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to usher in new mobile operator

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sale of stake in Vodacom

eCommerce looking up?

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from the Editor's Desk

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Africa: The eCommerce Era Unfolds

ECOMMERCE is assuming prominence in Africa now, just as it has been in other parts of the world. This importance has been down to investment-friendly policies by African governments and a growing population of young, upwardly mobile and innovative people who love to live, work, and play by merely pressing a few buttons on their devices, and bringing the world closer to them.

Analysts believe that it is the geography that holds the future for the growth of eCommerce. That future is gradually crystallizing, going by developments in many an Africa economy. Frost & Sullivan projects the eCommerce market in Africa will be worth $50 billion by 2018, compared to $8 billion in 2013. Currently, eCommerce businesses of various persuasions and sizes are sprouting and investment money is flowing into the sector. Many have said it is a good thing that eCommerce players from the continent have joined the race to appropriate a fair share of the global $1.4 trillion eCommerce market. Our Big Issue, eCommerce looking up?, examines this growing trend.

There is good news coming from CEC Liquid Telecom, the World Bank, Cell C, MainOne and Tigo around the improvements to connectivity following focused investments on infrastructure. Migrate to Telecom & IT Money and read the stories in full. With the exception of the scorecard for mobile money in Kenya, partnerships between and among players in the cashlite space dominate stories in Cash-less World. Wireless World has two interesting stories: Africa's first commercial "white space' network goes live in Ghana. Nigeria's tele-density is approaching the 100 per cent threshold. We bring you a cross-section of some of the personal computers and tablets that were on parade at this year's CES, in Products Review. Chimezie Ndubisi compiled the segments for your reading.

In Business Central, some of the giant strides of Nigeria's Ministry of Communication Technology in nearly four years of its existence are captured by Clifford Agugoesi. The News pages, as in editions before, are gems. How would information technology in North Africa look in 2015? What is Lagos State in Nigeria doing to beef up security in its jurisdiction? When would the Douala and Yaoundé Internet exchange points in Cameroon be completed? When would the $56 million Cote d'Ivoire digital village be completed? Pan to Computer.COM and read about these developments in full.

For the status of the digitalisation scheme in Botswana and Kenya, the nexus between digitalisation and eCommerce and the impact of the Al Yah 3 Satellite on Pay TV service in Africa, flip through the pages of Digital Broadcasting. The new Secretary-General at the International Telecommunications Union (ITU), Houlin Zhao, talks to Olubayo Abiodun about Africa's ICT prowess in Executive Forum. Olubayo Abiodun's article on the Nigerian Postal Service (NIPOST's) potential impact on eCommerce in the country is the subject of Discourse. Our guest in Online Scope, David King, argues trusted data will either make or break telecom firms and point the way to their profitability or failure in 2015.

In Perspectives, the quartet of Riad Hartani, Frank Rayal, Ananda Sen Gupta and Rolf Lumpe provide a compelling analysis on the most significant trends and considerations likely to shape the emerging services and business models and how these impact the African ecosystem. Their article is exclusive to us. In Digital Cars, LG and Mercedes are synergizing on auto-driven cars even as Google plans building Android directly into cars.

Now, in order to make our feedback mechanism more robust, we are glad to inform you that your letters can now be published under 2 Way Com, created for this purpose. Your straight-to-the point contributions may be on previous stories published and or trending industry issues. Letters must not be more than 400 words. Always read ICT stories on the go at www.africatelecomit.com. Both Consumer Scope and Global Scope will return in the March edition.

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Editorial

A Vote for an African Digital Venture Capital Fund

AS African governments finally grasp the importance of ICT to their countries' economic development, it has become imperative for the players within the local ICT ecosystem to adequately support its growth in all ways possible.

The impressive showing of seven African countries on the McKinsey IGDP Index largely explains why investors and venture capitalists are bringing huge investments into these countries. In Kenya a $14.5 billion project was launched last year to build a city to shape African tech businesses – something similar to the Silicon Valley – called the African Silicon Savannah. This city is designed to become a hub for outsourcing of BPO operations and general IT support, as well as helping to foster growing businesses.

Morocco boasts over 100 companies in the country's Technopark. South Africa is among the most economically developed nations in Africa and it is one of the most receptive to foreign investments. South Africa has IT hubs all along the Western Cape province – among which is the city of Stellenbosch – known as the Silicon Valley of South Africa. But growth needs to be accelerated as other African countries are steaming ahead with investment in the IT sector.

Only recently, the president of Ghana promised to build an IT city near Accra with a total investment of about $5.2 billion. The plans involve building a tower which aims to be the tallest in Africa.

These projects serve to develop a robust ecosystem of technopreneurs who will innovate and create jobs and make the tech space more exciting for existing and prospective investors. A noticeable drawback to the growth of the eCommerce space in Africa, however, is the lack of appropriate skills and requisite capital to help raise innovation from abstract to reality.

This is why Africa should get its act together to take advantage of the $1.4 trillion global eCommerce market. Currently, advanced economies are mainly benefiting from the growing online trade. Local investment in eCommerce is imperative because with the bulk of funds coming from abroad to invest in the sector, it is inevitable that there would be huge repatriation of funds, which would not be good for the continent. This explains why analysts favour a re-examination of the eCommerce model, with a view to making it Afro-centric.

We salute the bold steps undertaken by African governments to strengthen the ICT ecosystem in general and eCommerce in particular, such as the plan by Nigeria's Ministry of Communication Technology (MOCT) to increase the Technology Innovation Fund (venture capital fund) from the current $16.2 billion to $50 billion. According to the Minister, Dr. Omobola Johnson, reaching the target of $50 billion will help in creating 35, 000 additional jobs in the economy.

Other African governments should follow Nigeria's example and create digital venture capital funds to be available to local technopreneurs and ICT hubs in order to sustainably grow the ecosystem. Financial institutions in Africa need to modify their SME-lending policies to make borrowing more accessible through friendly interest regimes.

The time is ripe for the African Union to establish an Africa-wide digital venture capital fund, which countries could easily access. The African Development Bank (AfDB) and other stakeholders should buy into this idea so that the expansion of the technopreneur base on the continent is fast-tracked.

Collaboration and co-operation between and among stakeholders is needed to ensure the right policy, legal and regulatory frameworks for the workability of the eCommerce ecosystem, are put in place.

Africa cannot eliminate capital flight due to eCommerce, but it can help itself by putting appropriate measures in place to mobilise essential funds needed for its development from haemorrhaging.

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Samsung Digital Village for Gabon

THE Gabonese government has taken delivery of Samsung Electronics Africa's revolutionary Digital Village, a cluster of connected health, education and administration facilities, fast-tracks the digital development of underserved communities.

According to IT News Online, the Gabonese government, currently seeking to harness ICTs for socio-economic development across the country, has shown keen interest in the installation. Government officials constantly reviewed progress during the development of the Digital Village. Airtel and Gabon Telecom provided connectivity for the project.

The Head of Public Affairs and Corporate Citizenship at Samsung Electronics Africa, Ntutule Tshenye said the Digital Village, pioneered in Africa in 2013, comprised a solar powered generator, solar powered internet school, a health centre, a tele-medical centre and administration centre. These facilities meet the most critical health and education needs of underserved communities, as well as giving communities access to power and internet connectivity - often for the first time.

Digital Villages quickly become multipurpose community centres and a hub of communication and development in communities where they are rolled out.

The solar powered internet schools revolutionise students' learning and become community internet centres and e-government access points after school hours. Entrepreneurs are able to use the admin facilities to gather information and trade more effectively. The health centres double as clinics and healthcare education hubs while and the solar powered generators generate additional power to the Digital Village. Enabling communities' access to internet connectivity has an immediate transformative impact, says Tshenye. This is reflected in a UN report, which states that the internet can play a key role in "mobilising the population to call for justice, equality, accountability and better respect for human rights. As such, facilitating access to the internet for all individuals, with as little restriction to online content as possible, should be a priority for all states".

"Gabon's vision for socio-economic development through ICTs made this the ideal site for a pilot Digital Village in the region," said Tshenye.

The Gabonese government believes such projects will have a significant impact on the communities they serve. Not only do they facilitate instant power and connectivity to isolated communities, they also allow for the delivery of e-government services and empower communities to take charge of their own development.

Samsung's Digital Villages are part of the company's far-reaching African citizenship programme, designed to have a positive impact on the lives of five million people by the end of this year. Digital Villages have also been installed in the Democratic Republic of Congo, Ghana, Nigeria, Tanzania, South Africa and Sudan. Additional Digital Villages will be installed in Ethiopia, Kenya and Zimbabwe this year.

- http://allafrica.com

CEC Liquid Telecom expands fibre network in Zambia

CEC Liquid Telecom Zambia last month announced that it is building a new fibre link between Lusaka and Victoria Falls in Livingstone that will provide both retail and wholesale customers with the most reliable, high-speed broadband connectivity in Southern Zambia. The estimated cost for the turnkey 500km fibre link build and terminal equipment is $5 million. The new link will start in Lusaka, transiting through eight southern circuit towns.

CEC Liquid Telecom Zambia is a joint venture between The Liquid Telecom Group and Copperbelt Energy Corporation PLC (CEC), a Zambian power transmission, distributing and generating company. Its fibre network – spanning more than 5,000km – is the first fully-redundant network in Zambia, providing SLAs at a level not previously experienced in the country. The Lusaka – Livingstone Victoria Falls link will provide additional capacity, increased redundancy and route diversity and will cement CEC Liquid Telecom Zambia's position as the country's most reliable and consistent broadband provider.

At Victoria Falls, the new link will interconnect with The Liquid Telecom Group's fibre network in Zimbabwe providing the company with its third route into and out of Zambia. International access is through the multi-award-winning pan-African fibre and satellite networks of The Liquid Telecom Group, which connect to five different sea cables - WACS, EASSY, SEACOM, SAT3 and TEAMs. CEC Liquid Telecom provides IP Transit, MPLS, backhaul, disaster recovery and data protection services to a wide variety of customers: businesses of all sizes including financial institutions and tourism-related companies, government and academic organisations as well as operators and ISPs.

Andrew Kapula, CEC Liquid Telecom Zambia Managing Director, said: "The Southern part of Zambia, along the economic zone from Lusaka via transit towns to Livingstone, has lagged behind in terms of access to quality ICT services. Our new fibre link will provide much needed capacity in the area. We are investing heavily in Zambia as part of our goal to build Africa's digital future. We believe in the power of connectivity to transform lives and our goal is to connect as many people in Africa as possible." Following completion of the Lusaka – Livingstone Victoria Falls link, expected by June 2015, CEC Liquid Telecom Zambia will continue its build to the border towns of Kazungula and Sesheke to link with Namibia and Botswana.

Tigo partners with Ericsson to improve network quality

CEO, Tigo Ghana, Roshi Motman

TIGO Ghana has entered into a partnership with communications technology and services provider Ericsson to help manage and improve its network quality and service delivery. The strategic deal will enable Tigo extend its footprint nationwide and ensure customer satisfaction by delivering superior network quality using Ericsson's state-of-the-art technology and experience.

In a recent interview with the CEO of Tigo Ghana about its overhead fibre project in Bogoso in the Western region, Roshi Motman, touted Ericsson's capability and capacity saying: "Ericsson is recognised worldwide for their extensive experience in advising and supporting telecom operators to secure network quality and improved efficiency. Tigo Ghana is going to leverage on their expertise to offer our customers a reliable and seamless network experience".

She explained that although like other telecom companies the network is core to their operations, companies like Ericsson are market leaders and renowned for telecommunications services. She believes the partnership will give Tigo Ghana the opportunity to focus on delivering quality experience for its customers and managing the network. "It will also guarantee network quality and optimisation which is crucial for customer experience" Roshi emphasised. Ericsson will manage all maintenance and operations of Tigo Ghana's active network among others.

Benin's ACE connection to be completed in March

THE World Bank has given an update on the expected timetable for the Republic of Benin to be connected to the Africa Coast to Europe (ACE) high speed international submarine cable, which is currently in its second-phase rollout of connectivity to additional countries on Africa's Atlantic coast. The Bank stated that a technical team from Alcatel-Lucent – the consortium cable's main technology partner – deployed equipment in the transmission room of the Cotonou (Benin) cable landing station in late-December 2014, while the cable laying ship is scheduled to reach Cotonou on 24 February 2015, and Benin will be connected to ACE on March 3, quoting Alcatel-Lucent projections.

In parallel, the architecture of the system allowing the switching and routing of international traffic between ACE and Benin's sole existing submarine cable link (to the SAT-3/WASC system), is currently being designed by an international consultant.

Benin's involvement in the ACE consortium (led by France's Orange) is being managed via a local special purpose vehicle (SPV) named Benin ACE GIE, a joint venture which includes local mobile operators and internet service providers (ISPs). The World Bank's latest report says that the operating team at BENIN ACE GIE now has three appointed permanent staff and eight cable landing station technicians.

It adds that the draft licence for operating access to the ACE cable via BENIN ACE GIE is currently under review within the various legal departments of the SPV members, as questions have been raised about legal status: the current legal framework for the SPV remains 'vague', and this status may be 'difficult to reconcile with the conditions for open and non-discriminatory access [to ACE cable bandwidth], as capacity allocation to new entrants could pose problems.' The report continued that once the cable is operational, the legal issues will be further examined to identify the 'most adequate legal status for the SPV'.

Referencing the relatively recent launch of ACE connectivity in another western African country, Guinea, the World Bank added: 'In order to build on the Guinean experience, the project team will travel to Conakry in the second quarter of 2015 to meet and exchange with their Guinean counterparts.'

President of the Republic of Benin, Boni Yayi

Cell C plans to invest ZAR2.4bn in 2015 upgrades

SOUTH African wireless operator Cell C is planning to spend ZAR2.4 billion in upgrading its mobile network as it prepares for the commercial launch of its Long Term Evolution (LTE). CEO Jose dos Santos disclosed that the operator, which completed a Radio Access Network (RAN) upgrade project in Gauteng in December 2014, will introduce similar projects in other metro regions.

Under the RAN upgrade, Cell C replaced outdated network equipment on 1,215 base stations in the Gauteng province, with plans to install an additional 158 base transceiver stations (BTS) in early 2015, in order to increase capacity and coverage in the area.

Meanwhile Cell C has lodged an application in the High Court in Johannesburg requesting a review of telecoms regulator Independent Communications Authority of South Africa's (ICASA's) wholesale mobile termination rate (MTR) regulations, published in September 2014. The operator is seeking to obtain access to the information that led to the regulator's decision to further reduce the MTR tariffs, including "all correspondence between ICASA and the network operators and other parties, ICASA's meeting minutes, reports from ICASA's experts, presentations and other documentation that shows what process ICASA followed and what information it relied on in making its decision".

Dos Santos said in a statement: "Once Cell C has received the full record and has studied it in detail together with its legal advisors, economists and other experts it will decide what further steps to take in this matter." Last September Cell C expressed its disappointment with the regulator's proposed termination rates and accused it of making 'a dramatic U-turn' by stating that "the massive proposed reduction in asymmetry completely eliminates any pro-competitive remedy".

The regulator had revealed its final MTRs for the period 1 October 2014 to 30 September 2017, which give smaller players 'slightly better asymmetry' than the one proposed in its draft regulation from earlier that month.

MainOne commissions N7b Tier III data centre

MAINONE, Nigeria's leading provider of innovative telecom services and network solutions for businesses in West Africa, has commissioned its premier Tier III Lekki Data Centre to address the growing demand for colocation, cloud and disaster recovery services in the sub-region. It said the purpose built facility designed to international TIA 942 standards will be managed under a new subsidiary branded as MDX-i.

The facility was declared open by Nigeria's Minister of Communications Technology, Dr Omobola Johnson, who said that the facility was a notable accomplishment that complemented initiatives required to further drive the realisation of the country's National Broadband Plan. "Availability of world class data centres in Nigeria is critical infrastructure required for the implementation of our Broadband initiatives.

The accomplishment by MainOne is indeed significant as it provides an outsourcing and cost effective model to further drive ICT adoption," she said.

MDX-i's Tier III Lekki Data Centre, the first of many planned by the company in Nigeria, is a N7 billion investment and has capacity for 600 racks.

eCommerce looking up?

The sheer size of the eCommerce market worldwide is staggering. Estimated at over $1.4 trillion, the advanced economies have taken advantage of this while African and other developing economies are beginning to position themselves to get on the bandwagon. **Olubayo Abiodun, Clifford Agugoesi and Chimezie Ndubisi** take a look at this trend

‘African countries experiencing growth’

DG, World Trade Organisation (WTO), Roberto Azevêdo

GLOBALLY, the ICT sector has been growing rapidly since 2003, when member states of the World Trade Organisation (WTO) agreed to deregulate and liberalise telecommunications. Following the agreement, African governments began putting in place policies that would take them to the realm of the digital economy. Indeed, ICT has over the years been contributing a huge chunk to the gross domestic products of these countries.

One area that many see as a potent force for growth in Africa is eCommerce. The Head of marketing for DHL Express sub-Saharan Africa, (SSA), Sumesh Rahavendra, noted last year that the continent “offers enormous growth potential for e-retailers given that online shopping is in its infancy in the region,” quoting his company’s Shop the World report, which showed that emerging markets offered the highest growth potential for the eCommerce industry.

“Globally, it took over 2,000 years for a formal monetary system to evolve and over 600 years for a formal banking system to be implemented. It’s taken over 50 years for credit and debit cards to be introduced and still not every person has a bank account. With all these milestones that have taken place in the evolution of commerce, it goes to show that how we shop (eCommerce), is still in its infancy,” Rahavendra told ITNews Africa.

The 2014 Mobile Media Consumption report by InMobi, which included data from 14,000 users across 14 countries, including Nigeria, Kenya and South Africa, predicted that 83 per cent of consumers planned to conduct mobile commerce in the next 12 months, up 15 per cent from the current figure.

Nigeria’s Minister of Communications Technology, Dr Omobola Johnson, would seem to have concurred with the findings of this report. While speaking with Africa Telecom and IT during the ITU Telecom World 2014, she said that the changing dynamics in the e-Commerce ecosystem was one of the things that had continued to excite her. Citing the specific example of Konga.com, the largest online shopping site in Nigeria, she stated that “this is the kind of thing that is exciting about this industry”. Konga is an online company that was launched in July 2012 with eight staff members and $50,000 investment from two venture capital companies. By Q4 2013 they had moved to an 11, 000 square-meter warehouse.

“In less than three years of their operations they have improved in customer satisfaction. They are the leaders in the market in customer satisfaction, merchandising and innovation. Apart from Lagos operations, they’ve got hubs in South Africa and in China. And again the most exciting thing about them is that they have opened their software engineering centre,” Johnson said.

There are100 Konga software engineers in Yaba which is the local Silicon Valley of Nigeria. These 100 software engineers are focused on developing software and services that are going to be delivered by Konga

Testifying to the massive boom enjoyed by Konga in Q4 2014, Johnson said: “Of course Black Friday, which was a US phenomenon, has now gone global in terms of sales on a single day.” She noted that Konga recorded an unprecedented 1,444 per cent year-on-year revenue. “They processed N50 million worth of orders every hour on Black Friday and their website did not crash. I think that is very important as well,” Johnson said. “They achieved N600 million in revenue on Black Friday and Saturday. 100, 000 items processed and 500 per cent more items sold over the two days of Black Friday. So we are building very robust organisations that have very robust platforms.”

“As technology continues to evolve in the respective African countries, so will the levels of online shopping. It is our opinion that many African businesses will start to skip the traditional ‘bricks and mortar’ formal retail environment, and instead move straight into online shopping space due to the rise in mobile and internet services within Africa,” said Rahavendra.

According to experts, some of the reasons for the success of eCommerce worldwide include convenience, lower price and more choice. In countries where eCommerce is already well developed, the top-performing online product categories were digital content and subscriptions, consumer electronics, event tickets, apparel and accessories and computer software.

African eCommerce, though, has not yet fully taken on these aspects. Experts noted: “Sadly, most discussion about the development of eCommerce in Africa is too much focused on the eCommerce infrastructure: (terminals, internet access, payment gate, delivery, logistics and trust. But before any discussion relating to eCommerce infrastructure, we need to check, like any sound business plan, what the market is and who the customers are that we want to bring online.”

According to analysts, discussing the business model is necessary because “most are confused about what eCommerce actually means. It is not about putting up a website. Anyone can do that with the kind of software that is available today. eCommerce is like any other kind of commerce. The only exception being, it is done online as opposed to being done via a bricks and mortar store.”

In line with the projection of Rahavendra, the ‘bricks and mortar’ formal retail environment is assuming a life of its own in many parts of Africa with the growing penetration of the mobile devices in the mobile ecosystem. For instance, the African Bank of the Year, Guaranty Trust Bank, launched The SME MarketHub. This has been described as Nigeria’s first e-commerce portal for Small and Medium Scale Enterprises (SMEs).

The e-commerce and business directory portal, launched on May 31 last year, is part of GTBank’s strategy to empower and support Nigerian SMEs and also contribute to the growth and development of the Nigerian economy. The portal is designed to enable Nigerian entrepreneurs migrate their businesses online and take advantage of the vast international and local sales opportunities within this space. SME owners will also have access to a wide variety of business tools that will enhance profitability as well as a community that will allow them forge relationships with other business owners.

The Bank’s Chief Executive Officer, Segun Agbaje said: “There is no getting away from the fact that economic conditions remain challenging for small and medium scale enterprises (SMEs) in Nigeria. It is however vital that this integral sector of the economy gets all the support it needs to drive growth and development. E-commerce is widely acknowledged as a powerful tool for fully enhancing business possibilities as it opens up a world of businesses to customers and a world of customers to businesses. The speed, efficiency and convenience with which transactions can be completed are distinct advantages that e-commerce has over traditional means of transacting business. With the introduction of the SME Market Hub, GTBank has provided SMEs an E-commerce platform that allows small and medium business owners create and maintain an online presence and expand their business frontiers to new markets and millions of buyers that are online.”

But the most impactful development in the online business community in Nigeria was the partnership between First Bank of Nigeria and PayPal. Prior to this partnership, it was virtually impossible to buy goods online or pay for any service on the web if you were in Nigeria. This experienced was the albatross in the e-Commerce ecosystem in the country. At onset of e-commerce in Nigeria, various payment options began to emerge to make things easier. Unfortunately, what was lacking was the one payment method for Nigerians accepted everywhere. However, with the strategic partnership forged between First Bank of Nigeria and PayPal, Nigerians now have an online payment solution accepted all over the world.

This partnership is a milestone in PayPal’s Africa growth story, as First Bank customers can now pay and get paid globally; in a manner that is seamless, secure and convenient. Why? PayPal has over 148 million accounts in 26 currencies spread over 203 markets around the world; while First Bank is a leading Nigerian commercial bank with over 750 branches across Nigeria with cards accepted in over 200 countries and on millions of POS terminals and ATMs around the world.

The arrival of PayPal in Nigeria allows PayPal to connect Nigerians to merchants from Asia, North America, Europe and beyond. The discrimination against online transactions from Nigeria is now becoming a thing of the past as Nigerians can finally do online transactions on almost every site because PayPal is a popular global online payment platform

First Bank has made a paradigm shift from the traditional banking practices with another partnership with 3AL Limited for a portal to provide various services including retail, insurance products and e-ticketing solutions. The portal, www.3al.com is, according to First Bank, Nigeria’s first social commerce channel which has social media and e-Commerce capabilities. It has social media features that enable businesses to interact with potential customers while its e-Commerce functionality enables online ordering and payment for goods & services.

Akin Fanimokun, Head of Technology and Services, First Bank, said: “The social commerce portal will be a meeting hub for businesses and SMEs who wish to showcase their services online; shoppers who desire to buy goods at discounted prices and individuals who love interacting and networking with friends and loved ones from all locations in Nigeria and globally. The portal is

Head, Marketing, DHL Express sub-Saharan Africa, Sumesh Rahavendra

the first of its kind in the industry, combining the power of social media and e-Commerce. It offers businesses access to display their goods and services on the web at no cost to them; retailers and buyers can comment on items displayed as well as have live interactions with merchants on particular goods and services.”

The CEO of 3AL Limited, Oladapo Okupe, said: “The portal will totally revolutionize retail business in Nigeria and Africa enabling consumers to interact with merchants efficiently and in a secure manner. As a proudly Nigerian initiative, 3AL Limited is excited with this opportunity to assist in the growth and empowerment of businesses and we are proud to have First Bank as a strategic partner in empowering Nigerians to grow their businesses, reach their goals and achieve their dreams.”

First Bank says, the portal enables businesses set-up their online store, upload their products and interact with potential consumers. Online payment is processed by First e-Connect, a robust payment gateway deployed by First Bank which enables secure payments for goods and services through the use of all payment card types issued in the market today as well as enabling online ordering of products which will be delivered to the doorsteps of customers.

Taking e-Commerce to a new height, a mem-

ber of the Nigerian Stock Exchange (NSE), Afrinvest Securities Limited, introduced the Afrinvestor.com, a website that allows individual investors as well as institutional clients to trade Nigerian stocks and other investment products online, using their personal computers and other smart devices.

Charles Egbunonwo, Managing Director of Afrinvest Securities Limited, said the launch of the online trading platform was a great initiative in e-commerce. "Afrinvest has always placed a premium on the use of technology as a business enabler, and the introduction of Afrinvestor.com is to empower clients to take more control of their investments, supported by sound investment advice and professional guidance," he said.

"With Afrinvestor.com, our clients and investors will not only be able to initiate and execute trade online; they can also view (and edit) their account information and portfolio performance, access a wealth of in-depth equity research as well as market data and intelligence on companies, key sectors and the broader Nigerian economy, all from the comfort of their homes or offices."

On February 26, 2013, Silicon Africa published an article headlined Africa e-commerce: Beyond the Hype, by Mawuna Remarque Koutonin, which was an attempt at summarising the state of ecommerce in Africa. The report said: "The oldest and most successful African eCommerce company is eShopAfrica.com, from Ghana, started in 2001, selling arts and crafts from Ghana, Ethiopia, Zimbabwe and Mali to consumers in USA, and UK. Products are made in Africa, and sold to fat-wallet middle class consumers in developed world, who can pay with credit card, Paypal and can access Internet at any time.

"The second most successful African eCommerce company is Skinny laMinx, from South Africa, which sells highly designed crafts to consumers abroad. 80 per cent of Skinny la Minx sales come from USA and Australia. To accelerate their growth, they moved their shop to etsy.com, and recently opened an offline boutique in central Cape Town, at 201 Bree Street.

"The third most successful African eCommerce is again a craft company, Rwanda Partners, which sell hand-made baskets and jewelleries from Rwanda in the USA market. I love Rwanda basket, and the quality of their products. Obviously, the handmade and crafts segment is the most successful eCommerce segment in Africa …"

The report went on: "We can conclude from above that except the Entertainment segment (online movie and Pay TV) which have Africans as customers, the only successful ecommerce in Africa are targeting foreign customers.

"There are now hundreds of other websites claiming to bring African retail online. But how could they? Most of them don't make any money or are losing money, stated the report.

What are the factors driving eCommerce? The head of http://www.kaymu.com.ng/ sites in 16 countries across Africa, Elias Schulze, said eCommerce was now one of the key and arguably the leading enabler for growth within the consumer sector across in the region.

"We anticipate various adoption rates based upon how quickly Internet penetration deepens, education levels grow, GDP per capita shifts and existing retail backbone shifts," Schulze said. "Overall, we shouldn't be surprised if significant portion of retail, and perhaps the majority in key markets, is captured within e-commerce by 2020."

Schulze's forecast is in line with expectations of other investors in the eCommerce sector in Africa, said a senior research analyst at Ovum, Thecla Mbongue. Ovum's Digital Africa Survey 2014 reports that 46 per cent of the poll's respondents believe that eCommerce will be the most important digital service generating increased revenue for African industry over the next five years. "The increased level of data connectivity, mobile financial services and usage of smartphones will boost traffic on e-commerce platforms," Mbongue said.

In February last year, www.siliconafrica.com reported: "The African Development Bank says: 34 per cent or 313 million Africans are now middle class (living on $2-$20 a day). Most of this so called $2-a-day-middle-class is located in North Africa. Tunisia ranks top with 45.6 per cent of its population falling into the middle class category, followed by Gabon (37.8 per cent), Egypt (31.6 per cent), Botswana (29.3 per cent) and Algeria (27.3 per cent). At the bottom end, Liberia is the country with the smallest middle class – only 1.9 per cent of its total population."

The real African middle class' monthly revenue is about $800 a month. The reasoning is that with more money in the pockets of the middle class comes a corresponding appetite to make purchases, even of items that are not needed. Also, the cash-less initiative, whose objective, among others, is to achieve financial inclusion of citizens, embarked upon by many economies on the continent, is providing impetus for the adoption of eCommerce.

Senior Research Analyst, Ovum, Thecla Mbongue

Peter Karaszi argued in a recent article: "The eCommerce boom is limited by the fact that consumers are interested in physical contact with the products on offer. eCommerce winners will be those retailers who deliver a compelling shopping experience in all channels – and particularly for products with 'physical connection. Personalisation will be another strong trend in 2015.

"Websites, web shops, e-mailings and other forms of digital marketing are becoming more targeted. The presentation and the offering will become more designed for individual customer preferences, behaviours and purchasing power - all in order to maximize sales, profit margins and customer satisfaction. Indeed a very interesting year to look forward to for everyone in the eCommerce industry."

A preponderance of young, creative and passionate entrepreneurs, who are deploying all manner of social media to air their propositions for businesses also fuel eCommerce. Competition between and among web designers has reduced the price of websites, making them much more affordable now than before.

Web businesses in Africa are benefitting from formal and informal sources of financing both in forms of foreign direct investment as well as local direct investment. Banks are reluctant to lend to SMEs. However, analysts say the bulk of financing is skewed in favour of offshore investors. As reported by Forbes, $500million eCommerce platforms so far have emerged in Africa and the Middle East region. Global consulting firm McKinsey estimates African eCommerce sales will reach $75 billion by 2025. Souq.com and Jumia, by international standards, are not shallow-pocket start-ups. They exhibited guts to get to where they are. Both of these emerging ecommerce leaders are being bankrolled by smart money from their respective regions and from the West.

Souq.com recently attracted $75 million from South African media giant Naspers, which gave it a valuation at the time of $500 million. Tiger Global's venture-capital arm, led by Lee Fixel and Scott Shleifer, is an investor in Souq.com.

Jumia backed by Rocket Internet recently received €120 million ($150 million) in funding, giving it a valuation of €445.0 million or about $550 million. Yuppiechef secured $100 million investment from Tiger Global.

7 African countries with booming eCommerce markets

ECOMMERCE is at the epicentre of Africa's thriving economy. With internet penetration rapidly spreading across the region, this represents a huge potential which has hitherto been untapped. Indeed, Africa is a burgeoning and largely unexplored consumer market.

According to McKinsey, consumer industries in Africa are predicted to grow by over $400 million in 2020.

Below are the top seven countries in Africa where iGDP is significant and why it is in the spotlight for investors and venture capitalists.

Senegal:

This country leads the pack in Africa with an iGDP of 3.3 per cent. Initiatives like the Jjiguene Tech Hub – Jjiguene means 'woman' in Wolof – are designed by women for women. It aims to help women enter the world of IT driven businesses. The potential for this initiative has been recognised by a number of investors including IT giant Microsoft.

Kenya:

Close on the heels of Senegal is Kenya, with an iGDP of 2.9 per cent. The previous president of Kenya launched a $14.5 billion project earlier this year to build a city to shape African tech businesses – something similar to the Silicon Valley; called the African Silicon Savannah. This city is designed to become a hub for outsourcing of BPO operations and general IT support, as well as helping to foster growing businesses.

Morocco:

The country is growing fast and is well-positioned to become Africa's financial centre. With projects like Casablanca Finance City and Casablanca Technopark, it is not surprising that the country's iGDP is 2.3 per cent. King Mohammed VI of Morocco is on his way to realising his dream of making Casablanca the financial hub of Africa and attracting investment to help companies tap into the huge Franco-African market. There are over 100 companies in the Technopark already.

Mozambique:

Mozambique radar is one of the top three African countries with rapid growth. Recent collaborations with China have further enhanced the country's agricultural industry and, in addition to this, real estate and hospitality opportunities are abundant. It is among the top five economies in Africa which have made significant progress in the IT sector. Mozambique now has an iGDP of 1.6 per cent and this looks set to increase as IT underpins many other areas of growth in the country.

Nigeria:

The country has an iGDP of 1.5 per cent and is also the eCommerce hub of Africa, with sites especially popular among the fashion conscious urbanites that do not shy away from making purchases online. IT is thriving in Nigeria and, apart from multiple technology hubs, there are several accelerators in Nigeria to help start-ups and to facilitate IT based businesses.

South Africa:

South Africa Nigeria closely with an iGDP of 1.4 per cent. It is among the most economically developed nations in Africa and it is one of the most receptive. South Africa has IT hubs all along the Western Cape province – among which is the city of Stellenbosch is known as the Silicon Valley of South Africa – but growth needs to be accelerated as other African countries are steaming ahead with investment into the IT sector.

Ghana:

Though last on the list here, with an iGDP of 1.1 per cent, Ghana is definitely not the least. Only recently, the government promised to build an IT city near Accra with a total investment of about $5.2 billion. Plans involve building a tower which aims to be the tallest in Africa. Apart from the top seven above, Egypt, Tanzania and Cameroon are additional countries in which businesses are thriving and growing. Africa is the second fastest growing region in the world and it is attracting investors across multiple sectors.

-http://ventureburn.com

Power of vision

Co-founder,
JUMIA,
Jeremy Hodara

ACCORDING to Internet World Stats, Africa was home to 167 million internet users in June 2013, representing a 15.6 per cent penetration of the continent's total population. An average world penetration rate of around 34 per cent means that Africa's internet usage has far from reached its zenith.

The African heat is now also providing an attractive environment for incubators. Kenya is one of the African leaders in this field with incubators and seed funds salivating at the country's high mobile penetration rate (around 74 for every 100 people). In addition, mobile subscriptions in Kenya grew 16 per cent between 2011 and 2012, with 99 per cent of Internet subscriptions being on the mobile.

The four players to watch are Nailab, Savanna Fund, Growth Hub and 88mph – all of which have sprung up within the last few years. NaiLab offers an accelerator for early-stage start-ups, which lasts from three to 12 months. The aim is to nurture innovation within the tech industry by offering bespoke business coaching and support for successful applicants. The template for the entrepreneurship programme seems not unlike schemes currently running closer to home, such as Berlin's Start-up Academy.

South Africa, the continent's second largest economy, has distinguished itself as an innovation leader. It has even attracted the eyes of technology giant Google, which has teamed up with African tech accelerator programme 88mph. Through a Google for Entrepreneurs partnership, 88mph and Google provide start-ups enrolled in the 12-week programme with investment, access to a vast network of mentors and local businesses, space at their tech hubs, and a featured spot during Demo Day, a platform to pitch to investors.

Berlin-based incubators have also been eyeing the continent for market opportunities. The usual suspect, Rocket Internet, has been one of the first German incubators to venture to Africa. With a commercial presence in Egypt, Morocco, Cote d'Ivoire, Ghana, Nigeria, Kenya and South Africa, Rocket has shown no timidity in its expansionist ambitions.

This is the first time in the recent history of Africa that growth is not due to raw materials and investors see a string middle class emerging. The other thing that is important for investors is that when they look at Africa is that there are few strong competitors in the market.

Even the smaller fish of the technological ocean have shown interest. Start-up Partners Africa, a new Berlin-based incubator, has set its business sonar solely to Africa. The incubator's CEO is a Rocket alumnus, and former co-founder of the online fashion retail store, Sabunta, before it merged with Kasuwa and rebranded itself as Rocket Internet's Jumia in Nigeria, Leonard Stiegler.

Stiegler and Start-up Partners Africa are the brains behind the new retailer Sunglasses, which launched in Nigeria less than three months before the incubator got off the ground. "We tested and concept-proofed two models in the African market, the first of which was fashion and beauty and the second was sunglasses," Stiegler says. "We are now looking at other models and other markets, specifically Kenya now."

But with his feet firmly on the ground, Stiegeler wisely decided to root his venture's headquarters on European soil. With Berlin as the base for the incubator there is the advantage of working with high-level talent. This gives the necessary confidence and the legal set-up to run these kinds of businesses.

"There is very much a demand from the growing middle class to have quality products both in beauty and in fashion that is currently not met in the Nigerian market or in many other African countries," Stiegeler says. "That means that either they buy things abroad or have other people ship the product in, which is obviously very time-consuming, expensive and tedious."

Whereas in most other markets eCommerce is replacing a pre-existing sophisticated network of physical retailers, an underdeveloped logistical framework has prevented physical retail stores from prospering in many African countries.

"Players are not coming into this market fast enough based on various reasons, one of which is that real estate is very expensive. Secondly, to have the same kind of reach that an online company can have in terms of potential customers, it would be very expensive for offline retailers."

The African Version of Amazon 'Will Emerge From Nigeria'

WHEN Amazon CEO Jeff Bezos announced the company's plans for 30-minute delivery drones with Amazon Prime Air in December, it became clear that ecommerce has exciting days ahead.

But Amazon is not the only company ramping up digital business, nor is the US the only region in the game. In fact, Africa may have already stolen a march on personal delivery from the air, and Nigeria — specifically the rapidly growing city of Lagos — may produce the next great ecommerce company.

Africa's tech space, which has been defined and accelerated by the mobile phone, is undoubtedly growing as investors scramble toward the continent. Various African countries have leapfrogged fixed-line Internet because of the ubiquity of mobile phones and their networks, and entrepreneurs will likely tackle transportation in a similar way. Why build roads to inaccessible places when the air is a better and increasingly cheaper option?

A current initiative that addresses African drone delivery is the Flying Donkey Challenge, a 24-hour race around Mount Kenya where African companies have to deliver and collect 20-kilo payloads as they go. The winner receives a prize of more than $1 million.

But while these companies face huge challenges in circumnavigating Mount Kenya in East Africa, it's actually in Nigeria, West Africa, where today's challenges are almost unfathomable in scope — and, yet, also where future "African Amazons" are likely to emerge from.

Lagos isn't Nigeria's capital city, but it is by far the biggest in the country. Depending on which statistics you believe, the city's population is between 17 and 21 million, with 30,000 people arriving every week from across Africa.

Delivery in Lagos is utter chaos. There isn't a viable postal service in the city — or the country, for that matter — and by all standards the city just shouldn't work. But it does, and ecommerce companies are proliferating. Some even guarantee delivery of products across the city within 24 hours.

"By 2030, one in every six Africans will be Nigerians, and its economy will have the largest GDP on the continent," says managing director of Africa for global IT consulting firm ThoughtWorks, Betty Enyonam Kumahor. "But understanding how to launch an ecommerce business in Nigeria requires an understanding of the ecosystem and country, and other aspects such as the cost of generators and the relative dearth of the talent pool."

But eCommerce start-ups in Lagos, such as online grocery business Gloo.ng, are facing logistic problems beyond buying generators. There's also the problems of trying to get through Lagos' terrible traffic and finding addresses that often cannot be found on a map, for example.

Gloo.ng's founder, Dr. Olumide Olusanya, is positioning the company as Nigeria's equivalent of Ocado, the very successful UK delivery arm of Waitrose supermarket. Olusanya gave up practicing medicine to become an entrepreneur, and Gloo.ng has expanded rapidly in its short history. It has quadrupled in size in the past year, and in January moved to a 20,000 square feet fulfilment centre in the city.

"We believe the timing of starting our company has been God-sent," he says. "Brick-and-mortar supermarket shopping, which is exceedingly painful on this side of the world, is not yet culturally ingrained, and we will leapfrog the curve of building supermarket brick-and-mortar, as you have in the developed climes where this is an embedded culture."

According to Olusanya, the two biggest brick-and-mortar players have a combined market share of 0.9 per cent, with fewer than 13 outlets in a nation of 170 million people — a significant portion of who are migrating to the middle class.

"The fact that 65 per cent of first-time users become repeat shoppers with us is proof that we are on to something huge," Olusanya says.

CEO, Amazon,
Jeff Bezos

Ecommerce innovation isn't limited to Nigeria, but entrepreneurs around the world are closely watching what is happening there. One such UK entrepreneur is Ivan Mazour, CEO of Ometria, a software company providing an ecommerce intelligence platform to retailers.

"Ecommerce is the next frontier for emerging markets — an unstoppable wave in the evolution of retail," he says. "The MINT countries [Mexico, Indonesia, Nigeria and Turkey] are the future, and Nigeria is the most interesting of this new group. As an economy, it's projected to go from the 39th largest GDP to 13th in the next two decades."

More importantly, Mazour adds, Nigeria is already home to many successful ecommerce giants, including Konga and Jumia, two Nigerian ecommerce companies that have raised $63.5 million and $61 million respectively from global

investors. These two companies provide the inspiration for African entrepreneurs, such as Gloo.ng's Olusanya, as well as other more niche ecommerce companies to create Africa's first retail hub or cluster in Lagos.

"[Ometria was] founded with a focus on bridging the gap between the knowledge that exists in developed markets. As we continue to expand globally, we are looking to Nigeria as a future ecommerce leader in the EMEA [Europe, Middle East and Africa] region," Mazour says.

There's also a wealth of exciting start-ups such as QSR Consult, a company that is developing three new "quick service" restaurants Grubs, Spice Bowl and Kobis in Nigeria. The company's CEO, Tunde Ogunrinde spent 17 years at Burger King UK and returned to Nigeria in 2009.

"There is a greater comfort with shopping online with many Nigerians nowadays due to pricing and non-payment until goods are delivered at the door of client," Ogunrinde says. "It seems that Jumia [and] Konga are leading the market in terms of brand awareness and potential volumes. As confidence grows, this form of buying and selling will increase, but for many of these ecommerce companies, the biggest challenge is logistics and getting products to clients on time."

So, while Bezos dreams of drones and talks hot air, and while some African companies clamber to join the race to Mount Kenya for the Flying Donkey Challenge, it's Nigerian ecommerce start-ups that are doing it right now.

Moreover, they are finding quick success in one of the most competitive cities in the world. We'll see drones over Lagos sooner than we think and probably a lot sooner than the cities in the West.

Moves by African governments to set up venture capital for tech start-ups in their jurisdictions serve to brighten prospects for developments in the tech space and ecommerce sure will benefit. Nigeria, for instance, has raised about $16.2million for this purpose, but the country's Minister of Communication Technology, Dr. Omobola Johnson thinks the fund is inadequate and has her mind fixed on raising this amount to $50million.

CEO, Ometria, Ivan Mazour

Challenges of eCommerce in Africa

CEO, Konga.com, Sim Shagaya

ANALYSTS say the truth of booming eCommerce on the continent is more nuanced. Although it is undoubtedly a long-term opportunity and investors are quick to notice this, currently the market faces severe limitations.

The primary issue is that the market is just too small. Only 26.5 per cent of Africa's over one billion people are connected to the internet, with a recent UN report saying eight of the 10 countries with the lowest levels of internet availability in the world are in sub-Saharan Africa.

Those that are online approach shopping on the internet with trepidation. In South Africa, ecommerce accounts for only 1.3 per cent of the total consumer goods market, compared to 14 per cent in the US and UK, among other economies. Africans are still generally scared of buying online, and are more at home with the use of cash.

"In spite of the well-established long-term opportunities, African ecommerce has been forced to adapt to this current climate. The major example of this again comes from South Africa, where e-commerce platform Takealot had a 2014 that pretty much sums up the state of the market thus far. Despite raising $100 million in funding from Tiger Global, the company was also forced to admit defeat in its efforts to win market share alone and merge with its biggest rival, Kalahari," writes http://thenextweb.com

It went on: "The move was driven by the fact that, without scale, South African e-tailers simply can't compete successfully against the local brick and mortar retailers and foreign companies such as Amazon and Alibaba."

Naspers, which owns Kalahari, has itself had a tough year, realising the need to remove some competition from the market when it closed eCommerce sites, SACamera, 5rooms, Kinderelo, Style 36 and 5Ounces in February, 2014.

It is not just South Africa where companies are facing these issues. Given the size of its population and growing middle class, Nigeria is generally deemed as one of the most lucrative eCommerce markets in Africa, and has seen a number of major players launch online stores.

Chief executive officer (CEO) of Konga.com, which itself is partly funded by Naspers, Sim Shagaya, said there is still a long way to go to make eCommerce a truly profitable business on the continent.

"The biggest challenge to the growth of e-commerce in Africa is the lack of proper operating systems to coordinate the vast resources the continent has to offer," he said. "For example lack of robust and scalable logistics infrastructure, particularly small-parcel and final mile to consumer – both of which are essential prerequisites for any retail eCommerce business."

Shagaya said Konga.com was acting to overcome these issues itself, not least by building its own delivery fleet to overcome the logistics problems that hindered its growth. The main way to help grow the sector, he said, was to focus on delivering exceptional customer service.

"This is what would make customers come back the next time they need to purchase an item, we must show how e-commerce is value added for them," he said. "For us at Konga, growth came on the back of us listening to the customer."

Companies in in eCommerce in Africa are advised to focus as much as they can on obtaining new customers and investing in new markets to make themselves more profitable later on. This explains why Jumia has thrown so much money at expanding across Africa, and why Takealot and Kalahari have decided that together they are stronger in terms of the market share they control.

But some investors are put off by the need for deep pockets and long-term thinking. Founding partner of South African investment firm Silvertree Capital Paul Cook said his company had invested in many e-commerce businesses but wished it had not. "It is definitely the way that retail will be moving, but it is not necessarily the most attractive investment area," Cook said, saying so many companies were throwing around so much money that it was difficult to go head-to-head.

Though Cook advises focusing on niche eCommerce in order to build a successful business without the need for billions of dollars, this advice is being disregarded by the likes of Jumia and Naspers. For the time being, Africa's eCommerce giants are involved in an expensive land-grab, and must hope the projections of long-term riches are correct.

As CMO at Africa Internet Accelerator, (a start-up incubator) Remo Giovanni Abbondandolo explains in an interview, there are many opportunities in the eCommerce space in Africa. However there are also a few challenges that need to be taken into account. "First of all, it is very hard to find people with the right skills and expertise necessary to work in the online space, in particular for specific positions such as IT, Business Intelligence, Online Marketing and UX.

Second, the internet penetration – even though growing it's still very low, as well as data in Africa are still relative expensive compare to other countries in the world," Abbondandolo said.

"Third, the typical eCommerce challenges are even more relevant in Africa. Users are afraid to shop online as they don't trust the websites easily, as well as they don't feel safe to do an electronic transaction e.g. with credit card prior the delivery of the goods.

"Moreover, access to products can also be challenging in countries where there is insufficient product selection as the import duties are very high.

Last, but not least, the lack of infrastructure has had an impact on business operations, such as logistics and delivery as ensuring timely delivery in every area it's not easy, considering the ‚distribution of the population, which in Africa is concentrated in a few cities/countries" he added.

Setting up businesses on relatively uncharted territory is not without difficulties. A common problem is sourcing top-notch talent with the right skills. "It is no surprise that employees on the ground in Africa might not be as technically skilled as equivalents in America simply because so far the online market is still very nascent," acknowledges Stiegeler. "But we train local employees on the ground with the help of experienced professionals who have been in the business for years."

While some skills may be absent in the local workforce, entrepreneurial spirit is certainly not in short supply. Rocket Internet said that the company found in Africa that everywhere it went go it saw "unbelievable talent who are just waiting for an opportunity to become entrepreneurs with young companies in the online world and not just in the big banks or the government".

Emerging businesses also need to direct a lot of attention to the logistical side of operations. "There is not a well-established delivery setup as in Europe – addresses are not always well defined", states Stiegeler, referring to his incubator's foray into the online optical industry. "Door-to door delivery is more challenging here than it is in Europe. So we create our own expertise and build our own fleet."

CMO, Africa Internet Accelerator, Remo Giovanni Abbondandolo

Even before a product is delivered, there are additional complexities in payment during the online ordering process. Credit card and bank penetration is lower in many African countries compared to Europe or the US; many people prefer to or can only pay with cash. Start-up Partners Africa, as well as Rocket Internet, has avoided this problem by offering the option of cash-on-delivery.

On the whole, monetary reward is never the sole motive for entrepreneurs in emerging economies. The excitement about the general growth prospects are palpable, creeping into every aspect of everyday life "It's very exciting to be here," Stiegeler says. "There are a lot of things happening on the ground in terms of the developing eCommerce environment. You feel that kind of excitement. You feel it in everyday interactions. I encounter people from all walks of life, whether it is somebody from Rocket Internet setting up a food delivery business, to a plumber who is building a business here welcoming the many international companies coming into the country."

PayPal, Microsoft partner on mobile payments

PAYPAL is updating its card reader – called PayPal Here – to work for the first time with devices running Windows, as part of a mobile point-of-sale alliance with Microsoft.

Devices including the Surface Pro 3 tablet and Lumia 830 and 635 smartphones, which all run Windows 8.1, will soon support the PayPal debit and credit card reader.

Microsoft will offer a complete package (Surface tablet, PayPal Here app and card reader and POS hardware) through its own stores later this year.

PayPal Here, which was launched in 2012, already supports iOS and Android.

Last month also saw the unveiling of a rival mobile point-of-sale line-up between Samsung and Verifone based on Android. PayPal and Microsoft's pitch is more at small businesses, while the rival partnership is more intent on hitting large retailers.

A PayPal Here SDK is already available for select Windows developers to embed in their apps. These include Canvas and iConnectPOS who aim to introduce new software in the coming months. Previously, the payments firm ran a trial for iOS and Android SDKs, which will officially launch later this month.

Finally, and separate from its Microsoft alliance, PayPal will add EMV (chip and PIN) capability to its card reader in the US later this year, working with Android, iOS and Windows devices. The US is a relatively later adopter of EMV technology, having previously stuck with magnetic stripe technology for a long time. PayPal Here already works with EMV cards in the UK and Australia.

PayPal says that the new reader, due later this year, will allow EMV and contactless transactions via Bluetooth and will support "any chip card, magnetic stripe card, or contactless payment form, including mobile wallets."

WorldRemit and MTN agree major mobile money partnership

ONLINE money transfer service WorldRemit and telecoms operator MTN have signed a global partnership that will enable WorldRemit customers to send remittances instantly to MTN's Mobile Money customers.

The agreement extends WorldRemit's position as the leading provider of remittances to Mobile Money users (also known as mobile wallets) at a time when the technology is experiencing rapid uptake, especially in Africa. MTN Mobile Money is increasingly an important part of MTN's service offering, and the partnership with WorldRemit further strengthens the operator's position in cross border remittances.

Founder and CEO of WorldRemit Ismail Ahmed said: "Mobile Money is rapidly displacing cash as a way of receiving money from friends and family abroad. WorldRemit's partnership with MTN allows our customers around the world to send money instantly to MTN Mobile Money users.

"As well as being fast and convenient, MTN Mobile Money is reaching millions of people who don't have bank accounts, giving them access to a variety of life-enhancing financial services including savings and insurance schemes."

MTN Mobile Money is currently used by 22.2 million customers in 16 countries across Africa.

To kick-start the partnership, MTN's operations in Uganda, Rwanda and Zambia will be added to WorldRemit's list of mobile recipient options, with additional countries following soon after.

"The partnership with WorldRemit is yet another important step in our journey to enable the affordable transfer of monies across borders. Our remittance strategy places the customer at the heart of any offer we introduce as MTN and, working with WorldRemit, we intend to further extend the convenience of MTN Mobile Money to our customers," said MTN Group Chief Commercial Officer, Pieter Verkade.

CEO, WorldRemit Ismail Ahmed

MTN Mobile Money enables users to perform local and international money transfers, make utility payments, save money in their interest bearing mobile wallets, purchase airtime and access a range of mobile financial products.

More than 50 per cent of all WorldRemit transfers to Africa are received in Mobile Money accounts or as mobile airtime top-ups.

goSwiff's mPOS approved for Nigerian banks

GOSWIFF, a global mobile commerce and marketing services provider, announced last month that its mPOS platform has been certified for the Nigerian market to support the government's "Cashless Nigeria" initiative. The Central Bank of Nigeria aims to reduce the amount of physical cash circulating in the economy, and encourage more electronic-based transactions.

goSwiff mPOS will enable merchants in Africa's largest economy to accept card payments in a secure and easy way, using mobile devices such as smartphones and tablets with card readers. The certification is the first for an internationally recognised mobile POS solution and covers both the goSwiff mPOS platform, chosen already by over 50 banks globally, and goSwiff PINPad card reader, specifically designed for harsh mobile environments.

"Certification of the goSwiff solution for Nigeria means that banks can now help local entrepreneurs to start accepting card payments with goSwiff's secure and fully certified platform. With goSwiff's global expertise in mobile payments, banks in Nigeria will be able to roll out a safe and reliable solution enabling merchants to accept card payments", said CEO of goSwiff, Simone Ranucci Brandimarte. "Most banks cannot afford to take the risk with unproven solutions, so we are thrilled that goSwiff can help to accelerate the expansion of card acceptance in Nigeria."

The population of Nigeria is over 178 million, with 34 million cards in circulation. mPOS helps increase electronic transactions and reduce the dependence on cash, whilst extending the reach of the financial services infrastructure also to the unbanked due to the mobile nature of the solution. mPOS facilitates full service agency banking, enabling banks to expand into rural areas and providing a platform for other transactions: loans, insurance as well as other services. People who live in rural communities without bank branch offices are now gaining access to banking and transactions through mPOS applications.

NIBSS, by independently certifying mPOS solutions, is ensuring that these solutions are fit for the Nigerian market. goSwiff's mobile payment platform is matching the local market conditions and will help drive revenues for Nigerian banks.

"Many banks in Nigeria have struggled with POS due to high cost, unreliable connectivity and low staff usage. With goSwiff mPOS solution and expertise on successful roll outs in the emerging markets, these issues are solved," said VP Business Development for Sub-Saharan Africa at goSwiff Rebecca Ayoola. "NIBSS independent certification confirms that our mPOS solution works in Nigeria. We are proud to have been admitted the certificate for our platform."

"We have implemented mobile payment solutions for banks and MNOs across the globe, currently in 25 countries. goSwiff has boosted electronic payments in the emerging markets with great results: Merchants have increased their business being able to accept card payments; banks have generated more revenues with new services; and governments appreciate the increased visibility in the economy", said Chief Strategy Officer, goSwiff, Erik Holst-Roness.

CEO of TITIS Integrated Services Limited, the Support Services Partner of goSwiff for Nigeria, Lare Ayoola said that the policy of the Federal Government of Nigeria to create a cashless society is taking hold. The use of traditional POS (Point of Sale) terminals is becoming a common feature in large commercial outlets. "However, we are confident that the much more affordable goSwiff mPOS terminals combined with their advanced mPOS platform will reach all segments of the market, from taxi drivers to the large logistic and distribution companies, leading to a revolution in the adoption of card payments. We at TITIS are happy and excited to be associated with goSwiff at this time of great opportunity and change in Nigeria," said Ayoola.

Kenyan Mobile money transactions hit sh2 trillion in 2014

KENYANS sent over Sh2.146 trillion shillings using mobile money system in 2014, surpassing the Sh1.8 trillion 2014/2015 national budget.

According to statistics provided by the Central Bank of Kenya, there were 825 million mobile transactions up to November 2014, compared to 732 million transactions in 2013.

Kenyans made an average of 75 million mobile money transactions in 2014, with October having the highest number of transactions at 82 million. Mobile money transaction in Kenya has grown exponentially.

In 2007, the total amount of money that moved across the mobile system, was Sh16 billion. M-Pesa has the largest market share with 17 million active users. Airtel Money and Orange Money have 3.8 million and 2.1 million subscribers respectively.

Equity's Equitel has signed 140,000 users, months before it officially goes live.

Africa's first commercial 'white space' network

US technology giant Microsoft has launched what it claims is Africa's first commercial broadband network utilising 'white space' broadcast frequencies in Ghana, via its 4Afrika initiative. In partnership with SpectraLink Wireless – and in the wake of successful white space pilot tests at universities in Koforidua, Ghana, from May 2014 – the new network will offer students affordable, high speed internet bundles and zero-interest loans in partnership with UT Bank for the purchase of eligible internet-enabled Microsoft, Lenovo, Dell and HP devices.

The Executive Director of the Dynamic Spectrum Alliance, Professor H Nwana, of which Microsoft and Spectra Wireless' parent company are both members, commented: "Having overseen TV white space (TVWS) trials in the UK at Ofcom, I am truly delighted to see Spectra Wireless and Microsoft's move to make TVWS-based broadband a commercial reality in Ghana, a first in Africa. I applaud the Ghanaian regulator, the National Communications Authority (NCA), in granting a commercial licence, which allows use of TV frequencies on a secondary basis as long as TV is not interfered with. This would drive up spectrum efficiency of TV bands in Ghana, and I hope other countries learn from NCA's decision."

Executive Director, Dynamic Spectrum Alliance, Prof. H Nwana

Nigeria's tele-density nears 100% mark

Executive Vice Chairman, Nigerian Communications Commission (NCC), Dr. Eugene Juwah

NIGERIA'S telecommunications subscribers' base grew by 2.4 million between September and November 2014, bringing the country's tele-density to nearly 100 per cent. It grew from 96 per cent in September to 97.8 per cent in November 2014.

According to statistics from the Nigerian Communications Commission (NCC), the country's total connected lines grew from 184.1 million in September to 186.5 million as at November, while the active lines also moved from 134.5 million to 136.6 million within the same period of review.

Tele-density, the number of telephone connections for every hundred individuals living within an area, varies widely across nations and also between urban and rural areas. It has significant correlation with the per capita GDP of the area and is also used as an indicator of economic development.

The quartet of GSM operators in Nigeria – MTN, Globacom, Airtel and Etisalat – continued to dominate the market, recording 182.4 million connected lines and 134 million active subscriptions. It was however mixed fortunes for the Code Division Multiple Access (CDMA) operators. The CDMA technology, which is being championed by Visafone Communications in Nigeria, had 3.7 million connected lines in September but grew to just 3.8 million in November 2014. But the active subscriptions fluctuated, recording 2.4 million in September; 2.35 million in October and 2.41 million in November.

For the fixed wired/wireless operators, it recorded 363, 233 million connected lines but only 183, 555 are active.

While commissioning a base transceiver station (BTS) last year, the Minister of Communications Technology, Dr. Omobola Johnson, said that about 40 million Nigerians still lacked access to basic ICT. The commissioning was one of the several BTS deployed across the South West region by Odu'atel through subsidies provided by the Universal Service Provision Fund (USPF) to connect Nigerians to telephone services.

She said that in the next implementation phase would see more than 200 BTS deployed across the country, giving more than 300 communities with an estimated population of 1.65 million access to ICTs.

L-R: Fmr. ITU, Secretary-General, Dr. Hamadoun Toure, Dr. Cosmos Zavazava and Qatari Minister for Telecoms, Dr. Hessa Al Jaber during the Ministerial visit of Pavilions

L-R: Director Policy, Competition & Economic Analysis, Ms Josephine Amuwa, COO and Legal Secretary, CTO, Lasantha de Alvis and Nigerian Communications Commission (NCC), Commissioner, Dr. Mike Onyia

L-R: Nigeria's Minister of Communications Technology, Dr. Omobola Johnson, Dr. Hamadour Toure and Secretary-General, CTO, Tim Unwin in Doha, Qatar

L-R: Dr. Hessa Al Jaber , Dr. Toure and a UN official during the Ministerial visit of Pavilions

Dr. Toure (l) at the Chadian Pavillion, Dr. Hessa Al Jaber (m), Chadian Communications Minister, Hassan Sylla Bakari Ben and other delegates during the Ministerial visit of Pavilions

Delegates from Comoros in Doha

L-R: Manager Govt., and Regulatory Affairs MTN, Oyeronke Oyetunde, Business/Editorial Director, Africa Telecom&IT, Ms Monique Butt and Nnenna Ukoha of the NCC

Public Relations Manager, Post and Telecommunications Regulatory Authority of Zimbabwe (POTRAZ0), Mrs. Sibonginkosi Muteyiwa presents a souvenir to Dr. Toure at the Zimbabwe stand in Doha

PCs and tablets of CES 2015

The CES events usually saw launches and announcements by several major manufacturers. However, this year, there was an overwhelming number of tablets and laptops. All-in-one (AIO) PC systems and laptop-tablet hybrids by some major tech firms like Samsung and Asus, were also on parade.

While Lenovo and Dell ruled the laptop and tablet segments, other tech firms like Samsung, Acer, and Toshiba also stole some of their limelight with their own devices. Smaller players like Archos and Alcatel showcased their technology under the tablet section. We have compiled a list of all the devices to give users an idea of what they can expect this year.

Lenovo Tab 2 A7-10 & Tab 2A7-30

THE Chinese tech giant launched two tablets, Tab 2 A7-10and Tab 2 A7-30, which are for budget-conscious users.

The Android 4.4 KitKat running devices has already hit the shelves. The devices are powered by MediaTek processors, 1GB of RAM and feature 7-inch 1024x600pixel resolution display.

Some specifications however differ between both the devices.

Samsung ATIV Book 9 2015

THE ATIV Book 9 2015 (also known as Samsung Series 9 2015 Edition) ultrabook, and the ATIV One 7 Curved AIO (also known as Series 7 AIO).

The 12-inch Samsung Series 9 2015 Edition is said to be the thinnest and lightest offering by the firm, with an 11.8mm thickness and a weight of 950 grams.

Asus Transformer Book Chi T300

THE T300 Chi hybrid has a 12.5-inch display and will be offered with either a 1,920x1,080-pixel or 2,560x1,440-pixel screen resolution, along with the Intel Core M.

Billed by Asus as something of a MacBook Air killer, the T300 is a 12.5in tablet with an accompanying detachable keyboard section that allows it to function as a laptop too.

Thinner, lighter, faster and with a higher resolution screen, runs windows 8.1.

Alcatel One Touch Pop 2 tablet

ALCATEL launched the One Touch Pop 2 (10) tablet, which features LTE Cat. 4 network support along with other specifications that make it a mid-range device. The tablet features a 10-inch IPS display, 5-megaixel rear camera, 2-megapixel front-facing camera, 8GB of inbuilt storage, and a bunch of other accessories including a keyboard dock to let users work on it as a laptop.

Dell Venue 8 7849

DELL showcased what it calls the world's thinnest tablet, Dell Venue 8 7849, with a 6mm thickness along with other near bezel-less designed XPS 13 laptops. As for the Android 4.4 KitKat-based tablet, the device features an 8.4-inch Quad-HD (2560x1600) OLED display, quad-core Intel Atom Z3500 SoC, an 8-megapixel rear camera and a front 2-megapixel shooter. It also comes with the Intel RealSense '3D snapshot' photography solution that creates a high-definition depth map to enable measurement, refocus and selective filters with a touch of a finger.

Toshiba Encore 2 Write 8-inch and 10-inch tablets

THE firm launched the Toshiba Encore 2 Write 8-inch and Toshiba Encore 2 Write 10-inch tablets, which are the refreshed versions of the company's Encore 2 tablet lineup from last year. The specifications of the Encore 2 Write are mostly identical to last year's Encore 2 tablets. These include 8-inch and 10-inch 1,280x800 pixels multi-touch displays; an Intel Atom processor; 2GB of RAM; 64GB of built-in storage; expandability via microSD card (up to 128GB), and Windows 8.1 with Bing.

Archos 101 Helium

ARCHOS launched three tablets named Archos 101 Helium 4G, Archos 80b Helium 4Gand Archos 70 Helium 4G. All the tablets come with dual-SIM support, but do not support voice-calling. The 80b Helium 4G and 70 Helium 4G share most of the specifications except the screen size, camera resolution and battery. However, the Archos 101 Helium 4G tablet is the best amongst the three. The tablet includes a 10.1-inch WXGA (1280x800pixel) resolution IPS display and is powered by a 1.5GHz quad-core MediaTek MT8732 processor.

HTC Desire 826

HTC presented the HTC Desire 826 during the CES 2015. The newest addition to the Desire line, which is a series of budget devices which are reputed for good specs and an even better price, comes with a 5.5-inch LCD display of 1,920 x 1,080 pixels.

The Desire 826 comes with 16 GB of internal storage, but with a micro SD slot to expand storage space. It's also got a 13 MP shooter on the back and 4 MP Ultrapixel camera on the front, though in some markets it has a 13 MP f/2.0 sensor on the front instead. The HTC Desire 826 also comes with HTC's recently released Eye Experience software as well. The whole is powered by an octa-core Snapdragon 615 processor clocked at 1 GHz, 2 GB of RAM and a 2,600 mAh battery.

It comes with Android 5.0 Lollipop straight out of the box!

ICT's: The Foundation of Nigeria's Transformation

Last month Nigeria's Minister of Communication Technology presented her report card at the fourth ICT Stakeholders Forum in Lagos. **Clifford Agugoesi** reports

Nigeria's Minister of Communications Technology, Dr. Omobola Johnson

THE recent slump in the price of crude oil in the international market has once again justified the Nigerian government decision to seek ways and means of reducing the country's dependence on oil and broadening its sources of revenue. One such move was the establishment of, among others, the Ministry of Communication Technology (FMCT) under President Goodluck Jonathan's Transformation Agenda (2011-2015), which was meant to guide the country to attaining its Vision 20:2020 goal – aimed at placing Nigeria among the world's top 20 economies by 2020.

ICT has not let the government down, it would seem. It has played a major role in national growth and development. Under the guidance of Dr. Omobola Johnson, a former Country Manager at Accenture Nigeria, the FMCT has been the fulcrum for ICT expansion in the country.

Almost four years on, the Minister presented her report card at the 4th ICT Industry Stakeholders Forum, held in Lagos, last month. In 2011, the industry was dominated by the telecommunications sector and multilateral corporations. The industry's contribution to the gross national product (GDP) of Nigeria then was a mere 5.46 per cent, featuring a fragmented IT sector with small domestic players comprising nearly 350 companies.

Domestic value added in key areas was suboptimal and it was characterised by consumer preference for global brands and high levels of importation of inputs and finished products encouraged by the tariff regime and challenging operating environment for manufacturing. Over $360 million was transferred out of the country to purchase IT products and services.

Things are different today. The industry is ranked with oil and gas and power. In the third quarter of 2014 the industry contributed 9.58 per cent to GDP, while enabling other sectors of the economy. This has helped to create local companies that are innovating and adding value to the economy.

The Nigerian telecoms sector is one of the fastest growing in the world and continues to attract foreign direct investment (FDI). An additional $6billion was made between 2011 and 2013, according to figures released by the Nigerian Communications Commission (NCC). The ministry has been able to lay down the following key policy documents: National ICT Policy, National Broadband Strategy and Local Content Guidelines, which have recorded massive impacts as a result of what the industry perceives as the judicious application of the principles contained in the policy documents.

The stock-taking presentation by Johnson highlighted the priorities of the FMCT, whose objective is to deliver on the promises of the transformation agenda by addressing the challenges in the ICT industry and leveraging the opportunities for socio-economic development.

In the area of Infrastructure development, the ministry is implementing 'Connect Nigeria', aimed at providing a ubiquitous, robust and cost effective ICT infrastructure to support the creation and development of a digital economy. The vehicle for inclusive development is the 'Connected Nigerians' programme through which the FMCT is catalysing access to infrastructure and devices ownership. Also the ministry is promoting Local Content by ensuring an increasing domestic value added in the ICT industry while its IT in Government' programme promotes e-Governance by harnessing ICTs to ensure transparency, efficiency and productivity in governance and citizen engagement – which will create an enabling environment to foster investments both at local and international levels and deliver on the mandate to increase contribution of ICT to the nation's GDP.

"Our current focus has yielded significant dividends," stated Johnson. "The ICT sector is growing at 24 per cent annually and the contribution of ICT to the nation's GDP has increased from 5.6 per cent since the ministry's creation in 2011 to 7.8 per cent in 2013. Given the significant inroads made, the ministry is confident that the contribution to national GDP would significantly increase by 2015. In terms of connectivity, we have achieved remarkable progress in facilitating increased access to ICTs. Teledensity ratio increased tremendously to 88.62 per cent in 2013 and over 121 million active subscribers are now connected.

"In 2012, the number of telecom subscribers was 114.76 million against 95.9 million in 2010; which represents a 19.5 per cent increase in telecom subscriber base. The ministry's achievement in the area of IT In Government shows that the number of Government services delivered online has increased tremendously. The number of Ministries, Departments and Agencies (MDAs) with government allotted websites has increased to 420 and by 2015 all the MDAs will have allotted websites.

"As at June 2012, Nigeria was home to 48.4 million Internet users up from 45 million as the end of 2011. The 2012 figure represents 28 per cent penetration rate and 229 per cent of total internet users in Africa making Nigeria the largest internet market in Africa by volume," the minister added.

According to her, improving environment for investment and rapid growth in the country's telecom sector led to increased market potentials for submarine cables. Capacity at the shore increased from 4.78 terabits per second (TBPS) in 2011 to 11TBPS in 2014. The coming of MainOne reduced the cost of international bandwidth between $1700 & $1200 to between $700 & $500 per Mbps.

"Now, with SAT3, Glo1, MainOne, WACS and ACE, landing on our shores, the cost is between $300 & $400 per Mbps and 'to ensure diverse cable routings, an alternative landing point outside Lagos is being considered for future cable landings" Johnson said, adding that her ministry's trust is to ensure the cost keeps falling for the benefit of consumers.

The reasoning within the ICT industry is that prices of bandwidth will not decrease appreciably to a point where it could be described as pocket friendly, from the point of view of consumers, until something critical happens at the last mile. These challenges are being addressed as the ministry works in concert with its agencies – the Nigerian Communications Commission (NCC), National Information Technology Development Agency, (NITDA), Nigerian Postal Services, (NIPOST), Nigerian Communications Satellite, (NIGCOMSAT) and Galaxy Backbone.

Through the NCC, the ministry successfully auctioned 2.3GHz spectrum in March 2014, which was won by BitFlux, which is yet to commence services. The 2.6GHz spectrum licence will be issued by the first quarter of this year. Also, licensing of infrastructure companies (InfraCos) to provide efficient wholesale bandwidth services on a non-discriminatory, open access and price-regulated basis as well as provide metropolitan fibre and transmission services, is underway. The Executive Vice Chairman and chief executive at the NCC, Dr. Eugene Juwah, disclosed at the Forum that both MainOne and IHS, were winners of the InfraCo licence in the Lagos and North Central zones, respectively. The winners of the other five licences are yet to be announced. Under Connect Nigeria, Fibre Optics Rollout, by early 2011, over 30,000 kilometres of long haul intercity fibre was laid by legacy cabling and telcos. As at December 2013, the telcos had deployed a combined total of 68,124 kilometres of fibre optic cabling and in 2014 the telcos alone deployed an estimated 38,000 kilometres of additional fibre optic cabling.

While integrating the broadcast sector with the telecom, IT and postal sectors to fast-track convergence of the ICT sector is desirable, and is in sight, Johnson said it had to be done in such a way that the activities and programmes of one agency did not antagonise that of the others, which could stall progress.

Meanwhile, the FMCT says it is pushing the reforms of the postal sector as well as the privatisation of NIGCOMSAT. Part of the reform process of NIPOST is to separate its regulatory and commercial functions.

NIGCOMSAT 1-R

In order to erase the perception in some quarters that tended to portray NIGCOMSAT as a cost centre, the Minister announced that NIGCOMSAT 1-R has increased its commercial value through the generation of revenue for government investment.

The minister also disclosed some generic and specific interventions by her ministry to drive ICT inclusiveness and create jobs, particularly as they affect persons with disabilities and the girl child.

The Forum was, by all intents and purposes, a dialogue, for participants took time to make contributions on the way forward for the sector as well as raise germane questions concerning the trust of the ministry's intervention programmes and activities and their continuity, after the exit of the minister post-2015 elections.

On the question of continuity, Dr. Johnson said the ministry's priorities were not just ICT sector priorities, but national priorities, adding she would be surprised if her successor would dismiss broadband, postal sector reforms and privatisation of NIGCOMSAT, as baseless pursuits. But should it happen, Johnson stated the onus is on the industry stakeholders to resist such attempt.

"So what I would expect is that if the next administration comes and we see him/her doing things different from these priorities, then I would expect the industry to resist that. So I am throwing that responsibility back to the industry."

And, she got a standing ovation for all this.

Liberia to amend licensing regime to allow new mobile operator

THE Liberian Telecommunications Authority (LTA) is reportedly in the process of amending the country's Licensing and Authorisation Regulations in a move designed to allow the entry of another mobile player in the market, and offer financial support to struggling incumbent operators. FrontPageAfrica cites unnamed sources as saying that the regulator has been working on amendments to the legal framework to smooth the path for South Africa-based Vodacom Group to enter the local market. The pan-African group already has active operations in Tanzania, Democratic Republic of Congo, Mozambique, Lesotho, and provides services to over 40 African countries such as Nigeria, Zambia, Angola, Kenya, Ghana, Cote d'Ivoire and Cameroon.

The online journal claims that one plan on the table envisages Vodacom stepping in to take control of Liberia's ailing fixed line incumbent Liberia Telecommunications Corporation (LIBTELCO), as part of a privatisation of the company, but this has been scotched by the latter, with its Managing Director, Sebastian Muah, denying the reports. The LTA last amended the licensing regulations in 2009 but it is currently cash-strapped and seeking additional revenue to support it – rather than going to the government for hand-outs.

With local operators calling on the LTA to 'revisit' the rules on Licence Fees Regulations to meet international standards and best practices, last month the watchdog wrote to local operators to say it will look to implement amended Licensing and Authorisation Regulations to reflect the concerns and take on board suggestions raised by the cellular companies.

As a result the LTA informed the incumbents that "all operators and or service providers will be expected to have migrated to the new regime by or before 30 June 2015". Further, the LTA says the new regime will create a level playing field and will usher in technology-neutral licensing.

However, not everyone is fully behind the mandatory licensing regime, claiming it will impose an uneven distribution of taxation on firms. William Samoa, chief of operations at Cellcom said: 'They [LTA] are punishing the successful companies to subsidise the unsuccessful ones … Under the new regime, three per cent in gross goes to the LTA while the government of Liberia will get two per cent. What incentives do we get by relinquishing our existing licences?'

Liberia's President, Ellen Johnson Sirleaf

South African government mulling Vodacom sale


CEO, Vodacom, Shameel Joosub

THE South African government is reportedly looking into selling its 13.9 per cent stake in telecoms operator Vodacom South Africa, which is estimated to be worth ZAR28 billion ($2.44 billion), in a bid to raise much needed funds to address the country's power crisis, Bloomberg reports.

According to two people with knowledge of the situation, however, Vodacom's majority owner Vodafone Group – which has a 65 per cent stake in the South African telco – is allegedly reluctant to increase its shareholding, as it is reportedly comfortable with its current share.

Meanwhile, another state holding – a 39.8 per cent share in fixed line operator Telkom SA – is reportedly less likely to go under the hammer, as it may face tougher opposition from trade unions.

Three people familiar with the negotiations have disclosed that South African mobile operator MTN is reportedly eager to acquire a stake in Telkom, although such a transaction is likely to attract the scrutiny of the country's antitrust regulators.

As previously reported, Telkom and MTN signed an agreement in March 2014, under which the latter will take over the deployment and operation of Telkom's radio access network (RAN), although both companies would 'retain and enhance competitive differentiation and flexibility'. The agreement however is yet to be finalised.

Orange invests in Afrimarket cash-to-goods money transfer start-up

ORANGE has contributed to a fund-raising programme initiated by Afrimarket, the leader in cash-to-goods money transfers. This investment comes a few months after Stéphane Richard, Chairman and CEO of Orange, announced that the Group and the start-up had entered into a commercial partnership. In addition to this investment, Orange will participate in the development of Afrimarket by sharing market knowledge and the many benefits of an international mobile operator with a strong brand reputation.

Money transfers in the form of "cash-to-goods" enables people in Europe to pay directly for everyday goods or services (food, healthcare, education, etc.) in partner retail outlets for contacts living in Africa. This type of service has grown into one of the most promising segments in the international money transfer market. In choosing how he or she wants to help his family and friends, the user also pays lower fees compared to traditional solutions and can be sure of the quality of the end-products purchased with the funds. Three young entrepreneurs – Rania Belkahia, Jeremy Stoss and François Sevaistre – founded Afrimarket less than two years ago in France.

The start-up has grown quickly, aided by an innovative business model and broad knowledge of cross-border transfers and African immigrant populations in Europe. The decision to take a minority stake in the company reflects Orange's new strategy of funding start-ups through vehicles such as Orange Digital Ventures. The investment is also the first one to be made in a start-up that has gone through the "Orange Fab" acceleration programme.

Pierre Louette, Deputy CEO of Orange, noted: "Afrimarket is a start-up in the development phase with an original and promising offer. It's a good example of the type of project that our new Orange Digital Ventures fund is interested in investing in. We're supplementing Orange's existing open innovation initiatives, such as Orange Fab".


CEO, Orange, Stéphane Richard

Three new telecoms licences on offer in Ghana


Director-General, NCA, Mr. Paarock VanPercy

GHANA'S National Communications Authority (NCA) is offering three new telecoms licences for a mobile virtual network operator (MVNO) concession, a fixed access service of a unified access service licence, and an international wholesale carrier (IWC) permit.

The NCA is inviting applications from entities registered under the Ghana Companies Code of 1963, Act 179. Applications for each of the above licences must be accompanied by a non-refundable fee of GHS150,000 ($45,321).

The MVNO licence costs GHS1.2 million for a five-year term; the IWC service licence costs GHS1 million (also for five years); and the fixed access service licence is priced at GHS600,000 a year.

MVNO and IWC licences applicants are required to be at least 70 per cent Ghanaian-owned, with the IWC licence holder obliged to provide a point of presence (PoP) and connect directly to a licensed international gateway operator; the unified service licence targets existing mobile network operators (MNOs) who wish to expand their services.

NigComSat 1R to be sold

NIGERIAN satellite firm NigComSat 1R is to be sold to make it more efficient. According to th4 Minister for Communication Technology, Dr Omobola Johnson, who made the announcement, the company has said has been taking much from the public coffers but giving back too little.

She said the management was working to increase the company's commercial value, which showed a gradual improvement in performance. But this marginal increase notwithstanding, it must be sold, Johnson said. "NigComSat 1R takes a huge portion of our budget and I don't think there is any minister that will not support its privatisation for the country to make more money," she added.

Maroc Telecom completes €474m Moov takeover

MAROC Telecom has completed the takeover of all Moov operations in six African countries – Cote d'Ivoire, Togo, Gabon, Benin, Central African Republic and Niger – to the total value of €474 million. The Moov mobile brand used to be owned by Atlantique Telecom, a subsidiary of United Arab Emirates group Etisalat in Francophone Africa. Etisalat is currently the major shareholder of Maroc Telecom with 53 per cent.

The transaction also includes the takeover of Prestige Telecom, which provides IT services on behalf of Etisalat subsidiaries in these countries, and which is believed to command over 42 million mobile lines. Maroc Telecom, which is said to be the continent's second-largest telecommunications company after South Africa's MTN, is present in 10 African countries.

Company CEO Abdeslam Ahizoune said the transaction marked an important step in the development of Maroc Telecom and strengthens its strategic positioning as a major player in Africa. "We support south-south economic cooperation through this operation," he added.

The total takeover of Moov was not as smoothly as it sounds in the sense that Maroc Telecom did encounter a few challenges in Togo, where the government sanctioned the Moov Togo takeover on condition that 30 per cent ownership went to Togolese investors. Maroc Telecom also owns Gabon Telecom, which it bought in 2007 and merged it with mobile operator Libertis. This means that the recent takeover pushes Moov Gabon to be automatically swallowed' by Gabon Telecom. Many analysts said Maroc Telecom now needs to work hard to revive some of these subsidiaries which were said to be struggling.

CEO, Maroc Telecom, Abdeslam Ahizoune

MENA deploys Infinera transport network in Egypt

INFINERA has announced the deployment of the Infinera DTN-X platform across Middle East and North Africa (MENA) submarine cable system's trans-Egypt terrestrial network, providing multi-terabit capacity and network services. The Infinera Intelligent Transport Network, featuring the DTN-X packet optical transport networking platform, will allow MENA to differentiate its services and manage costs as it scales network capacity.

MENA, a subsidiary of Orascom Telecom Media and Technology, owns and operates a submarine telecommunications system connecting Europe to the Middle East and Southeast Asia. Spanning three continents, MENA's infrastructure provides wholesale capacity to global networks via Asia and the Middle East.

With the deployment of an Infinera Intelligent Transport Network, MENA is equipped to provide wholesale carriers with a range of connectivity services from STM-1 to 100 Gbps and terabit capacity. The Infinera Intelligent Transport Network features a single-card 500 Gbps FlexCoherent super-channel solution and is based on Infinera's photonic integrated circuits. By integrating DWDM optical transmission and up to 12 Tbps of non-blocking OTN switching into a single platform, these 500 Gbps super-channels provide network operators the ability to scale to terabits of transmission capacity.

TTCL, Huawei ink $182m network improvement deal

STATE-owned Tanzania Telecommunications Company Limited (TTCL) has signed a $182 million deal with Chinese vendor Huawei Technologies to upgrade and expand its fixed and wireless networks, local website Daily News reports, citing CEO Dr. Kamugisha Kazaura.

Under the terms of the contract – the first phase of which is expected to conclude in June – the vendor will upgrade the telco's 2G and 3G networks and also deploy 4G Long Term Evolution (LTE) technology.

The agreement will also see Huawei deploy networks in rural areas in line with a Universal Communications Service Access Fund (UCSAF) contract won by TTCL in February 2014. The contract is part of a wider UCSAF programme designed to provide connectivity for more than two million people living in rural areas, with Kazaura clarifying that TTCL is contracted to expand rural services to 69 wards that make up over 400 villages, effectively extending coverage to 50,000 residents.

CEO, TTCL, Dr. Kamugisha Kazaura

Alca-Lu's GPON solution to drive ultra-broadband network for Vodacom

ALCATEL-Lucent has been selected by Vodacom, South Africa's largest mobile service provider, to build a gigabit passive optical networking (GPON) solution to expand Vodacom's customer base. The new converged network will enable Vodacom to provide customers with ultra-broadband needed to access bandwidth-hungry services and applications such as online gaming and streaming video.

Vodacom will deploy Alcatel-Lucent's comprehensive end-to-end GPON solution, as well as the Motive customer experience platform to provide high-quality network performance through advanced performance management capabilities across both wireline and wireless. Vodacom expects to reach about 150,000 homes and 100,000 businesses within the next three years.

Vodacom will deploy the new converged network in all major centres in South Africa, including Johannesburg, Pretoria, Cape Town and Durban.

The converged network will enable Vodacom to offer mobile, voice, video and data services to 250,000 homes and businesses within the next three years.

Vodacom Group Chief Technology Officer (CTO) Andries Delport said: "We first began talking with Alcatel-Lucent about expanding Vodacom's business into the fixed access market five years ago. This was a significant move for us and required a great deal of consideration. Over time, the Alcatel-Lucent team was able to show that it was the right move for us and that their solution was the best for our needs."

The President of Alcatel-Lucent Europe Middle East and Africa (EMEA Willem Hendrickx, said: "This effort represents a significant and bold move by Vodacom into the fixed network space and allows them to take advantage of new, revenue-generating business models. We are excited that our technology, expertise and knowledge are helping take Vodacom to the next level of converged communications."

President, Alcatel-Lucent Europe Middle East & Africa, Willem Hendrickx

AfDB and MasterCard broaden financial inclusion in Africa

President, (AfDB), Dr. Donald Kaberuka

THE African Development Bank (AfDB) and MasterCard have announced a broad collaboration that aims to expand financial inclusion across the African continent. The collaboration seeks to develop solutions that drive inclusive growth in Africa by broadening access and usage of digital financial services.

They will work with African governments and local private sector companies to develop and deliver affordable services that meet the needs of a wide consumer base, especially the traditionally unbanked.

Specifically, the collaboration will seek to:

- Build cohesive African financial systems that drive inclusion at a country level and enable service delivery to traditionally excluded populations;
- Invest in a curated set of innovative financial services companies and solutions targeted at addressing barriers that hinder financial inclusion; and
- Share knowledge across academic, policy and commercial sectors to create thought leadership on financial inclusion and economic development.

The President of the AfDB, Donald Kaberuka commented: "Despite the phenomenal economic growth in Africa, this has not translated into shared prosperity and better livelihoods for the majority. Growth has to be inclusive to be socially and politically sustainable. One key component of inclusive development is financial inclusion, an area in which Africa has been lagging behind other continents. Broadening access to financial services will mobilize greater household savings, marshal capital for investment, expand the class of entrepreneurs, and enable more people to invest in themselves and their families."

MasterCard CEO Ajay Banga said: "Less than one adult out of four in Africa has access to an account at a formal financial institution. While many of our industry partners have been active in this space, we believe that through our payments expertise, and the AfDB's 50 years of experience in financing Africa's economic transformation, we can achieve scaled impact and lasting transformation. This can only be accomplished when the public and private sectors combine resources and act together."

Algerie Telecom in spat with Mobilis subsidiary over fibre rollout

AGENCE Ecofin reports that a feud is brewing between incumbent operator Algerie Telecom and its subsidiary, Mobilis, over the latter's desire to 'stand on its own feet' through the acquisition of its own fibre optic network infrastructure that will enable it to go head-to-head with competitors Ooredoo and Djezzy in the provision of integrated telecoms services. Since November last year, the pair have reportedly locked horns over Mobilis' plans which stemmed from the wireless operator's launch of a tender for the "supply, installation and commissioning of advanced, high speed transmissions next generation dense wavelength division multiplexing (NG-DWDM) equipment, including the supply of fibre-optic cable and passive equipment".

Mobilis' quest for independence has not, however, curried favour with its parent, which currently provides it with fibre capacity on its own infrastructure and stands to lose up to $8 million in revenue per day if Mobilis goes ahead with its plan. Indeed, Algerie Telecom chairman and CEO Azouaou Mehmel has warned that the loss of such an important revenue stream could result in it being forced to shed 'several thousands' of its workforce.

The government of Algeria has reportedly called a number of meetings in a bid to resolve the silent impasse, although it appears likely that market forces will prevail, given that both companies are simply looking to protect the interests of the firms they run.

CEO, Algerie Telecom, Azouaou Mehmel

Nokia Networks, Safaricom launch LTE-A network in Kenya

CEO, Safaricom, Bob Collymore

SAFARICOM has selected Nokia Networks as one of its partners to modernise and expand its 2G and 3G network infrastructure and to help launch the first LTE-Advanced (LTE-A) network in Kenya. The network launched in December 2014 will offer peak speeds of up to 100 Mbps, which is more than twice the speed offered on 3G technology.

Carrier aggregation is a key feature of LTE-Advanced, enabling operators to create larger, virtual carrier bandwidths for services by combining separate spectrum bands, thus boosting network capacity and speed as well as performance. Safaricom's customers will be able to download and upload files faster as well as enjoy buffer free audio and video streaming.

Safaricom will roll out 4G services in Nairobi and Mombasa first before introducing to major towns over the coming months.

Bob Collymore, Chief Executive Officer, Safaricom said: "This project marks an important milestone in our journey toward a modern and energy-efficient network that's capable of delivering world-class voice and data services to our customers. It clearly underlines our focus on having the most advanced network in Kenya." Bernard Najm, Vice President and Head of Middle East and Africa, Nokia Networks, said: "With this ambitious network modernization, we provide Safaricom with the highest quality network in Kenya. Our cutting-edge solutions and services help Safaricom offer a truly rewarding service experience to its customers."

MainOne launches West African Tier III data centre, MDX-i

NIGERIA-based MainOne, which describes itself as a leading provider of innovative telecom services and network solutions for business users in West Africa, has opened a Tier III Data Centre to address the growing demand for colocation, cloud and disaster recovery services in the region. The purpose built facility will be managed by a new subsidiary, called MDX-i. MDX-i's Tier III Lekki Data Centre is the first of a number of planned data centres being considered by MainOne. It is a NGN7 billion ($37.8 million) investment and has capacity for 600 racks. Speaking at the launch of MDX-i, the Minister of Communications Technology, Dr Omobola Johnson, said: "Availability of world class data centres in Nigeria is critical [in terms of the] infrastructure required for the implementation of our broadband initiatives.

The accomplishment by MainOne is indeed significant as it provides an outsourcing and cost effective model to further drive ICT adoption."

ARTP Senegal extends 4G trial period

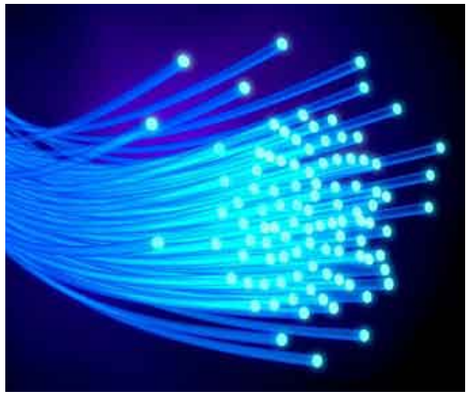
SENEGAL'S telecoms regulator, L'Autorite de Regulation des Telecoms et des Postes (ARTP), has extended the testing phase of 4G services to the end of March, Ecofin Fides reports. The trials were launched by Sonatel (Orange) in October 2013 and Tigo Senegal in December last year, and the extension means that users will be able to enjoy free ultra-high speed mobile broadband for another twelve weeks or so. ARTP did not give any reason for the decision to extend the trial phase, although its announcement will be welcome news to Expresso Telecom (Senegal) – the only company yet to launch a 4G pilot.

ARTP says that once the trials are complete, it expects all three mobile operators to submit detailed assessments on the quality of service (QoS) achieved. The government is basing its decision on how best to commercialise 4G, and on granting licences to existing operators or new entrants, on QoS and ability to deliver national coverage.

Orange Senegal launched its 4G network trials on the back of a $240 million investment programme to expand and upgrade its overall network capacity. To date, it has deployed more than 40 4G sites in Dakar and Saly, and has plans to add more towns and cities in future. In its most recent expansion, the carrier added the city of Touba to its 4G footprint.

Meanwhile, Tigo's Long Term Evolution (LTE) trials are taking place in the capital Dakar, targeted around the areas of Yoff, Almades, Fann Residence, the University, Dakar-Plateau, Abdou Diouf International Conference Centre, Diamniadio and the city of Touba.

Kenya South Sudan collaborate on fibre optic



KENYA and South Sudan have signed an agreement that will see the two countries connected by fibre optic cable. South Sudan's ICT Minister Rebecca Joshua Okwaci and her Kenyan counterpart, Fred Matiang'I, signed the memorandum of understanding last month that will lead to laying of the cable from Eldoret to Juba.

The project, to be funded by World Bank, is set to run concurrently with the construction of the Northern Corridor road network. Fibre optic cable offers reliable and huge data capacity convenient for video conferencing and telemedicine.

"Kenya will be responsible for the laying of the cable from Eldoret to the border, while the government of South Sudan will lay it from the border to Juba and further to other parts of the country," said Matiang'I. He noted that part of the project, however, will be part of the second phase of the inland nationwide network National Optic Fibre Backbone Infrastructure plan that is expected to cover 2,100 kilometres and link all of Kenya's 47 county headquarters.

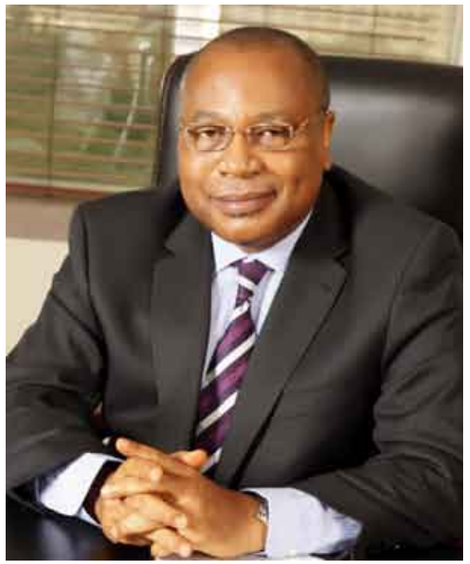
Okwaci added that the project would go a long way in building South Sudan's infrastructure and ensure that the country is not left behind in the ongoing development of the region. "We are a landlocked country and do not even have an inch of fibre optic cable; this project will ensure that we have a better way of communicating with the rest of the world," she said.

POTRAZ threatens to withdraw Telecel's licence

ZIMBABWEAN mobile operator Telecel is once again under fire for failing to comply with the country's empowerment laws which require local investors to own a majority stake in the company. Telecoms regulator POTRAZ is now threatening to withdraw the operator's licence unless it moves to restructure its ownership. Telecel's operating concession was renewed in August 2013 on the condition that it met the empowerment requirements, but the watchdog is becoming increasingly exasperated by the firm's failure to comply.

At present, 40 per cent of Telecel is held by Empowerment Corporation (E Corp), itself comprising Kestrel (23 per cent), IEG (18 per cent), Indigenous Business Women's Organisation (17 per cent), National Miners' Association (14 per cent), Zimbabwe Farmers' Union (14 per cent) and Magamba eChimurenga (14 per cent). The remaining 60 per cent is owned by Telecel Globe, which is part of Egypt-based Global Telecom Holding (GTH, renamed in September 2013 from Orascom Telecom Holding), itself a 51.9 per cent -owned division of Russian-controlled, Netherlands-headquartered Vimpelcom, which announced in December 2014 that it was looking for a buyer for its stake in Telecel but it has so far attracted little interest.

Broadband Gets A Boost With Infracos Licensing



EVC, NCC, Dr. Eugene Juwah,

BARELY three months after the Nigerian Communication Commission reached agreement with industry stakeholders on the open access model for the deployment of optic fibre that will bridge the current broadband gaps, enhance development of local content and deliver cost effective services to Nigerian households and businesses, two winners have emerged from among infrastructure companies (InfraCos) for the licences: Main One and IHS for the Lagos and North Central zones, respectively.

The announcement was made at the 4th Industry Stakeholders Forum in Lagos last month under the auspices of the Ministry of Communication Technology, whose minister, Dr Omobola Johnson, gave an account of the ministry's progress since it was established four years ago.

The NCC and her sister agencies under the Ministry – the National Information Technology Development Agency, NITDA, Galaxy Backbone, Nigerian Postal Services, NIPOST and Nigerian Communications Satellite, NIGCOMSAT – were on hand to provide their insights and perspectives on some specific industry issues. The NCC used the questions, answers and comments session to make major announcements on its licensing of InfraCos, clarify erroneous impressions on some national industry issues and provide an update on global ICT trends as they affect Nigeria and Nigerians.

A participant pointed that following NITEL's privatisation, its licence covered some of the key parts of InfraCo licensing. But he noted that there were seven zones for licences, and NITEL would appear to be the eighth InfraCo. How would the licensing be reconciled?

The Executive Vice Chairman (EVC) and chief executive of the NCC, Dr Eugene Juwah explained: "Well, concerning InfraCo, the plan was to divide the country into seven zones and to licence Lagos and North Central first. NCC has concluded the bidding process and has selected licensees for the Lagos and North central zones.

"I do not mind telling you that the licensee for Lagos is MainOne. The licensee for North Central is our new national infrastructure company in Nigeria called IHS. Now, their award letters are already underway and what we are just working out with them is the detailed contractual obligations both on NCC and on them."

On the NITEL issue, the EVC stated that the NCC did license metropolitan fibre operators that were able to do the job. "With the new infracos, a new regulation is coming because, we want vibrant laying and fibre utilisation to be more efficiently done, and when you want to go to a new area now, you require NCC's approval. So in doing that we will be able to connect both the new infracos and also the licences that NCC has issued in the past," Juwah said.

Another questioner wanted to know whether it was possible for the Ministry to support the effort to have digital rights secured for all Nigerians and to have a digital free environment? Another question was on data privacy legislation.

In her response, Johnson stated that there was Internet freedom in the country, adding that her ministry is disposed to supporting the proposed Bill on Internet freedom, stressing the need to promote Internet freedom with digital responsibility, hinting there is the need to find a way of crafting this into the proposed Bill.

On Internet security, Juwah explained that Internet freedom is a controversial issue even within the community of the ITU, saying freedom of expression is not limitless, citing government interventions in some parts of Asia. According to him, the fact there can be damaging information with dire consequences in emerging democracies like Nigeria, justifies the necessity for cybersecurity law. "In Nigeria a cybersecurity bill that has been designed in collaboration with international bodies, is today before the National Assembly. So in Nigeria, we are dealing with both Internet Freedom and Cybersecurity at the same time," he said.

On digital migration deadline, Juwah stated broadcasting is yet not under the purview of the Ministry of Communication Technology, but under the purview of the Ministry of Information, adding information available from the National Broadcasting Commission, NBC, shows commitment to meeting the deadline.

The body language of a cross section of the audience, who applauded while the names of the initial two winners were announced, seemingly reflected its satisfaction with the choice of MainOne and IHS. Both firms are major players in the provision of infrastructure in the nation's telecom industry. However, some members of the audience, who shared views with our reporters, raised concerns about the danger of both MainOne and IHS becoming monopolies, which would subject consumers of services to their whims and caprices.

Juwah said the announcement of winners for the other zones will come 'very soon.'

Nigeria's Telecom Regulator Bags Public Service award

THE Executive Vice Chairman of the Nigerian Communications Commission, NCC, Dr. Eugene Juwah added another award to his kitty in January, Lagos, Nigeria. The award for Public service 2014 was given him by The Sun Awards, organized by the Sun Publishing Ltd, publishers of Daily, Saturday and Sunday Sun, as well as Soccer Star.

The award recognizes outstanding contributions to top public servants who, in the spirit of national transformation, have demonstrated uncommon character, passion, innovation and unalloyed commitment in service delivery, and thereby rendering maximum benefit to the country.

Within five years of his tenure, he doubled the nation's ten years of telecommunication success. Between 2001 and July 2010, the nation recorded about 88million active phone subscribers, while in four years, from July 2010 to July 2014, the figures have hit 134 million, with growth projections remaining positive; while teledensity shored up to 96%.

L-R: Commissioner, Mrs Biodun Olujinmi, Dir. USPF, Abdullahi Maikano, Commissioners Dominic Nwator and Dr. Michael Onyia, Dr. Juwah (holding the plaque), Dir. Financial Services, Mrs. Iyabo Sholanke, Dir. Public Affairs, and Head, Public Relations, Reuben Muoka.

The pioneer MD/Editor-in-Chief of The Sun Publishing Ltd, Mr. Mike Awoyinfa (r) presenting the award to Dr. Juwah.

Dr. Juwah speaking in response, after receiving the Public Service award.

The NCC team lending support to Dr. Juwah

The shape of North African IT in 2015

Country Manager for North & French-speaking, Africa, IDC, Ouafa Kathir.

THE North Africa region will push ahead with IT transformation initiatives throughout the course of 2015, spurred on by growing adoption of '3rd Platform' technologies such as cloud, mobility, and Big Data.

That's according to International Data Corporation's newly released predictions for the year ahead, with the global advisory services firm expecting IT decision makers across the region to make a bigger push to implement mobile business intelligence, predictive analytics, and metadata management solutions.

"Lines of business will drive the adoption of advanced analytics and big data solutions, particularly in the region's burgeoning banking and telecommunications industries," says Country Manager for North and French-speaking Africa, Ouafa Kathir. "A large proportion of these deployments will be conducted via the public cloud model because organisations will be unable to find the skilled staff to implement and run such analytics environments in their own private clouds.

This will raise its own set of complexities as organizations become open to new vulnerability points, and will result in the focus across the region being not only on solutions deployment, but also on the implementation of advanced security policies." "Keeping with the 3rd Platform theme, the transition to mobility will continue to gather pace across North Africa's commercial segment throughout 2015," continues Kathir. "The introduction of more appealing all-in-one computers will lead to an erosion of desktop share as vendors revisit their offerings and make them more compatible with the Windows 8 operating system and its touch capabilities. This cannibalisation will occur even more rapidly in the region's consumer segment as all-in-one devices become increasingly attractive to home users."

The IDC's top 10 ICT predictions for North Africa in 2015 are:

1. The North African market will continue its IT transformation in 2015, with different levels of maturity and adoption across the region.
2. The telecommunications, banking and finance, and government sectors will continue to top the region's IT spending charts in 2015.
3. Organisations will press ahead with investments in cloud infrastructure, but the offerings will continue to be hampered by a lack of adaptation to local market needs.
4. Big Data technology will start to attract serious interest from banking and telecommunications organizations.
5. Security will remain the biggest inhibitor for cloud and mobility adoption across the region.
6. Telecom operators will struggle to change their role from voice providers to services providers.
7. Print services and document solutions will offer interesting growth potential as the number of vendors and distributors operating in this space continues to rise.
8. The proliferation of low-priced smartphones will see feature phones edge ever closer to extinction.
9. All-in-one computers will cannibalize desktops in both the commercial and consumer segments of the market.
10. Local brands will intensify their focus on launching new tablet devices across North Africa.

Cote d'Ivoire's $56m digital village to be completed in 2017

THE first phase of the Ivorian digital village, VITIB, currently under development in the coastal city of Grand Bassam, has a price tag of 28 billion FCFA (about $56 million) and will be completed in 30 months' time, the Ivorian government said. VITIB, Village des Technologies de l'Information et de la Biotechnologie, is being developed with the help of India, whose Eximbank has made available a loan of $40 million to Cote d'Ivoire to finance the project. Grand Bassam, located some 45 km east of the commercial capital Abidjan, is the country's oldest capital city.

Construction work of the digital infrastructure is set to create about 40,000 direct jobs, Ivorian PM Daniel Duncan Kablan said. Work kicked off last December. The digital infrastructure will be armed with four fibre optic networks worth over $120 million, the government said. Cote d'Ivoire has built a 2,000km fibre optic network, and is about to build another 5,000km this year at the cost of $240 million.

VITIB represents the country's technological development launch pad, the PM said, adding that VITIB's digital mission was to primarily strengthen the capacity of local businesses.

The government says VITIB is a business meeting crossroad for all backgrounds working in the field of ICT. Kablan said Cote d'Ivoire's challenge was to build a society oriented towards the development of ICTs. Several countries in Africa are currently involved in projects of this nature in an effort of attracting hard-core foreign investors who seem to be overlooking the continent due to – as they put it – its technology fault lines.

Lagos builds 100 ICT centres for police

Governor, Lagos State, Nigeria, Babatunde Fashola

LAGOS State Governor Babatunde Raji Fashola has begun handing over 100 Information Technology Centres to police stations in the state. He said the centres, equipped with solar power, were being put in place to enhance the judicial process by assisting the Police to decongest their stations of exhibits, especially abandoned vehicles, which hitherto hampered traffic flow in the state.

He disclosed that each police station was being equipped with two computers and specially trained personnel to man the accessories, digital camera, Digital Assert Management Systems Software (DAMS), two KW Solar installations. "From now on, records of all exhibits in our police stations will be captured and stored in the computers' databases for ease of access and retrieval of relevant exhibits for effective prosecution of all cases," the governor said. Fashola added that in spite of the remarkable decline in the crime rate in Lagos, the state government would not relent in living up to its main responsibilities of securing lives and properties in the state. "This is the merit in continuity in governance," he said.

The governor disclosed that the state, in partnership with security agencies, was set to take its wide-ranging crime-reduction strategies to another level with the recent provision of digital cameras to police men and impending addition of state of the art squad cars fully equipped with computers on board. He commended the "invaluable support" of the private sector to the state's Security Trust Fund. '"This gesture should be emulated by all the citizens as they promptly fulfil their civic obligations of paying their taxes as at when due,' Fashola said.

The Commissioner of Police, Kayode Aderanti, noted that the state government had once again recorded another first in the realm of policing with the ICT project, adding that his men will reciprocate the gesture by putting the equipment to good use in the ongoing effort to combat crime and preserve law and order in the state.

Douala, Yaoundé Internet exchange points to be ready by June

CAMEROON'S two internet exchange points (IXPs), earmarked to be established in the main cities of Douala and Yaoundé, will be ready by June, the ministry of posts and telecoms said.

The price tag of the project has not been disclosed but its importance is already generating a lot of interest in the telecommunications circles, where criticism of the government's handling of internet infrastructure and governance continues unabated.

Douala, the commercial capital and the country's largest city, is located some 240 km west of the political capital, Yaoundé. ICT company ICCSOFT has been chosen to install the infrastructure under the supervision of state-run ANTIC, Agence Nationale des Technologies de l'Information et de la Communication.

"The government should have thought of such project long time ago to ensure that Cameroon had affordable internet prices and a connectivity of a good quality in the aim to improve internet penetration and access," internet café operator Theophile Jean Onguene said in Yaoundé.

Despite being Central Africa's largest economy, Cameroon has not invested a lot to improve its internet sector, and an Internet Society Cameroon Chapter's report shows that the country's internet challenges include poor telephone lines, lack of qualified technicians to run TCP/IP networks and poor PC penetration, among others. Internet Society Cameroon said the establishment of internet exchange points will lead to the reduction of prices and towards the improvement of internet access in the country.

Cameroon's Minister of Posts and Telecoms, Jean Pierre Biyiti bi Essam, echoed this sentiment, saying that the internet exchange points will help cut the price of internet products and reduce the country's reliance on foreign networks.

African countries that lack internet exchange points go the painful route of seeing their emails routed via foreign networks before reaching the continent, and experts said this exercise is costing Africa more than US$800 million per year.

Africa has 54 states but only 30 are believed to have their internet exchange points.

And the list reveals the remarkable presence of less fancy nations such as Burundi, Swaziland, Lesotho, Djibouti, Congo Brazzaville, Sierra Leone, Namibia, Rwanda, Malawi and DRC.

BOCRA consults on digital terrestrial TV

THE Botswana Communications Regulatory Authority (BOCRA) has put out a consultation paper on a licensing framework for digital terrestrial television for public consumption and feedback. According to BOCRA, this development forms part of the Authority's intention to "revolutionise digital broadcasting in the country and create an enabling environment for all stakeholders".

Botswana initiated discussion on the licensing framework in 2012; which, however was not completed because of legislative measures which eventually culminated in the establishment of BOCRA in 2013. BOCRA has invited the nation to make comments on the proposed paper before the January 2015 deadline. "Upon reception of all comments, BOCRA will produce a draft Licensing Framework which will be circulated to all stakeholders and will convene a consultative workshop to finalise the framework," said Deputy Director – corporate communications and relations at BOCRA, Aaron Nyelesi.

BOCRA proposes to licence commercial television stations using this framework that incorporates both Free-to-View and Subscription-based television, while other classes of licences will be considered in a holistic licensing framework as may be determined by the Authority. The regulatory body also wants to issue national, regional and zonal or sectional licenses television coverage classes in order to promote the market entrance and growth. In order to promote service roll out and ensure equity, BOCRA proposes to use an open and transparent method for licensing of all interested providers including the existing broadcasters.

Further, BOCRA proposes to issue licences to only locally registered companies to licence digital terrestrial television on UHF channel 470-698 MHz in order to take advantage of availability of channels and for regional harmonisation. "This will permit the country to be open for future development for other services," the paper stated.

BOCRA also plans to adopt the Geneva 2006 (GE06) frequency plan to facilitate entry to the market, and, considering the size of Botswana, aims to licence multi frequency networks in accordance with the GE06 plan.

Digital switchover to boost e-commerce

THE complete switch-over from analogue to digital transmission means better broadcast quality and a wider variety of channels for consumers, yet for the corporate world the switch is going to mean more than that, says online retailer Jumia. It believes the digital migration will boost e-commerce uptake in Kenya and assist the acquisition process of new customers for the e-commerce sector.

"Some digital TV service providers offer their customers a three-service package that involves television, internet and telephone services over a single bill per month over one fibre optic cable connection," says the MD of Jumia Kenya, Parinaz Firozi. "This means more people will get access to an affordable internet connection and many retailers will migrate their businesses online moving back and forth between online and physical stores to make their livelihood and maximise the advantages of both," adds Firozi.

Similar sentiments are shared by the MD of Kaymu Kenya another online marketplace in Kenya, Aleeda Fazal "The internet is very crucial to this business most customers will check online for a product before buying it. They compare prices and then make up their mind. This definitely boosts e-commerce."

According to Aleeda, most online shoppers are located around urban areas where the internet is accessible, with Nairobi forming the biggest chunk of online shoppers. She believes that with most digital TV service providers offering internet that can be shared among people within the same flat, more people will access online shops thus boosting e-commerce.

Leading the pack among digital TV service providers offering a three-service package inclusive of internet is Zuku fibre as more set top boxes with the capability to interface with such devices such as a cell phone, memory card or internet modem continue to make their entry into the Kenyan Market. Kenya's digital migration suffered a setback late last year, after a two-judge bench extended the migration date "until further directions of the court", allowing three media houses Nation Media Group, Royal Media Services and Standard group to continue transmitting on the analogue platform until their application is heard. However, Most Kenyans continue to ready themselves for the migration.

Top Kenyan media firms fight digital TV migration

DG,CCK, Francis Wangusi

KENYANS are already enjoying the fruits of digital TV broadcasting despite a fervent war from three top media houses in Kenya who want the process delayed. At the beginning of January, Kenya officially started its march into digital broadcasting starting with Nairobi and its environs. The Standard group (owner of Kenya Television Network), Nation Media group (Nation Television) and Royal Media Services (Citizen Television) filed a case at the Supreme Court to block the switch off date for Nairobi set for December 31, but did not manage to totally block the digital migration.

The Communications Authority proceeded to order all stations to shut off their analogue systems and move to digital broadcasting that began on the night of December 31. TV firms, including pay TV companies like MultiChoice Kenya, Zuku, and StarTimes, are already competing to sell digital TV decoders to viewers as the rush continues. However the Supreme Court stopped the Communications Authority of Kenya from switching off the analogue frequencies of the Nation Media Group, Standard Group and Royal Media Services. Other media firms operating in the country are however relaying their TV signals via digital platform.

According to the Director of Consumer and Public Affairs at the Communication Authority, Mutua Muthusi, by February 2 all other major towns in Kenya will have to abandon their analogue system as the rest of the country will go digital by the end of March. From the court papers seen by journalists, the three media houses want to be given a two-month simulcast period during which their television channels will be available on both the analogue and digital platforms before they fully switch-off. They are also want to use this period to order, import and install transmitters, antennas and other equipment necessary to roll out their digital transmission infrastructure as well as order and import set-top boxes.

"One frequency that was allocated to the media houses by [the] CA is not enough to appropriately cover Nairobi and its environs, which requires at least three frequencies," said a lawyer representing the media houses, Paul Muite. Nation Media Group, Standard Group and Royal Media Services want the CA to allocate three UHF frequencies that are not being used for analogue broadcasting, one for each of the three designated digital television broadcasting sites in Nairobi.

According to an article in The East African, a sister publication to NTV and Daily Nation, the three media houses under a consortium they are calling Africa Digital Network, control 90 per cent of the media in the country consisting of "87 per cent market share in TV, 80 per cent in radio and 98 per cent in print". This is expected to make them a force to reckon with in the digital migration.

Al Yah 3 satellite set to lower cost of Pay TV in Africa

ALL Yah 3 satellite is set to lower cost of Pay TV in Africa as the international deadline for digital migration fast approaches. TV viewers have got a boost with an imminent launch of Yahsat satellite targeting both Africa and Brazil. The revelation was made recently by Yahsat, the UAE-based satellite operator. The firm explained in a statement that they have completed the Preliminary Design Review (PDR) for the Al Yah 3 spacecraft and payload.

The satellite, dubbed Al Yah 3, is based on Orbital's GEOStar-3™ platform and is an all Ka High Throughput Satellite to be designed, manufactured and tested at Orbital's satellite manufacturing facility in the US. Once operational, Al Yah 3 will enable the delivery of affordable broadband, to over 600 million users, specifically covering more than 95 per cent of the population in Brazil and 60 per cent of the population in Africa.

The PDR was a comprehensive review that validated Orbital's design approach to the physical and functional requirements of the spacecraft. The review is the first step toward confirming that the satellite will operate effectively on orbit. Acting Chief Technical Officer Marcus Vilaça said: "The Preliminary Design Review is an industry standard process where our engineers review and confirm the overall architecture and design of our Al Yah 3 satellite. This is a significant step forward in the development phase of Al Yah 3 and ensures that we are on track to launch as scheduled for Q4 2016. While progress is underway with developing our third satellite, we are actively engaging with potential partners in Africa and Brazil enabling us to deploy much needed connectivity to underserved markets." "This important milestone is a key step towards the Al Yah 3 launch", said Orbital's Senior Vice President Christopher Richmond. "Al Yah 3 will be the first hybrid electric propulsion GEOStar-3-based spacecraft to be launched by Orbital at the end of 2016. It provides the benefits of higher power and greater payload capability while still maintaining advantageous launch costs."

Africa: A Potential waiting to be unleashed

Houlin Zhao is the new Secretary-General of the International Telecommunications Union (ITU), having taken over from Dr. Hammadoun Toure at the beginning of this year. In this interview with **Olubayo Abiodun** in his office at the ITU Telecom World 2014 in Doha, Qatar, he spoke on a wide range of issues and his plan for Africa

Secretary-General,ITU, Mr Houlin Zhao

➲ ***Africa Telecom & IT: What is your vision for the ITU and ICT industry in the next four years?***

➲ Houlin Zhao: I see that the ICT and telecom business over the recent decade has achieved a lot of progress and development, and ITU's mission to connect the people is also gradually progressing. Seeing this kind of achievement the situation today is something we should all be proud of. But, however, looking at the future we still see a lot of challenges of keeping those successful businesses continuing: how can we connect those people not connected yet? How we can keep our innovations that have been brought to us not only from big companies but everywhere including Africa. So these are issues, and as we put our connected 2020 strategy plan into action, inclusiveness, sustainability, growth and innovation are the major topics we'll have to focus on in order to bring our planet new powerful ICT tools to improve our lives.

The ITU is the oldest UN agency, and will be celebrating 150 years next year. It has contributed to human development so successfully that today they still respect the ITU and still want to strengthen the ITU, but as an organisation we also face our challenges of how we can increase our efficiency, make better use of our very limited financial resources, and also make better use of the very limited human resources and how we can bring organisations with moving target from our members.

As we find ways to keep the ITU still relevant we have to work together with our members. We have 193 member states and 700 sector members from the industry. We have 70-80 academy members already. We are that unique UN system but we're not that unique when you're talking about organisations of the future since we also have challenges and opportunities. I'm very pleased that at the ITU we reached a strategic and financial plan at the recent plenipotentiary conference and all have mostly been approved and this shows a good sign that our members will work with ITU to move further.

I'm excited with this kind of opportunity that I'll be leading the ITU for four years and whether I need a second tenure is another thing. But the 4 years is not a short period, we can do a lot and I'm confident that we will contribute to the human society success.

➲ ***AT&IT: How will the ITU help Africa to bridge its capacity gaps?***

➲ HZ: It is true that this capacity gap exists, actually not only in Africa but everywhere. In one country you have the gap between cities and rural communities. Nigeria is not a small country, it is the biggest populated country on the African continent with a lot of contributions (financial, education, and creating ideas to harmonise Africa) to the continent. I see that since we have this capacity gap then we have opportunities. But how can we use these opportunities to eliminate this gap?

To build a very advanced ICT network to connect people is very critical and we can see that the benefit it offers to the rural areas is good in order to advance education. You cannot take refined teachers to the villages but you can take e-Course online. This will give them the same opportunity to receive the same teaching which gives you very talented qualified teachers.

I see very good development in Africa where they're not only trying to learn from the others but also trying to offer some kind of approach they discover by themselves; maybe a better approach than the others and they don't want to miss the opportunity. I like this kind of spirit I very much appreciate it and since these people have very good education, know their national situation and have a very strong will to contribute to the development of the continent I'm sure they will offer even better opportunities to eliminate the capacity gap within the continent.

ITU will be helpful in contributing to this process that we as a UN international agency have some kind of advantages to mobilise international families to create a better platform to help young techpreneurs and villagers to have better contact with the rest of the world so that they get better ideas and opportunities and information about potentials and partnerships which will help them move together better, to eliminate this issue of capacity gap.

Managing Editor, Africa Telecom & IT, Olubayo Abiodun interviewing the ITU Secretary-General at the National Convention Centre, Doha, Qatar

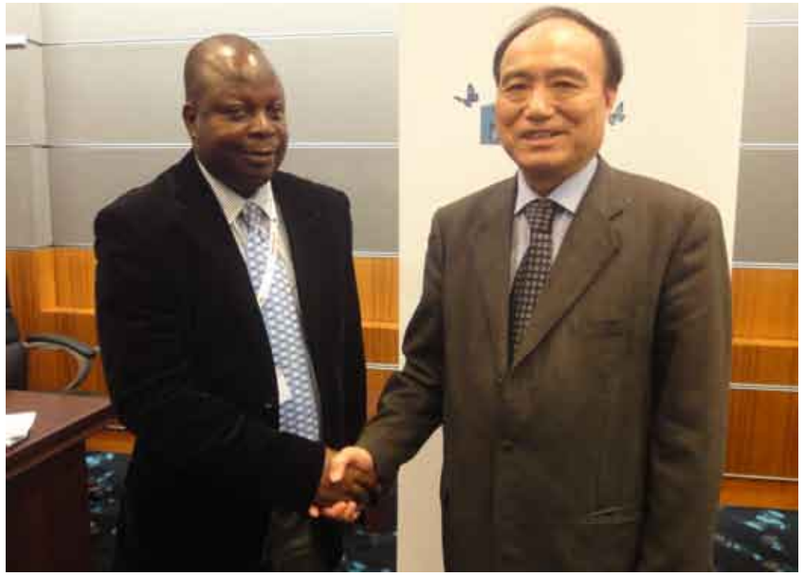
➲ ***AT&IT: What is the most pressing agenda of the ITU given the myriad challenges in the ICT ecosystem?***

➲ HZ: We're talking about connecting people and connecting the world and today we're very proud with the recent statistics that by the end of this year we'll have almost seven billion mobile penetration and the planet is 7.3 billion. That's almost 100 per cent. I was very pleased when we were told that in Nigeria mobile penetration has reached almost a hundred per cent. But on the other hand you may have more than one mobile phone. And I heard again that broadband penetration in Nigeria is less than 10 per cent so we have to first of all find out where people are not connected.

We have to not only talk about this issue of connected or not connected but we really have to see where these people are and then put our agenda to find a way to connect them. Another issue is to offer everyone equal opportunities to enjoy modern ICT technologies like broadband. There's the potential to quickly develop broadband in Nigeria and also in the continent and then consider that the other continent may be better than you but I think in other countries there're still some areas not covered by mobile phone signals and broadband is a big challenge to them even in Europe and the United states.

In Africa people talk a lot about m-Banking but in the United States people do not use that technology. In Africa you still have some areas you show your leadership so I'm very sure that in the next decade we'll see Africa show up at the front line to lead in the development of technology services more often than we see today.

I'm very excited by the opportunity to lead this organisation for the next four years. I will continue on what Dr. Toure has done so far; to pay attention to those countries that are still not enjoying the same development as others and also to try to encourage innovative ways to eliminate this gap as quickly as possible. Here, we ask other continents to help and we also encourage others to show some form of good approach and ideas.



The ITU Secretary-General welcoming the Managing Editor, Africa Telecom & IT, Olubayo Abiodun to his office at the National Convention Centre, Doha, Qatar

During our debate at our conference we talked about sustainability and affordability; how we can offer these services to people so that they can afford to pay. These are issues we're trying to work with our members on, to bring them together in order to bring price down and potential powers to our equipment close to our people at lower prices. I think we'll be able to do that because in ICT not like in other eco system, ICT prices are always going down so there's the opportunity for us to expect this kind of thing to happen.

➲ ***AT&IT: What is the ITU doing to redress the gender-digital balance?***

➲ HZ: The ITU has already addressed this issue at several IT conferences. We always try to encourage our members to work on these issues of inequality to raise the equality between men and women, boys and girls. ITU since 2010 recognised the Tuesday of the last week of April every year as ICT for girls day. This is to encourage the ITU family to bring in more girls to the ICT profession. We also at the recent plenipotentiary conference launched this gender equability in the mainstream program and we awarded a group of distinguished ladies including the minister of communication technology of Nigeria. I see that work is in progress but it has not reached a satisfactory point yet. We have to work hard to encourage more girls to join our ICT profession and also to find more ways to get more women to occupy leading senior positions. I see that if everybody pays attention to this issue, I'm very confident that the situation will improve.

➲ ***AT&IT: Africa still needs huge investments to deal with gaps in its ICT ecosystem. In what ways can this be achieved?***

➲ HZ: I was very pleased when I visited the Nigeria Pavilion and I heard your minister encourage investment in ICT. She offered a lot of words for opportunities for investment and this is great because we need strong investments to keep everyone in a win-win situation in the business, this is the only way you can keep the business going. If you're thinking of charity donation, you'll get very limited financial and human resources and the benefits will be limited in certain areas.

This kind of donation can have some immediate benefits but cannot be sustained. You really have to change people's mind. I so much appreciate the opportunity to join your minister and Nigeria at the pavilion and the message is very clear; that Africa and indeed Nigeria encourage investment and try to make sure that the investment is put in good hands and with that I can see our business going forward.

➲ ***AT&IT: What programme does the ITU have for the physically challenged in its development agenda?***

➲ HZ: ITU has put this in the agenda for many years. When I was Director for Telecom Standardisation Bureau, I participated in the WSIS 2005 process in Tunisia. I participated in so many sessions with people with disability and even as early as 2003 I used our limited fund to support to have these kinds of messages to help people better understand discussions. But then again I see that we've not done enough.

I was very pleased at the end of ITU world 2012, where we concluded and agreed in the regulation's provision talking about communications to help people with disabilities, because the population of these people is getting bigger and bigger.

We need some tools to help not only those who already have this physical disability but also for people to be able to catch up with their local environment, talking about the future where we'll have internet of things, trying to have everything connected. You have new challenge when you find yourself in an environment you cannot manage; all these are things we have to manage. I'm very pleased that the ITU family has set this as part of its agenda.

➲ ***AT&IT: The phenomenon of Internet of Things is raising concerns relating to the invasion of privacy. What is you view on this?***

➲ HZ: Just like the internet, today many people enjoy internet services but they're worried about their privacy. They don't have the confidence to put everything on the web; not just the web but even your mobile phone, you're worried that your personal data will be taken by someone else.

Now in Africa we're proud of the m-Banking, but it seems to me that Africa people have more confidence to use this as a commercial business than in very developed countries. Definitely this will be the issue but I see that this will be addressed and if we all put this on the table I think solutions could be found. I'm very confident that we'll protect users' privacy and also balance the nations' security with individual privacy. And provide more benefits than problems. We will protect users' privacy.

➲ ***AT&IT: From your vintage position, what are your expectations for Africa's ICT market in the years ahead?***

➲ HZ: I believe that people really appreciate the Chinese market and the ICT market is developing so rapidly but people also get a lot of ICT products from the Indian market and these two are very big markets in the world, as far as international market is concerned and this is because they have about more than 1 billion population each and also Africa has more than 1 billion population put together and therefore Africa will be the next focus in the world in terms of development.

Of course today, you find that although the telecoms business already achieved a lot of result in terms of development but still other services and equipment are offered from other continents. In China in the 70s and 80s, all their equipment and services were provided by foreign companies but now they can offer these things themselves and they can even offer the rest of the world their products. But in Africa I see that the time will come, it's a potential that is waiting to be unleashed, and I've already heard this kind of call from our Africa members to have their own industries, but this does not mean that you just assemble the products from China, India or America market where they just give you technology and then you just assemble. At the earlier time you can do that but I'm sure that after some time you'll try to develop your own products and services.

➲ ***AT&IT: What prospects do you see in Africa's potentials for IT product manufacturing?***

➲ HZ: I shared this message with some of my friends in Kenya in 2003 when I attended a meeting organised by KCC. They invited some entrepreneurs with me at the table and they were talking about new technologies and they told me that if they use ITU standard they can produce some equipment but unfortunately the product wasn't looking nice.

Producing the equipment yourself and using the international standard works. This will create room for efficiency and improvement in your production. You should also come to the market with something that your people will be able to buy.

The most important thing to me is that you have the capacity to use ITU standards to develop your own products. In 2013, I saw products from these countries and I couldn't tell the difference from that made in Kenya and the one developed in United States.

Your minister offered me the Z-pad and I couldn't see the difference in the technology with that from USA or China. I think that in the next decade we'll see Africa moving faster than in the last decade and a lot of potentials will be fully exposed and Africa will show its own way to the world that they can be the development of technology in the world.

➲ ***AT&IT: How much entrepreneurship skills have been passed to the young innovators beyond the prize awards in the ITU scheme?***

➲ HZ: Now you just touched my point. That is the point I will start to discuss with many ministers from June this year. In Uganda for example I met with their minister and he said they have not got any high tech parks yet but they have a lot of innovators and tech start-ups but they have not put them together in a place, like the high tech park, but they have a lot of projects to support them. So I would like to create a new environment to invite our member states and industry members to come together with their work on SMEs start-ups, innovation centre members to come together to share their ideas of development to perhaps look for opportunities of partnership and to try to encourage the others to come invest in their products and I firmly believe that in some countries the young guys have ideas and they come to the government for support at the beginning and then continue on their own. If we create this kind of environment to bring them together, governments are very susceptible to support young people to come to this platform. But of course there are some start-ups that have a strong finance to travel abroad; if they have money they do their business but how can we create such environment to help those who cannot help themselves? That is one of the priorities I'll like to focus on this year and I've gotten a very good support from ministers of various countries and they're very kin to move with me on this initiative.

➲ ***AT&IT: Are you also planning tech hub for tech start-ups?***

➲ HZ: Yes. In the world now there's this cross point that innovation may not come from the big guys only but something big can come in the future from those you never heard of because the internet is providing opportunities for young people to get access to various technologies relatively easily. If they see these various opportunities they will try to use these to contribute to market

development.

➲ ***AT&IT: How do we translate the opportunities in the broadband space in Africa to a huge strength, notwithstanding the challenges of the cross-border integration?***

➲ HZ: I know that in Africa you have the various regional sub-groups and the Central America states seem to be a little bit individual. But I see that Nigeria has a very large population with a lot of territories and neighbours; you can use all tactics to get your neighbours to work with you.

➲ ***AT&IT: What structure does the ITU have in place to support Africa's efforts?***

➲ HZ: We have our regional office in Addis Ababa and we also have some area offices in a few countries on the African continent. We also want to focus on this type of coordinated development for our continent, trying to find opportunities to raise development. Guinea Bissau and some others for example are late as far as market economy is concerned and they need others to help them with regulation.

To have a very powerful Africa compared to the others, you need interconnection among our capitals, towns and cities and these kinds of things will be very difficult if everyone just looks at their territory. We need to have a regular connection and I'm really pleased to see that the Smart Africa have four countries sharing the same pavilion and the minister of Uganda told me that they have five priorities and each of the priorities is taken by one of the members so that there is sharing. This is very good if you ask me and ITU can be part of the initiative if they ask us to. And I agree with you that the ITU can play an active role here to facilitate the inter co-operation interconnection among members of the same continent.

➲ ***AT&IT: What would be your priority at the end of your four-year tenure?***

➲ HZ: My priority will be to have this connection gap reduced substantially. We still have a huge gap here and according to our statistics we have about 450 million people who are not connected yet and the number may be higher and also those technologies should be offered to everybody to enjoy not only for those in the urban area. Not everybody perhaps, but everywhere people are moving about they should have a space to use modern technologies.

My first term is four years and it seems long but very short. For many things at the global level you do not expect that in four years you can change it all, but if at the end of my term we see some new progress we'll be very happy. I'll also like to see Africa come up with their own industries that are fully developed at the end of my four-year term.

➲ ***AT&IT: In what ways can the challenges of cyber security be minimised?***

➲ HZ: This is already part of our agenda at the ITU. We have the global cyber security agenda we did in 2007 and we have our technical expert groups that look at cyber security related standards and that's in the National Telecommunication Regulation where we put security issues highly on the agenda.

As long as security is concerned, it is not only technical approach that we need to solve this matter but we have a lot of laws, moral commitments and law enforcement. You have to agree with some principles and if you come to this kind of agreement it's not only through technical issues that you solve such issues and ITU cannot do that alone. ITU only contributes to technical considerations development. But we have to work with others to really establish a better environment with some kind of accepted principles to see that our cyber space is peaceful, reliable, accountable and affordable also.

➲ ***AT&IT: How will ITU assist African nations in the integration of ITU standards in ICT technologies evolution?***

➲ HZ: ITU standard is international standard and should cover Africa as well. However, there are particular issues; talking about electromagnetic effects to our health. I heard that 10 years ago there was a criteria set by international families to be based on studies in Europe and you know our borders are not the same as Europe, so they want to have some specific attention to our Africa people. But I checked with some medical doctors and experts they said that as far as the human body is concerned there is no much difference. A particular group may have a particular interest but we encourage our members to bring these concerns and suggestions to the ITU family because if you do not do this people will not attend to your issues. When you raise your voice you encourage the others to work with you to find solutions.

➲ ***AT&IT: Many countries in Africa are struggling to meet the deadline for digital migration. How do you see this ending?***

➲ HZ: I was in Guinea in March 2012 and I was very pleased that as early as March 2012, Guinea government tried to put this in their agenda to make sure that in June 2015 they can join the others to have the digital transition. I was pleased with this commitment and I think it's necessary for us to come together for a successful transition. It may not be the same case everywhere because I was in Central America and I saw that there's no coordinated approach, each have their own target year.

So Africa's effort to try to work together as one family should be appreciated. The date is very important to us and we encourage everyone to try to meet up. Those who will not meet up will suffer because others have moved on with the digital age and you've lost the opportunity for them to enjoy the digital age. There are some transition measures that should help from the ITU but again we encourage everyone to meet the deadline.

NIPOST to boost Nigeria's e-Commerce

The Postmaster General Of Nigeria,Mallam Ibrahim Mori Baba

THE Nigerian Postal Service (NIPOST) has opened a parcel collection centre at the University of Lagos Post Office, which online retailers feel will boost e-Commerce in the country. The business is valued at $10 billion, with 300,000 web orders being placed each day.

The pilot scheme at the University of Lagos will eventually lead to similar rollout to other tertiary institutions, which, NIPOST believes, provide a captive and sizeable consumer market that is digitally savvy and comfortable with buying online. These institutions are also located close to bustling residential areas and centres of commercial activity. The new collection centres will therefore serve not only students but also a broad spectrum of the population.

Konga.com, Nigeria's largest online store, has already tied up with NIPOST to get its goods to customers. The Minister of Communications Technology, Dr. Omobola Johnson, while endorsing the partnership between NIPOST and Konga.com, reiterated the government's commitment to transforming NIPOST into a viable, socially conscious and profit-orientated entity.

According to her, since the first Post Office in Nigeria was established over 160 years ago, NIPOST has been fulfilling its mandate of providing universal access to postal services ever since. The Minister stated that the Post Office had grown to become the most extensive retail network in Nigeria. "It is only logical that the e-Commerce industry leverage the experience and facilities of NIPOST to provide secure and more convenient services to their customers," she said.

She expressed the expectation that the partnership would enable NIPOST to contribute its own share to supporting the growth of retail businesses in Nigeria. Though e-Commerce in Nigeria has ballooned in less than five years, logistics and collection centres have continued to be the major drawbacks in the ecosphere. These challenges include a shortage of secure and conveniently located places where customers can pick-up their purchases, and also return items that do not meet their expectations. Stakeholders are hoping that the Lagos University collection centre and others planned will to address logistics and delivery issues experienced by e-Commerce operators in Nigeria.

It is expected that the NIPOST-Konga collaboration will assure customers that the items they have bought are safe and waiting to be collected at a place that is easy to reach.

Trusted data will tip the balance between success and failure in 2015

The wheels are turning ever faster in the ICT industry. For every year, there are new and often unexpected developments. As we face another eventful year, **David King** describes which developments had the biggest impact in 2014 and what we can expect from 2015

CEO, Flexenclosure, David King

A YEAR ago, when I was asked which trends would have a significant impact on the ICT industry in 2014, I predicted that there would be an increasing interest in prefabricated modular data centres to cope with the expected data boom in developing countries.

One year later, we can see that prefabricated modular data centres have proven to be just as flexible, energy efficient and quick to deploy as manufacturers had promised and customers had hoped, and many ICT companies and mobile operators have chosen this path – ACS Angola, Vodacom Mozambique and MTN Côte d'Ivoire being just a few examples in emerging markets.

Another trend that I predicted was a renewed focus on increasing reliability and reducing operating expenses when powering mobile base station sites. In the last 12 months we've seen that this is indeed a critical combination for the specialised tower companies that are increasingly taking over ownership and management of these sites, as the success of their core business depends much more on the long term reliability and cost efficiency of their power equipment than it did to the mobile operators themselves. Implementation of green power solutions that reduce diesel fuel consumption has been one result of this trend, as well as efforts to increase telecom sites' reliability and uptime.

So what's in store for 2015?

Here are the three trends I think will have a major impact on the ICT industry in the year ahead:

2015 is the year that prefabricated modular data centres will truly come of age. As the data boom continues to accelerate globally, prefabricated facilities will be increasingly adopted not only by telcos, but also by colocation and global Internet companies worldwide, driven by their ability to be quickly and easily expanded as required. The data centre colocation market has been quietly putting down roots in Africa and will now enter a growth phase – with prefabricated facilities giving colocation providers the ability to precisely time facility expansion, thus allowing them to maintain a high level of utilisation (return on capital) while avoiding missing out on new customers due to a lack of capacity.

At the same time, global Internet companies will take increasing advantage of the capital-efficient expansion opportunities and risk-free build process offered by prefabricated data centre buildings. And of course, an additional benefit is that prefabricated data centres can offer very high quality and price competitive solutions compared to traditional brick and mortar buildings. This previously tended to drive demand mainly in developing economies, but we will now see exponential growth in the adoption of prefabricated modular data centre solutions from developing and developed nations alike.

In the mobile telecom site arena, we will see specialised towercos continuing to take over responsibility for tower sites from the mobile operators. For the towercos, operational cost savings are key to driving business profitability, while for the operators its network uptime. Power solutions that can reduce diesel-related expenditure in areas where grid power is unreliable or unavailable, while at the same time guarantee network uptime, will therefore be in much demand and drive significant innovation.

To ensure that this combination of operational reliability and guaranteed network uptime can be delivered, power equipment vendors will need to develop long-term partnerships with managed service companies and we will see new energy service companies (ESCOs) start to establish themselves in many markets. The broader presence of ESCOs will in turn reinforce the green site power trend, as these companies look to invest in the most cost efficient power equipment for generation and sale of power to the telecom operators under long term contracts.

As mobile towerco networks increase in both size and the number of tenants hosted, the availability of trusted site data will drive the difference between profitability and failure. To keep control over and reduce network energy costs (which can constitute up to 60 per cent of operating expenses for tower companies), as well as to prevent system failures, tower companies need to be able to trust their data and will invest in software-driven intelligent monitoring systems that are fully integrated with the power systems right from day one. These solutions will give site owners and managers the ability to broadly monitor their entire networks as well as to perform deep dive analyses on a site-by-site basis. This will ensure that they understand the status of their equipment at all times, thus giving them full control over their assets and business.

Data should be providing accurate quantitative and qualitative historical performance analysis, trend benchmarking, forward planning and real-time monitoring for true energy optimisation. But towercos are struggling to understand how to best crunch the data they have in the most useful way, with incomplete raw numbers and a lack of analysis and reporting tools resulting in a lack of trust in the data that seriously impairs informed business decision-making.

The answer is a fully integrated intelligent solution (like Flexenclosure's eManager), that lets you look across the entire network as well as performing deep dive analyses on a site-by-site basis. Now, rather than making broad decisions based on overall and incomplete network-level results, reliable data is available to help drive profitable business planning.

This monitoring system should be fully integrated with the power system right from the start, rather than adding it after the fact. This reduces the number of potential failure points and the performance of the sensors themselves can be monitored, with alarms flagging issues in real time, allowing for immediate action and resolution. This also allows for the easier combination of sensor output and system behaviours into smart alarms, like combining voltage generated and power used.

Capturing accurate data at the sensor level is one challenge. Compiling complete data at both site and network levels is another. This requires connectivity from all the sites to a central database, but with network connectivity often breaking down, data that has successfully been captured at the sensor level can then just as easily be lost during transfer. And with standard hardware based monitoring systems, there is often no way to recover the data once it is gone. And whose responsibility is it? Towercos spend a lot of time fighting with monitoring system suppliers about responsibility, but is always a discussion that is being had too late - whether the monitoring system or the network was at fault, the end result is the same.

An intelligent system organises, time stamps and stores all collected data locally and checks with the central energy data warehouse what has been sent versus what has been received, so that any data lost during a network outage can be retransmitted. The best monitoring systems guarantee 100 per cent complete and accurate site reports regardless of communications breakdowns, thus ensuring that data is never lost.

Collected data needs to be analysed or it remains a combination of virtually useless numbers. Typically, towercos need to have analysis scripts written bespoke in efforts to try to make sense of enormous workbooks of Excel data compiled by random and disparate sensors on site. This is a complicated and incomplete solution compared to having the analysis and reporting capability fully integrated into the system from day one. This can be done for the most crucial data points like fuel consumption, genset performance, power generated, power used, cooling data, battery use and equipment temperatures, as well as logistics data such as diesel refuelling, generator servicing, cooling filter replacements, and data required for battery warranty issues.

The system also needs to be customisable, allowing users to create bespoke easy-to-read reports that seamlessly overlay with the standard ones, supporting every aspect of their business. This provides better opportunities for data analysis, management of opex, tighter tracking of assets, immediate bad site detection, faster response times to site critical failures and reduced frequency of site visits.

Reliable data is very important to inform major business decisions spanning both network energy operating expenses cost control and broader asset investment and management. These fall into two key categories: operational and investment. Trusted data enables customers to make informed business decisions on both accounts.

● **David King** *is CEO of Flexenclosure, of one of the leading data centre and power management systems suppliers.*

Into the Internet of Things Era: the African Context

Riad Hartani, Frank Rayal, Ananda Sen Gupta and Rolf Lumpe look at the changing data management dynamics driven by the IoT evolution across industry verticals. They analyse the most significant trends and considerations that are likely to shape the emerging services and business models and how these have an impact on the African eco-system

Dr. Riad Hartani

AS we progressively evolve towards the Internet of Things (IoT) era, various industry verticals are likely to see disruptive transformations, with a direct impact on their underlying business models, enabling technologies and competitive environments. At the same time, this is opening up new opportunities for new ways of delivering novel digital services. The African context, with its own set of diverse specificities, forms an ideal setting for leveraging such advancements, with potentially profound socio-economic impacts.

➲ **Devices:** Sensors, identifiers and gateways are types of IoT devices used to collect and convey information. Devices are designed and deployed to meet the application use case requirements. They can range from simple identifiers that provide specific information on the object, or more complex devices that have the ability to measure (sensors) and process data (gateways). A variety of IoT devices have emerged in various business verticals, with the utility / energy business being some of the precursors and more recently, devices in the health, transportation, home and finance eco-systems.

➲ **Connectivity:** Devices can be connected to the network directly or indirectly through another similar device (mesh) or a gateway that is provisioned to support multiple devices. Connectivity can be through a number of physical media such as copper, fibre optical cable or over the air through a number of wireless technologies. Examples of connectivity would include the traditional 2.5/3/4G networks, as well as various local area solutions (zigbee, Wi-Fi, etc.) and low power wide area solutions (weightless protocols, etc.) among others.

➲ **Applications:** These define the use case of the device and include all the necessary functions required to make use of the device for the intended purpose including the hardware and software architectures. IoT application stores are emerging with applicability to specific industry verticals, with the health wearable devices being a recent example. Platforms: devices and connectivity requires a platform to provide a service. Platforms are used to provision devices, manage and control them. They are used for billing and fraud detection.

➲ **Services:** This primarily refers to the IoT service to the end-customer. The service provider leverages all the downstream elements in this value chain: platforms, applications, connectivity and devices. Examples would include automotive automated diagnostic, medical geriatrics and remote power consumption optimisation.

➲ IoT: Fundamental Observations and Nascent Opportunities

Africa, although very diverse in terms of digital infrastructure, levels of development and economic needs, shares three common themes across most of its countries: (a) the requirement for an aggressive cost structure efficiency to make the deployment on novel technologies a viable and sustainable business over time and (b) the relatively little legacy in terms of infrastructure and applications, that makes it ideal for the rollout of new technologies with little backward compatibility constraints and finally (c) a significant portion of the population with little access to various mainstream digital services that leads to a more urgent adoption of new services innovations, versus what we would likely find in more developed regions of the world where such innovations would be a substitution to existing services. Examples include the recent successful adoption of Internet payment/banking and mobile health models.

The development of the IoT eco-system has been progressive and will continue evolving over the next decade and beyond. Some of the most relevant considerations are highlighted, with a specific focus on ways of leveraging them in an African context, with its specific emerged and emerging economies constituents.

➲ **Proliferation of connectivity standards:** Connectivity standards can be divided into different categories depending on fundamental characteristics. We consider three categories: Spectrum requirements (for wireless connectivity; devices can be connected through wireline technologies); and range, power and cost, which are highly correlated. 3GPP standards such as GPRS, UMTS and LTE are licensed band access schemes that rely on high power for long range, consequently are relatively expensive in comparison with other connectivity techniques.

On the other hand, technologies such as Bluetooth are meant for short-range communications in unlicensed spectrum and are low on power consumption. Various LPWA proprietary solutions have also recently emerged, mostly in unlicensed sub-1GHz spectrum but also in some licensed bands. Wi-Fi relies on higher power and provides longer range than Bluetooth albeit at a higher cost. The policy and regulatory environment in the various African countries, shall consider such developments to facilitate the rollout of new connectivity models that would speed up the rollout of IoT networks.

➲ **Commoditisation of devices:** Devices and connectivity continue to march on a downward slope of cost reduction (Figure 1).

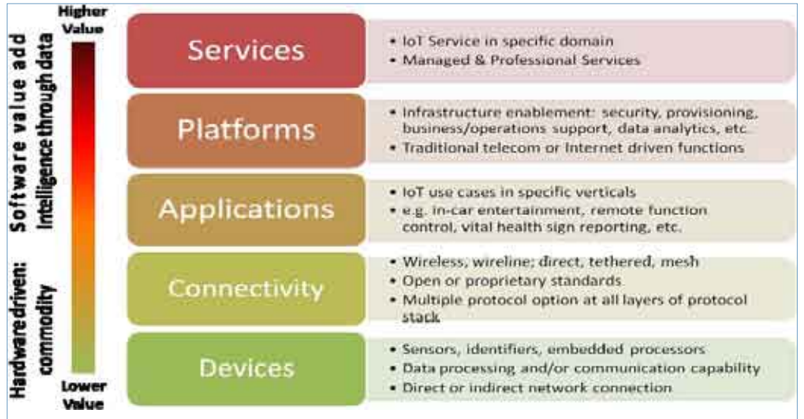


Figure 1. IoT ecosystem reference model

Figure 2. Device commoditisation

This is essential to enable the business case for IoT applications. The challenge to device manufacturers is how to differentiate from competition. Our observation in this space is that software applications and platforms, including operating systems, are the essential leverage used by device manufacturers to differentiate (e.g. Apple/iOS, Google/Android; Samsung attempt at differentiating through Tizen, and in a similar way with Alibaba and XiaMi's own platforms design). Such commoditisation, leading to lower cost structure, shall enable new business models with long term viability in areas such as health, finance and education, all of which having significant socio-economic impacts in the emerging world.

➲ **Commoditisation of connectivity:** Low-cost connectivity is essential to enable the business case of most applications. There are many variants of connectivity including wireline and wireless technologies. The lowest cost wireless connectivity leverages license-exempt spectrum over short distance (Figure 3). Wearables, for example, leverage Bluetooth to connect with smartphones. Alternatively, some consumer devices rely on longer-range licence-exempt technologies such as Wi-Fi for greater range. Central hubs for connectivity and routing are deployed to tether over longer distances for remote control and monitoring. Where mobility is required, wireless technologies in licensed spectrum can be implemented albeit at a higher cost. Such connectivity commoditization, shall allow the deployment of new Internet broadband architectures and service models in the emerging world, with a direct implications on applications running on top.

➲ **Emergence of long-range low power wireless technologies:** We see an opportunity for very long range wireless technologies that are low power, low cost and work over long range (Figure 4). Such technologies are now on the market but are yet to prove their commercial viability. These technologies often assume the build out of a parallel IoT network to the mobile network. The IoT network is operated as a private network on a subscription model of per device/message basis for low fixed cost pricing. In specific industries such as energy, utilities, logistics and transportation, such developments shall lead to the rollout of new services with clear economic benefits.

➲ **Partnerships and alliances to win the IoT platform war:** The development of IoT solutions is inherently about the development of ecosystems around offered solutions. Such ecosystems are built via tight and lose partnerships between the various industry players. The leading players will aim at controlling the ecosystem by providing a platform that would host IoT applications, and over which IoT services will be built (Figure 5). As in any platform model, such as those in smartphones and the Internet, the key is to increase the adoption of the platform. Various models are being put in place to achieve this, via the development of open source IoT con-

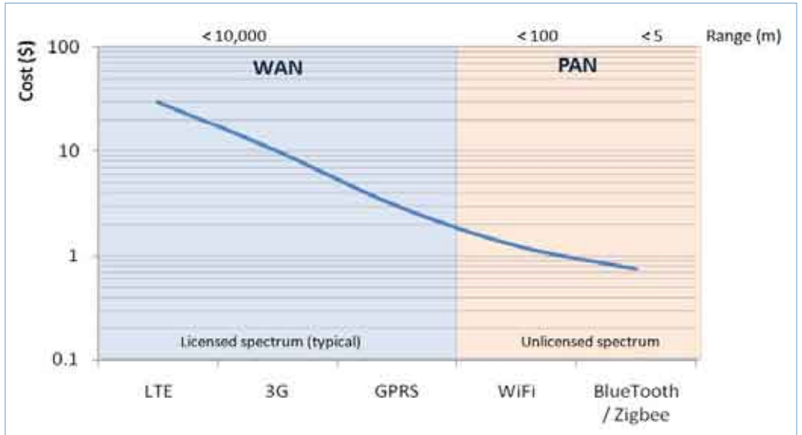


Figure 3. Commoditisation of wireless technologies

nectivity and interworking software, open APIs to plug into the platforms, and SDKs to develop services on top of the platform.

Various contenders are already in the game to achieve the control of IoT platforms, including the Internet platform players (Google, Apple, Amazon, etc.), the lead industrial players with a specific vertical focus (e.g. GE for industrial Internet), and to some extent certain mobile operators with a strategy towards Internet-scale OTT deployment. This opens up the opportunity to develop optimized platforms that would be best suited for the device and applications required for the African eco-system.

➲ **Emergence of new MNO and MVNO/OTT service models:** A key dynamic of the IoT market that needs to be highlighted is that the majority of 'value' in any IoT application lies not in the simple carriage of data, but in the provision of an overall service. For example, a wide-area wireless enabled home security system represents a significant revenue opportunity for a mobile or virtual mobile operator, including revenues from device sale, installation, and monthly service fees. However, the data traffic revenue that such a solution generates is likely to be relatively small in comparison.

In a similar fashion, a connected health solution would include the connectivity network as well as the platform to manage the solution, interfacing with the various stakeholders in the health solution value chain. The story is the same for many other IoT applications: the real opportunity for mobile operators lie in moving up the value stack and away from the simple provision of data carriage services. The mobile network operator has to provide the connectivity and IoT management for value added. IoT solution provider (either over-the-top IoT service provider or mobile service provider who offers IoT solutions) has to integrate all the components of the ecosystem for the end-to-end IoT solution. MVNO and OTT models, with the right cost structure would likely emerge to tackle specific services needs in the emerging world.

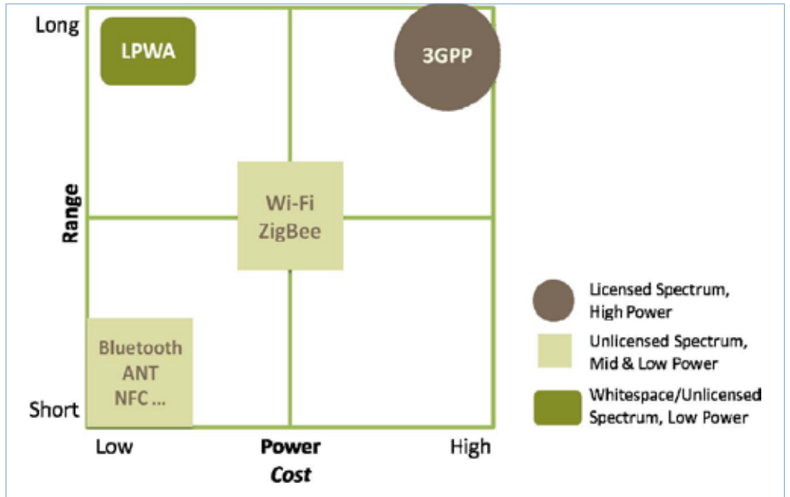


Figure 4. IoT Wireless connectivity

➲ **Extracting value through data sciences:** As businesses evolve to leverage the huge amounts of data assembled – mining and learning through such data as well as optimising communication between those producing it and those using it brings significant opportunities around IoT business models. As such, the desired goal is to create a solid foundation architecture that is able to provide these optimal functional capabilities and a platform to overlay data science applications. This would include the various layers in the data value chain – optimised processing through an acceleration of migrations to the cloud, scalable data management leveraging big data models and the use of customised data sciences solutions for business intelligence creation. This is complemented by a fundamental re-architecture of IT models within the businesses integrating IoT models.

We are now witnessing the emergence of enhanced (and new in some cases) set of machine learning and data mining algorithms, specifically focused on clustering and predictive modelling in high dimensional spaces based on imprecise, uncertain and incomplete information, efficient statistical data summarisation and features extraction algorithms as well as large-scale real-time data stream management. These tools will be at the core of the processing engines being commercialized or running in open source environment, and will aim, when applied to specific industry problems, at optimizing the existing business logic and augment it with new functionalities over time. Such data science models in IoT environments would form the basis for new solutions and services offering that can only benefit societies in the developing world.

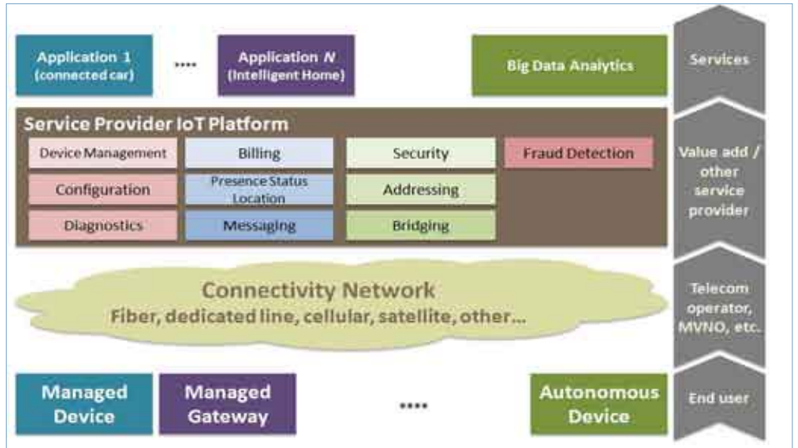


Figure 5. Value appropriation through platforms

➲ IoT enabled Innovations – Illustrative Use Cases in an African Context

A large number of digital solutions in various business verticals are seeing an aggressive insertion and leverage of IoT components in their value chain. This includes mobile internet, financial applications, education, energy and healthcare. Some of them are illustrated below, with applications soon to be seen in various eco-systems within Africa.

a) Financial services

One of the impacts of IoT in financial services is that it will reduce the cost of monitoring a loan in asset-based lending especially machinery/equipment loans and inventory based financing. Asset based loans typically cost more than traditional loans and sometimes include additional audit and due diligence fees. With proper agreements and understanding between the lender and loan recipient, IoT can monitor the functional characteristics of the equipment or provide tracking of inventory. This can not only reduce the cost of monitoring for the bank but would reduce the overall risk and provide advance warnings on cash flow issues that may lead to default, triggering for instance proactive collection attempts.

Loan recipients can be incentivized with lower rates and fees to allow for opting into IoT sensors on their equipment. This is similar to what is in use today in some personal auto loans, where an IoT can assist (thereby reducing the cost) in the repossession of an automobile after a default. In auto-insurance, IoT can provide more valuable driving performance information that insurance companies can use to provide discounts to drivers.

b) Industrial internet

Data associated with industrial Internet that is, data created by Industrial equipment such as wind turbines, jet engines, and MRI machines – holds more potential business value on a size-adjusted basis than other types of Big Data associated with social web, and consumer internet. The typical use cases of IoT in the Industrial Internet are to collect equipment performance data as part of Asset performance management. This data can be organized in the Cloud and analysed for insights that can predict breakdowns and other kinds of occurrences. Industrial companies can boost productivities of their operations and equipment by up to 30 per cent by introducing IoT and Big Data based analytics to monitor and manage their assets. Recent examples include the rollout of smart meters and sensors in water utility businesses on their various operational assets (pipes, treatment facilities), with analytics leveraged to predict critical situations such as leaks and adverse weather events. The water utility expects to save on scheduled repair and overall maintenance cost, allowing a superior business case for scalable rollouts.

c) Health Care

Health care probably has the biggest applications of IoT. From remote tracking of patients to predict onset of acute symptoms to streamlining patients' flow through emergency department in the hospital, there are numerous applications of IoT supported by Big Data analytics. For example, sensors that snap on to an Asthma inhaler and users can voluntarily opt-in to track when and where they use their inhalers. The data collected is analysed and presented back to the Asthma patients through a mobile app to better understand triggers like pollen counts that may affect their symptoms.

The overall benefit potential is huge with early studies reducing the number of people with uncontrolled Asthma by about 50 per cent. The potential of such solutions to reduce overall health care costs is huge. Another example is an ingestible sensor that can be swallowed. An example would be a pill that gets energy by reacting to stomach acids and transmits useful information to a mobile phone through a patch worn on the body. All in all, the Internet of Things era has had various false starts, as far as mass adoption and progression to mainstream.

The recent convergence of various trends including innovation in low power and low cost devices technologies, scalable network connectivity as well as mainstream cloud and big data processing models, have opened a new window for the emergence of IoT based value add services. A specific focus on ways of taking advantage of this IoT evolution in an African context, with its specific emerged and emerging economies is analysed in this paper. It is illustrated via various real world scenarios in the areas of health, finance and logistics.

We believe that this evolution will provide the appropriate framework for new services creation, which will increase in strategic importance and becomes a major component of business competitiveness and socio-economic development moving forward.

● **Dr Riad Hartani, Frank Rayal, Ananda Sen Gupta, Rolf Lumpe** *all work for Xona Partners in Silicon Valley in the USA.*

● ***This article is exclusive to us.***

LG Electronics and Mercedes-Benz team up for self-driving cars

FOLLOWING in footsteps of Google and Audi, South Korean electronics manufacturer, LG and German car manufacturer Mercedes-Benz have announced that they are partnering to create "next generation camera systems" for automobiles. LG reportedly told The Verge that it would "provide the core components of self-driving cars from Mercedes-Benz in the future". The new systems will make use of cameras, algorithms and computing power to assist the driving experience.

The new system will be based on LG's ADAS or Advanced Drive Assistance System. The ADAS system features technologies that include Forward-looking Single and Stereo Camera Systems for Autonomous Emergency Breaking, Lane Keeping Assist, Traffic Sign Recognition, High Beam Assist, Pedestrian and Bicyclist Protection, Driver State Monitoring for eye positioning, drowsiness level, and other biometric states, and surround view monitoring to assess with parking maneuvers. LG will license Mercedes-Benz's 6D Vision technology. The 6D Vision technology is named for its ability to not only process 3 dimensions but also motion, direct, and speed.

"Mercedes-Benz is the ideal partner for LG as both companies share a vision of how ADAS technologies can improve the wellbeing and lives of all consumers," said Woo-jong Lee, president and CEO of the LG Vehicle Components Company. "As the automobile evolves from a mechanical to an electronic system, LG will be in the perfect position to contribute its experience to the exciting automotive industry."

LG is aiming to be in all spaces of automotive electronics as it will also bring home entertainment and Mobile technology to Automobiles. LG's mobile technology makes use of Android. Recently, Google announced the opening up of its developer programming interfaces for Android Auto. Both Google and LG are members of the Open Automotive Alliance. LG officially announced its involvement in the Alliance in June last year. At the time, the company showcased a

new range of audio, visual and navigation system solutions for connected cars at the Google I/O conference. The system based on Android technology allowed drivers to view and control their favorite smartphone navigation apps and search their mobile phone contacts to make calls and send text messages through the in-car display. The Mercedes-Benz and LG announcement only covered the Advanced Drive Assistance System

Google may build Android directly into cars

GOOGLE is working on an Android version that would be built into cars, enabling drivers to use the internet without the need for plugging in smartphones, as is the case with its current Android Auto software, sources have told Reuters.

Thilo Koslowski, vice president and automotive practice leader at Gartner, did not know about Google's plans but said they would provide "a much stronger foothold for Google to really be part of the vehicle rather than being an add-on."

While vehicles with Android Auto are set to debut in 2015, Google has not commented on the new capabilities, although sources say they could be rolled out with the next version of Android in a year or so.

It is possible that Android becomes the standard system for 'connected car' entertainment and navigation features like music and apps, if Google is successful. It would also give the company access to data that could be useful for advertisers, such as gas usage, speed and location.

However, one of Google's hurdles may be convincing car manufacturers to integrate its services into their vehicles.

Mark Boyadjis, an analyst at IHS Automotive, noted: "Automakers want to keep their brand appeal and keep their differentiation."

Google will have to improve its performance and stability, one of the sources said, if it wants to persuade car companies, including ensuring the software powers up instantly when the car is turned on, rather than take time like smartphones do.

Google has signed on several manufacturers for its Open Automotive Alliance and its Android Auto product, such as Nissan and Hyundai. Apple introduced its rival software CarPlay in March last year. Both have the capability of projecting smartphone apps onto car screens.

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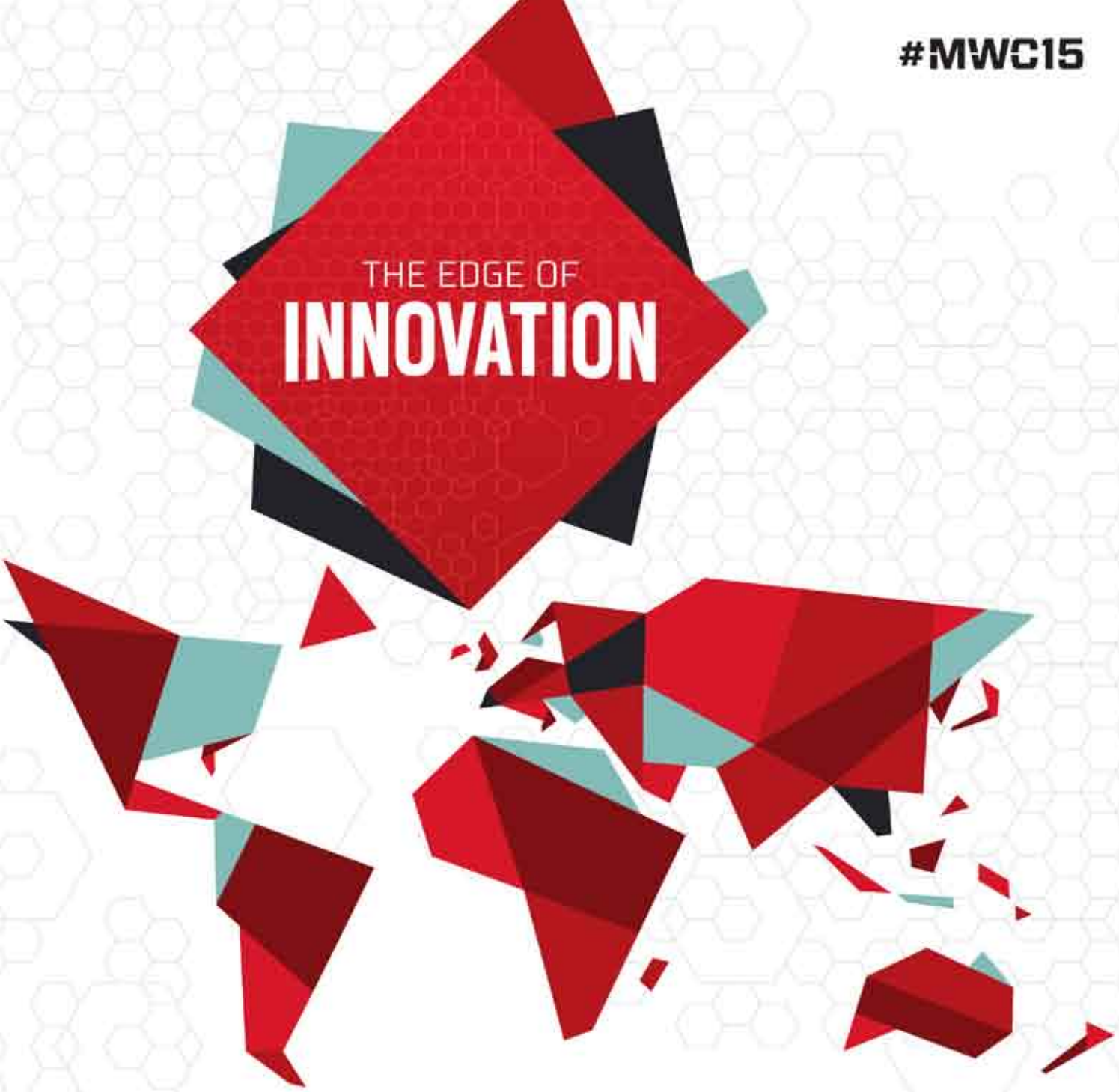

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