noted that the entrepreneurial vision is not about creating new products or services but about creating a better way of doing something that enriches people's lives. Yet another literary take is to see a visionary entrepreneur as one who is able to inspire others and lead them to creating extraordinary services and products by concentrating to motivate them to heights once deemed unreachable. Chukwudi Obinna Ekwueme, Chairman/CEO of Uniccon Group of Companies, cuts fittingly into that description. A serial entrepreneur and astute businessman, he leads a dynamic team spearheading innovative projects including Africa's first humanoid, Africa's first e-commerce platform that integrates the Metaverse and NFTs into its functions, and many more ingenious projects.

Ekwueme manages an umbrella company of subsidiaries with operations in STEM, software development, ecommerce, agro-commodities value chain supply and export logistics, jewelry, as well as international business consultancy and advisory.

In Abuja where the Uniccon Group is based, Ekwueme superintends challenges, opportunities and the unending struggle for business sustainability and charting new directions to get the Group going. "Entrepreneurship in Nigeria is not an encouraging experience," he tells IT Edge News in his office in Abuja.

But he must keep the faith and keep the company on track. He has nurtured the vision of using his company to help businesses and people in Africa to achieve their fullest potential via access to the most innovative and impacting technologies. To achieve this feat, he works with great researchers, innovative tools, and resources to build the African economy.

Ekwueme is revolutionalizing the industry with offerings in the Blockchain, workplace, and communications optimization solutions, marketplace, payment gateways, cybersecurity, cloud infrastructures, e-learning, and e-health management.

A firm believer in STEM, he built a facility housing robotech resources for Robotics, UAVs, IoT, and Data Science for research, training, and projects. As an Industrial Chemist, he is advancing research in Chemistry and Molecular Biology by leveraging Artificial intelligence and emerging tech. Ekwueme strives to put African tech on the global map with these initiatives. He partners with relevant bodies, institutions, and academia to make an impact. He is an ardent researcher who believes research is the bedrock of success.

Chukwudi Obinna Ekwueme's profile offers insight on the power of resilience and determination, and "the amazing impact we can have on the world when we refused to let setbacks diminish our dreams. His ardent passion for making a difference from the community level on the global stage has earned international awards and recognition. He is a recipient of the Peace Achievers Award for Excellence in Technology and Community Development.

## Quick insight into the Uniccon Group through some of its projects



- 1. Omeife: Omeife the first African humanoid robot. Omeife is unique as a humanoid with near-human resemblance, language competency, movement, navigation, and behavioral intelligence using AI and Computer Vision capabilities.
- 2. SFCloud: SFCloud is an advanced cloud computing hardware for VM and cloud hosting. Its flexibility, security, and low latency make it the best choice. We provide data centres with nodes across Europe, the Americas, and Asia. Go limitless with SFCloud.
- 3. Lossless 360 Security: Your Peer-2-Peer platform for cloud security using Artificial Intelligence. Avert website, service downtime, and reputational damage. Gain customer confidence with protection from Data, Spoofing, IP, DDOS, OS, and Server attacks. Be on Guard, Always.
- 4. STEMFocus: Africa's first Robotech facility for STEM research, projects, training, and solutions.
- 5. Ike Igwe Drones: Hybrid, stealth, and multipurpose drones for bird and rodent scare, irrigation, pipeline surveillance, military surveillance, etc.
- SmartAfri: A verified marketplace for African products & talents. Explore African products and innovations on a secured platform, with a safe payment system. Producers, manufacturers, processors, off-takers, and service providers can sell to buyers across the world.
- 7. SmartWorks: An optimized Software as a Service (SaaS) for workflow, communication, doc creation

& management. Hold virtual meetings, and assign, and manage tasks and projects in one place. SmartWorks - Making ideas work with the right tools for better productivity.

- 8. SmartSee: A financial and identity intelligence system for individual and organisational profiling, credit scoring, and risk management. An AIpowered service for financial institutions and investigation agencies. Unveil identities with SmartSee.
- 9. SmartAcad: An EdTech software for immersive learning. It has Learning Management System (LMS) and School Integration System (SIS) to meet the educational and professional development needs of learners. Get ahead of the traditional classroom system to upskill.
- 10. SmartMedic: A SaaS for facilitating operations in the healthcare sector. It has a Hospital Management System to ease coordination of the operations so healthcare givers can focus more on providing healthcare. Manage schedules, tasks, communications, meetings, and ease documentation.
- 11. PayFocus: A B2B and B2C secured, easy-to-use, and seamless payment solution. Get transactions done with a reliable, end-to-end encrypted service. Suitable for individuals, SMEs, and enterprises. PayFocus works on mobile, desktop, USSD, and web-based. PayFocus - payment without borders

# "Omeife has shown that Africa is able to create sophisticated technology" - Uniccon's Ekwueme

Chairman/CEO of Uniccon Group of Companies, Chukwudi Obinna Ekwueme, shares with IT Edge News, Olusegun Oruame, insights on creating Omeife, Africa's first humanoid robot, and why the continent must not miss out on the unfolding opportunities for tech and innovation as well as a humanoid robot market expected to be worth \$11 billion by 2026.





#### What is the motivation for the Omeife humanoid robot?

The motivation has always been to bridge technology gap in Africa because Africa has suffered setback in technology especially regarding using products that are not made for them. We felt that we should begin to think like Africans and design products that are going to meet African needs and that was how it started. We decided to make her a female character, meaning we want to encourage more women in tech and finally we want her to portray Africa's image, culture and heritage to the global community in terms of technology. These are part of the motivations.

#### When the idea for Omeife, humanoid robot came to mind, what were the fears you had as to whether this was doable or not?

First of all, we made our research. We read. We toured around with my team to see what everybody was doing, and got to engage some of these top tech countries and organisations. So, I looked at it, it's no rocket science. These things are just mechanism. If it works for A, it can work for B. So, we told ourselves, all we need is determination. And yes! We had challenges. We were kind of skeptical about the acceptability of this product in the African market because we know we have the problem of Nigeria and Africa not accepting their own but that didn't deter us. We were still committed to prove a concept that we can show sophisticated technology through Omeife and finally we've shown it. The Uniccon Group is into different technologies, and we said why not bring these technologies together to power it in one product of Omeife and let her be an advanced robot. If you watch, Omeife is capable in artificial intelligence, in computer vision, in IoT, and so many other technologies that we have deployed into her. It took a whole lot of mathematical algorithms to get to the level we have achieved and we are very happy that we got to this point that she is now celebrated as the first African humanoid - that is history for us and I believe with the right support and motivation, we would go farther than this.

#### You see Omeife as the convergence of technologies. What would Omeife change in the marketplace?

Omeife first of all would change the mindset of people, that things are possible in technology and technology doesn't need to come from the far west and all that, then secondly, she's going to make access to technology very easy because communication to technology is a pipeline to accessing it. Omeife is famous for speaking African languages, so it means that you'll be comfortable to communicate in your language and also, she identifies the local problems of Africa and provides solution in terms of the Omeife as a Service (OaaS). Omeife as a Service is a program we launched so that she can be relevant without her physical hardware. We can apply Omeife brain, people in South Africa for example; Kenya and other part of the world can be able to use services of Omeife without having her physically. It is going to change a lot of narratives in security and defense because we got the solutions in terms of surveillance and intelligence gathering needed by the army; and also anti-vandalism, protection of properties and life; and we look at medical sector in Africa and also service sector like customer care and all that. There's a lot more Omeife is going to change for every internet user in Africa.

It is obvious that you have been able to drive some level of government commitments at the launch today. Just so that it doesn't turn out to be mere 'political speak,' the Vice President said the country will work with you, the Ministry of Communication and Digital Economy said they will work with you; the National Information Technology Development Agency (NITDA) said they will work with you. What exactly does the Uniccon Group want from government and how can Omeife work with government to make it a better experience?

We can't over-emphasize the support and we need the support. Support comes in different forms and yes, we need the support of the government both in finance and also in promotion because if the government promotes us then we can ride on a very strong backbone and also, we need to commercialize Omeife right now, so we need that backup. It's of no value to us that we designed a robust technology like this and it's not being commercialized. We saw from the presentation today, an opportunity of over 11 billion dollars is in Omeife via our various product lines. You can imagine what the resources will do to the GDP of Nigeria , so it's a project for everybody. Besides the government, the private sector has its role in partnership, backup collaboration and using the service as well as believing in the service. Other

"

We know we have the problem of Nigeria and Africa accepting their own but that didn't deter us. We were still committed to prove a concept that we can show sophisticated technology through Omeife and finally we've shown it.



African countries have their role to play by standing with us too. This project is most rated to protect the interest of not just Nigeria but the entire Africa, We expect fulfillment of government policies. This should not be one of those political statements and promises because it's not something we should joke with.

## What's your projection for Omeife in two years' time, what will give you a sense of fulfillment?

Omeife in two years' time should be a kind of house-brand name in Africa, such that when we mention Omeife to kids they know what Omeife is because they may have encountered Omeife's service in one way or the other or used it because we are going to be rolling out various applications like we have stated in our timeline. Omeife as a service would have become a part of daily routines; and we have the Omeife metaverse and a lot of other things around Omeife that we believe in two years' time would be up and running; and Omeife would have surpassed the 11 billion dollars market projection or be around that figure. That's our expectation.

### The Uniccon Group is a convergence of technologies as a group. Apart from drones, what other solutions do you offer?

We're into general hardware and software; general technology comprising of both hardware and software. We have to put hardware because hardware has been undermined especially in Africa and believe me; hardware has to consume the software. So, we took that bold step to lead that sector and that is what you're seeing in Omeife. Omeife is an application of both software and hardware and you can see how interesting it is, so we can't shy away from the full-blown hardware and software technologies. And behind the hardware and software technologies there are others, so you can say we render software that is why we have cloud servers, we render cloud services and we are building the first African, the largest African e-market platform where 'made in Africa products' can be sold and also digital products. So, for the first time Web 2 and Web 3 are having a handshake. You have an entire convergence of NFTs, metaverse and token and in addition, blockchain whether Binance or Ethereum. But we are going to be independent on our chain and putting the African culture and heritage in our technology because we feel that the people would prefer what is theirs and what represents their culture than forcing themselves into other technology. We are also into full-blown STEM education and of course research and deployment. That is what we're doing; we have laboratories, where we carry out imaging research, AI labs and the rest of that. We have smart products from office automation and we're also a leading company in cyber security, and we have so many other smart products.

#### The Uniccon Group is a convergence of technologies as a group. Apart from drones, what other solutions do you offer?

We're into general hardware and software; general technology comprising of both hardware and software. We have to put hardware because hardware has been undermined especially

#### Special Report



in Africa and believe me; hardware has to consume the software. So, we took that bold step to lead that sector and that is what you're seeing in Omeife. Omeife is an application of both software and hardware and you can see how interesting it is, so we can't shy away from the full-blown hardware and software technologies. And behind the hardware and software technologies there are others, so you can say we render software that is why we have cloud servers, we render cloud services and we are building the first African, the largest African e-market platform where 'made in Africa products' can be sold and also digital products. So, for the first time Web 2 and Web 3 are having a handshake. You have an entire convergence of NFTs, metaverse and token and in addition, blockchain whether Binance or Ethereum. But we are going to be independent on our chain and putting the African culture and heritage in our technology because we feel that the people would prefer what is theirs and what represents their culture than forcing themselves into other technology. We are also into full-blown STEM education and of course research and deployment. That is what we're doing; we have laboratories, where we carry out imaging research, AI labs and the rest of that. We have smart products from office automation and we're also a leading company in cyber security, and we have so many other smart products.

"

It's of no value to us that we designed a robust technology like this and it's not being commercialized. An opportunity of over 11 billion dollars is in Omeife via our various product lines. You can imagine what the resources will do to the GDP of Nigeria.

Once again, congratulations for the feat today. Will you say Nigeria frustrates entrepreneurship or Nigeria

### is a country of 'possibilities' to address challenges?

I must be honest. Entrepreneurship in Nigeria is not encouraging in the sense that there are basic support entrepreneurs need and there are some policies that are supposed to favor entrepreneurship. Like a speaker said today, R&D is very expensive, most times about 13-20% of a country's budget goes to R&D, because you either innovate or you die, and if you don't research how do you innovate? So, we are having a shortfall in that and if the private companies begin to put their hardearned resources into R&D, they are bound to struggle financially, so it's not been easy.

## Will you say Nigeria is good to you as an entrepreneur?

Like I said, it is glaring, that Nigerian policies and budgets are not supportive to tech entrepreneurs. Except there will be a new change, because I want to believe that the government's commitment, which we heard today, will be put into reality and be fulfilled, maybe that will change the narrative, but so far it has not been an encouraging experience. Entrepreneurship in Nigeria is not an encouraging experience.

#### When you started Omeife, did it ever occur to you that you were starting something that will be novel, something that could set a record on the continent?

Actually, before we started, we knew there was no such because at the international robotics conference, you'll hear Sophia or any of those other humanoid robots, none is coming from Africa. Our target was to also come up with ours which is of African heritage. We decided to come up with something that has African features and that will go a long way to tell people what more to expect from Africa in terms of technology. So, we targeted to build the first African humanoid and here we are, that goal was achieved.

#### It was one of the motivations?

Yes, the main motivation was to allow the technology to take off. But all these are technologies we have built in different applications, we put them together and we bridged that gap to build the first African humanoid and we can say for sure, Africa has something to represent her in the global community.

# **10 Things about Omeife**



Africa's first humanoid robot, 'Omeife' was first unveiled 10 October 2022 at GITEX GLOBAL, Dubai World Trade Centre (DWTC), UAE; Africa's unveiling of Omeife happened 02 December 2022 in Abuja, Nigeria.



Omeife is human-like; skilled in language, movement, navigation, and behavioral intelligence using Artificial Intelligence (AI) and computer vision capabilities.



The humanoid robot, Omeife, was created by Uniccon Group of Companies, one of Nigeria's fastest growing technology startups that offers eclectic, innovative technology solutions to businesses and government agencies across Africa.



Omeife is a 6-foot-tall female



Omeife offers language as a service for businesses needing to integrate native African audiences.



Omeife is also a multipurpose and assistance robot. She is programmed to have a deep understanding of African culture and behavioural patterns.



Omeife speaks Pidgin, Yoruba, English, French, Arabic, Kiswahili, Hausa, Igbo and Afrikaans. She is capable of speaking more languages



Chuks Ekwueme, CEO/ Chairman of Uniccon Group of Companies, leads the Omeife Project

(17)



By 2023, the humanoid robot market is expected to be worth \$3.9 billion to grow to \$9.74 billion by 2026 a more optimistic projection is \$11 billion. The Uniccon Group is working to leverage this global market potential to improve Nigeria's and Africa's GDP





Humanoid robots are being utilized across sectors, medical fields, financial services, energy including managing of power plants; education as tutors; etc. Omeife as a Service (OaaS) is being programmed to deliver solutions across multiple sectors.

# Other facts about Omeife

#### Movement

**1. Terrain intelligence:** Knowing the level of ground and stability of itself on the floor, this will help it navigate on non-flat surfaces and maintain good balance.

**2. Position awareness:** GPS for location and State-management for knowing whether the system is standing, walking, talking etc.

**3. Advanced Gestures:** Expression while talking, hand illustrations, smile and other bodily gestures.

**4. Grip:** Ability to size, understand shape and how to hold things with hand.

#### **Conversation**

**1. Realtime understanding:** Active listening and ability to focus on a specific conversation thread as its happening.

**2. Multilingual:** Ability to switch languages and interact with the specific gestures.

**3. Native Accent:** Pitch and Vocabulary detailed pronunciations of words, sentences and even phrases.

### <u>Vision</u>

**1. Face detection:** Identifies and tags humans through face and facial expressions.

**2. Subject focus:** Paying attention to a specific item when required.

**3. Object detection:** Identifies objects and knows their characteristics.

**4. Distance analysis:** Calculates positions and distance of objects it sees.



### **Social Interactions**

**1. Discussion awareness and focus:** Pays attention to a specific person to keep the conversation alive.

**2. Politeness:** Careful and aware of words, phrases, sentences and expressions that are not polite in African cultures.

**3. Safe for kids:** Smooth interaction and not reactive.

**4. Knowledgeable in various fields and always teachable:** Learning pipeline to always improve and understand new things from conversations.

**5. Retention:** Ability to recall, understand old concepts better with new information.

editorial@itedgemail.com











DG, NITDA, Abdullahi; Chairman, UNICCON GROUP, Ekwueme; President, NSE, Enge Babagana Mohammed ( $4^{tt}$  from L) and some top functionaries with the Omeife Built-Team at the launch.





Prof. Abiodun Musa Aibunu (Summit University) in the Middle and Dr. Agu Collins of NITDA (in Suit)



Members of Uniccon Management with Director of Research, NITDA, Dr Agu Collins Agu; and Knowhow Media's Olusegun Oruame



**I** 















Eval Esege and Pearl Denedo (Block Chain Engineers) Uniccin





Some members of media houses: Voice of Nigeria (VON) and News Agency of Nigeria (NAN)









Chief Kenechukwu Ekwueme (Chairman/CEO Coevis World at the left and rep of Cubana













## ALDAPCON seeks speedy passage of Nigeria's Data Protection Bill, says FG memos will drive compliance



The Association of Licensed Data Protection Organisations of Nigeria (ALDAPCON) is seeking speedy passage of the data protection bill into law to provide legal and institutional frameworks for the country's nascent data protection industry.

Also, ALDAPCON commended the federal government notably the Office of the Secretary to the Government of the Federation and the Head of Service for the executive memos compelling all ministries, departments and agencies (MDAs) to ensure compliance with the Nigerian Data Protection Regulation (NDPR) under the supervision of the Nigeria Data Protection Bureau (NDPB).

The Chairman of the Association, Mr. Ivan Anya, in a press conference, said the Data Protection bill when passed into law will address the data privacy and confidentiality of Nigerians, enable effective dataflow and create economic development for the country. Anya said the memos will help drive awareness and practice of data protection in the public service adding that this will also enable data processors and data controllers to have significant clarification of duties.

Speaking on the objectives of the association, Mr. Anya said Data Protection Compliance Organisations (DPCOs) under the umbrella body ALDAPCON as the privacy overseers in the country, focuses on driving data compliance in the industry which include to provide credible and authoritative data protection advisory to government, private and public organisations in Nigeria.

"The data protection compliance model is the only one of its type globally and no other country currently practices what we do. It is called the Public Private Partnership (PPP) arrangement where the supervising authority in this case, the NDPB has delegated some of its functions to the DPCOS to go to business organisations and assist them achieve compliance, this is what exactly we do,"

He said the association is helping to create awareness on the importance of data protection and cyber security as well as the provision of data protection regulation in Nigeria.

He added that ALDAPCON has also provided certification trainings in data protection as well as the implementation and filling of gaps that may arise in the course of an audit assessment of how an organisation is compliant to the data protection regulations or the laws.

He noted that the data privacy sector has recorded significant achievements; adding that the need assessment audit report published early this year for 2021 shows that there has been a significant improvement in terms of compliance within the fintech sector which has been quite remarkable.

The Secretary of the Association, Mr. Abdullaziz Ari disclosed that the Association is coming up with standards to guide compliance in the industry, developing capacity within the ecosystem and most importantly, to create awareness on how to assist the ecosystem comply with the requirements of the regulation.

"Well, for now we try to focus mostly on public and private sectors. The memos will help bridge the gap in the public sector as the private sector has been more responsive in terms of compliance" Ari added

#### Galaxy Backbone showcases datacenter, e-services at Communications Council in Ibadan



Galaxy Backbone (GBB) recently showcased its data center, business e-connect and other offerings designed to enhance digital services across sectors in Nigeria. "GBB is projecting the strength of its fibre connectivity services as a way to connect more people, improve efficiency of businesses and enhance the productivity of their clients," said Managing Director of GBB Prof. Muhammad Abubakar in Ibadan, Oyo state where the company is participated at the 10th General Meeting of the National Council on Communications and Digital Economy.

This year's gathering for stakeholders held with the theme: 'Digital Innovation & Entrepreneurship as a Panacea for Challenges to Sustainable Economic Development in Nigeria.'

Abubakar said GBB provides IT infrastructure and shared services targeting federal government's ministries departments and agencies (MDAs) as well as the private sector.

The publicly owned ICT Infrastructure and shared services company offers its clients services that include: datacentre, cloud and cybersecurity services. Also on its menu are smart home plans (e-Connect services) under which it delivers fibre-to-homes, fibre- toestates and fibre-to-small within Abuja.



## NCC to judiciary: Show more interest in ICT trends



The Nigerian Communications Commission (NCC) is seeking the nation's judiciary to be part of Information Communications Technology (ICT) trends, whose impact has now affected ways that justice is delivered across the world.

The leadership of the commission made the call during a workshop organized for Nigerian judges which started in Lagos on Tuesday with the theme: *'the digital world and the future of adjudication,'* with judges from the federal and state high courts, and appeal courts in attendance. Speaking at the 18th annual capacitybuilding workshop, the Chairman, NCC Board of Commissioners, Prof. Adeolu Akande, urged the legal luminaries to make greater contributions towards ICT development in Nigeria.

While stating the centrality of a functional adjudicatory system as a bedrock for any civilised society, Akande said there was the need to constantly equip judicial officers with the requisite skills for effectual adjudication, especially in the digitized world, where the rate if technology development t is fast ahead of laws.

Executive Vice Chairman/CEO of the

NCC, Prof. Garba Danbatta, in his address, said the Internet comes with several challenges, hence the need for judges to be exposed to the benefits as well as the challenges associated with new technologies.

Danbatta said through the workshop, judges will be exposed to disruptive technologies, the rights of data subjects, and jurisdictional issues in the digital age, which have continued to make the ICT industry a dynamic one.

"Hopefully, this workshop will illuminate these challenges and proffer ways to meet the dynamics of the changing times. I, therefore, enjoin you to freely make contributions and raise issues that would assist the commission in coming up with adequate regulatory measures that would enhance development in the communications sector of the economy. We assure you that every view expressed would be respected and considered in this regard," he said.

On his part, the Chief Justice of Nigeria (CJN), Olukayode Ariwoola, commended the Commission for the annual forum while assuring the telecom regulatory of the commitment of the judiciary to using technology for justice dispensation as well as support a more robust legal ecosystem for sustaining socio-economic growth of Nigeria through telecoms sector.

## Vodacom partners tech startup to make cybersecurity more accessible to businesses

Vodacom Business has partnered with CybSafe to offer its clients and businesses on-demand access to security awareness and training. CybSafe is wellknown for its industry-leading, customisable, behavioural-science based cybersecurity solutions. Now, Vodacom Business clients can download the CybSafe app onto mobile devices and use it to achieve cybersecurity compliance, while improving their employees' security behaviours.

The news comes at a time when Africa's growing networks are increasingly vulnerable to cyberattacks. According to INTERPOL's 2021 African Cyberthreat Assessment Report, the South African economy lost about US \$573 million (nearly R10 billion) in 2016 more than any other country on the continent.



The report goes on the note that, "South Africa had 230 million threat detections in total, while Kenya had 72 million and Morocco 71 million. In South Africa, 219 million detections were related to email threats. South Africa also had the highest targeted ransomware and Business Email Compromise attempts. The exploitation of these vulnerabilities within South Africa was further highlighted by Accenture, who identified that South Africa has the third highest number of cybercrime victims worldwide."

Vodacom's move, which effectively puts cybersecurity at the fingertips of millions, will undoubtedly be welcomed by security professionals across the country. A step above traditional Security Awareness & Training (SA&T), the platform educates, nudges, and provides real-time security support, doing away with the tick-box exercises that have dominated the security industry for decades. Backed by behavioural science and powered by SebDB, the world's most comprehensive security database another CybSafe innovation CybSafe's approach reliably measures and reduces human-related cyber risk.

28

### In Ibadan, NITDA stresses value of collaboration to bridge digital divide



The National Information Technology Development Agency (NITDA) has reemphasized the value of collaboration to bridge the digital divide. The agency also demonstrated its commitment to closing the digital gaps across country by organising a one-day stakeholders' engagement programme in Ibadan, Oyo state.

Part of the agenda was to identify challenges in the state's ICT ecosystem, cocreate solutions through shared knowledge and expertise as well as extend NITDA's services to grassroots stakeholders.

"As the needs of the digital economy ecosystem grow, the agency has striven to respond appropriately. This has been demonstrated in the strategic actions the NITDA has taken in the implementation of critical areas of the National Digital Economy Policy and Strategy (NDEPS)", said NITDA's Director General, Kashifu Inuwa Abdullahi, while giving his opening remarks at the event with the theme: 'Creating Opportunities, Breaking Boundaries: Towards Digitalisation and Entrepreneurial Evolution.'

Abdullahi who was represented by the agency's Director, Zonal Offices Directorate,

Mr. Babajide Ajayi said the quest to deliver outstanding customer services has continually driven the agency in developing strategies and initiatives to boost digital inclusion in the country.

Highlighting some of the people-oriented programmes that have been implemented in consultation with stakeholders, he said the National Adopted Village for Smart Agriculture (NAVSA), the National Adopted School for Smart Education (NASSE), Digital Literacy Capacity Training for Persons Living with Disabilities, ICT Innovation Hubs and a host of other activities have had direct impact on the citizens of the country.

He maintained that through the constant reset and invigoration of the "agency's vision and mission, it has evolved from a highly centralised organisation to a functionally decentralised one with the foundational aspiration of always being close to its stakeholders."

He further stated that, "the objectives of the programme are to offer stakeholders the opportunity to express their views on matters related to the agency's implementation of its mandate, establish sustainable collaborations and consistent channels for feedback and share with stakeholders our vision, regulatory instruments for national development and our journey so far".

Giving his keynote address, the Special Adviser to the Executive Governor of Oyo State on ICT and e-Governance, Mr. Adebayo Akande appreciated NITDA for putting together the stakeholder's engagement programme.

He described the initiative as invaluable and expressed his conviction that the programme would enable stakeholders share ideas together rather than work in silos.

Acknowledging the several policies, regulations and frameworks rolled out by NITDA in the last few years, Mr. Akande stated that the Oyo State Strategic Roadmap follows the same pattern of NITDA's Strategic Roadmap and Action Plan (SRAP).

He said: "when we came in newly, we had to create our ICT policy then move on to digital literacy. We also had to constantly train and retrain a lot of civil servants and a lot of digital transformation has taken place with regards to providing the right ICT infrastructure which led to digital innovation with regards to government processes in the state."

Stressing the importance of collaborations especially between the federal and state governments, he assured NITDA of the state's support.

The Director General of the Development Agenda for Western Nigeria (DAWN) Commission, Seye Oluseye in his goodwill message appreciated NITDA for bringing the initiative down to the grassroots.

Describing ICT as the next oil in the country, Mr. Oluseye called for collaborations between the agency and the DAWN Commission.

### Twitter closes African office in Ghana, sack all staff



Twitter appears to have closed down its only office in Africa located in Accra, Ghana after it sacked its entire African staff. The office had operated remotely for over a year.

The sack happened just days after officially opening the physical office in Ghana, CNN reported.

"The company is reorganizing its operations as a result of a need to reduce costs.... It is with regret that we're writing to inform you that your employment is terminating as a result of this exercise," Twitter's director of people services in Dublin, Ireland told its staff in Africa in the email, the CNN quoted. Elon Musk, Twitter's new owner after his \$44bn takeover, has embarked on over 50% cut down on staff worldwide. More than 90% of its staff in India has been sacked.

(29

### Kenya to manufacture \$41 smartphones



President William Ruto has announced that Kenya is set to manufacture the cheapest smartphone in Africa within a year, whose cost will be less than five thousand shillings (about US\$41), Capital News reports.

President Ruto speaking at a Micro, Small and Medium Enterprises (MSMEs) roundtable forum Thursday morning said that having a cheap smartphone will ensure that all Kenyans can access digital platforms for business and accessing government services.

The President noted that they are already working with the telecommunication

sector so as to come up with a cheaper gadget which is capable of doing everything.

"Today the cheapest smartphone is between sh10,000 and sh15,000, we want to see. I want to promise the country that in the next 8 to 12 months we will have the cheapest smartphone in Africa, manufactured in Kenya," President Ruto stated.

The Head of State also announced that his administration is working towards moving about 90 per cent of government services to digital platforms between a period of six months to one year.

The President noted that digitization of government services will ensure that citizens access services at the comfort of their homes. The President also has underscored the importance of technology in upscaling trade in the MSEMs sector.

"We have about 15 per cent of government services in the digital platform, and we want to ensure that between six and 12 months we will have moved 90 per cent of government services to the digital platform," he stated.

#### Data Privacy: FG orders MDAs to comply with Nigeria Data Protection Regulation



By law, all ministries, departments and agencies (MDAs) of government are to comply with the provisions of the Nigeria Data Protection Regulation (NDPR) following a service-wide circular issued by the Federal Government.

Issued 7th November, 2022 with Ref No. SGF/OP/l/S.3/Xll/186, the circular which was signed by the Secretary to the

Government of the Federation, Mr. Boss Mustapha, is to the effect that MDAs should:

1. designate appropriate officers as their Data Protection Officers (DPOs) who will on regular basis advise management on data processing activities of their organization and ensure compliance with the provisions of the NDPR and all matters relating to protection of the privacy, rights and freedom of data subjects;

2. forward the name and contact details of the DPOs to Nigeria Data Protection Bureau (NDPB) for documentation and requisite induction training;

3. appoint licensed Data Protection Compliance Organizations (DPCOs) who will guide the MDAs through compliance framework and file their annual reports with the NDPB;

4. make appropriate budgetary provision for annual Data Protection Audit compliance process and capacity building of Data Protection Officers as well as other staff; and 5. on annual basis, file the report of their Data Protection Audit to the NDPB not later than the 30th day of March of every year.

The implementation of the circular is with immediate effect and any MDA which fails to comply risks hefty sanction including suspension of its chief executive, those familiar with matter told IT Edge News in Abuja.

The NDPR is the main data protection regulation in Nigeria and was issued in 2019.

The National Commissioner and CEO, Nigeria Data Protection Bureau (NDPB), Dr. Vincent Olatunji, lauds government for taking this historic step towards advancing fundamental rights and freedoms of Nigerian citizens and residents particularly in the area of privacy.

According to NDPB's Head, Legal Enforcement and Regulations, Babatunde Bamigboye, "MDAs may wish to make enquiries at the headquarters of NDPB at No. 5 Donau Crescent Maitama, Abuja or visit www.ndpb.gov.ng."



## Innov8 launches Unity Board Lab; adopts board for capacity development, prototyping

Innov8 Hub has adopted the Unity Board for capacity development, and prototyping among other uses even as it formally launches the Unity Board Lab.

Abuja based Innov8 Hub is an innovation startup driven organisation with a mandate to groom generations of innovators, inventors and researchers across board.

Innov8 is a focal point for innovation startup incubation, technology transfer, knowledge and skill impartation, prototype development and fabrication.

Co-Designer of the Unity Board, Dr. Agu Collins Agu announced this in a post this week.

His words: "Some time ago, while on Sabbatical, I was invited for the I-fair Program (www.ifairisraelnigeria.com) organised by the State of Israel as a Technical Mentor to facilitate prototype development for the startups at the Innovate Hub,

"It was a month long intensive program during which I introduced the Unity Board to the program while working alongside the Israeli Mentors from MAKELAB Israel. The Unity Board was well appreciated by the startups due to its flexibility, etc

"I'm proud to inform you that Innov8 Hub under the management of the Israelis is adopting Unity Board



and launching Unity Board Lab named after me," said

"Quite frankly, I resisted the idea of naming the Lab after me since I'm a codesigner but they insisted citing several reasons. While attending the NSE Conference, I was invited to grace the occasion."

The Unity Board was globally unveiled at the GITEX 2018 expo to underscore a major trajectory in Nigeria's efforts at development of hardware computing, notably for IoT.

The Unity Board is an Arduino Compatible Development Board for fast and flexible IoT solutions. It is maker friendly and fully compatible with Arduino peripheral modules making it programmable via Arduino IDE and compatible with all the example codes and libraries for Arduino. It is also compatible with Graphical Programming Environment such as XOD, ArduBlock, Scratch for Arduino (S4A), Minibloq, Modkit, Visuino, Embrio, GraspIO, etc.

## Nigeria Police deploy drones to fight crimes



The Nigeria Police authorities have acquired three high-powered unmanned aerial vehicles (drones) for improved armed surveillance operations to checkmate criminal activities.

According to the Inspector-General of Police (IGP) Usman Alkali Baba, "the newly acquired drones will surely assist the Police in monitoring active crime scenes, coordinating response operations, and providing armed aerial support to officers on reconnaissance operations."

The drones are already being utilised in strategic locations across Nigeria even as the security agency announced that three more UAVs of the same specifications are expected to be further deployed.

The IGP, in a statement signed by the Force Public Relations Officer, Olumuyiwa Adejobi, and available on its Twitter handle: @PoliceNG, disclosed that the acquisition is a further manifestation of its leadership's "determination to integrate the use of innovative technology in the law enforcement duties of the Nigeria Police Force."

The statement further reads: "The newly acquired drones will surely assist the Police in monitoring active crime scenes, coordinating response operations, and providing armed aerial support to officers on reconnaissance operations.

"The 3 newly acquired UAVs are rotary wing aircrafts capable of flying up to an altitude of 1000ft with high operational endurance and capacity of firing at acquired threats and targets from reasonable distances.

"The Nigeria Police Airwing has equally concluded trainings for the operators of the drones in partnership with foreign experts who have been consulted for trainings and maintenance of the drones."

## Orange launches commercial 5G network in Botswana

Orange Botswana is the first Orange affiliate in Africa to launch 5G commercially; The 5G network will be available in greater Gaborone and Francistown, covering 30% of the population from the 11th November 2022; New healthcare, education and security services will be enabled in the country by the 5G technology.

Orange Botswana is the first Orange affiliate to launch 5G, with a coverage of 30% of the population, including greater Gaborone and Francistown. Other cities will follow in early 2023.

This 5G launch will further support innovation and digital inclusion in the country, putting Botswana at the forefront of 5G in Africa and is closely aligned with the government's ambition to leverage Fourth



Industrial Revolution (4IR)

innovation towards transforming Botswana into a knowledge-based economy, leaving no-one behind.

5G, with its ultra-high speed and low latency, will support new disruptive services such as e-health, connected vehicles, connected

cities, real-time gaming, smart homes and learning through VR and augmented reality. It offers a new world of possibilities to companies, innovators and society at large. Orange Botswana introduces new 5G fixed broadband services and mobile data bundles. The offers are available for residential customers, small and medium enterprises and include value added services.

After this very first commercial launch of its 5G services in Botswana, Orange Middle East and Africa intends to maintain its efforts in getting the latest and most advanced technologies in all its MEA countries adding value to local economies and continuously bridging the digital gap within the African populations.

#### INEC insists on electronic transmission of Nigeria's 2023 election results

Technology will drive the outcome of the 2023 national elections in Nigeria as the Independent National Electoral Commission (INEC) insisted on live transmission of results to the INEC Result Viewing Portal (IReV).

"Let me once again reassure Nigerians that there is no going back on the deployment of the Bimodal Voter Accreditation System (BVAS) for voter accreditation. There is no going back on the transmission of results to the INEC Result Viewing Portal (IReV) in real-time on Election Day," INEC Chairman, Mahmood Yakubu, told political parties at a meeting this week in Abuja.

The IReV will allows for real-time transmission of the 2023 elections eliminating dangers of ballot stuffing and stealing that has plagued Nigeria's electoral process for decades.

"There will be no Incident Form that enables ineligible persons to vote using other people's Permanent Voters Cards (PVCs) during elections," Yakubu told his audience even as the All Progressives Congress (APC) expressed concern over INEC's decision.

The party warned the country's unreliable

power supply could undermine the transmission of election results electronically.

APC National Chairman, Senator Abdullahi Adamu, expressed his concern to a delegation of the Commonwealth on a preelection assessment mission to the party's headquarters Abuja.

INEC has cautioned against such worries assuring that the election umpire is taking every step to ensure that technology does fail the delivery of a "free and fair general elections."

# Angola Cables to enhance connectivity and digital solutions in Nigeria through Telcables

The Telcables entity has been established to provide connectivity and digital solutions in Nigeria and West Africa. The Telcables team will work with local network service providers, metro networks and operators to develop and deploy localised ICT solutions powered by the Angola Cables' global network.

Rui Faria, Commercial Director for Angola Cables said that the establishment of the Telcables entity is an important step in promoting agreements with metro and other network and data center providers in Nigeria to offer local solutions that have access to, and are supported by, a robust and reliable global network.

As Africa's most connected network provider in Africa, the company can offer enterprises in the region the capability to



exchange traffic with more than twenty of the largest IXPs around the world and offer scalable connectivity and IP transit to the major hubs of Lagos, Abuja and Port Harcourt as well as several international traffic routing options to South America and the USA and also low latency IP Transit to destinations such as Lisbon and London.

Faria said that through the Telcables

brand, customers in Nigeria and West Africa will be able to select their preferred international connectivity options through dedicated or multiple links as their business or enterprise may require.

He said that through partnerships with international and Nigerian entities, connectivity can be greatly enhanced in the country. "Nigerian companies will be in a position to connect to the ultra-low latency subsea cables of both WACS and SACS which provides express Western connections to New York, Miami and Sao Paulo as well as secure high-capacity traffic options from Lagos to Lisbon and London. Latencies between Lagos and Fortaleza in Brazil have been reduced to -114ms, while data sent via Lagos to London is -97ms."



Abuja to host Spark Africa - largest tech gathering, startup expo on the continent



Abuja, Nigeria's administrative capital, will be playing host to Spark Africa, a technology expo and gathering of tech enthusiasts and stakeholders with the aim of promoting indigenous African talents and

#### innovations.

"We are enthusiastic about the success of the expo holding on the 28th of January at the renowned International Conference Centre, Abuja, and we hereby call for the participation of all tech entrepreneurs and enthusiasts, as well as the partnership of all relevant stakeholders from the private and public sectors to join us as we create such an ecosystem that empowers indigenous innovation and talents," said Convener of the event and CEO of Spark Africa, Nnaemeka Clinton, during a press briefing.

According to him; "Nigeria has over 30 million people with viable ideas, about 10,000 startups and over 200 of these startups are fintech.

"Most tech events in Africa and Nigeria specifically do not solve the issue of helping our unique talents with viable tech ideas translate their ideas to startups.

"The Africa Technology Expo, the largest tech gathering in Africa is different, this year's debut edition is aimed at converting over 2000 ideas into real startups and businesses."

With over 4000 people participating, Spark aims to have about 1500 2000 of all participants go through the Startup Aisle where the Nigeria Internet Registration Association (NiRA), Corporate Affairs Commission (CAC), National Information Technology Development Agency (NITDA)

"The Africa Technology Expo is unique and the first of its kind.... An innovation that truly deserves every accolade, partnership, and spotlight it gets" The Microsoft Africa Azure Head said in a launch briefing.

He added: "With all of these and more, we are achieving and promoting non-oil exports, intercontinental free trade amongst African countries and the "Come with an idea and leave with a business initiative, one that is pivotal in creating a nurturing ecosystem and enacting the recent Nigerian Startup Act."

## Nigeria scales up connectivity for varsities and MSMEs as Pantami launches new broadband support By Jeremiah Unom, Abuja

About 18 higher institutions and 20 micro, small and medium enterprises (MSMEs) are first-phase beneficiaries of the Federal Government's Provision of Broadband Infrastructure for MSMEs and educational institutions across the country as well as the distribution of ePads at an event in Abuja Thursday that also featured the public presentation of the book 'Skills Rather than Just Degrees' authored by Minister of Communications and Digital Economy, Professor Isa Ali Ibrahim Pantami.

Each of the institutions would have limitless access to broadband infrastructure valued in excess of N400 million to significantly impact positively on learning and research. The initiative will help to kit up MSMEs allowing them to improve on their business goals and enhance their sustainability. According to the Small and Medium Business Statistics Report for 2020, Nigeria has up to 39.3 million MSMEs. Before COVID 19, these businesses contributed 46.7% of the country's GDP. By implication, Nigeria's MSMEs account for half of the country's GDP. They make up 96.7% of businesses in Nigeria justifying the need to empower them with connectivity and other digital tools, List of the 18 educational institutions



- 1. University Of Lagos;
- 2. College Of Education (Special), Ibadan;
- 3. Obafemi Awolowo University, Ile-Ife;
- 4. University Of Nigeria, Nsukka;
- Federal University Of Technology, Owerri:
- 6. Nnamdi Azikiwe University, Awka;
- 7. University Of Calabar;
- 8. University Of Benin;
- 9. University Of Port Harcourt;
- 10. Ahmadu Bello University, Zaria;
- 11. Bayero University, Kano;
- 12. Umaru Musa Yar'Adua University, Katsina;
- 13. Borno State University;
- 14. Abubakar Tafawa Balewa University, Bauchi;
- 15. Gombe State University;
- 16. Federal University Of Technology, Minna;
- 17. University Of Ilorin and

#### 18. University Of Abuja

List of the 20 MSMEs

1. Kantin Kwari Market, Kano, Kano State;

- 2. Central Market, Lafia, Nasarawa State;
- 3. Mandate Market, Ilorin;
- 4. Jos Main Market, Jos, Plateau State;
- 5. Jimeta Central Market, Yola;
- 6. New Market, Gombe;
- 7. Monday Market, Maiduguri;
- 8. Central Market, Gusau, Zamfara State;
- 9. Central Market, Katsina, Katsina State;
- 10. Bodija Market, Ibadan, Oyo State;
- 11. Oja Oba, Akure, Ondo State;
- 12. Kuto, Abeokuta, Ogun State;
- 13. Ariaria International Market, Aba, Abia State;
- 14. International Modern Market, Owerri, Imo State;
- 15. Main Market, Onitsha, Anambra State;
- 16. Watt Market, Calabar, Cross River;
- Oba Market, Benin, Edo State;
  Swali Market, Yenegoa, Bayelsa
- State;
- 19. Wuse Market, Abuja; and
- 20. Computer Village, Ikeja, Lagos



## Is Jumia on the verge of a shock exit from Nigeria?

Recent developments indicate that all is not well at one of Africa's biggest e-commerce outposts, even as facts on the ground suggest Jumia may be considering exiting its biggest market.

By Kameni Doe



Long touted as the Amazon of Africa after a much-publicised listing on the New York Stock Exchange (NYSE) in 2019, Jumia has since contended with a reversal of fortunes, accentuated by a series of missteps or unforced errors that have crippled its status and left market watchers speculating about a potential exit from Nigeria, its biggest market. As recently as 2016, Jumia became the continent's first unicorn being valued over 1 billion USD. It had equally seen a rapid expansion of its services to over 15 countries in Africa. However, after a highly subscribed Initial Public Offer (IPO) on the NYSE that later went south after a bashing from Citron, a USbased equity intelligence research company (which described the filing as a fraud and the company's shares as worthless), it has been a seeming trajectory of grace to grass for Jumia.

But how did it all go wrong for this e-commerce giant?

In analysing the Jumia debacle, it is important to situate the fact that the company, from inception, has been a loss-making entity. Jumia is yet to turn profitable, despite over a decade of huge financial investment and massive expenditure in marketing and overheads in Nigeria.

Considering the fact that Nigeria remains the biggest contributor to its revenue profile, one can only imagine how it has fared in other African countries in which it is operating. In November 2019, Jumia announced the suspension of its e-commerce operations in Cameroon effective November 18 as the company concluded that its transactional portal is currently not suitable to the current environment in that country.

As part of the portfolio optimization effort, Jumia later ceased operations in Tanzania effective November 27, 2019. While its operations in Tanzania provided



many opportunities for customers and vendors, the company said it needed to focus its resources on other markets that can bring the best value and help Jumia thrive.

In addition, the company held that the decision would help it achieve greater success in the future. On December 9, 2019, Jumia suspended Jumia Food in Rwanda, making it the third country in two months as part of a continuous monitoring of the business environment and operating costs in the markets in which it operates. However, it expressed its intention to continue doing business online in those countries on the classifieds portals, previously called Jumia Deals.

From the foregoing, one can detect its ongoing struggles in Nigeria mirror a discernible pattern across other locations in Africa.

More importantly, Jumia's challenges in Nigeria can also be extrapolated from its often-changing business model which sometimes may appear misguided in navigating a peculiar market such as Nigeria.

In 2020, Jumia announced a tweak in its business model to focus more on its third-party marketplace. This saw the company place less attention on its first-party model which involved the company basically buying items and putting it at the disposal of shoppers.

Consequently, the intent was to grow its revenue from the collection of commission on items listed and sold on its platform a move which appeared to have an instant impact. In 2021, Jumia generated more revenue \$24m in Q1 2021 compared to \$23m in Q1 2020 from third-party sales on its platform. However, in what would seem like not being able to have one's cake and eat it, Jumia's first-party revenue dropped from \$12m in Q1 2020 to \$8m in Q1 2021, a massive 35% decline. Although this switch in its business model contributed to lower logistics costs (Jumia's fulfilment costs dropped by 18% Year-on-Year to \$23.7m in Q4 2020 and in Q1 2021, it dropped to \$17.2m), Gross Merchandise Volume (GMV) also took a hit as a result. In fact, average order value declined by 16% from \$35.8m in Q1 2020 to \$30m in Q1 2021 while GMV also dropped by 21% compared to 13% in Q1 2021. Critics have also fingered the Jumia strategy of outspending

Konga, its main rival in Nigeria, as one of the missteps that landed it in trouble. Jumia has spent a humongous sum to

\*One can detect its ongoing struggles in Nigeria mirror a discernible pattern across other locations in Africa, Jumia's ... often-changing business model sometimes may appear misguided in navigating a peculiar market such as Nigeria.





occupy a dominant Share of Voice in the Nigerian market, while not investing as much effort in cleaning up its reputation. The reality on ground, however, shows that while it has consistently spent more than 500 times than its closest rival, Jumia has not seen the massive expenditure result in any meaningful outcome in its acceptability, brand love or trust for the platform among Nigerians.

Closely related to this is some of the unethical shenanigans that have dogged Jumia over the years. After enduring a thrashing of its share value following revelations by Andrew Left, a short seller at Citron in 2019, Jumia confirmed that several class action lawsuits have been filed against the company and its officers in New York over alleged misstatements and omissions in its IPO prospectus.

In addition, Jumia, in the same year, admitted that it had uncovered instances of improper orders placed and subsequently cancelled on its marketplace platform, wrongly inflating its order volume. Some of the improper sales practices, the company said, were carried out by its own personnel in Jumia Force, its network of commissioned agents.

The fraudulent orders generated \$17.5 million in GMV between the last quarter of 2018 and the first two quarters of 2019, prompting allegations that they had been used in padding the company's financial statements filed as part of its IPO. Recently, Jumia was in the news for the wrong reasons once again this year, with over 60,000 units of fake Nokia 105 traced to it which the ecommerce company had already distributed to its outlets in Africa to grow their sales and number.

Reports indicate that Nokia 105 is a marque product from Nokia and highly sought after in Africa. Since the relaunch of Nokia phones, some of its products have been targeted by crooks who clone them and sell at lower prices to beat competition. Checks at Nokia also showed that fake Nokia 3310, the rave of smartphones from Nokia and their most sold brand before it



suffered market eclipse, had popped up in China soon after it was relaunched in 2017, as well as some markets in Asia and Africa, with Jumia believed to have been one of the distribution channels of these fake Nokia phones.

Not long after this development, the company had announced the exit of co-CEOs Jeremy Hodara and Sacha Poignonnec, ex-McKinsey consultants, who founded the company in 2012 alongside Tunde Kehinde and Raphael Kofi Afaedor.

But beyond this, the exit of a number of key investors seem to present the most valid evidence of the shaky foothold of Jumia in the Nigerian market. Added to this is the historical losses that have become a tradition of sorts for it. Jumia has accumulated over \$1 billion in losses since inception in 2012 as it continues to burn through cash in order to stay relevant in the market but without a clear, discernible strategy to turn a profit. Only a fool would have supported the Jumia strategy of burning cash, with over \$221m loss every financial year.

Leadership has remained a major sore point of note too. The vagaries and peculiarities of the Nigerian ecommerce market requires some deep, local insight which has been obviously lacking at Jumia. Indeed, feelers from industry experts suggest that the company's leadership is inexperienced and blindsided, especially with respect to a core understanding of the Nigerian market. But the sacking or exit of two founders and some Management staff of the company equally appears to have come too late.

I had predicted years back that Jumia's fight with Konga in a market that never existed may destroy Africa's potential as a future market to bet on. Naspers and AB Kinnevik, erstwhile owners of Konga, were smart enough to sell to a strong and experienced indigenous company in the Zinox Group. The folks at Zinox at least understand the market, having built a solid reputation of leadership and constant success in the sector for over 30 years and are financially strong to navigate the tough market. Konga pioneered the third-party marketplace structure which Jumia later aped. Also, Konga launched the omnichannel structure which has remained the mainstay of its business model, one that has also been adapted by global e-commerce players such as Amazon and Alibaba, among others. This model has aided Konga consistently take a share of the growing appetite for online shopping, while also allowing it key into the still predominant traditional shopping predilection of the average Nigerian.

Since its 2018 acquisition by the Zinox Group and the subsequent operational merger between it and Yudala, we read that Konga has cut losses by over 45 per cent and also achieved growth of over 800 per cent in the past 18 months. Crucially, Konga's advantageous understanding of the Nigerian market finds further expression in its fusion of an online platform with a growing chain of brick-and-mortar stores including its robust digital logistics, as well as its strategy of retaining a highly ethical, customer-centric approach to the business.

Clearly, there is strong optimism that Konga will survive, despite the encumbrances in the tough Nigerian market, but with Jumia, it would require a miracle. If founders anywhere in the world are unable to turn their company to profitability before exiting, it is near impossible for any corporate genius to restructure it and turn it around except they sell.

Like they say, founders understand the DNA of their companies.

Author: Sonny Aragba-Akpore. Former Information and Communications Technology/News editor at the Guardian Newspaper, was Head, Corporate Communications, NigComSat, and Head, Media & Public Relations, Nigerian Communications Commission



# As we continue the wait for 5G services By Sonny Aragba-Akpore



On September 18, 2022 when MTN carried out what looked like a roll out of its 5G commercial services in Nigeria, it's Chief Executive; Karl Toriola was full of excitement and boasted in a speech before all present that:

"5G will change everything. It will allow us to connect, create, collaborate, and compete in ways we cannot imagine yet. Today we will show you a glimpse of the many possibilities 5G has in store. What is most important is what you and every Nigerian can create with it."

Toriola is certainly one of the choristers in this 5G orchestra performing a hit song even though he can only sing the verses allocated to him according to the song writers and choir masters.

At the well-choreographed event, one of the promoters of the 5G and Executive Vice Chairman of the Nigerian Communications Commission (NCC), Prof. Umar Danbatta, noted, "Today, we are celebrating the outcome of the successful auction of the 5G spectrum, we are celebrating the commercial launch of 5G services in the country. This puts the country in the global 5G space and from today many of you will experience the super speed associated with 5G."

5G project in Nigeria has been laced with so many speeches so much that it has become a very big orchestra with many song writers as we await the services.

As we write today, it's not clear where the services are being received especially when as it appears, only MTN is trying to run a race



two licensees began.

In December 2021, MTN and a little known portfolio company or a Special Purpose Vehicle (SPV) Mafab Communications Limited won the two available lots then.

The auction was done with so much fun fare that made Minister Isa Pantami to giggle with thumbs up as if Nigeria had won major awards like the Nobel, the Oscar and Booker prizes including a Grammy for this "feat".

While MTN paid its \$273.6m license fees in a record time, Mafab wobbled until NCC announced that Mafab had paid its fees. And as MTN announced a test run and pre-launch of commercial services, Mafab said the regulator had granted them another five months to get ready.

And we now realized that 5G is not for rookies. Too many speeches have dogged this 5G in Nigeria. In another few weeks from today, the NCC will carry out another licensing for two more lots at a reserved price of \$273.6m per lot.

With MTN said to be at pre -commercial launch stage and Mafab Communications yet to initiate any of the stages, industry players

are worried that the NCC should have tarried a little while to see the full implementation of the two licenses before beginning a new licensing round as everything appears very slow by the operators than the consumers were made to expect.And this on its own is a major drawback.

Danbatta told the Senate Committee on Finance on September 19,2022 that the Federal Government will generate over N500bn in 2023 fiscal year through the 5G spectrum.

While addressing the committee during the interactive meeting on the 2023-2025 Medium Term Expenditure Framework and Fiscal Strategy Papers (MTEF-FSP) he said the projected revenue would be realised from the auctioning of two 5G spectrums and the bidding process for auctioning of the spectrums. But it's not clear whether the intention of the NCC is guided by the race to generate revenue for the government or provide licenses as parting gift for some vested interests or to enable 5G services in the interest of subscribers in the country who want to have a very good taste of broadband internet for which the National Broadband Plan targets 70%by 2025.?

So many questions are begging for answers especially when two of the already licensed for 5G services are yet to grapple with service provisions.

What is visible is that Nigerians May wait longer than necessary for the much hyped 5G services. No fewer than 13 countries are in various stages of 5G service implementation in Africa. As at May this year 5G services had begun in Ethiopia, Botswana, Egypt, Gabon, Kenya, Lesotho, Madagascar, Mauritius, joined by Nigeria, Senegal, Seychelles, South Africa, Uganda, and Zimbabwe.

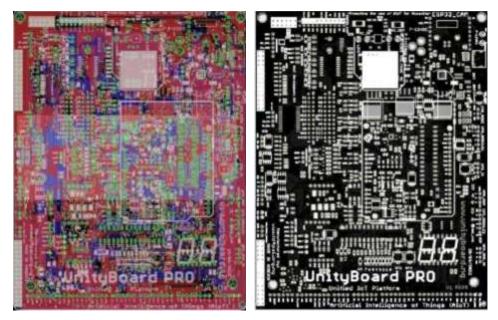
A third of the global population is expected to be covered by 2025. In terms of 5G innovations, and spread, countries like the US, China, South Korea, Japan, Netherlands and the Philippines have some of the biggest rollouts.

And in terms of the number of cities with 5G services, China leads the pack with 356 cities while the US follows closely behind with 296 cities.



## Agu Collins Agu: Unity Board Pro AIoT Platform (Arduino Compatible) ready for manufacturing

By Agu Collins Agu, Phd



The Design of Unity Board Pro AIoT Platform (Arduino Compatible) is finally AI + IoT = AIoT: Artificial Intelligence of Things, Unity Board Pro AIoT Platform is where Superpowers of Innovation Artificial Intelligence meet the Internet of Things (IoT).

By 2025, there's projected to be 42 billion IoT-connected devices globally. It is only natural that as these device numbers grow, the swaths of data will too. That's where AI steps inlending its learning capabilities to the connectivity of the IoT. Without AI, IoT would have limited value. AI can multiply the value of IoT; conversely, IoT can promote the learning and intelligence of AI. An important facet of the Unity Board Pro AIoT Platform is AI being done on the board in-situ, i.e. at the edge or Edge Computing.

By linking IoT with AI and machine learning, we can draw the right conclusions from huge quantities of data and react to these data in seconds.

Unity Board Pro AIoT Platform is an Arduino compatible, affordable development board that combines an ESP32-CAM Module. It still retains all the previous features of Unity Board while adding some powerful new features & specifications:

#### ARDUINO COMPATIBLE

Onboard ESP32-Cam Module, 32-bit CPU @160MHz clock speed, computing power up to 600 DMIPS

Image Classification using Machine Learning

Can be widely used for intelligent IoT applications such as wireless video monitoring

Can run OpenCV as a standalone device

QR wireless identification Facial recognition Video streaming web server, build a surveillance camera, take photos, face detection, and much more. Mains/Grid Voltage (110 - 380 VAC) **Detection for Smart Grid Applications** Solid State Relay 110 -380 VAC @6A for Smart City Applications onboard BME680 for Smart Environmental/Climate Monitoring for Air Quality (VOC), Humidity, Temperature, Pressure & Altitude Monitoring Onboard Energy Harvester MPPT Solar Battery Charger Solar Panel Input/Connector Micro SD Card for data logging etc Multiple Interrupt Sources using Port Expander **OLED** Display Gesture Sensor individual Load/peripheral switching capability for battery conservation Detachable SIM Module Onboard Fuel Gauge with alarm through I2C ADC 5V/3.3V SPI PORT 5V/3.3V I2C PORT 6-DOF ACCEL/GYRO **USB TYPE-C Connector** Crvpto-Authentication Screw Terminals for Industrial Applications etc Passive Piezo Sound Alarm

Capable of doing on-device machine

classification, person detection, etc Smart home devices image upload

learning tasks like image

Edge detection Wireless monitoring Intelligent agriculture

Stepper, Servo and DC Motors drivers and many more!!



Dr Agu Collins Agu, IoT Systems Expert, Programmer, UnityBoard Co-Designer, and mentor to many startups/innovation hubs, is Director of Research and Development (R&D) Department, National Information Technology Development Agency (NITDA).

#### ONE AFRICA. LIMITLESS OPPORTUNITIES.

# A F R I C A Morocco

31 MAY -2 JUNE 2023 MARRAKECH

## RISE OF THE NEXT DIGITAL ECONOMY



**SITEXAFRICA.COM** 

Under the authority of



Ministère de la Transition Numérique et de la Réform<del>e</del> de l'Administration Agence de Développement du Digital

Hosted by

Organised by



Powered by: UNICCON GROUP

