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A note from the Editor

THE LATEST ISSUE of Communications Africa highlights the challenges in cybersecurity, including the top ten predictions for the sector in 2019. This issue also looks at past and future events; the Fourth Annual Sub-Saharan Spectrum Management Conference, which will discuss major challenges, such as inefficient deployment of services on bands that have already been assigned for use, as well as a post-show report on this year's AfricaCom show in Cape Town.

Une note du rédacteur

LE DERNIER NUMÉRO de Communications Africa met en évidence les défis en matière de cybersécurité, y compris les dix prévisions les plus importantes pour le secteur cette année.

Ce numéro examine également les événements passés et futurs. la quatrième conférence annuelle sur la gestion du spectre en Afrique sub-saharienne, qui traitera de défis majeurs, tels que le déploiement inefficace de services sur des bandes qui ont déjà été attribuées et un rapport post-spectacle sur le spectacle AfricaCom de cette année au Cap.

The evolving role of the CISO

How digitalisation is bringing the fight to industrial security threats.

IT'S A SIMPLE fact that data makes the modern economy turn. Being the first business to act on insights gained from pivotal pieces of information gives businesses a distinct competitive advantage. However, it's also quickly becoming a fact that the same data is being targeted by skilled cybercriminals intent on causing damage to infrastructure.

Here, Robin Whitehead, managing director of systems integrator Boulting Technology, explains how this is impacting the role of the chief information security officer (CISO) and resulting in the need for end-to-end digitalisation.

Sophisticated cyber attacks

With the world facing sophisticated attacks such as the likes of WannaCry, Petya and NotPetya in 2017, cyber threats are the biggest modern technological fear. Although sectors such as financial services are most at risk, there have also been numerous high-profile attacks on utilities, oil and gas and food manufacturing environments in recent years.

On 27 June 2017, confectionary manufacturer Cadbury was hit by a cyber attack, which halted production at its Hobart factory in Australia. Computers were infected with the Petya ransomware virus and displayed a message on the screen demanding payment in cryptocurrency.

Later that same day, NotPetya — a variant of the Petya virus — further damaged facilities across Europe. NotPetya exploits a backdoor in the update system of a Ukrainian tax-preparation programme running on Windows and used by around 80 per cent of all Ukrainian businesses.

The new CISO

It should come as no surprise then that the advice of IT and security

Robin Whitehead, managing director at Boulting Technology.

experts is now being sought at the highest levels of business. The role of the chief information security officer (CISO) is also changing in response. Acting as the head of IT security, the CISO has traditionally been responsible for things such as operational compliance and adherence to ISO standards as well as performing IT security risk assessments and ensuring that the business is using the latest technologies.

Increasingly, the CISO must also drive IT security and strategy, guiding everyone from the shop-floor staff to the most senior officials on how best to prevent cyberattacks. The modern CISO now takes a seat at the boardroom table, ensuring business continuity, come what may.

End-to-end digitalisation

For industrial businesses, this change cannot come soon enough. The desire to integrate manufacturing networks with the outside world and the increased use of smart data is driving efficiencies in sectors from food and beverage, and automotive to utilities. At the same time, it's also leaving them vulnerable to attacks that can lead to extended periods of downtime.

Part of the reason for this is that many businesses have traditionally operated in silos, with information technology (IT) and operational technology (OT) experts not historically well aligned to the same objectives and outcomes. However, as we increasingly use more internet-

connected devices such as PLCs, HMIs, intelligent motor control centres and smart meters — all relaying millions of data points to centralised and often remote SCADA and ERP systems — it will become crucial to take a joined-up approach to industrial operations. Cue end-to-end digitalisation.

For many businesses, replacing hardware and software to allow functionality such as real-time cloud data, analytics and centralised control across every aspect of their operations is neither a cheap nor fast-acting undertaking.

After all, most plant managers have built up a complex system over many years, retrofitting new components and modules to existing equipment. This is driving the need for end-to-end digitalisation, moving away from fragmented system control, maintenance and upgrade towards a holistic approach that encompasses system-wide analytics that can deliver actionable insights to improve process efficiency.

At Boulting Technology we're helping our customers introduce cybersecurity measures to retrofitted equipment in existing industrial setups. Our range of control systems, networking products, intelligent motor control centres and more, form an integrated system that gives engineers easy and secure access to their operation around the clock. Ultimately, end-to-end digitalisation will help companies respond to attacks and breaches in minutes rather than hours or days.

So, while we come to the realisation that cyber attacks are simply a normal part of doing business, take heed of your CISO's advice and rethink your end-to-end digitalisation strategy. ©

Robin Whitehead, managing director at Boulting Technology

❝ By 2020, the value of Africa's mobile money industry is projected to top US$14bn. We need African-developed mobile phones to leverage this potential."

- Akinwunmi Adesina
President
AfDB

❝ Through AfricaCom, we want to give others the ability and inspiration to change the African continent. Because, when people get access to the Internet, they get access to education, health care, banking and more, and can start a business and continue grow existing operations."

- Ben Wieglgus
Head of sustainability
Informa

❝ The DLA calls for a greater volume of authentic African voices in the global digital space is growing and we are well poised with our relationship with the DLA and through our Digital Content Hub to fill that gap with meaningful content."

- Lesley Donna Williams
Tshimologong Precinct

❝ Economic growth in East Africa is averaging between 5-10 per cent across the region. When combined with parallel trends in digitalisation and content consumption, we are seeing annual data usage and associated storage requirements increasing by 20-30 per cent."

- Robert Mullins
Executive director
First Brick Holdings

❝ By opening up M-PESA to the world, we aim to enable a world of opportunity for Kenyans by making it easy and seamless for them to connect with the world."

- Sitoyo Lopokoiyit
Chief financial services officer
Safaricom

❝ 5G is a key investment and innovation and the connectivity it offers is critical to digital transformation. This is the path to unlocking new opportunities, enhancing education and driving economic growth."

- Marc Rouanne
President of Mobile Networks
Nokia

❝ With Oradian and initiatives from local government, TAB Finance will be enabled to overcome some of the major challenges of the microfinance sector and serve more clients across West Africa."

- Onyeka Adibeli
Co-founder and program director
Oradian

Spacecom to provide satellite services to BTC

THE OPERATOR OF AMOS satellite fleet, Spacecom, and Botswana Telecommunications Corporation (BTC) have announced an agreement on a satellite services deal.

AMOS-7 will supply satellite services to BTC's VSAT (Very Small Aperture Terminal) network throughout all of Botswana.

Spacecom will be providing BTC with highest efficiency satellite capacity alongside migrating the existing network towards next generation VSAT technology.

Utilising the AMOS-7 KU-band Africa beam, BTC high-speed VSAT services will realise increased bandwidth and better service availability. Spacecom's new Vertical Solution Division is said to be leading migration and professional services for the VSAT network.

Peter Olyn, GM Technology at BTC, said, "Spacecom brings us an inclusive solution for our entire VSAT business. Spacecom's strong beam enables us to further an already impressive lineup of services for our growing business and consumer markets to reach throughout Botswana. We look forward to more growth with Spacecom as our satellite communications partner."

Jacob Keret, SVP sales of Spacecom, commented, "AMOS-7's Africa KU-beam provides us with solid opportunities in sub-Sahara Africa with our new contract with BTC reinforcing the AMOS brand in Southern Africa. We are excited to commence our business relationship with BTC and support their new network in Botswana.

"Spacecom's new business division is proving its worth to our partners at BTC. Being able to offer more in this growing market is an important tool in our business development and in supporting our clients with additional market growth opportunities," Keret added.

MTN to launch first 3G smart feature phone powered by KaiOS

MTN GROUP, KAIOS Technologies, China Mobile and UNISOC have announced a partnership to launch the world's first 3G smart feature phone in Africa.

This announcement was made at the annual AfricaCom conference held in Cape Town.

Rob Shuter, group president and CEO of MTN, said, "This initiative contributes to the achievement of one of our key goals to provide affordable data enabled handsets to our customers, and by so doing, remove some of the barriers to mobile Internet adoption in Africa."

The new smart feature phone will run on KaiOS- an operating system for smart feature phones.

MTN CEO Rob Shuter stated that the new handset will make Internet connectivity and advanced digital services affordable for everyone.

It will include features and services such as fast Internet access through Wi-Fi and 3G, Bluetooth connectivity and GPS for navigation, Google Assistant and other smart services, KaiStore-home to the most popular apps and localised content, two cameras, as well as music and video streaming services, long battery life and Dual SIM support.

Sebastien Codeville, CEO of KaiOS Technologies, commented, "With 834mn people still unconnected to the Internet in Africa, the launch with MTN, UNISOC and China Mobile stands to have a significant impact on communities across the continent."

"MTN has one of the largest customer bases in the region, and coupled with KaiOS, we're taking an important step toward closing the digital divide on the continent," Codeville added.

The new smart feature phone will be powered by the UNISOC SC7731EF, the 3G smart chipset with up to 256MB RAM. The device will have a 2.4' screen, 256MB/512MB RAM/ROM and a 2000MAH battery.

Adam Zeng, executive vice-president of Unigroup and CEO of UNISOC, said, "UNISOC is glad to partner with MTN, China Mobile and KaiOS, and together we will continue to invest more to fill in the gaps in the mobile communications and IoT fields in African markets."

The 3G smart feature phone will initially be available from MTN in Nigeria and South Africa followed very shortly by the other MTN operations in Africa as well as the Middle East.

The new product will retail between US$20-US$25 and will be available starting from the first quarter of 2019.

Orange to accelerate multi-service operator strategy in Africa

ORANGE, A FRENCH telecommunications company, will accelerate its multi-service operator strategy in Africa with innovations to democratise access to smartphones, promote e-education and support the start-up ecosystem.

Africa has taken a technological step by switching directly to mobile phones. The prospects for the smartphone market continue to see exponential growth. It is estimated that at least 660 million Africans (compared to 336mn in 2016) will be equipped with a smartphone by 2020.

This breakthrough can be explained by several factors, mainly due to the fact that Orange is fully mobile: it has established mobile payment services (via the Orange Money service), it continues to invest in mobile Internet coverage (14 Orange countries with 4G) and offers affordable prices to make it accessible to all.

Orange continues to innovate by partnering with KaiOS Technologies to democratise access to digital services in Africa.

In 2019, Orange customers in Africa will have access to a new category of smart feature phones with KaiOS, the operating system from KaiOS Technologies that creates an emerging ecosystem of digital products and services at an affordable price.

In addition, customers will be able to use Google's digital assistant in French, English and Arabic to help overcome language and literacy challenges.

The first product to be launch will be a 3G smart feature phone, followed by a 4G version later next year. The new phones will provide access to popular apps like Twitter, Facebook, YouTube, Google Search, Google Maps and the Google Assistant.

Of all the digital revolutions, e-learning is one of the most transformative for Africa. Online education will make it possible to train the millions of professionals the continent needs to take charge of its development.

Through its "African Digital School" programme, Orange aims to mobilise its infrastructure, access and expertise to help Africa rise to the challenge of training young people, especially in digital growth sectors.

The first partners in this programme are major French institutions such as the CNED and the University Institutes of Technology, as well as the startup OpenClassrooms for IT lessons.

Orange has announced a new partnership with the Virtual University of Tunis, the world pioneer in online education, which has been offering digital training to all Tunisian students for over a decade.

The partnership aims to support access to their courses and training in the African countries within Orange's footprint. A similar partnership will be signed in December with the Virtual University of Senegal, another leading provider of online training in Africa.

Orange will award its "Orange Social Entrepreneur Prize in Africa and the Middle East" at the AfricaCom Awards 2018.

This competition aims to reward the best projects of African start-ups that contribute to improving the living conditions of local people through digital activities, for example in the fields of education, health, agriculture, mobile payments or sustainable development.

Avanti signs agreement with Afrique Telecom

AVANTI HAS SIGNED an agreement with Afrique Telecom, a pan-African service provider, to provide high-speed satellite broadband services across sub-Saharan Africa.

The deal is expected to improve the penetration of reliable satellite broadband in unconnected areas through Avanti's HYLAS4 satellite, connecting homes, small businesses and enterprises.

Avanti Group CEO, Kyle Whitehill, said "HYLAS 4, the latest addition to our satellite fleet, was launched to complete our coverage of sub-Saharan Africa. Partnering with Afrique Telecom supports our mission to deliver broadband access to help liberate the potential of communities and businesses wherever they are located."

GE Nigeria launches e-learning portal

GENERAL ELECTRIC (GE) HAS launched an e-learning portal for its Lagos Garage advanced manufacturing training programme.

The aim of the portal is to extend the training programme to thousands of Nigerians across the country. The portal was launched during GE's Lagos Garage Week 2018.

At the portal launch, director of Communications and Public Affairs, GE Africa, Patricia Obozuwa, said, "Our goal is to empower Nigeria entrepreneurs with the relevant skills required to compete on a global scale. I'm happy to say that so far, more than 250 people have successfully graduated from the advanced manufacturing training programme we offer here at the Garage."

Obozuwa added that with the e-learning platform, interested entrepreneurs no longer have to be physically present at the Garage to benefit from the innovative training the hub offers.

"This platform will make the training on offer at our hub reach a much wider audience than ever before, thus increasing the number of beneficiaries and making it more impactful. This has always been our goal, to reach the maximum number of Nigerian entrepreneurs in a short period, delivering valuable training that they would otherwise not have access to," she added.

Hakeem Fahm, commissioner of Lagos State Ministry of Science and Technology, who was represented by the


Photo: Adobestock
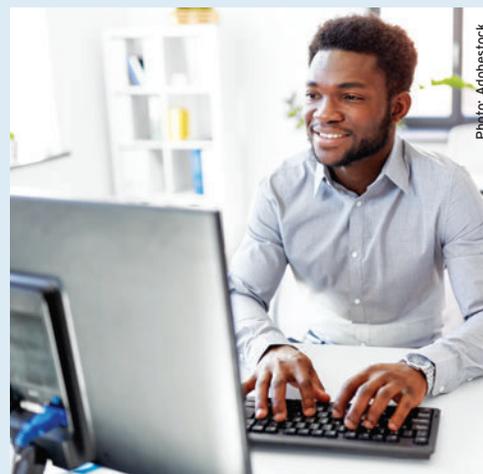
The Lagos Garage is a hub for advanced manufacturing-based innovation, strategy development, idea generation and collaboration.

permanent secretary, Kayode Ogunnubi commended the company on being a collaborative partner of the Lagos State government for several years.

He commented, "Lagos state is at the forefront of ICT development in Nigeria and training programs like the GE Garage that equip youths with innovative skills is one of the ways we believe we can develop the economy of the state and by extension the entire country."

Azuri and Unilever launch mobile e-voucher system in Kenya

PAY-AS-YOU-go solar pioneer Azuri and consumer goods company Unilever has launched an e-voucher system designed to help off-grid rural consumers in Kenya access consumer goods and services.

Currently more than 600mn people in Africa have no access to electricity and Azuri aims to deliver reliable, renewable and distributed power on an affordable pay-as-you-go basis. The e-voucher system powered by Safaricom has been developed to ensure the widest coverage across the remotest areas.

During UK Prime Minister Theresa May's visit to Kenya earlier this year, Azuri and Unilever announced that they had teamed up to bring solar to millions of more off-grid homes across Kenya and, with that, modern goods and services to improve family life.

The offer available meant Azuri customers who purchased a Quad solar home lighting system would receive an e-voucher for free sunlight washing powder for each week they top up their pay-as-you-go solar system.

The e-voucher system, powered by Safaricom, a telecommunications provider, has been designed to ensure the widest coverage across the remotest areas, the company said. Customers can redeem the e-vouchers at any participating kiosk or trader.

Snehar Shah, Azuri general manager for East Africa at the official launch in Busia County, Kenya, stated, "This is an example of how Azuri is helping rural consumers to access modern services and goes beyond just providing lighting as a service. Through our collaboration with leading consumer and telco companies such as Unilever and Safaricom, off-grid households are finally enjoying the benefits that technology and modern living can bring, powered by solar."

Also commenting on the launch Anthony Esyalai, home care marketing director for Unilever East Africa, said, "Unilever through our Sunlight Brand is proud to leverage on its vast distribution networks to help connect more Kenyans access clean power while at the same time providing a product that allows them to look after their families and their homes in a more hygienic way."

Liquid invests US$400mn in Egyptian network

PAN-AFRICAN TELECOMS GROUP Liquid Telecom has announced that it will invest US$400mn in network infrastructure and data centres in Egypt following the completion of its "Cape to Cairo" link.

Liquid, a subsidiary of telecoms provider Econet Group, has signed a partnership with Telecom Egypt as part of the three-year investment plan, the company said in a press release.

The investment was made during a signing ceremony between the two companies on 8 December at the Africa 2018 Forum.

Telecom Egypt will use the network to connect Egyptian businesses to the rest of Africa while partnering with Liquid Telecom to build data centres across Egypt.

Following an initial investment of US$50mn in data centres and cloud services, Liquid plans to invest an additional US$350mn in broadband and financial inclusion initiatives as well as high capacity data centres.

Liquid Telecom's network is almost 70,000 km and connects 600 locations in 13 countries, with data centres in Egypt, Ethiopia, Nigeria, Rwanda, Senegal, Kenya, Zimbabwe and South Africa. The 'Cape to Cairo' network represents the first direct land-based terrestrial fibre link from Cape Town to Cairo, the company added.

The US$400mn investment will enable Liquid Telecom to significantly expand its position as a connectivity and cloud solutions provider in North Africa, serving businesses in the region with world-class network and data centre services, it continued.

Strive Masiyiwa, executive chairman of Liquid Telecom's parent company Econet, added that the next mission is to complete a link between Cairo and Dakar in Senegal through Sudan, Chad, and Nigeria, as well as the rest of West Africa.

Events/Événements 2019

JANUARY/JANVIER

9-12	**CES International Consumer Electronics Show**	Las Vegas, USA	www.cesweb.org
12-13	**Expo Elettronica**	Modena, Italy	www.expoelettronica.it

FEBRUARY/FÉVRIER

13-15	**Africa Tech Summit Kigali**	Kigali, Rwanda	www.africatechsummit.com
19-21	**CIS**	Dusseldorf, Germany	www.eurocis.com
25-28	**Mobile World Congress**	Barcelona, Spain	www.mwcbarcelona.com
27	**Securika**	Krasnodar, Russia	www.krasnodarexpo.ru
28-1	**Blockchain Africa Conference 2019**	Johannesburg, South Africa	https://blockchainafrica.co/

MARCH/MARS

3-7	**OFC San Diego**	San Diego, USA	www.ofcconference.org
4-6	**Africa Tech Week**	Cape Town, South Africa	https://africatechweek.co.za/
6	**Blockchain Africa Conference 2019**	Cape Town, South Africa	https://blockchainafrica.co/
12-14	**Smart IOT 2019**	London, UK	www.smartiotlondon.com
12-14	**CABSAT**	Dubai, UAE	www.cabsat.com
19-20	**Ecommerce Africa**	Cape Town, South Africa	www.ecommerce-africa.com
19-22	**Data Centre World**	Phoenix, USA	www.datacentreworld.com

AfricaCom 2018: Smart feature phones arrive in Africa

AFRICACOM 2018 IS over, but the excitement and innovation it generated continue to energise those who attended, including our team most of whom were attending the show for the first time.

We were delighted to announce two partnerships that will introduce the first 3G and 4G smart feature phones to Africa: One with MTN, China Mobile and Unisoc - and the other with Orange.

Both collaborations will introduce a new category of affordable mobile devices for MTN and Orange's customers across Africa from Q1 2019 onwards; a major step forward in bridging the digital divide.

These new devices– which run on KaiOS, the world's leading operating system for smart feature phones - combine the simplicity of a feature phone with the powerful capabilities of a smartphone. They enable people to upgrade from a feature phone with only voice and text capabilities to a fully connected handset with fast, 3G and 4G Internet.

Smart feature phones also run services such as the Google Assistant, Facebook, and Google Maps, as well as

Sebastien Codeville,
CEO of KaiOS Technologies.

functionalities including the KaiStore (the first app store for smart feature phones), Bluetooth, and GPS.

Kai's announcements were well received as device affordability, alongside the cost of data, has long been an issue in the African market. Despite the availability of a few lower-cost budget smart phones in Africa,

figures from the GSMA revealed that in 2017 Eastern Africa had the world's lowest smartphone adoption level at 25 per cent - compared to the global average of more than 50 per cent.

The GSMA also says that the US$100-US$200 price for a smartphone is preventing 64 per cent of Africans from upgrading their 2G voice and text-capable phones to 3G/4G devices that can access the Internet – and that ''market pressures alone will not bring down prices to a level that makes smartphones affordable for low-income groups in the near future''.

Rather than forcing people to choose between a feature phone without internet access, or a budget smartphone with limited user experience, Africa's MNOs, and their customers, now have a choice.

KaiOS already powers more than 50mn smart feature phones globally, including in the USA, Canada, India, China, and several countries in Europe.

The competitive pricing of both smart feature phones, and the monthly data plans that will accompany it, mean that access to advanced digital services is finally a reality for some of

The partnership will introduce the first 3G and 4G smart feature phones to Africa.

the 834mn people still unconnected to the Internet in Africa.

Sebastien Codeville, CEO of KaiOS Technologies

iWayAfrica establishes first HYLAS 4 sites in Africa

Following its earlier announcement in August 2018 on becoming an Avanti Master Distributor, iWayAfrica has confirmed service availability in Ghana and South Sudan as initial launch markets for HYLAS 4 Ka-Band services.

RCS-Communication has established the first site for Avanti's HYLAS 4 high-speed satellite broadband service in South Sudan.

Photo: Avanti

FOLLOWING ITS EARLIER announcement in August 2018 on becoming an Avanti Master Distributor, iWayAfrica has confirmed service availability in Ghana and South Sudan as initial launch markets for HYLAS 4 Ka-Band services.

RCS-Communication, a leading ISP in South Sudan, has established the first site for Avanti's HYLAS 4 high-speed satellite broadband service in the country. Following successful beam testing in early November 2018 in Juba, South Sudan, the new Ka-Band service with high throughput speeds of up to 35Mbps download and 4Mbps upload, is now available to RCS-Communication's customers in South Sudan. The site at RCS-Communication's technical office in Juba is the first HYLAS 4 service in East & Central Africa.

"We have a long-standing relationship of almost 10 years with iWayAfrica for the provision of high throughput volume capped VSAT services and are pleased to extend this to the new HYLAS 4 service that offers much improved speeds," says Flippie Odendal, Managing Director, RCS-Communication.

"RCS is always on the lookout for suitable technology and services that increases options to our clients and enhances their user experience. We focus on the Enterprise and SME market, and with the HYLAS 4 broadband service, we see SME clients across South Sudan benefiting from high speeds and a selection of volume options at affordable rates." continues Odendal.

In parallel, AfricaOnline Ghana, one of the continent's oldest ISPs became the first ISP in West Africa to test and make H4 services commercially available via iWayAfrica to Ghanaian business and homes.

AfricaOnline Ghana became the first ISP in West Africa to test and make H4 services commercially available via iWayAfrica to Ghanaian business and homes.

"2018 has seen Ka services come to Ghana for the first time. Our customers are seeking affordable solutions with high speed and high usage requirements. HYLAS 4 enables us to meet those customer expectations. With full coverage of Ghana, HYLAS 4 is not just for remote connectivity, but for stable reliable urban connectivity solutions too," says Foster Plender, Managing Director, AfricaOnline Ghana.

iWayAfrica has been a key partner of Avanti's since 2014 for its HYLAS 2 services across East and Southern Africa. With HYLAS 4, Avanti's high-speed Ka-Band service is now available with a wider footprint of sub-Saharan Africa helping more people to become digital citizens.

iWayAfrica has a presence in over 44 African countries and has regional offices for all its wholesale services in Ghana, Kenya, Mauritius and South Africa. iWayAfrica supports its partner channel with competitive wholesale rates, sales support with lead generation, installation training, a 24/7 Network Management Centre and access to a dedicated distributor partner portal. ✆

The full spectrum

The Fourth Annual Sub-Saharan Spectrum
Management Conference takes place in March 2019

The Fourth Annual Sub-Saharan Spectrum
Management Conference will be held in Kenya.

Photo: Adobestock

MOBILE TECHNOLOGY AND the Internet are key components to sub-Saharan Africa's socio-economic development.

Efficient spectrum management holds the promise of expanding access and improving the quality of these services.

Yet the region continues to face major challenges, such as the slow release of the digital divided spectrum and inefficient deployment of services on bands that have already been assigned for use.

Countries must also strike a balance between the ever-expanding spectrum needs of mobile technology and those of other users.

These and other critical challenges will all be discussed at the Fourth Annual Sub-Saharan Spectrum Management Conference this coming March.

Since its launch in 2015, the Sub-Saharan Africa conference has established itself as the number one meeting point for spectrum management executives in Africa.

The event takes place as part of The Global Spectrum Series, the world's largest collection of spectrum management policy conferences.

And that now includes a rising profile across the African continent, one of the world's future growth hotspots.

In previous years, the conference has been held in South Africa, Senegal and Kenya, and has now established a reputation as the leading platform for spectrum policy discussion in the region.

Spectrum management is the process of regulating the use of radio frequencies to promote efficient use and gain a net social benefit.

The annual showcase is an event that attracts the industry's best and brightest minds: from an initial starting point of just 100 attendees at the inaugural event, the conference is expected to attract more than 300 attendees from up to 50 different countries in 2019.

At the heart of this growth is its positioning as a wholly neutral platform, one that enables all stakeholders get their voices heard.

Key event partners include major trade organisations such as the International Telecommunication Union (ITU) and the African Telecommunications Union (ATU).

These work with national governments and regulators and industry stakeholders across Africa from mobile, satellite, broadcast, public safety, high altitude platforms and others, to ensure that their voices are all included.

Major corporates at the 2018 summit also included Huawei, Ericsson, Microsoft and Liquid Telecom, among others.

The fourth outing of the conference will once again provide a meeting place for the region's most influential spectrum policymakers and thought leaders.

This year's event will also run alongside an ITU Capacity Building Workshop on cross border frequency co-ordination, which will take place in the same venue on 27-28 March.

Expect lively and dynamic discussion with plenty of room for interaction.

Last year's event included an interactive brain-storming session where participants were split into small groups and asked to consider the 'bigger picture' of how to truly maximise the potential of spectrum for the region.

And there will be plenty to debate too. At the end of last year's conference, a keynote speech challenged delegates to focus on five main themes: bridging the technology divide; understanding consumers and their role in spectrum management; accelerating the release of the digital dividend; developing a 5G strategy that fits Africa's needs; and ensuring that the region's voice is heard on the global stage, especially at major events such as the World Radiocommunication Conference 2019 (WRC-19), which takes place in Egypt from October to November 2019.

On the road to WRC-19, stakeholders at last year's Sub-Saharan Spectrum Management Conference were urged to continue actively participating in regional forums and preparatory meetings in order to shape the decisions made at the Sharm El Sheikh conference.

It means that, this coming March, at the Fourth Annual sub-Saharan Spectrum Management Conference, the conversation will move on to the next level — and at a critical juncture for all parties involved in the industry.ⓒ

The Fourth Annual Sub-Saharan Spectrum Management Conference takes place on 25-26 March 2019. The event is free to attend for all attendees. Visit the website for more information: https://eu-ems.com

Driving transformation and superior guest experiences in hospitality

Thanks to Industry 4.0, globalisation and rapid digitalisation, today's consumers are very connected and mobile. How does this impact the hospitality industry?

Photo: Adobestock

As people become more connected, the hospitality industry has needed to adapt to meet consumers' needs.

A RECENT REPORT from Infor highlighted that in 2016 52 per cent of all travel reservations were made online, with 65 per cent of same-day hotel reservations made from a smartphone. Hospitality organisations that do not meet their customers' need for a digital presence and mobile operations will soon become irrelevant.

There are three key challenges to delivering excellent customer experience: internal operations, marketing operations and technology foundation.

When it comes to internal operations, front of the house (property management and guest management) and back of the house operations often aren't aligned, resulting in inefficient workflow and operational glitches. When these inefficiencies affect the customer, their experience is tainted.

Marketing operations should go much further than the latest promotional campaign. Every interaction with a guest/potential guest should be seen as a marketing opportunity. Yet, many hospitality companies are unable to interact with their guests in a seamless and intelligent way, across all touch points. Systems that enable the users to identify the time of an interaction or pull up an individual's preferences are essential to delivering personalised guest experiences.

Hospitality establishments often lack the technology foundation that ties all areas of the business together, thus marketing and internal operations cannot collaborate and achieve efficiency. With no common store to collect data on individual customers, and make it accessible across the organisation, opportunities to create unique guest experiences and interactions are lost.

Infor's Master Partner in Africa), EOH, focuses on providing the right solutions to its customers. It delivers enterprise applications, enterprise resource planning (ERP) solutions, and drives extended best of breed solutions including; supply chain planning, extended warehouse management, asset maintenance, hospitality management, product life cycle management, information management (BI, data warehousing and analytics), and enterprise performance management (financial planning, forecasting, budgeting, consolidation and governance).

> **There are three key challenges to delivering excellent customer experience: internal operations, marketing operations and technology foundation.**

In 2011, EOH was appointed as the only Infor Gold Channel Partner in sub-Saharan Africa. In 2014, it was appointed as Infor Master Partner, one of only a few worldwide. Most recently, as the result of a rebranding, it became EOH Infor Services in 2018.

According to Jane Thomson, managing director at EOH, innovative solutions are the answer to overcoming these obstacles. She noted: "What is needed is a solution that delivers in-context business intelligence, such as detailed guest history, preference profiles, and recommendations presented at the point of guest interaction. This empowers users to react in real time, and surprise guests with an even better experience than they had imagined."

Infor has developed a targeted set of hospitality solutions, driving customer experience in a powerfully positive way. Infor Hospitality is already achieving this across the globe, delivering phenomenal customer experiences in over 20, 000 hotels, restaurants, and casinos in more than 100 countries.

This solution will officially be launched across Africa, in February 2019, by EOH Infor Services. The strategic set of solutions is tailored to the hospitality industry, giving these establishments the power to delight their guests and increase sales by more than 30 per cent, maximise revenue by as much as seven per cent, and reduce labour costs by as much as six per cent.

Streamlined operations, run in an integrated system for all guest and hotel data, mean employees and management can stay on top of all the intricate details that ensure a superior guest experience.

"Can you ask customers to be your guest, with full confidence that all of their needs and expectations will be met? If not, you're falling short. With the power of a digitally transformed organisation at your fingertips, why settle for being average?" concludes Thomson. ✆

Top Ten Cybersecurity predictions for 2019

Ian Kilpatrick, executive vice-president cyber security, Nuvias Group highlights the top trends for the cybersecurity sector in 2019

Cloud insecurity grew in 2018 and, is expected to carry on growing even more in 2019.

Photo: adobestock

Ransomware, crypto mining, banking Trojans and VPN filters are some of the key malware challenges that continue to threaten businesses and consumers.

1. Increase in crime, espionage and sabotage by rogue nation-states

With the ongoing failure of significant national, international or UN level response and repercussion, nation-state sponsored espionage, cyber-crime and sabotage will continue to expand. Clearly, most organisations are simply not structured to defend against such attacks, which will succeed in penetrating defences. Cybersecurity teams will need to rely on breach detection techniques.

2. GDPR - the pain still to come

The 25th of May, 2018 has come and gone, with many organisations breathing a sigh of relief that it was fairly painless. They've put security processes in progress and can say that they are en route to a secure situation – so everything is OK?

We are still awaiting the first big GDPR penalty. When it arrives, organisations are suddenly going to start looking seriously at what they really need to do. Facebook, BA, Cathay Pacific, etc. have suffered breaches recently, and will have different levels of corporate cost as a result, depending on which side of the May 25th deadline they sit. So GDPR will still have a big impact in 2019

3. Cloud insecurity – it's your head on the block.

Cloud insecurity grew in 2018 and, unfortunately, it will carry on growing even more in 2019. Increasing amounts of data are being deployed from disparate parts of organisations, with more and more of that data ending up unsecured.

Despite the continual publicity around repeated breaches, the majority of organisations do not have good housekeeping deployed and enforced across their whole data estate in the cloud. To give an idea of the scale, Skyhigh Networks research indicated that seven per cent of S3 buckets are publicly accessible and 35 per cent are unencrypted.

4. Single factor passwords – the dark ages

As if we need the repetition, single-factor passwords are one of the simplest possible keys to the kingdom (helped by failure to manage network privileges once breached). Simple passwords are the key tool for attack vectors, from novice hackers right the way up to nation-state players. And yet they still remain the go-to security protection for the majority of organisations, despite the low cost and ease of deployment of multi-factor authentication

solutions. Sadly, password theft and password-based breaches will persist as a daily occurrence in 2019.

5. Malware - protect or fail

Ransomware, crypto mining, banking Trojans and VPN filters are some of the key malware challenges that continue to threaten businesses and consumers. Live monitoring by Malwarebytes, Kaspersky and others, has shown that the mix of threats varies during the year, but the end result of malware threats will be a bad 2019.

Increasing sophistication will be seen in some areas such as ransomware, alongside new malware approaches and increased volumes of malware in other areas. Traditional AV will not provide sufficient protection. Solutions that have a direct malware focus are essential for organisations, alongside tracking of network activity (in and out of the network). With Cybersecurity Ventures predicting that ransomware damage costs will exceed US$11.5bn by 2019, it certainly won't be going away. Oh yes, and make sure that your backup plan is working and tested.

6. Shift in attack vectors will drive cyber hygiene growth.

The ongoing shift of attack vectors, from the network to the user, is causing a reappraisal of how to manage security. Driven partly by the shift in boardroom awareness, and partly by GDPR, many organisations are recognising, perhaps belatedly, that their users are their weakest link.

Not only is there a greater awareness of the insider threat from malicious current and ex-staff, but there is also a growing recognition that staff cyber awareness and training is a crucial step in securing this vulnerable area. The response from organisations will take the form of cyber education, coupled with testing, measuring, and monitoring staff cyber behaviour. Increasingly, Entity and User Behaviour Analytics (EUBA) systems will be adopted, alongside training programmes and automated testing, such as simulated phishing and social engineering attacks.

7. IOT - the challenge will only increase.

We've already seen some of the security challenges raised by IoT, but 2019 will significantly demonstrate the upward trend in this area. Driven by the convenience and benefits that IoT can deliver, the technology is being increasingly deployed by many organisations, with minimal thought by many as to the security risks and potential consequences.

Because some IoT deployments are well away from the main network areas, they have slipped in under the radar. In the absence of a standard, or indeed a perceived need for security, IoT will continue to be deployed, creating insecurity in areas that were previously secure. For the greatest percentage of IoT deployments, it is incredibly difficult or impossible to backfit security. This means that the failure to segment on the network will further exacerbate the challenges IoT will create in 2019 and beyond.

8. Increasing risks with shadow IT systems and bad housekeeping

Shadow IT systems continue to proliferate, as do the number of applications and access points into systems, including legacy applications. In the case of shadow IT systems, these are indefensible as they are; and in the case of increasing applications and access points, if they relate to old or abandoned applications, they are difficult to identify and defend.

> ### We've already seen some of the security challenges raised by IoT, but 2019 will significantly demonstrate the upward trend in this area.

In both cases, these are an easy attack surface with significant oversight, internal politics and budget challenges, and were previously seen as a lower priority for resolution. However, there has been both an increased awareness of the opportunity for attack via this route, and an increase in the number of attacks, which will accelerate in 2019.

9. DDoS - usually unseen, but still a nightmare

DDoS is the dirty secret for many organisations and attacks will continue to grow in 2019, alongside the cost of defending against them. Nevertheless, DDoS attacks aren't generally newsworthy, unless a big name organisation is involved, or the site is down for a long time. And, of course, the victim does not want to draw attention to their lack of defence. That's not good for custom or for share prices.

The cost of launching an attack is comparatively low, often shockingly low, and the rewards are quick – the victim pays for it to go away. Additionally, cryptocurrencies have aided the money transfer in this scenario. Yet the cost for the victim is much higher than the ransom, as it involves system analysis, reconstruction and, naturally, defending against the next attack.

10. Cybersecurity in the boardroom

A decade, perhaps two decades, late for some organisations, cybersecurity is now considered a key business risk by the board. 2019 will see this trend accelerate as boards demand clarity and understanding in an area that was often devolved as a sub-component of the CISO's role, and was not really a major topic for the boardroom. The financial, reputational and indeed C- Suite employment risks of cyber breach will continue to drive board focus on cybersecurity up the agenda. ✪
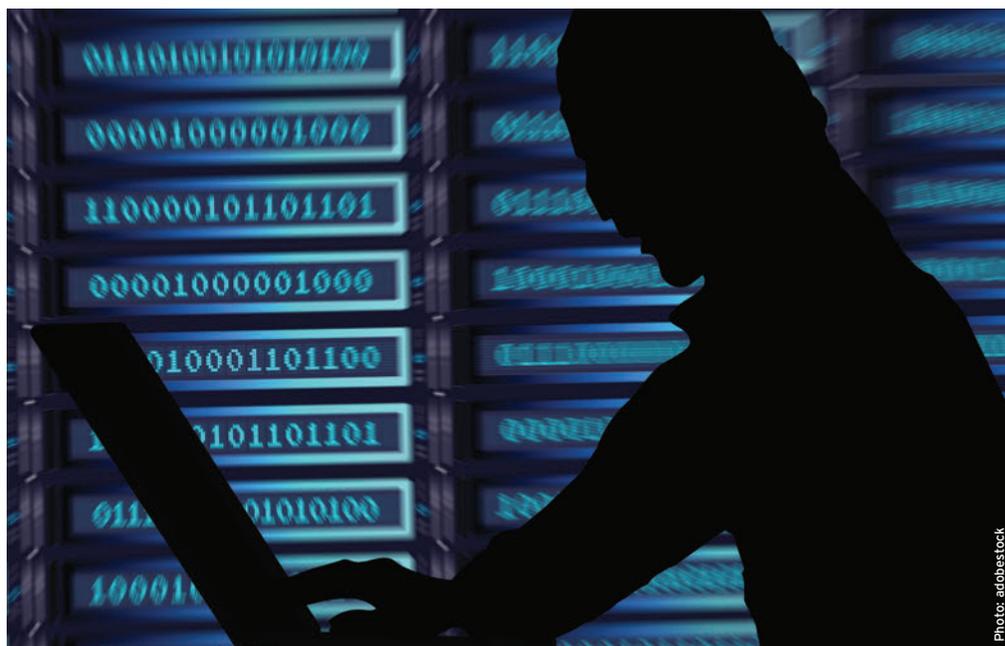
Photo: adobestock

There is an increase in the number of attacks with shadow IT systems.

Cummins gensets for data centre applications

Robin Kuriakose, power generation sales leader for Southern Africa, speaks about how Cummins diesel gensets are now offering a unique DCC rating, guaranteeing unlimited hours of operation to customers.

A MAIN ADVANTAGE of Cummins diesel gensets for data centre applications is that they boast a DCC rating from the Uptime Institute, which guarantees total dependability. This is a vital criterion in such a niche but premium market segment, where reliable back-up power is critical, according to Robin Kuriakose, power generation sales leader for Southern Africa.

The Data Centre Continuous (DCC) rating means that the Cummins diesel gensets are rated for unlimited hours of operation, with no restrictions on average variable or constant load factor. This spans Cummins' range of high horsepower diesel gensets, from 400 kVA to 3300 kVA, including Cummins's ability to offer technical solutions regarding Tier I to Tier IV applications whilst maintaining our two year standard warranty offering.

Consultants and engineers can design with the confidence that Cummins' diesel gensets can be applied up to the specified rating without restrictions on varying or non-varying loads or hours of operation. These ratings greatly simplify the engineering design process, and also make it easier for customers to achieve site certification from the Uptime Institute.

"There is a definite push for more data centres, due to the growing need for effective data storage"

By combining DCC ratings with the time-tested ability of Cummins diesel gensets to achieve 100 per cent load acceptance in a single step, together with best-in-class PowerCommand digital controls, data centre customers are assured that their power generation systems are at the cuttingedge of technological development.

"This is a particular value-add for our clients, as we are one of very few local suppliers offering a DCC rating as standard," Kuriakose notes. From large financial institutions to telecoms companies and even parastatals, it is critical that data centres have reliable back-up power in the event of any unforeseen outage.

"Back-up power can be supplemented by UPS, but this solution has a finite battery back-up capacity before it runs out. Only diesel

Robin Kuriakose, power generation sales leader for Southern Africa.

Photo: Cummins

gensets are capable of supplying power on-demand, for whatever period required," Kuriakose stresses.

The implications of downtime for any data centre are not only potential loss of data, but reduced data traffic, and therefore less revenue generated.

Commenting on battery back-up as a potential solution, Kuriakose points out that this technology still has a long way to go before it matures. "The fact of the matter is that, if power supply to a data centre is interrupted for an entire day, for example, only a diesel genset is sufficient for such an extended period. Cummins is a premium engine manufacturer, which means that its diesel gensets are of the highest quality."

Cummins' complete power-system solutions for data-centre applications comprise highhorsepower gensets, automatic transfer switches, digital control technology, and remote monitoring and control in the form of PowerCommand, which allows operators to view power-system performance from a web browser, for example.

"These innovations represent the cutting edge in data-centre back-up power supply. The combination of reliable equipment and seamless components, together with the DCC rating, make our diesel gensets the most trusted in the world for such critical applications," Kuriakose elaborates.

Cummins was a proud exhibitor at Infracom at the Kyalami Theatre on the Track, in Midrand, in June, which was billed as the biggest data-centre networking event in Africa. "We are seeing a lot of development in this space in the local market, particularly as we have a product range designed specifically for it. There is a definite push for more data centres, due to the growing need for effective data storage. This is why our ongoing commitment to this market is reflected through our participation at major events such as Infracom," Kuriakose says.

He concludes that Cummins' strategy in this regard will be to focus on forging partnerships with its main clients, in order to get a foot in the door by upfront involvement in such projects. This will allow Cummins to offer the latest technology and the best aftermarket support and back-up. "A key differentiator for us is our total power-solutions approach, which means our involvement can extend from the design to the actual installation and commissioning," Kuriakose adds. ✆

Honeywell heightens cyber security services in response to industry demand

Honeywell announced at the Honeywell Users Group EMEA conference in Madrid in early October the launch of new cybersecurity consulting services to address the growing cyber threat to industry and the industrial cybersecurity skills shortage.

THE NEW SERVICES are designed to help industrial and critical infrastructure customers identify and eliminate dangerous security weaknesses.

The Honeywell CyberVantage Security Consulting Services portfolio now includes Penetration Testing, providing active "white-hat" hackers who exploit customer defenses in order to fix them. It also now offers System Hardening to reduce software vulnerabilities and assist customers in safely complying with global Center for Internet Security (CIS) industry benchmarks. These new offerings expand the Honeywell CyberVantage Security Consulting Services portfolio of more than 30 services that deliver comprehensive cyber security expertise to industrial clients, from assessments and audits to remediation, enabling safer connected plants, digital transformation, and Industrial Internet of Things (IIoT) efforts. Delivered by consultants with expertise in both operational technology (OT) and industrial cyber security, the services help organisations lower the risk and possible impact of security incidents and improve their industrial cyber security maturity levels.

Addressing the media at the Honeywell Users Group EMEA conference, Marty Israels, Honeywell's director of product marketing for Industrial Cyber Security Solutions, explained that the new services are being added in response to the increase in the frequency and sophistication of attacks over the last twelve to eighteen months, with many targeting critical infrastructure and the process industries. This is a big challenge for customers, who are looking for expertise and support.

"Planning an attack on industrial controls systems (ICS) is now easier than ever, with malware that can be used to attack an individual or company easily accessible on the dark web," he commented. "Organised crime and individuals looking to do harm are taking advantage of this. That is one of the reasons why we have seen an increase in ransomware attacks over the last couple of years." According to Trend Micro, there were 1.7bn ransomware attacks detected globally in the first quarter of 2018.

The Middle East is one of the regions most under threat. A PwC survey has found that businesses in the Middle East suffered larger losses than other regions in the world last year due to cyber incidents. Around 18 per cent of respondents in the region have experienced more than 5,000 attacks, compared to a global average of nine per cent.

Another challenge is the cyber security skills shortage, with a global shortfall of 3.5mn cyber security jobs globally forecast by 2021, according to research company Cybersecurity Ventures, while the move to connected operations to drive efficiencies is further driving the demand for industrial cyber security and the expertise to support it.

"Fifty one per cent of organisations report a shortage of cyber security skills. The feedback from our customer advisory board indicates there is a need for industrial security expertise," said Israels.

"In response to this, we are building a strong cyber security service portfolio to complement the software and technology we provide. Over the past year-and-a-half we have put a focused effort into strengthening our industrial cyber security capabilities and increasing the level of services, driven by a multi-site defence in depth approach, complemented by the ability to do multi-vendor cyber security management. With our CyberVantage security consulting services we can bring expertise on-site, offering various services to increase customer defences. This is complemented by software that offers secure remote access, through a single pipe into a control network, providing advanced industrial security protection."

In addition, Honeywell introduced Cyber Vantage Managed Security Services in June, which offer 24/7 access to industrial expertise and monitoring.

Honeywell now employs more than 250 people focused on industrial cyber security, with a specialised knowledge of requirements such as industrial control system (ICS) security standard IEC-62443 and a variety of country specific standards. The company has opened Industrial Cyber security Centers of Excellence (COEs) around the world, launching its first COE in the Middle East in Dubai in February to serve its customers in the region. The pioneering technology centre provides a safe off-process environment to test and demonstrate process control network vulnerabilities and threats, train customers with real-time attack simulations and provide advanced customer consultations.

"We are very much involved in cyber security, with a strong and growing cyber security business," stressed Israels. ✆

The new services are designed to help industrial and critical infrastructure customers identify and eliminate dangerous security weaknesses.
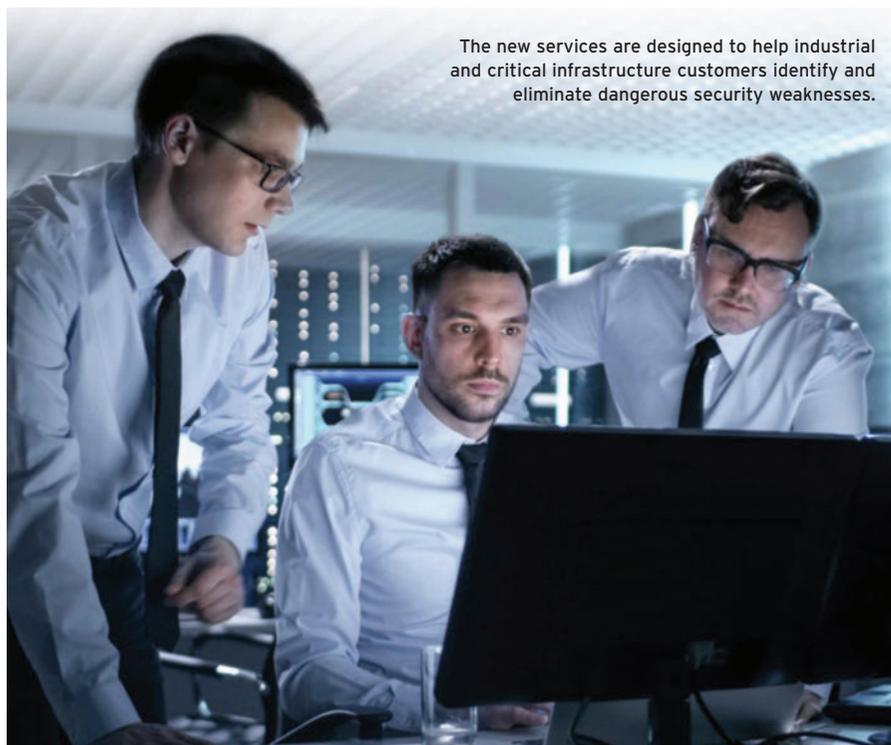
Photo: Honeywell

AfricaCom 2018: Pathway to building a fully connected Africa

The 21st edition of AfricaCom – Africa's largest technology conference – offered a glimpse of the connectivity divide in Africa and new trends to connect the unconnected.

Photo: Nancy Atieno Onyango

Intelsat was one of the exhibitors at this year's AfricaCom.

THE THREE-DAY EVENT was jam-packed with stimulating panel discussions, networking forums, product launches and showcases, was held at the CTICC in Cape Town, South Africa from 13 to 15 November.

The conference featured more than 17,000 attendees from over 150 countries ranging from telecom operators, government, researchers and media working in the African telecoms and technology landscape. There was a high level of interaction with influencers across the African digital ecosystem during the event.

According to Lanre Kolade, CEO of CSquared said, "Africa needs to showcase success stories in the African continent and AfricaCom provides the opportunity for Africans to do that. African governments need to understand that we have restless youth across the continent who need to be empowered."

More than half of the world's population (4.021bn) is now online. Africa still lags behind, with the latest data showing close to 35 per cent Internet users (435mn) and 85 per cent mobile users (1mn) in Africa. Mohammed Dabbour CEO Africa at Millicom stated, "The 4th industrial revolution promises to improve the lives of billions of people across the world. The revolution requires the right foundation to be ready. As actors, we need to collaborate within and across the industry as the revolution will touch every industry, discipline and economy."

More than 60 per cent of the African population comprises of youth below the age of 25.

More than 60 per cent of the African population comprises of youth below the age of 25. They are mostly unemployed and live in rural and peri-urban areas, where the provision, of services such as health care, education and transport are constrained due to poverty lack of funding, infrastructural gaps and conflict. For the majority of young Africans, mobile phones are not just a communication device but a vital tool for accessing either life.enhancing or life-changing changing services and opportunities.

Highlights and announcements during AfricaCom 2018 aimed at shaping Africa's digital future and closing the connectivity gaps included:

Africa's first smart feature phone

MTN, KaiOS Technologies, China Mobile, and UNISOC announced a partnership to launch Africa's First Smart Feature Phone. The mobile phone will initially be available from MTN in Nigeria, and South Africa followed very shortly by other MTN operations in Africa. The handset will allow customers to upgrade from a feature phone with only voice and text capabilities, to a fully connected handset with fast, 3G Internet. Of the partnership, Rob Shuter, group president and CEO of MTN, said, "As MTN we are proud to be part of this partnership that supports our ambitions to deepen digital inclusion in our markets. This initiative contributes to the achievement of one of our key goals to provide affordable data enabled

handsets to our customers, and by so doing, remove some of the barriers to mobile Internet adoption in Africa." The handset will retail between US$20-$US25 which is relatively affordable compared to the average price of US$40 of entry-level smartphones across the African continent. MTN is aiming to sell about 10mn of the devices over the next three years.

Fiber connectivity

Angola Cables, a multinational telecommunications company running a variety of international submarine Cable Systems announced that it had signed a Memorandum of Understanding with Broadband Infraco, a wholesale state-owned service provider in the South African telecommunication space, to provides extensive regional long-distance network coverage and connectivity in the SADC region. Broadband Infraco currently has nearly 15,000km of fiber networks across South Africa.

Satellite connectivity

Geographic and infrastructural challenges are among the complexities faced by mobile network operators when trying to expand mobile connectivity in rural areas of Africa. According to the African Digital Outlook 2019, a report by Ovum, " Even as Africa sees progress with broadband and digital services, basic connectivity remains out of reach for many people on the continent. The gaps in connectivity represent a missed commercial opportunity as well as an obstacle to achieving economic and social benefits that should arise as broadband penetration increases."

The conference featured exhibitions by leading satellite providers such as Intelsat, Arabsat and Gazprom.

Pan-African telecoms group Liquid Telecom partnered with Kymeta in a bid to extend its VSAT service in the most under-serviced and remote parts of Africa.

Photo: Nancy Atieno Onyango

MTN, KaiOS Technologies, China Mobile and UNISOC launch Africa's first smart feature phone.

Broadband outlook

Nigeria, South Africa, Egypt, Ethiopia and Algeria are the biggest mobile markets in the African continent in terms of subscriptions. Mobile data is the leading revenue growth area for mobile operators in Africa.

5G is being punted globally, but in reality, Africa will see a much larger uptake of 3G in the next few years. According to Ovum's African Digital Outlook 2019 report which was launched at the conference, '3G and increasingly LTE will power the growth of mobile broadband in Africa for the coming few years. The number of mobile 3G

Nigeria, South Africa, Egypt, Ethiopia and Algeria are the biggest mobile markets in the African continent in terms of subscriptions.

subscriptions on the continent will rise from 456.6mn at the end of 2018 to 697.6mn in 2023.' Ovum expects mobile 5G services to be launched in Africa by 2021, but the number of mobile 5G subscriptions on the continent will initially be small, rising to 5.9mn at the end of 2023.

Creating an Internet economy

After two days of intense discussions and networking, networking events provided the agency for vibrant discussion and information sharing that help close the digital divide plaguing the African continent. The agriculture, education and health sectors are best positioned to benefit from the digital connectivity in the immediate future because of the youthful population that could benefit from innovations in their respective fields.

According to the 2017 African Futures report by the Institute for Security Studies (ISS), "Mobile technology uptake can help banking, health and education services to reach underserved populations, but increasing firm productivity and attracting foreign direct investment (FDI) will require investments in relatively pricey ICT infrastructure. The buzz surrounding leapfrogging also overlooks a fundamental reality. Many African families, communities and governments cannot afford this new technology."

For the African ICT sector to thrive, there is a need for partnership and collaboration between the regulators and operators. African governments need to revise regulatory obstacles that are slowing efforts to digitise the continent. By ensuring spectrum availability, reviewing harsh laws regulating internet use and scraping social media taxes that increase the cost of connectivity, African governments will be paving the pathway to building a fully connected Africa. ✆

Nancy Atieno Onyango

Photo: Nancy Atieno Onyango

Panel discussion on embracing digital transformation to strengthen African economies.

Securing the smart energy revolution in Africa

The potential of the Internet of Things (IOT) to make consumers' lives more convenient is well-documented. One area in which it can deliver immediate benefits and significantly change how a household or company in Africa manages and keeps track of its energy use is smart metering.

RATHER THAN RELY on estimated energy use to calculate bills, or physically visit customers' homes to take meter readings, a smart meter allows energy suppliers to have a real-time view of a household's or business' energy consumption – resulting in more accurate billing. Smart metering systems open up opportunities for better management of the demand and supply of energy. Utilities can track energy which is stored and available for purchase for other players who are in demand. Today's systems no longer rely on just fossil fuels, but also on renewable energy, which more and more parties produce and sell, when not using it for their own consumption.

Africa and the Middle East are now seen as the next frontiers for the implementation of this technology. Africa, in particular, is experiencing massive population growth combined with growing economies in many countries. Electrification is obviously a major driver in this kind of development and, as with other technological implementations, Africa is in a position to adopt new technologies immediately because it has few legacies.

Figures from ABI Research support the view that Africa is beginning to leap onto the smart metering bandwagon. Figures show that smart meter shipments to the Africa/Middle East region are predicted to grow at a compound annual growth rate of 36.6 per cent between 2011 and 2022. Revenues of companies involved in smart metering are set to grow by an equivalent 35.4 per cent over the same period.

The installed base of smart meters with cellular connections will grow by 29.1 per cent (GSM/ GPRS) and 71.2 per cent (WCDKA), but off a very low base. As with any connected device, there are security considerations with smart metering. And since energy grids are critical national infrastructure, robust protection is paramount.

A highly-motivated cyber target

National energy infrastructure is a prime target for cyberattacks, and the consequences can be devastating. Blackouts across entire countries, access to personal data and even to nuclear power plants make the smart energy ecosystem very attractive to cyber actors. Smart meters and smart grids present many

IoT can change how households in the continent track their energy usage.

Photo: adobestock

potential routes of attack for and, they must be protected. This is why governments around the world are responding with initiatives that mandate specific protection protocols for smart grid deployments. Non-compliance could prevent access to the marketplace or lead to costly fines.

Smart meters have a long product lifecycle

Smart meters are not just installed for a couple of years and then updated – the intention is for them to last as long as 10-15 years. This means that advanced security processes need to be in place to replace ageing keys and to enable remote credential management, along with strong encryption and authentication tools to ensure that only authorised parties can access the energy assets and their data.

Smart meters can also be very difficult to access. Deployments are very wide – spread out over an entire country or even further – while the devices themselves are put into walls, behind locked doors or in physically remote locations such as mines or offshore sites. These make regular maintenance visits difficult, time consuming and costly. For these reasons, the ability to remotely monitor smart meters appear as crucial, to continuously protect the ecosystem in the long-run.

A dynamic market

Lastly, the energy market changes quickly. New entrants join the market frequently, while others disappear. The smart meter ecosystem has thus to be configured so that only authorised organisations and applications have access to metering data, and that changes to access can be applied instantaneously, whenever needed. As smart meter manufacturers might not be IoT security experts, partnering with digital security specialist firms can avoid putting AMIs (Advanced Metering Infrastructures) at risk.

It's clear that the smart meter market is set to grow significantly across Africa in the near term. There are several market drivers behind this, such as theft and revenue protection, rising urbanisation rates, improved operations among others. With this rise, comes the need for governments to understand end-to-end security of the smart energy ecosystem and the dedicated solutions available that provide encrypted keys and hardened key storage into smart meters – right from the manufacturing steps, as well as throughout the lifecycle of the smart meters. ✆

Sherry Zameer, senior vice president Internet of Things (IOT) for CISMEA region at Gemalto

The rising demand for connectivity in South Africa

South Africans with Internet connections lead the world in expectations for constant connection both at and away from home, with 95 per cent of respondents saying they expect it and it is important to them, according to the 2018 ARRIS International plc (NASDAQ: ARRS) Connectivity & Entertainment Index (CEI).

Photo: adobestock

87 per cent of South Africans with connections believe constant connectivity is changing their lives for the better.

ANOTHER SURPRISE: A majority of households with Internet connections (56 per cent) are willing to pay more for access to new experiences that constant connections deliver. Only India and Chile matched South Africa's level of expectation.

In a finding increasingly mirrored worldwide, 51 per cent said they want an equivalent content experience (and 77 per cent said they wanted equivalent quality of connection) away from home as they have while inside.

"This demand for constant connection away from home has appeared quickly," said Duncan Potter, senior vice president of global marketing for ARRIS. "All of this has huge implications for providers and even enterprises as they cater to more demanding workforces. Other global markets are showing us that pent-up demand will likely grow as younger consumers continue to enter the market."

The complete findings have wide-ranging implications for mobile operators, residential service providers, and enterprises. The global report, which surveys 20,000 consumer technology buyers in 20 countries about their behaviors and purchase plans, is now in its eighth year.

Better, More, Safer

South Africans' demand for constant connections runs deep. An overwhelming majority (87 per cent) of those with connections believe constant connectivity is changing their lives for the better. For these South Africans, constant connectivity means being reachable 24/7 (63 per cent), a seamless experience (defined as fast, reliable and uninterrupted) (56 per cent), and granting information anywhere, at any time (61 per cent).

Respondents also revealed a broad definition of entertainment. A full 86 per cent say entertainment is "more than just a screen," pointing to new experiences and opportunities that "should be available anywhere, anytime, in any format".

Throughout the survey, security and privacy gained in importance and emerge as a driving force in technology purchase plans: 74 per cent of respondents cited security and/or privacy as their top concern about constant connectivity.

In a first, security (55 per cent) and privacy (50 per cent) dominated the top five factors

> **In a first, security (55 per cent) and privacy (50 per cent) dominated the top five factors influencing selection of entertainment and broadband service providers for out-of-home use.**

influencing selection of entertainment and broadband service providers for out-of-home use. Speed (51 per cent) and reliability (51 per cent) tied for second place, with cost (49 per cent) and ease of use (45 per cent) completing the top five.

Security also appeared in the top three priorities for Wi-Fi devices, knocking off perennials ease of connection (51 per cent) and low pricing (46 per cent). Speed (86 per cent) and strength of signal (75 per cent) maintained their leads.

The survey found that installations of home security systems could double: 27 per cent of homes currently have one, with 33 per cent of respondents saying they plan to install one.

Security and privacy also loomed large in the appetite for managed video. A full 72 per cent said they'd prefer to manage their device options themselves, with 51 per cent citing security and 64 per cent citing privacy as the main reason.

Finally, South Africans with connections are poised to double their current use of paid streaming services, according to the survey. While 31 per cent currently subscribe to a streaming service, a full 34 per cent said they plan to use or subscribe to one going forward. Also here, churn for streaming services is pegged at 13 per cent, with the overwhelming reason for cancellation (63 per cent) being that the service was too expensive. ✆

Intersec 2019 to reflect expansion of Middle East's security market

Middle East security, safety, and fire protection industries are in sharp focus as countdown begins for Intersec 2019. The three-day trade exhibition in Dubai will host 1,300-plus exhibitors, 15 country pavilions, and a new conference format.

THE COUNTDOWN HAS begun for the 21st edition of one of the leading security, safety, and fire protection trade shows in Dubai, with global suppliers zooming in on a Middle East market that is estimated to more than double in value over the next six years.

More than 1,300 exhibitors from 59 countries, including 18 of the 20 leading commercial security providers, are set to participate at Intersec 2019, which takes place from 20-22 January at the Dubai International Convention and Exhibition Centre.

The annual three-day event, organised by Messe Frankfurt Middle East, covers the seven sections of Commercial Security; Fire & Rescue; Perimeter & Physical Security; Safety & Health; Homeland Security & Policing; Information Security; and Smart Home & Building Automation.

It will arrive as regional demand for these solutions soars at a compound annual growth rate of 15 per cent from 2018 to 2024. According to analysts at 6WResearch, the Middle East market for commercial and cyber security, fire protection, smart home solutions, and drones, worth a combined US$7bn in 2018, will grow to US$16.4bn in 2024.

Commercial security, comprising video surveillance, access control, and intrusion detection, holds the lion's share of that figure. Valued at US$2.9bn in 2018, the regional commercial security market will grow to US$7.4bn in 2024 according to 6WResearch, driven by increased infrastructure investments and stringent regulatory policies.
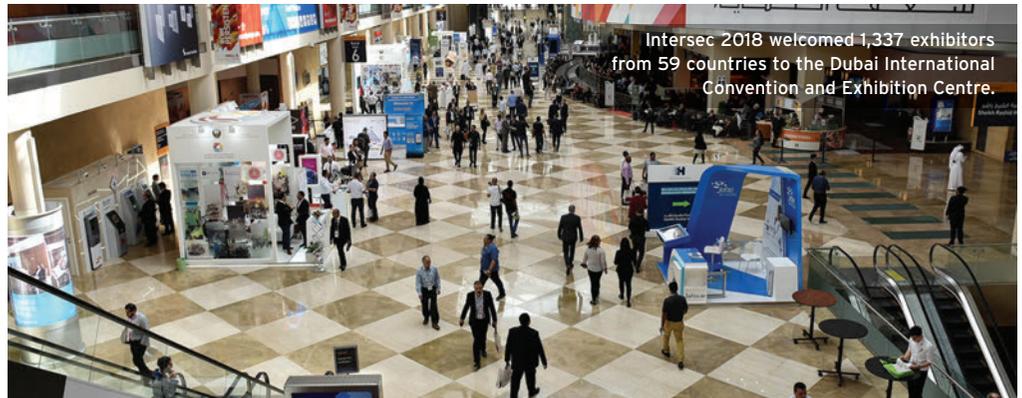
The Middle East fire safety systems and equipment market will increase by eight per cent annually, valuing US$3bn in 2024, from an estimated US$1.9bn in 2018, while the markets for cyber security (from US$1.4bn in 2018 to US$2.7bn in 2024), smart home (US$344mn to US$869mn), and drones (US$507mn to US$2.4bn), are also in-line for solid double-digit annual growth.

This sets the scene for three days of busy networking and knowledge-sharing at Intersec 2019, which returns with the key support of long-standing Government partners such as the Dubai Police, Dubai Civil Defence, Dubai Police Academy, Dubai Municipality, and the Security Industry Regulatory Agency (SIRA).

The increasing global significance of the annual showpiece will also be underlined by a number of new international partners coming on board, with Intersec's show director Andreas Rex confirming the Kuwait Fire Protection Association, the Royal Society for the Prevention of Accidents (ROSPA), the Institution of Occupational Safety and Health (IOSH) and the National Examination Board in Occupational Safety and Health (NEBOSH), among new official supporters next year.

"The Perimeter Security Suppliers Association (PSSA) and the Pakistan Safety Council have also confirmed their support for Intersec 2019, joining more than 35 official international government partners, trade associations, and professional non-profit institutions aimed at advancing the global security, safety, and fire protection landscape," said Rex.

Rex said plans for a new three-day conference format is also underway, bringing together equipment manufacturers, integrators, consultants and services providers with regulatory agencies and government authorities.

"A three-day Intersec Future Security Summit will raise key issues on Artificial Intelligence, security Integration, emergency preparedness and response, data protection, IoT and much more. A range of practical workshop sessions are also being organised for security managers to support skills development, professional expertise on security risk intelligence, threat identification, and disaster management.

"The SIRA Forum will also return with the latest updates in security law and industry regulations in Dubai, while a one-day Fire Safety and Protection Conference will involve authorities, fire chiefs, engineers, fire fighters and emergency response professionals."

Returning popular features at Intersec 2019 include the Drone Zone, an Outdoor Demo Area, a Smart Home Pavilion and the Safety Design in Buildings Pavilion.

More than 150 exhibitors will be participating for the first time, while Canada, China, Czech Republic, France, Germany, Hong Kong, India, Italy, Korea, Pakistan, Russia, Singapore, Taiwan, UK, and the USA comprise the 15 country pavilions.

Intersec 2019 is held under the patronage of His Highness Sheikh Mansoor bin Mohammed bin Rashid Al Maktoum. ©

For more details about the exhibition visit: www.intersecexpo.com.

Intersec 2018 welcomed 1,337 exhibitors from 59 countries to the Dubai International Convention and Exhibition Centre.

Photo: Messe Frankfurt

The show saw three days of busy networking.

Photo: Messe Frankfurt

How digital transformation is redefining performance testing

Staggering growth across industry and innovation is changing the face of performance testing. Technological innovation and invention have shifted foundations and redefined potential, putting the customer in the driving seat and the enterprise under pressure.

Digital transformation will become increasingly focused on the customer and service delivery.

Photo: Adobestock

AS SECRETS GO, the fact that technology has fundamentally changed the face of business has to be the worst kept. The past 10 years have seen cloud move from a concept to a critical business tool, the Internet of Things from postulated idea to realised potential, and artificial intelligence already embedded into chatbot and call centre. According to Mandla Mbonambi, founding CEO of Africonology, technology will continue its relentless evolution, transformation will become increasingly focused on the customer and service delivery, and testing will remain critical in ensuring the success of both.

"Innovation and digital transformation have placed the customer at the centre of the enterprise," he says. "Technology is allowing for the business to take products and services to market far more effectively and is putting it under pressure to ensure performance is closely aligned to customer demand. The changes that have taken place in the IT sector have been the biggest drivers of digital transformation and it is affecting each industry, regardless of type and product."

The organisations that invest in digital are those that are consistently and agilely refining the management of the value chain and unlocking out new revenue models and opportunities.

The mantra remains true – if your business doesn't transform today, it's done. Why? Because the changes have rippled along the value chain. The organisations that invest in digital are those that are consistently and agilely refining the management of the value chain and unlocking out new revenue models and opportunities. Manual processes are automated and service delivery improved to the point where it now provides other service avenues to the business.

"Customer expectations are consistently revising, upwards," says Mbonambi. "Speed of delivery and getting the product to market first has become critical to meet these expectations. It is also the agility and ability to pivot on opportunity – the ability to recognise customer trends or needs and to fill them before anyone else."

It is into this morass of customer and experience and satisfaction that automation has taken its first tentative steps. The immediacy and efficacy of the technology has introduced new layers to customer engagement and process management. Automation is transforming how the business delivers to its market but equally how its internal functions are managed. The focus has shifted from the where to the how.

"I believe that there will be even more services and automated solutions entering the market over the next few years," says Mbonambi. "Users will be able to access their services through technologies such as the Internet of Things (IoT) and artificial intelligence (AI). These changes aren't years into the future, either, they're imminent. They are also going to change the skills landscape."

For Mbonambi the next 10 years will not only see the rise of the robots but of new skills. Into the digitally empowered future will arrive a new type of talent that's multi-skilled and capable of taking on a variety of roles and responsibilities. Perhaps the changes in skills demand and ability could be defined as one of the most seismic shifts introduced by technology and this metamorphosis is unlikely to slow down any time in the future.

"I think that performance testing is also going to play a pivotal role in the success of any digital transformation strategy or implementation," he concludes. "We need to ensure that the services being created can satisfy clients and their objectives while remaining aligned to regulatory requirements and being compliant. This is particularly relevant when it comes to AI and IOT as regulation will continue to adapt to meet the challenges presented by these technologies and the enterprise has to keep up."

For Africonology, the market's changes in technology and capability have influenced an equal evolution in performance testing. To meet both business and market demand, the technology must meet objectives, deliver on parameters and take on more responsibilities and testing is critical in ensuring that this is exactly what happens. ✆

The future of digital advertising

Despite the rise of digital advertising in the MENA region broadcasters and marketers are faced with challenge of finding a viable solution for measuring and reporting on free-to-air content, says David Spencer, commercial director MENA, FreeWheel.

Photo: Adobe Stock

Throughout the region, approximately 72 per cent of TV is delivered through satellite with a 84 per cent free TV penetration rate.

What are your thoughts on the growth of the digital advertising market in MENA?

MENA's projected digital growth is one of the fastest in the world. Digital share of TV revenues is expected to rise from 10 per cent to 18 per cent by 2012. This is driven by a large, younger population, strong mobile connectivity and growth in streaming platforms and services. MENA's youth will drive growth. Talking about youth, this is also applicable to the market itself (and not only audiences). We are constantly working with new actors and new video companies that did not exist a few years ago. As the market restructures itself, we're now seeing bigger projects and opportunities at scale, and we're thrilled to be part of it.

What does the future hold for programmatic advertising?

Performance in video advertising can be measured with multiple KPIs, such as completion rates, cost per view, viewability, target audience, attribution, and the branding contribution to the sales cycle. Programmatic advertising is advantageous to marketers because of its extensive measurable, targeting and optimisation solutions. It was built with both advertisers and publishers in mind, to run at scale and address the scissor effect (the right balance between ROI for advertisers and yield for publishers).

It has become almost frictionless for buyers and brands to buy video media in a programmatic fashion. Publishers need strong software to make their video inventory available the way brands want to consume media. Whether they are buying using a DSP or

> **Broadcasters are the ones who best know their audience so they need to adopt the most adequate monetisation solution for an optimal user-experience.**

in a direct-sales IO model, publishers need to embrace all types of trading models with the same standards of quality.

What are the biggest challenges advertisers or broadcasters need to prepare for?

Throughout the region, approximately 72 per cent of TV is delivered through satellite with a 84 per cent free TV penetration rate. A big challenge for broadcasters and marketers in MENA need to find a viable solution for measuring and reporting on free-to-air content. As linear and digital TV further converge, transactions between broadcasters and marketers will become smoother by de-siloing TV & digital within the same organisation. Innovations will build the bridge between traditional TV and how content is consumed today.

The challenge is not only technical it is also organisational; broadcasters have to unite on technology standards and best practices. The more fragmented technologies are, the longer it will take to bring innovation into MENA markets. Because of digital giants

opportunistically looking into the TV market, broadcasters and media groups should embrace a more collaborative approach. A great source of inspiration is the European Broadcaster Exchange (EBX).

How do you think consumer influence on ad content will affect broadcasting?

Content is media companies' most precious asset. Broadcasters are the ones who best know their audience so they need to adopt the most adequate monetisation solution for an optimal user-experience. Due to the abundance of content available the attention span of the consumer has shrunk. Ad duration is an example: it's a joint responsibility of both publishers and marketers to address exposure and repetitiveness issues. It is key to reach the right audience with right message at the right time, while retaining the attention of the consumer.

> ## Throughout the region, approximately 72 per cent of TV is delivered through satellite with a 84 per cent free TV penetration rate.

How will the increase in customer demand for personalisation affect/influence traditional broadcasting?

The advanced TV industry evolves constantly with different trends and buzzwords including addressable TV, programmatic TV, connected TV, OTT, unified screens, and convergence. But no matter how you call it, the future of television is already here.

David Spencer, commercial director MENA, FreeWheel.

Does the rise in on-demand viewing pose a challenge to traditional broadcasting?

Faster and cheaper ISP, broadband and fibre optic connections provide a solid infrastructure to help broadcasters deliver their content in catch-up form and enrich their digital portfolio for viewers. Broadcasters need to utilise that to their advantage.

I think the future will see a significant increase in hybrid models, where 100 per cent subscription video-on-demand (SVOD) providers will blend with advertising video-on-demand (AVOD), to help reduce churn rates on subscriptions, attract new viewers and increase the average revenue per user. This will be exciting for everyone: more premium inventory for marketers, better yield for

> ## Digital share of TV revenues is expected to rise from 10 per cent to 18 per cent by 2012.

publishers and content providers, and improved cost-efficiency for viewers.

How can FreeWheel benefit the MENA market? What makes it stand out amongst its competitors?

FreeWheel has the infrastructure necessary to drive at scale. We want to help shift the market to align with advanced ideas that are taking place in the US and Western Europe. Our goal is to support sustainable revenue growth by helping our clients and customers understand their opportunities. Examples include their unified linear and digital strategy, or how programmatic generates incremental revenue. We also provide tactical support such as more effective processes across sales or ad operations. In a nutshell, we provide a holistic, white glove service to simplify a complex ecosystem.

In your opinion, what will be the biggest trend(s) in the next five years? What areas does FreeWheel aim to expand into?

From 2017–21, MENA's projected video revenue growth is six per cent for linear TV and 26 per cent for online video. The convergence of linear and digital will be huge, and the "living room" will continue to reshape itself.

Freewheel has been developing partnerships with broadcasters and premium publishers this last three years. We will grow our portfolio substantially and extend our footprint in the region by providing our first class technology and expertise. ℭ

Airbus wins HOTBIRD satellites replacement order from Eutelsat

FRANCE'S EUTELSAT COMMUNICATIONS has ordered two new satellites from Airbus Defence and Space to replace the three existing HOTBIRD satellites at its 13° East flagship neighbourhood.

These all-electric high-power satellites are seen to start operation in 2022, serving Europe, the Middle East and North Africa.

The new satellites are expected to reinforce and enhance the high quality of broadcasting services provided to Eutelsat customers on HOTBIRD, providing improved performances over Western Europe and Poland. In addition to this, the satellites are set to provide advanced features in terms of uplink signal protection and resilience, as well as exceptional in-orbit redundancy.

With a launch mass of 4.5 tonnes and an electric power of 22kW, the all-electric propulsion satellites will be based on Airbus Defence and Space's innovative Eurostar Neo platform which will be produced in their UK facilities in Stevenage and Portsmouth as well as in their French facility in Toulouse.

This enables Eutelsat to replace the current constellation of three satellites by two, further enhancing the capex optimisation achieved through the application of the design-to-cost policy.

This procurement is fully covered by the company's existing capex budget.

Commenting on the satellites, Rodolphe Belmer, CEO of Eutelsat, said, ''These new satellites have been specifically designed to enhance the service

HOTBIRD Eutelsat horizontalAirbus Defence and Space selected to build the electric propulsion satellites.

we offer to our customers at this major neighbourhood while representing the optimum solution in terms of capex efficiency.''

A long-standing business partner to Eutelsat, Airbus has already delivered 23 satellites for Eutelsat.

Driving organisational success through better security measures

Security is as vital to organisational success as technology and people as without it there is the risk of breach, reputational loss, and failure.

SECURITY IS THE oxygen that keeps the business alive. It is also, like the onion, multi-layered and complex enough to make even the sturdiest of Chief Information Security Officer's (CISO) cry. Today, security isn't at the beginning of the end as solutions relentlessly refine their capabilities and reach. It is at the end of the beginning. Technology is relentlessly evolving through digital transformation, the third platform, and the Fourth Industrial Revolution. Never before have industry and business been more reliant on technology. It has also never been more important to put security on the ground floor instead of loosely bolted on top.

Most South African companies are serious about digital transformation and yet only nine per cent of South African CIOs believe that cybersecurity and privacy technology are vitally important to a digital transformation strategy. This is a concern. Security should be the bedrock for digital transformation – if systems are taught the wrong things at the start, the issues scale rapidly. This is particularly true within the scope of the Internet of Things where machine learning, artificial intelligence (AI) and the algorithms that power them must start out with security at their core. A misstep at the start could create a potentially critical security weakness further down the line.

Security is under inordinate pressure to perform and protect while always remaining behind innovation and the demand for agility. IT decision makers must balance the need to drive innovation, monetise data, manage user expectations and enhance agility while simultaneously ensuring that governance, risk, and compliance (GRC) mandates are met. Research conducted by IDC has found that 37 per cent of CISOs are battling with this balancing act. They must align the business' need for growth alongside both security and regulatory demands – they're all looking for the digital cure to the GRC and security migraine.

There has been a collateral rise in spending on security and data management, particularly as the ramifications of POPIA and GDPR become more apparent. However, it is highly likely that real compliance across all fronts will only occur when a globally impactful incident kicks everyone into gear. The problem is that security is a complex web of intricate solutions on its own and this is made even more complicated by the influx of local and global security standards and guidelines.

There is an urgent need to minimise and mitigate risk, to address these challenges and to overcome some of the hurdles that are facing both organisations and security teams. IDC found that 51 per cent of organisations are finding it difficult to locate skilled IT security personnel, 49 per cent lack enough IT budget, and 36 per cent feel that employee adherence to policies is a threat. These challenges are further compounded by limited access to up to date threats (40 per cent, lack of mature security policies (31 per cent) and limited compliance with regulations (24 per cent).

Security can no longer be built in a vacuum. The organisation must partner with vendors to craft solutions that map back to specific challenges that pertain to industry, sector and internal structure. Internally, there needs to be a clear line of sight as to who leads digital transformation. The power has gradually left the IT department and headed into a line of business. Employees use credit cards to spin up servers and run workloads that IT hasn't heard of, and often never will until there's a breach. The technology hand is losing sight of what the business hand is doing with technology and this presents significant risk unless a clear line of sight is established at the outset.

IDC surveyed organisations to establish exactly who should lead digital transformation. The results found that 75 per cent believed it should be a joint activity between the line of business and IT, but 16 per cent believe it should be led by the business and eight per cent that IT should lead the way. The right approach is the one where both IT and the business work together, collaborating on projects and digital initiatives from the outset. Early on is essential to security success.

Fortunately, line of business has started to rethink its views on security. In an IDC survey from five years ago, only two per cent believed that it was a priority. Today the number has risen to 33 per cent. Breaches like those at Ster-Kinekor and Liberty are waking up the industry, especially as they realise that jail and corporate collapse sit on the lack of compliance horizon. Now is the time for the organisation to ensure it is covered and to be able to say with confidence that the steps have been taken towards a truly vivacious security posture. ✪

There has been a collateral rise in spending on security and data management, particularly as the ramifications of POPIA and GDPR become more apparent.

Increase data centre uptime

WHETHER A SERVICE Level Agreement can be upheld may depend on how efficient data centre troubleshooting is. Carefully checking each cable takes too much time, and carelessly unplugging the wrong cable can take webshops, apps or transactional sites offline. Brady Corporation offers reliable labels that are designed to reliably identify any data centre cable, server, component and rack to take the guesswork out of troubleshooting.

Efficient troubleshooting

Trying to determine which cable to unplug and replace or reconnect can be a daunting task in data centres. It is like finding a specific needle in a stack of needles: a challenge that is time devouring and nerve racking, especially when high level applications are down and agreed service levels are threatened. Imagine someone would unplug the wrong cable, and more servers go down. To avoid all this, Brady offers reliable identification solutions that enable data centre technicians to quickly retrieve the cable they need.

Label it once

Brady's reliable labels with adhesives for curved and flat surfaces stay attached to every cable and component. As a result, identification will be in place when fast troubleshooting is necessary to avoid downtime. Label sizes and shapes are available to easily identify any rack, server, component, STP, UTP and COAX cables, and Brady also offers a flag shaped label designed for minimum fibre optic cable contact with maximum available space for identification data.

Easy to design and print

The Brady Workstation app platform offers an array of label design capabilities that cover almost every data centre identification need.
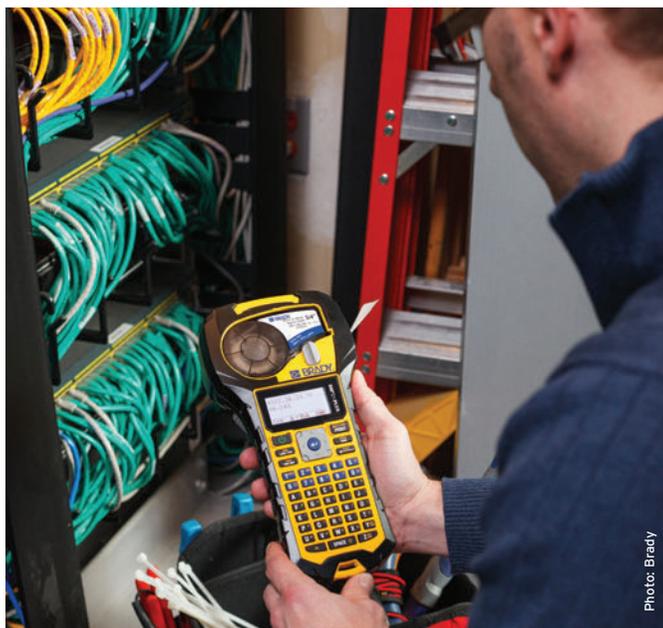
Photo: Brady

Cable, component and rack labels, and even facility signs and identification can be designed in a few steps. Designs can easily be sent to a Brady label printer for on-site printing so the new label can be applied immediately.

Support your data centre SLA with reliable cable identification - get the guide, samples and demo

Four ways the fourth industrial revolution will change HR in East Africa

The pace of technology change is accelerating, creating exciting new opportunities for human resources (HR) leaders and departments in East Africa.

I RECENTLY ATTENDED the Talent Agenda Series East Africa Conference in Nairobi, where I moderated a discussion focused on the fourth industrial revolution and how it influences African talent.

One of the key insights is that HR is still largely rooted in the third industrial revolution, but now needs to get ready for the fourth industrial revolution. Here are some of the key trends we see unfolding in HR in the era of big data, the Internet of Things and artificial intelligence.

1. HR will become more data-driven

Following the lead of the marketing department, the HR function is also becoming increasingly data-driven. HR departments have more workforce data than ever - data that they can use to drive better decision-making and to shape superior employee experiences. They can use HR analytics to help managers and senior leaders make better decisions for the business. HR can use analytics to answer business questions such as:

- Where did we find the best hires for our business, i.e. top performers, who have we retained for a good while?
- How many people will we need in our service department to support our forecasted revenue growth of 10 per cent for the next financial year?
- What are the possible reasons for high staff turnover in the call centre?
- What skills gaps do we have in our organisation?

2. The digital natives are taking over

Around 75 per cent of Kenya's population is younger than 30 years old. This generation has grown up with M-Pesa, smartphones and the Internet, and enters the workplace with different expectations of the experience they will get from their employer.

HR needs to look at how it can support technology-enabled ways of working to get the best from this culture -and how it can harness their curiosity, innovation and love of technology. For the sake of economic growth and stability, HR should also lead the organisation in seeing how it can absorb young people into the labour market. Kenya's youth unemployment rate, at 22 per cent, is one of the highest in the region, according to the United Nations Human Development report.

3. Emphasis must shift from compliance to strategic enablement

HR leaders and teams traditionally focus heavily on compliance and administration. These functions are essential, but today's employee self-service tools and business management solutions enable us to automate much of the red-tape as well as many basic employee interactions such as leave applications or capturing personal details.

HR should thus use automation to free up its time and focus on where it can add value: creating a differentiated employee proposition and experience, acquiring and developing talent, and driving better productivity, performance and employee satisfaction.

4. HR must help drive technology change

East Africa has changed dramatically, thanks to the introduction of technologies such as fibre Internet and mobile money. But the next wave of technology change is upon us with the Internet of Things, wearable computers, artificial intelligence, augmented reality and other tools promising to change how we live and work.

HR has a valuable role to play in supporting the rollout and adoption of such technologies, which will bring disruption to the workplace. Many employees will need to be reskilled as their traditional roles become more automated. Plus, the skills and talent the organisation will need will evolve - it will need more digital and customer experience skills.

Continuous learning will become a must for every worker and organisation. HR needs to look at how it acquires and builds skills for the future, while providing change management support to employees. €

Nikki Summers, regional director for Sage in East Africa

The recent Talent Agenda Series East Africa Conference in Nairobi focused on the fourth industrial revolution.

Photo: adobestock

Photo: Adobe Stock

A platform economy is a new breed of digitally-driven, disruptive business models.

Embracing the platform economy in South Africa

Looking to spur local growth, Prins Mhlanga, founder of Ocean on 76, a fintech company, says that South Africa needs to embrace a business model that is rapidly transforming the global economy - and that model is the platform economy.

HAVING EVOLVED OVER the years, a platform economy is a new breed of digitally-driven, disruptive business models. The most distinctive characteristic of this new model is the ability to expand into new markets by simply making their platform available in those new territories.

Mhlanga cites well known platform examples such as Uber and Airbnb, and online stores operated by the likes of Apple, Google, Amazon and Alibaba.

These platforms are the technology base that open up a whole new world of opportunities for retailers, musicians, software developers and private property owners so they can sell without creating their own online distribution channels.

Their presence in South Africa is evidence that the model works here, but what is holding back local companies from developing their own platforms?

According to a report released in June this year by Accenture and the Gordon Institute for Business Science, South Africa is far from ready for this. The country is ranked 14th out of 16 countries contained in the Accenture Platform Readiness Index and is expected to remain in that position through until 2020.

Sub-saharan Africa's mobile population is projected to reach half a billion people by 2020.

Far from seeing this as a blow to the ambitions of companies building local platform businesses, this presents a rich opportunity for business leaders to accelerate their efforts.

The Accenture study, Winning with Digital Platforms, says that 81 per cent of the 3,000-plus respondents to the worldwide survey said they expected platform-based business models to be core to their growth strategy in 2018. And 27 per cent said that digital ecosystems are transforming the way they deliver value.

There is little doubt, therefore, that global businesses see this as a valid way to pursue growth and customers.

South Africa's low ranking is due to a lack of sufficient infrastructure, skills and economic growth needed to support adoption of this business model. The Accenture report says these factors have produced a scarcity mindset rather than an abundance mindset in which commercial success delivers mutually beneficial results to all.

This stumbling block, more than any other, will prevent South Africa from making a successful transition to an environment that supports a platform economy.

What we need, rather than this insular view, is one in which everyone is able to see and realise the benefits of co-operation rather than outright competition.

This might sound far-reaching, but it is a model we have been honing at Ocean on 76 Holdings and is also the subject of my doctoral dissertation. This work is aimed at uncovering and formulating the components needed to establish and grow a local business ecosystem in the digital economy.

Many of the principles being explored are already being implemented in building our digital ecosystem that has a distinctly fintech flavour, with a bias toward the mobile technology sector.

This is a flourishing sector that is expected to deliver strong growth as sub-Saharan Africa's mobile population is projected to reach half a billion people by 2020. This market justifies our belief in the value of creating platforms and ecosystems that allow us to reach millions of mobile subscribers throughout the region.

Through this, we have established a platform for providers of mobile content and digital services to reach this rapidly-expanding market.

Which is a key insight that Accenture and GIBS outline in their report: not every company needs to be a platform provider. Most organisations, it is reported, will find it cheaper and faster to leverage existing platforms than creating their own.

It may be relatively early days yet for fully-fledged, home-grown platforms to emerge, but there is an unmistakeable move in that direction. The companies exploring ways to leverage this new trend are the ones that will be leading the pack once this phenomenon is fully embraced.

In as much as Accenture says the environment in South Africa is not yet ready, do not be fooled into believing that these platforms are not being built and that they will not dominate future commerce the way that global giants already own large shares of the global market. ✆

Fintech: the driving force behind financial inclusion

CATAPULT: Inclusion Africa, a programme of Fintech development from the LHoFT, targets fintech companies in Africa that are focused on financial inclusion and keen to build bridges between Africa and Europe, aligned with the sustainability goals of Luxembourg's finance centre.

The event was aimed at fintech companies from countries such as Uganda.

Photo: Adobe Stock

CATAPULT: Inclusion Africa provided a tailor-made programme with intensive mentoring, coaching, peer to peer learning and dedicated workshops.

THE PROGRAMME, WHICH was held between 5-9 November at the LHoFT, was sponsored by the Ministry of Foreign & European Affairs - Directorate for Development and Humanitarian affairs and PwC Luxembourg, and supported by strategic partners such as InFine, University of Luxembourg, Professors without Borders, ADA, LuxFlag, Innpact, House Of Training, MicroInsurance Network, CGAP and KAP Innovation in Frontier Markets.

The LHoFT Foundation believes that financial technology is crucial to advancing financial inclusion, empowering groups that have been left behind by the traditional financial system. Whether it's financing for rural farmers, point of sale technology for underbanked merchants, or specialised insurance products, the positive impact being driven by entrepreneurship is improving lives around the world. As such, Financial Inclusion is a key focus of the LHoFT Foundation.

Building on the success of previous experience, CATAPULT: Inclusion Africa is a one week programme of Fintech startup development, designed by the LHoFT Foundation, targeting Fintech companies from South Africa, Uganda, Nigeria, Senegal, Tanzania and others that are focused on financial inclusion and keen to build bridges between Africa and Europe, highlighting their initiatives and very much aligned with the sustainability goals of Luxembourg's finance centre.

CATAPULT: Inclusion Africa leveraged Luxembourg's Inclusive Finance and Fintech ecosystems, as well as LHoFT partners, to support the 14 selected firms in developing their businesses and achieving their inclusion goals, creating synergies between them, partners, sponsors, investors, Microfinance institutions (MFI) and Public Financial Institutions (PFIs).

The tailor-made programme offered intensive mentoring, coaching, peer to peer learning and dedicated workshops for the 14 selected Fintech startups. It included sessions on business mapping, scaling business, understanding and evaluating metrics, investability, risk and capital, legal and marketing. Several modules delivered by experienced strategic partners will also focus on the nuances of building business in Africa specifically, with sessions on MFI relations, Blockchain in Africa and market trends and developments in Africa.

Ahead of the programme, Nasir Zubairi, CEO of the LHoFT Foundation said: "CATAPULT:

Inclusion Africa is the first home grown programme of the LHoFT Foundation to focus on Financial Inclusion. Luxembourg is the microfinance centre for Europe and sustainable finance is a core priority of Government; it therefore makes sense to capitalise on the fantastic ecosystem and support available here to welcome these outstanding Fintech companies focusing on financial inclusion. We are very excited to welcome the participants in few weeks' time and we and our partners are looking forward to the positive outcomes of this programme."

Romain Schneider, minister for development cooperation and humanitarian affairs added: "Inclusive Finance is key to allowing people, especially women, to break the cycle of poverty, by creating economic opportunities. Today, one of the main changes we see in this sector is the development of digital financial services. Through its striving fintech sector, Luxembourg has a lot to offer in this area. Therefore, exchanges between the LHoFT and the broader microfinance ecosystem with upcoming African financial technology companies can facilitate positive and inclusive change."

The 14 qualified Fintech startups were:

Akaboxi Limited
Akaboxi provides rural communities with a more secure way of keeping smallholder farmers' savings managed and monitored by the use of a digital and inclusive system, replacing the rudimentary way of keeping.

Akiba Digital
Akiba is a mobile savings app that helps tech savvy millennials save using alternative and behavioural data. The gamified savings experience makes it fun and rewarding, with an AI bot that's there to educate, nudge and provide insights to our savers to ensure they realise their goals.

> **The LHoFT Foundation strongly believes that financial technology is crucial to advancing financial inclusion, empowering groups that have been left behind by the traditional financial system.**

BitValley
Luxembourg Fintech award's winner for Financial Inclusion, IBISA is a risk-sharing microinsurance alternative targeting small farmers worldwide. IBISA is based on a peer-to-peer architecture supported by blockchain and Earth Observation technology.

Four One Financial Services Limited
Four One Financial Services Limited's offerings include the first micro-pension scheme, followed by building the Mayicard Platform which makes access to healthcare insurance and/or prepayments and access to assets like land and housing possible.

Inclusivity Solutions - South Africa
Inclusivity Solutions designs, builds and operates digital insurance solutions for emerging markets with the aim of protecting and enhancing the quality of life of vulnerable people. It provides complete solutions to introduce and grow sustainable inclusive insurance markets.

> **Whether it's financing for rural farmers, point of sale technology for underbanked merchants, or specialised insurance products, the positive impact being driven by entrepreneurship is improving lives around the world.**

Koosmik Corp – Luxembourg
Koosmik provides a mobile banking application to the young or more generally unbanked population in Western Africa. Users get a free mobile wallet as a hub of services: cash deposit and withdrawal points, bills payment, mobile payment, social credit, insurance or remittance.

MaTontine Senegal – Senegal
MaTontine provides access to small loans and a range of financial services like micro-insurance for the financially excluded in Francophone Africa. Trying to solve the large and complex problem of how to lend small amounts profitably and at scale to the millions of financially responsible Africans.

NALA – Tanzania
NALA is a mobile money application offering a single, unified wallet for transactions that functions without a data connection over 2G signal and providing users with an accurate breakdown of their spending habits.

OKO – Israel
OKO creates and distributes affordable crop insurance products for smallholder farmers in emerging markets. They use satellite imagery
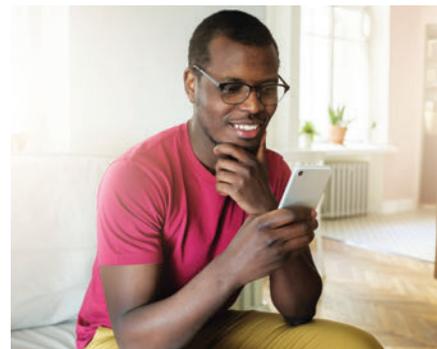

One of the startups, Koosmik Corp, offers a mobile banking application to the young or more generally unbanked population in Western Africa.

Photo: Adobe Stock

and localised weather information to automatically compensate the insured farmers when they identify that they have been affected by a loss of production.

Ovamba Solutions
Ovamba provides short-term capital to micro, small and medium sized businesses in Africa, emerging markets and the GCC for trade, inventory purchases and growth. The capital is provided by International investors from the US, U.K. and Japan.

Refuge Network – Malta
Refuge Network is a multidimensional financial ecosystem built on blockchain that uses proven business models of e-commerce and investments to connect displaced and marginalised communities to the global economy.

SmartTeller LTD - Nigeria
A digital banking platform for Financial cooperatives, smartTeller is bringing access to digital financial services to the unbanked and underbanked by providing cooperatives and microfinance institutions the all-inclusive tool to provide unbanked and underbanked standard financial services.

Vouch Digital Limited – Uganda
Vouch Digital builds an online verified digital supply chain platform that among other things helps simplify the distribution of cash in form of digital vouchers meant for purchasing goods or services such as hermetic storage, seeds, fertilizers, medical equipment, oil and gas among others.

WeCashUp
WeCashUp enables merchants to accept and disburse payments in Cash, Mobile Money, Bank Mobile wallets, Bank Cards and Crypto-currencies on their web or mobile apps in the 54 African countries via a single API integration. ✆

For more information on insights on each of the 14 qualified Fintech startups visit:www.lhoft.com/en/insights

Breaking technology silos to unleash Africa's broadband potential

There has been much debate on what it will take to build out Africa's broadband infrastructure. Yet, there is very little consensus on what technology is best suited to do so, particularly when it comes to extending the infrastructure into the more rural and ultra-rural areas of the continent.

Photo: Intelsat

Intelsat 33e, one of the EpicNG satellites covering Africa.

MNOs are able to extend coverage with minimal CAPEX and OPEX risk, grow their subscriber base and bring high-quality, affordable connectivity to communities.

MANY PEOPLE ENTER the debate through their own technology silo, proclaiming that their technology and their technology alone will solve the burgeoning broadband demands of the continent. This could not be further from the truth. Despite the many reasons to expand coverage, mobile network operators have a difficult time justifying the business case to expand outside of existing infrastructure, which is largely concentrated in the more urban areas of the region. Historically, deployments have involved heavy upfront costs due to difficult terrain and no power facilities, making the argument to expand into more suburban, rural and ultra-rural areas difficult. While many believe that fiber and

microwave are the only solutions available, many times the upfront CAPEX for terrestrial solutions combined with the OPEX to further expand that network are not feasible. With advancements in satellite technology, mobile network operators no longer need to rely only on fiber. By integrating satellite technology into their infrastructure, they can extend their network with minimal CAPEX, increase their subscriber base and generate a strong return on their investment.

Rural villages can be connected quickly and cost-efficiently with hybrid networks that mix satellite with terrestrial solutions.

A great example is the recent partnership between Intelsat and Vodacom Mozambique. Pomene is a rising tourist destination in

the country, and as more visitors and cruise ships were entering the port, Vodacom Mozambique needed to improve the network's capabilities and deliver a better connectivity experience in a cost-effective manner. Due to the higher performance and better economics delivered by Intelsat EpicNG, Vodacom Mozambique was able to upgrade its network and, more importantly, expand it to cover tourist lodges in Pomene, unlocking a new revenue stream for the operator.

In addition to the higher performance and better economics delivered by advances in satellite technology, new deployment models and partnerships are helping to overcome rural connectivity challenges. Recently, Intelsat partnered with Africa Mobile

Networks (AMN) who provides mobile network operators (MNOs) with a network as a service solution that essentially will fund, build and operate the network for the operators. MNOs are able to extend coverage with minimal CAPEX and OPEX risk, grow their subscriber base and bring high-quality, affordable connectivity to communities. The low-cost, small cell solution, combined with Intelsat's satellite fleet, can be rapidly deployed and installed in less than 6 hours, bringing much needed connectivity to communities across Africa.

Public and private partnerships as well as innovations throughout the ecosystem are instrumental in connecting those that remain underserved or unconnected. Intelsat partnered with ITSO, the Uganda Communications Commission, MTN and Parallel Wireless to bring connectivity to ultra-rural areas in Uganda. Parallel Wireless provides MNOs with an open, software-based, and virtualised network architectures to help MNOs overcome deployment challenges. Parallel Wireless' solution was fast and easy to install and as a result, two communities were connected for the first time.

Separately, many private businesses at the metro edge remain unconnected. Recently, Intelsat and Q-KON recently introduced a new, multiple high-speed broadband service powered by the IntelsatOne Flex for Enterprise platform. Combining a cloud-based management

Intelsat recently partnered on a project with AMN to bring affordable connectivity to remote areas.

Photo: Intelsat

Rural villages can be connected quickly and cost-efficiently with hybrid networks that mix satellite with terrestrial solutions.

platform with Intelsat's global satellite and terrestrial networks, the IntelsatOne Flex platform will enable Q-KON to rapidly deploy high-quality broadband that enables new services and applications for smaller businesses throughout Botswana, Mozambique, Namibia, South Africa, Zambia and Zimbabwe. As a result, small businesses, schools, farmers, and hospitality businesses can receive the affordable connectivity needed to support and grow their businesses and social programmes.

While much has been done to improve the power, efficiency and cost of satellite technology, a fully integrated space based platform is essential to capturing future opportunities. Advancements in ground and antenna technology are essential to harnessing the advancements made in satellite technology.

Another example of this will be on full display at AfricaCom in Johannesburg beginning November 13. Intelsat will be hosting live driving demonstrations in a Toyota Fortuner mounted with the Kymeta™ terminal, showing reliable high-throughput communications on the move with an electronically steered, lightweight, easy to install satellite antenna. For Africa, this could enable passengers in taxis to easily make phone calls, access Wi-Fi to power laptops and check email. It could also help bring broadband connectivity to buses and trains across the continent. And this is just the beginning.

In order to build out the continent's network infrastructure, it requires a fresh approach, fully integrated hybrid networks, new business models and creative partnerships. The development of standards will be essential to ensuring that the networks of the future can support the communications on the move that businesses and consumers are demanding. Intelsat is working with organizations such as ATIS to help develop the standards that will govern 5G and ensure that satellite can be easily plugged into any network wherever and whenever it is needed.

By breaking down barriers, eliminating technology silos and employing innovative business models, it will help accelerate the buildout of a robust network infrastructure that would provide a great foundation for further economic development and growth. Once that occurs, the possibilities for Africa are endless. ✆

Photo: Intelsat

The low-cost, small cell solution, combined with Intelsat's satellite fleet, can be rapidly deployed and installed in less than 6 hours.

Utility management in East Africa

Urban areas in East Africa are struggling to meet the high demands for electricity, water and sanitation, and poor, inefficient utility delivery continues to plague countries such as Kenya, Uganda and Tanzania.

YEAR-ON-YEAR URBAN POPULATION growth is adding pressure to an already over-loaded grid. Electricity and water supply is intermittent and often not regulated enough or not properly monitored, and complexities such as disparate systems and multiple service providers contribute to the growing problem.

Apart from increasing demand, many of these countries also struggle with aging infrastructure, which can make utility provision unsafe, as well as unreliable. Electricity supply is often interrupted due to people cutting down the wooden pylons to use to build their homes, often leaving the site dangerous and in a state of ill repair until the utility provider is able to find time to fix it – and that's when they are able to identify where the issue is.

Primed for technology

There is a strong push from governments to uplift these countries with innovative solutions for utility and infrastructure provision, which may well see them leapfrogging to sustainable energy solutions quicker than the rest of the world. However, before a country is able to get their infrastructure, services and utilities to the point it needs to be, they need to get their back-office systems such as billing structures and customer management in line, first.

Enterprise Resource Planning (ERP) solutions are gaining popularity in East Africa to help solve these billing concerns, and to try streamline processes and better manage various stakeholders. Current systems in place for many of these regions are outdated and fragmented, with many of them still operating manually. In order to run utilities more efficiently, proven Enterprise Asset Management (EAM), Metering and Billing solutions need to be deployed.

Next level EAM

This goes a step further, however. EAM systems can also help utility providers to fix and maintain their infrastructure, through enterprise asset management. Utility providers know that they need to address existing problems before they can begin upgrading or building out from their infrastructure. This is a lengthy and less rewarding process, especially as something inevitably breaks as soon as another thing is fixed.

These utility providers are perfectly primed to leverage EAM systems with built in toolsets, like field force enablement and edge devices like sensors, to quickly and proactively resolve issues on broken electricity cables and water lines. This enables them to better schedule regular and predictive maintenance teams who, with the aid of geo-fencing and tracking, don't waste time going to the wrong area or driving across country when a closer team can attend a fault.

Accurately measuring water and electricity usage is challenging in some African countries.

Smart devices

Accurately measuring water and electricity usage is challenging in some African countries. Many dwellers don't have running water or electricity, and either leverage off of their neighbour's supply or, as with water, take from a communal tank. Those with proper water and power often share theirs. Proper meter readings are not possible, therefore introducing smart metering – which have helped many countries with billing problems – will only be possible once the problem of accurate distribution is resolved.

The other side of the coin is that these countries have the ability to skip a few steps. Integrating Enterprise level Billing and Customer Relationship Management (CRM) solutions with mobile devices to enable the 'smart citizen' not only garners the help of the population to identify problem areas faster, but also enables a level of self-service to better manage billing and payments. Renewable power can be incorporated into traditional power supply, feeding back into the grid while ensuring users don't have to cut corners to receive power.

The opportunities to incorporate these technologies into systems as early as possible will not only begin to rectify the existing issues but will also take these countries' utility provision into the future, surpassing countries who have had to go the traditional route, and possibly even pacing the way for a greener, cleaner Africa. ✪

Marleze Loggerenberg, head of business development Africa at Wipro Limited

Countries such as Uganda are faced with the challenge of meeting high demands for electricity, water and sanitation.

Photo: Adobe Stock

Legacy Capital considère la blockchain comme un moyen de libérer le potentiel inexploité de la région.

Développer le futur de la fintech et de la blockchain sur l'Île Maurice

Le programme de pointe de Kingsland et les consultants en commerce et gestion financière les plus renommés de l'Île Maurice se sont rassemblés pour développer la formation des compétences en fintech et blockchain dans la région.

L'UNIVERSITÉ KINGSLAND A récemment annoncé son partenariat avec Legacy Capital pour offrir les cours reconnus internationalement de Kingsland sur le développement blockchainà l'Île Maurice. Legacy Capital est un conseil en management de fintech spécialisé dans les opportunités économiques uniques à l'Île Maurice et au niveau régional africain. Kingsland offrira sa liste complète de cours sur l'Île Maurice, y compris les cours sur le développement blockchain et la formation des cadres.

"La blockchain est le plus grand moteur économique de notre temps. Un bouleversement sismique a lieu dans l'économie mondiale en ce moment-même et aucune région dans le monde n'en profitera plus que celles situées en Afrique. Nous avons fondé Kingsland pour apporter une formation révolutionnaire sur les compétences technologiques à des régions défavorisées, et former ce partenariat avec Legacy Capital pour apporter des programmes de formation en blockchain à l'Île Maurice est donc une importante étape," a déclaré John Souza, PDG et fondateur de la School of Blockchain à Kingsland University.

Les programmes de formation au développement blockchain de Kingsland perfectionnent les compétences déjà existantes des développeurs de logiciels afin qu'ils soient en mesure de développer des projets blockchain qui transformeront le futur de toute industrie - de l'agriculture à la médecine et bien plus. Kingsland offre également des programmes de formation pour les dirigeants et représentants du gouvernements qui souhaitent mieux comprendre les principaux défis et impacts de la blockchain sur leurs organisations et cadres règlementaires.

"L'Île Maurice a vraiment montré le chemin en matière de règlementation et de gouvernance dans le domaine de la blockchain, en particulier en ce qui concerne les applications financières de cette technologie, et elle a mis en place une aide pour les entreprises de blockchain et de crypto-tech pour qu'elles puissent s'établir sur l'Île Maurice. Il y a donc beaucoup de potentiel pour de nouvelles opportunités et pour une croissance de l'emploi," a déclaré Robert H. Kim, directeur du développement international pour Kingsland.

Legacy Capital, qui a une longue expérience à faire venir des entreprises à l'Île Maurice, voit la blockchain comme un moyen de débloquer un potentiel inexploité dans la région. Avec une quantité impressionnante de ressources qui deviendront disponibles avec notre partenariat, il n'y a aucune doute qu'il existera une forte demande pour les cours qui seront offerts. Legacy Capital est en train d'obtenir l'approbation de la part des autorités respectives pour un remboursement partiel des frais des cours.

Legacy Capital accueille l'initiative de la Commission des services financiers en relation avec le rapport publié par le Comité de règlementation des services financiers généré par l'innovation et la fintech dans l'Île Maurice. En créant ce partenariat avec Kingsland University, Legacy Capital impose l'Île Maurice, au sein de la région africaine, comme pionnière dans l'offre de cours qui révolutionneront le secteur de la fintech et de la blockchain. De plus, le gouvernement mauricien a récemment annoncé son soutien inégalé pour promouvoir le secteur à s'établir lui-même comme ouverture sur l'Afrique.

"L'Île Maurice, de part sa position unique, peut devenir une plaque tournante pour la fintech en Afrique. Les crypto-monnaies et la blockchain auront un effet durable sur les résultats sociaux, culturaux et économiques de la région - mais afin de capitaliser sur l'énorme potentiel de la technologie, nous devons diffuser les initiatives de formation. C'est pourquoi nous formons ce partenariat avec Kingsland et leurs programmes de pointe pour former des développeurs blockchain," a déclaré Rouben Chocalingum, PDG de Legacy Capital. ✆

Les formations sur l'Île Maurice devraient démarrer en 2019.

4G Capital launches NxtGen for Africa's banking industry

NXTGEN IS A new credit solution developed specifically for the banking industry that will help provide working capital credit to micro, small and medium enterprises (MSMEs) across Africa.

The announcement was made at the Africa 2018 Forum in Egypt.

The Seed Funds (TSF), a financial institution in Ghana, will be the company's first banking customer to use NxtGen's turnkey technology that integrates seamlessly with their existing banking system.

NxtGen will enable TSF to reach the underserved MSME sector in Ghana in an automated and cost-effective way, the company added.

TSF will use NxtGen technology to support the 'last mile' retail supply chain by providing working capital credit, mixed with the company's fintech platform to established micro-retailers on behalf of large distributors and supply chain aggregators.

The application of NxtGen is based on 4G Capital's Kuza product, which has been successful in Kenya since its launch in 2017. To date, Kuza has provided more than US$ 500,000 in credit to 1,400 businesses.

According to a recent survey by TechnoServe, one of 4G Capital's partners, customers using Kuza saw an 82 per cent average increase in revenue over 12 months.

Wayne Hennessy-Barrett, 4G capital founder and CEO, said, "We are proud to stand alongside The Seed

Photo: adobestock

TSF has used NxtGen's turnkey technology which integrates seamlessly with its existing banking system.

Funds, showcasing the power of partnership between bank and fintech. Together we seek to address the MSME finance gap in Ghana which currently stands at over US$4.9bn".

Albert O. Mmegwa, CEO of The Seed Funds, added, "We are excited to partner with 4G Capital to introduce this innovative product to the Ghanaian market. TSF is committed to partnering with innovative fintech companies to develop financial products and services for Ghanaian consumers. We expect the full platform to be disbursing loans at the beginning of next year."

New 4G network in South AfricaDeblina.Roy

LIQUID TELECOM SOUTH Africa, part of the pan-African telecoms group Liquid Telecom, has announced that it will establish a multi-billion Rand 4G network in South Africa.

This investment includes the recent completion of its 'Cape to Cairo' network, which represents the first direct land-based terrestrial fibre link on the continent.

"This is an exciting development which will enable us to provide mobile network operators and ISPs with open access to our mobile 4G network. Using our 1800MHz spectrum, the network will handle 4G mobile data traffic to meet the needs of the most demanding users across the country," commented Reshaad Sha, CEO of Liquid Telecom South Africa.

Nic Rudnick, group CEO of Liquid Telecom, added, "This milestone builds on a remarkable year for Liquid Telecom. I am encouraged that the momentum will continue into 2019 with South African operators having access to wholesale roaming services across our network for the first time."

"Our announcement caps a busy and successful year which includes our recent announcement of a US$180mn investment in Liquid Telecom by CDC Group Plc, the UK's development finance institution. This will enable us to expand our broadband connectivity to some of the most underserved communities across the African continent," he explained.

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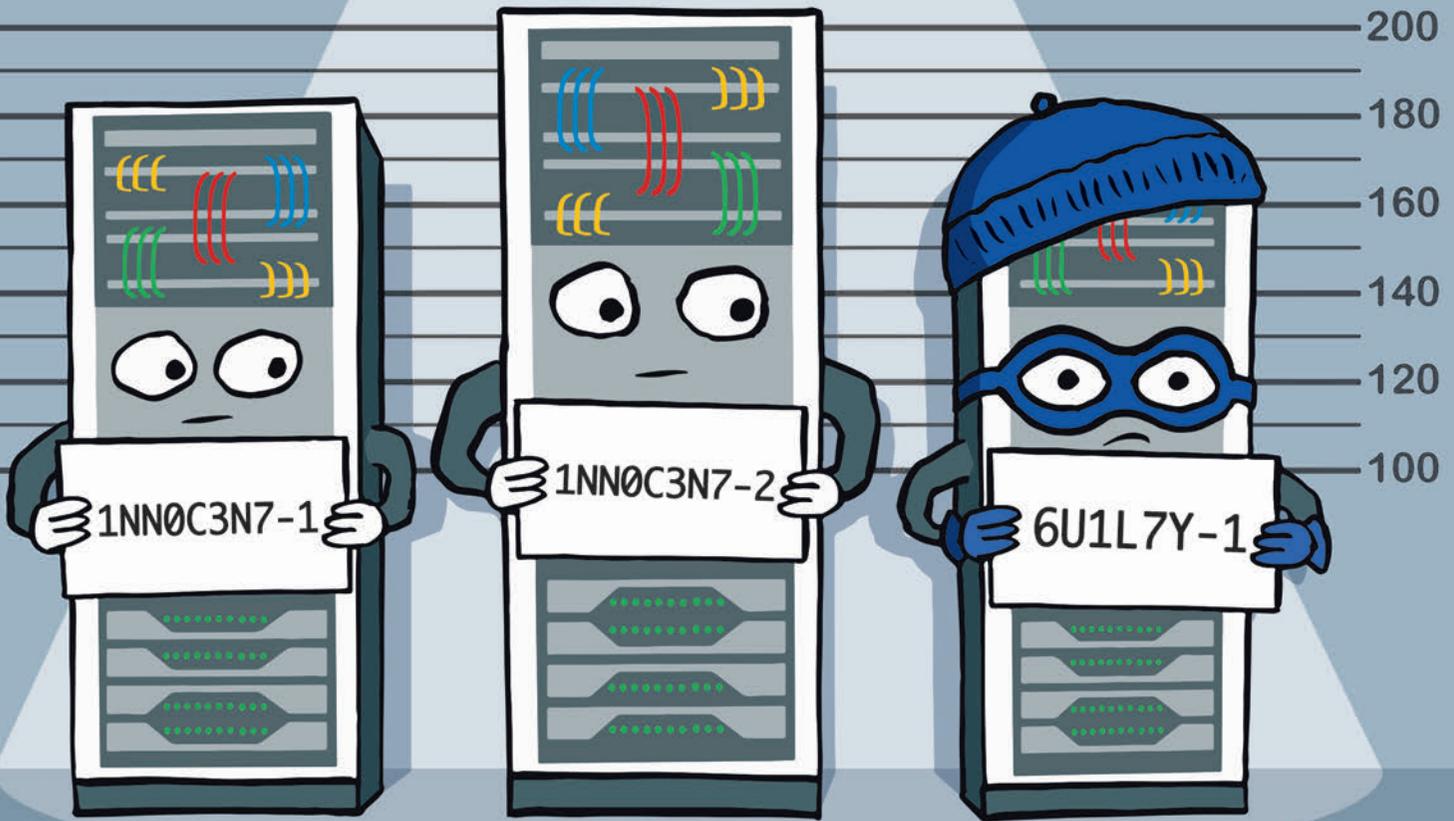
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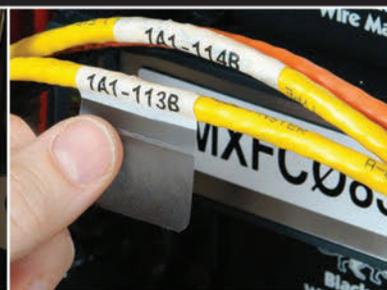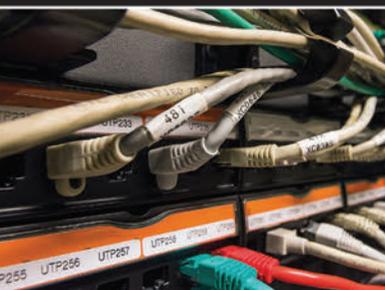
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