chapter 3 Value-added services

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For the last 5 years, we have seen Mobile Value Added Services (MVAS) such as SMS, MMS, Locations based services, mobile money and mobile multimedia dominate the telecommunications market in terms of additional revenue streams from the traditional mobile offerings as we know it.

According to a recent report published by Market Research Future (MRFR), the global mobile value-added services market will be valued exponentially by 2023, with a CAGR of 18.5 percent in the period of 2018 - 2023.

Up to now, value added services have been seen as a nice add on to the core mobile products with the majority of these services originating from app stores. With the decline of voice revenue in the last 6 years, and the high cost of mobile data, Telcos need to identify additional revenue streams else be capitalised by OTT players.

The traditional product centric business model is no longer sustainable. A greater drive for telcos is to position themselves into a solution centric business model focusing on the end to end customer journey and the overall customer experience. What this means is a fundamental shift in the Telco mindset, to optimise and extend their current platform and transform into a software defined network (SDN). By bringing Value Added Services in-house, it will allow the telcos more control over their customer behaviour. Instead of the proverbial 'Customer is king' we now see a shift to 'Data is king'.

For the customer, the focus on value and quality is greater than ever and will be seen as the differentiating factor in Africa. There is still immense opportunity in Africa as a result of it's still developing mobile infrastructure across agriculture, healthcare, education and banking industries. According to Prof Umar Danbatta, Executive Vice Chairman of Nigerian Communications Commission (NCC), Nigeria has generated US$ 200 million revenue as a result of Value Added Services in the first quarter of 2018.

Value added services such as M-PESA integrating into Paypal and Western Union in 2018 has now moved the total number of users to 28.5 million in East Africa enabling M-PESA to integrate with 500,000 global agents in over 200 countries and by doing so, connecting the rural population to the world and becoming a new way of life.

The drive towards social consciousness is prominent in India where most kids in rural India do not have access to formal education and often end up working on the farms during the day. A project called Millee is currently in progress which uses mobile gaming technology as a means of education to those of school going age.

Voice recognition smartphone capability is another capability that has been successful due to the focus on uplifting the lives of the community as a whole and ease of use even amongst non literate users.

But one cannot ignore the factors that have impacted the performance of VAS over the years and need to be considered going forward:

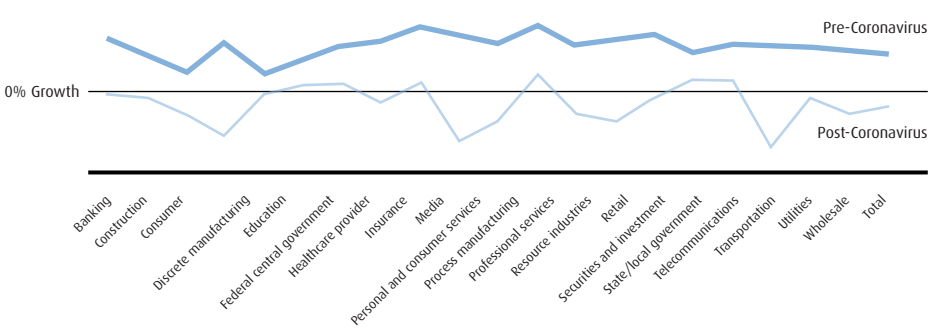
- **Regulatory conditions** – Withholding Tax, Forex repatriation challenges, different regional regulatory operating frameworks
- **Affordability** – From a Telco perspective, this will include costly system integration requirements; for customer – this will mean affordable products and services
- **Brand loyalty** – customers require quality of service. Network speed and poor connectivity is always a challenge in Africa. Telcos have the opportunity to provide a differentiated offering to customers by bundling products and value added services based on customer behavioral segmentation
- **Fraud risk** – Telcos need to ensure that severe data security and access procedures are in place to guard against malicious and fraudulent customer activities.

What the future holds for MVAS

According to IDC: 'Software will be the bright spot in technology spending, with growth of nearly 2% led by purchases of collaborative applications and content workflow and management applications.'

Traditional telcos need to build strategic partnerships across industries such as media to provide bundled offerings to their market. We've seen the start of this trend in the last 3 years

2019-2020 ICT spending growth SOURCE: IDC MEDIA CENTER, 21 APRIL 2020



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with Telenor, Singtel, Altice, Verizon, Comcast and At & T acquiring ad tech and media companies where traditionally they have lost billions of revenue to these media companies that have leveraged off their networks. Not only is the increase in demand for mobile music and gaming prominent amongst the youth, there is also an opportunity to provide educational services.

Fifth Generation (5G) cellular will enable many new advances such as greater capacity, lower latency, and optimized support for Internet of Things (IoT) networks, blockchain, mobile music, mobile gaming and enhanced voice and audio capability such as Voice over 5G (Vo5G) and Voice over LTE.

Telcos need to become an enterprise-ready one-stop-shop with global reach and horizontal scale. They can create significant value for both themselves and their enterprise customers: from improving business processes, to creating new business models, extending their customer base and allowing for complete business re-innovation.

- **Internet of Things** – IOT should allow telcos to predict, analyse and action information in real time. This is important from a customer intimacy perspective to provide a single view of customer across internal and external sources.
- **Blockchain done right** – Blockchain provides customers with the ability to track invoice transactions against actual usage of value added services reducing the element of fraudulent activities.

Jennifer Mbaluto, partner, co-head, east Africa, Clifford Chance

Africa is currently witnessing a number of major advancements in the wireless space, despite this incredibly challenging time.

There are also companies in the infrastructure space, such as Liquid Telecom, which is doing amazing things like building 50,000km of fibre from Cape to Cairo and have recently connected to west Africa – avoiding having to fibre link the continent through London. In addition, there are some very strong tower companies like IHS which continues to grow.

The improving quality of connectivity is being driven by technologies, such as 3G and 4G – which are doing a fantastic job of penetrating underserved areas.

Of course, more recently there's broadband connectivity through fibre but that still has the challenge of the last mile. So, I'd say the main player is wireless mobile connectivity.

Take Safaricom and MTN, which have both been hugely successful not just in terms of telecoms, but they've also positioned themselves as leaders in digital creation. To put that into context, look at what Safaricom has done with M-Pesa. It's become a generic term regarding mobile payments now.

The Covid-19 impact

What Covid-19 has done is that it has driven data consumption to unprecedented levels, which places significant strain on existing networks. You've got people staying at home due to restrictions. In many countries like South Africa, Kenya and parts of west Africa, the governments have been very active with regards to Covid mitigation. They have encouraged the use of mobile money for payments instead of cash. That's driven a lot of activity in the payment space.

Kenya has been leading the way with mobile money because there is an administrative

JANUARY 2019

MTN and Orange Group announced a joint venture enabling cross continent interoperable mobile payments, named 'Mowali' (mobile wallet interoperability). It gives a low cost, real time capability for money transfer from any mobile money account provider. Mowali is a digital payment infrastructure that connects financial service providers and customers in one inclusive network. It is open to any mobile money provider in Africa, including banks, money transfer operators and other financial service providers. The partners say the objective is to increase the usage of mobile money by consumers and merchants. Mowali is said to bring together more than 100 million MTN and Orange mobile money accounts and operations in 22 of sub-Saharan Africa's 46 markets.

FEBRUARY

Vodacom Lesotho and Facebook form new partnership Vodacom Lesotho has joined forces with Facebook to launch a free connectivity service that both companies claim will enable "hundreds of thousands of Basotho" to follow news and stay connected. Facebook Flex will allow Vodacom Lesotho customers to switch seamlessly between free and data modes, making it possible for them to chat, post, comment, like or share content for free with family and friends. The mobile network operator said it hoped the alliance would help more people access Facebook and become "first-time users of the internet" in a part of the world with limited connectivity. Vodacom Lesotho managing director, Philip Amoateng said it was important to give Basotho "the best possible tools for them to lead successful and fulfilling lives", and that the network and tools would make their lives easier. "This partnership is one of the many ways in which we hope to achieve that," he said. "In the face of blinding unemployment rates, hundreds of thousands of Basotho have found ways to build thriving businesses that use the power of Facebook. Thousands more have developed and built meaningful relationships in Lesotho and outside to further enrich their lives." Last August, Vodacom Group said it created "Africa's first standards based, commercial 5G service in Lesotho", using its assigned 3.5GHz spectrum to initially deliver fixed wireless access broadband services to two local enterprises. The operator hopes the partnership will help more people become "first time users of the internet" in a part of the world with limited connectivity.

MARCH

The Bank of Zambia started work on a key project to enable the linking up of money service providers across Zambia. The project was a collaboration with the Zambia Electronic Clearing House Limited (ZECHL) and was Implemented under the National Financial Switch (NFS), which is an electronic platform that can link all mobile money operators and thus increase financial inclusion. The Bank of Zambia said the pricing structure will be set by the payment providers and should reflect costs, while being affordable and non prohibitive to consumers accessing the systems. Lazarus Kamanga, Director of banking, currency and payment systems at Bank of Zambia said that there is no way for mobile money clients of Airtel Zambia, MTN Zambia and Zamtel to send money to competitor operator networks. He added that the NFS is expected to go live by June 2019. By March the country's ATMs and Point of Sale machines had been linked to the system at a time when the number of mobile money customers stood at just over 4 million.

APRIL

Centbee in South Africa claimed the "world's favourite bitcoin wallet" had landed a new R18.3m round of funding. Centbee stated that the entrepreneur Calvin Ayre best known for his company CoinGeek, had committed the funding based on its proven ability to attract users and ability to make the use of bitcoins easy. The announcement was unfortunately made just as the variant of bitcoin slumped in price. Centbee was co-founded by blockchain specialist Lorien Gamaroff and former eBucks chief executive officer Angus Brown and is associated with AlphaCode, a "club" created by Rand Merchant Investment Holdings to find and support businesses that could disrupt the financial sector.

system in place for people who don't have bank accounts to register with agents because they already have an identification system. However, the key difference is regulation. The Kenyan government decided not to stifle innovation and – while watching its progress very carefully – it still allowed it to succeed. The regulator only got involved when it was clear that it had moved to beyond just mobile payments to things such as lending.

Contrast that with Nigeria where until recently telecom wouldn't go anywhere near payments. You had to partner with a bank licensed for payment services. The lesson for the continent is while regulation has an important part to play, it's important that it doesn't stifle innovation. Of course, there's also been consumption of digital content increased use of media and social media.

In Africa, there is clearly going to be a shift to remote working as many companies have realised that can save huge amounts in costs. That will require heavy investment in infrastructure. We've seen destruction of supply chains and companies will have to fix this. In addition, we've seen high growth in e-commerce during the Covid period. I should also mention e-learning in places like Kenya where certain private schools have continued to provide education virtually. Again, is giving rise to increased consumption of data driving the demand for connectivity and therefore driving investment in infrastructure.

Of course, all the other things that were there pre-Covid such as the 4th industrial revolution have been doing amazing things in Africa and amazing innovations in agriculture, leveraging the Internet of Things, machine learning and artificial intelligence. All of that will continue in a post Covid world and will require good connectivity.

Ethiopia has, for a long time, been a sleeping giant and there's been a lot of reform in the sector. There are new licences up for grabs, the privatisation of Ethio Telecom, which has been a monopoly. The country has over 100 million people.

On the contrary Rwanda is hardly ever mentioned because it's such a small country, but if you look at connectivity, investment in technology, nearly 95% of the country is connected to 4G. There's a government-funded scheme and innovation hub and lots of respected tech companies are investing in Rwanda.

Landry Signe, senior fellow, global economy & development, Africa Growth Initiative

Africa is currently the fastest-growing mobile telecom market in the world. Since 2000, an annual increase of approximately 30 percent in mobile phone connections has led Africa to become the world's second-largest mobile market behind Asia. Almost half of all Africans report going online on a daily basis, and the general spread of information and communications technologies (ICTs) provides new avenues for consumer spending and marketing. The variations in different countries' ICT sectors may increase the uncertainty of returns; though, an increasingly mobile financial sector proves there are high returns if companies can capitalize on the continent's projected digitization. Africa's consumer e-commerce

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MAY

Airtel Uganda and URA partnered to ease tax payment in Uganda. A collaboration between Uganda's tax collection authority and Airtel Uganda was implemented to ensure that paying tax demands was easy and convenient. The two entities launched an Airtel Money payment mode, called Airtel Easy Tax, which facilitated the payment of all taxes while offering telecom subscribers convenience, reliability and efficiency.

In just a few steps, users can register a payment and pay their taxes from the convenience of their home, office or even while on the go. The tax collection body said that the initiative will be key in achieving two specific objectives.

Firstly, to improve "voluntary compliance" through the delivery of an improved and convenient service with efficiency at a reduced cost to the taxpayer, especially in small to medium sized businesses. Secondly it will effectively account for government revenue, while minimizing reconciliation challenges associated with payments especially those conducted online.

JUNE

DumaCard launches in Tanzania. Direct Pay Online (DPO), the African service provider, has launched the DumaCard business-to-business payment card in Tanzania and neighbouring Kenya.

It is available in both plastic and virtual forms, the latter provides a 16-digit card number, expiry date and security code as a physical card has.

Furthermore, the DumaCard can be used as a single or multiple use card and can be topped up regularly using mobile money so holders do not have to have a bank account in order to use it.

It gives businesses in Africa access to new markets by allowing online payments both regionally and internationally and allows customization so that merchants can pay single or multiple recipients.

JULY

The Malawi Communications Regulatory Authority (MACRA) announced that it will introduce a law to stop the import of ICT devices that do not comply with international standards.

The new rules, mainly targeting imports, will list all standards to bring imports into the country, in accordance with the regulatory, technical and minimum safety requirements.

Dan Chiwoni, who heads up MACRA's legal department, said this is an urgent matter in regard to the new challenges facing consumers and the country of Malawi caused by lack of appropriate regulation.

Poor quality of service, hacking and data theft, health and environmental risks are all threats that the Telecom watchdog wants to stop before they spread further. The law on conformity and interoperability will be added to a series of technical mechanisms for quality control of ICT devices already adopted by the national telecoms market.

AUGUST

Data free service BiNu said its Moya Messenger and content application is now being actively used by over one million people in South Africa every month, with 65,000 people using it every day. It enables enterprises to reach mass market mobile audiences through toll free data services. The main difference between Moya and WhatsApp is that no data cost is incurred by users to send and receive one-to-one or group messages and to visit a range of zero-rated websites and apps.

SEPTEMBER

Value Added Service (VAS) revenue in Nigeria down 74% in two years, as subscribers continued to opt-out of unsolicited messages through the 'Do Not Disturb' option.

According to the VAS providers in the industry valued at some NGN300bn in 2017 now only generates NGN79bn per annum. The Nigerian Communications Commission (NCC) stated that it had introduced the 2442 Do-Not-Disturb code activation for subscribers who did not wish to receive unsolicited text messages. A toll-free line was provided for consumers to report issues related to unsolicited messages and data renewals, among others.

The director, technical standards and network integrity at the NCC, Bako Wakil said, "The intention is not to bring down the market or the performance of the sector but as a regulator, we considered the consumers, with the kind of

market was valued at $5.7 billion in 2017 and these revenues will increase with an increase in the number of internet users across Africa.

Juvo is a mobile financial services platform made for people without access to traditional banking services. In November 2019, it partnered with Oxford Economics to produce The 'Yes' Economy: Giving the World Financial Identity. Here are some of the findings:

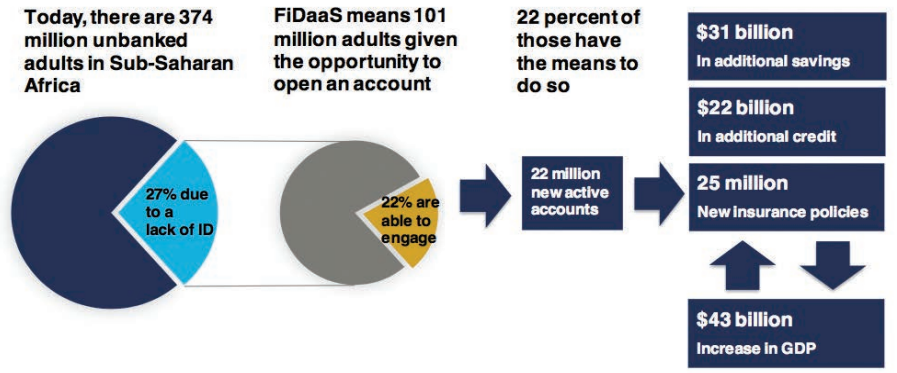
Sub-Saharan Africa is the region that would experience the strongest relative growth in both savings and GDP from our FiDaaS scenario, with17 and 2.4 percent increases respectively. The region's credit growth, at13 percent, is second only to the Latin America and Caribbean region. At an earlier stage of development, Sub-Saharan Africa has relatively low saving and borrowing levels, but the large share of unbanked adults pose a big opportunity for the financial services industry if the financial identity problem can be resolved.

Under our FiDaaS scenario, the Middle East and North Africa region would add US$25 billion to its GDP, while raising savings and credit by US$41billion and US$30 billion respectively. Driving these numbers are countries like Egypt and Morocco where 67 percent and 71 percent of the adult population are locked out of the financial system, respectively. ■

Key statistics on sub-Saharan Africa

GDP (USD, billion)	Population (million)	Household savings (USD, billion)	Household credit (USD, billion)	Insurance policies (million)
1,800	1,000	200	200	200

Fig. 17. Estimating the value of 'YES' in Sub-Saharan Africa

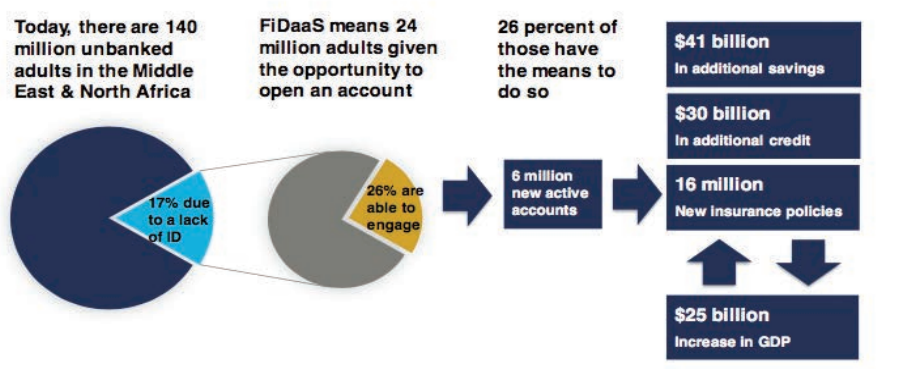


Source: Oxford Economics, Juvo, World Bank

Key statistics on Middle-East and north Africa

GDP (USD, billion)	Population (million)	Household savings (USD, billion)	Household credit (USD, billion)	Insurance policies (million)
3,400	400	1,000	800	300

Fig. 19. Estimating the value of 'YES' in Middle East and North Africa



Source: Oxford Economics, Juvo, World Bank

Year in review

The continued decline, worldwide, on the dependence of physical currency was significant last year. In the major industrial economies, the use of debit/credit cards, digital money transfer and payments systems are pushing governments to consider the future of expensive to produce, bank notes and coins. In developing countries, the growth in use of mobile money is exponential and nearly 50% of all mobile money transactions, by total value are undertaken in Africa.

Operators such as MTN and Safaricom M-Pesa are pushing ahead with mobile money services to the African market, not only accessing the unbanked but also the wealthy and emergent middle classes. The banks have not been idle in recent times and are making available platforms for digital banking via mobile phones.

Airtel and Ecobank Transnational Incorporated, signed a partnership agreement to enable each company's customers across the African continent to improve their access to mobile financial services. Airtel Money customers, via Ecobank's digital financial services ecosystem, can now make online deposits and withdrawals, effect real time money transfers, make in store purchases and access a variety of banking products. Ecobank Group are of the belief that financial inclusion can ultimately contribute to African countries economic development. Their collaboration with major telecommunications providers in Africa is therefore a key strategic driver towards closing the gap between the banked and the underbanked.

Cashing in: MTN banks on money again

MTN announced that it was set to re-enter the mobile money space, via its launch of a new mobile money service. MTN stated that there were 17 million people who are unbanked or underbanked in South Africa and that this was an opportune time to come back into the market. With 30 million customers on mobile money already and revenues of Rand 8 billion last year, it is well placed to push forward in South Africa, despite its previous experiences of commercial viability being a causal point in the closure of its mobile money service in 2016.

Growing a healthy Africa

Commercial viability and potential for profit are givens in the world of telecommunications but there is also the social aspect that governments often wish to see. In advanced technological societies with high per capita incomes, there is invariably a robust and universal health system in place, be it financed by the state or by the private sector and paid for by service users.

Many African states have developing health services, and many are faced with having to provide health services over great distances and varied, environments and terrains. In

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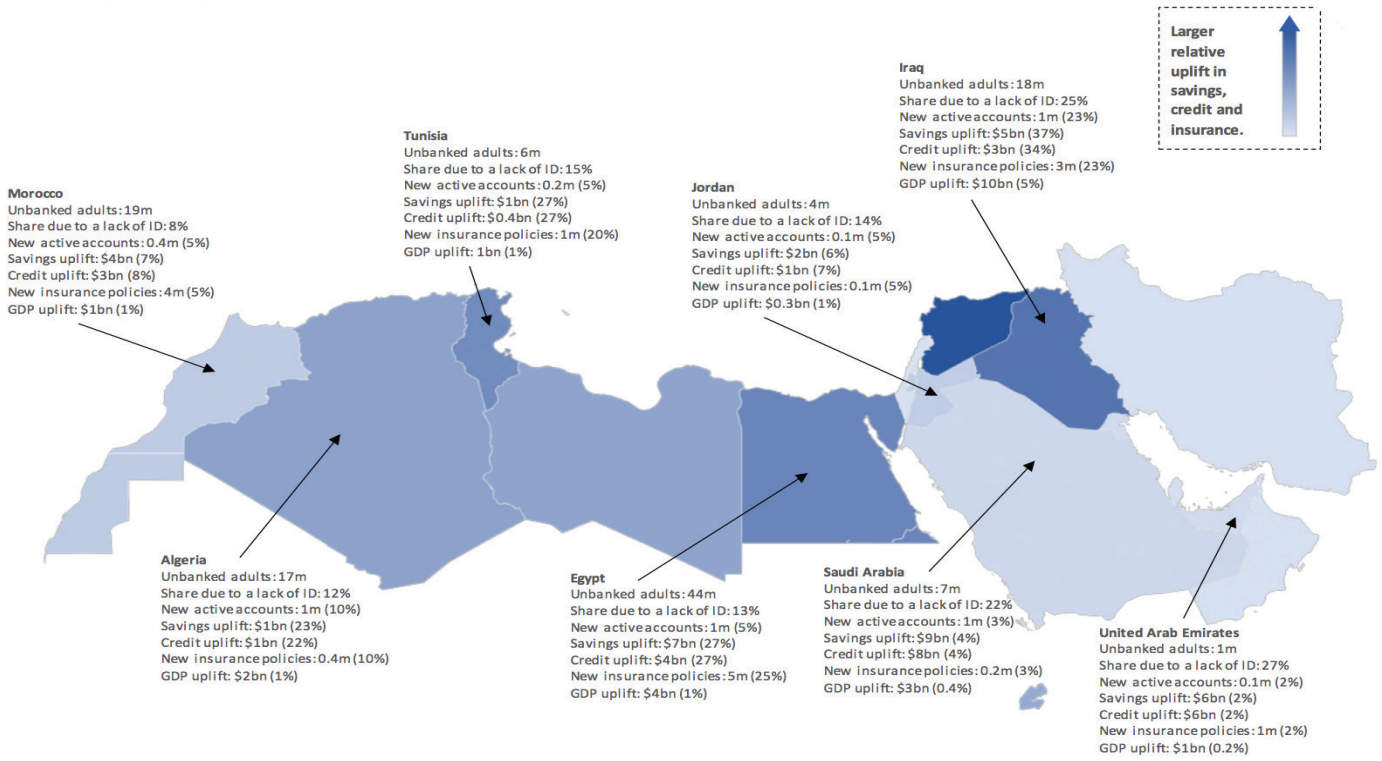
Middle East and north Africa



African countries health provision is patchy and varies greatly from nation to nation.

With some African nations only having hospitals in urban areas it is also important to be able to provide some form of health care and diagnosis in remote rural areas.

Telemedicine or the provision of health information, training and education or care over distance using information technology is a growth area in Africa, a continent that has susceptibility to epidemics and viruses.

The HIV/Aids and Ebola crises were a wake-up call for Africa and highlighted the need for universal and robust health care provision, which most African states still cannot afford. Thus, the need for an affordable solution using new technology supported by satellite, broadband and wireless communications, with the addition of access to electricity

money they are losing without their consent."

The NCC is looking into the needs of the consumer and how industry can address them. "If we get any solution that will take into cognisance the concerns of the consumers, we will look into and implement it so that the sector will bounce back to its former glory," Wakil said.

OCTOBER

Airtel and Ecobank Transnational Incorporated the parent company of African banking group Ecobank announced a joint partnership agreement allowing both Airtel money and Ecobank customers in Africa to use Ecobank's digital financial services ecosystem to make online deposits and withdrawals, effect real time money transfers, make in store merchant payments and access various products. The partnership will also allow Ecobank corporate customers to make bulk payments, such as payroll, directly into Airtel Money customers accounts. The deal was subject to regulatory approval in each African market of operation.

"This partnership is a further demonstration of Airtel Africa's commitment to provide affordable, simple and innovative solutions for our consumers across Africa," said Raghunath Mandava, chief executive officer, Airtel Africa. Chief executive officer at Ecobank Group, Ade Ayeyemi said the firm was of the belief that financial inclusion can ultimately contribute to economic development, collaborating with major telecommunications providers in Africa is therefore a key strategic driver towards closing the gap between the banked and underbanked."

NOVEMBER

MTN was set to re-enter the mobile money space before, according to MTN South Africa chief executive officer Godfrey Motsa. Speaking at the 2019 MyBroadBand Conference in Johannesburg, Motsa said that there are 17 million people who are unbanked or underbanked in the country, which made it an opportune time to re-enter the market. Although, he noted that similar mobile money services had failed twice previously, Motsa said that its current offering has remained incredibly popular in the rest of Africa. "We have over 30 million customers on mobile money already and made around R8 billion last year," he said. "While I often hear people say that 'South Africa is not Africa', there are still 17 million people that are unbanked and need to be serviced," he said. The Johannesburg-based operator launched a mobile money platform in 2012 – attracting over two million customers in the process. However, it shut the service down in 2016 citing 'commercial viability'. Despite shutting down its mobile money service, MTN said it was still committed to having a key presence in the financial services arena.

DECEMBER

Orange Liberia and the United Bank for Africa Liberia have joined forces to launch the Mobile Money Push and Pull service for customers of both businesses.

The service is also known as "Bank to wallet" and will provide an alternative channel deposit or withdraw money from a UBA account to the customer's Orange Money Wallet and vice versa. Customers can also check their bank account balance and their last five bank transactions. They first need to register on Orange Money using star 144 hash and then proceed to any UBA Business office in the west African nation to link their UBA account and Orange Money Wallet account.

In order to promote the service, for the first three months it will be free of charge for all customers with a minimum fee of LRD 0.50 per transaction after that period.

supply, to enable telemedicine health services.

This adoption of telemedicine is slow but will increase as the telecommunications infrastructure of the continent increases, economies expand and ironically the workforce becomes healthier. The South African health care system has the competence to provide world class health care, but this comes at a price.

The rollout of 5th Generation (5G) technology will improve the provision of e-health and telemedicine as well as enable the use of Artificial Intelligence (AI) as a diagnostic support tool. Software Applications to support teleconferencing and video conferencing, FaceTime and Skype are available for medical professionals to make remote diagnosis. Dealing with viruses such as Ebola and Coronavirus using remote diagnosis in the first instance reduces the potential for cross infection of medics. Given that about 2% of Africa's medics leave Africa to work in non-African countries, the ability to seek diagnosis help from anywhere in the world via telemedicine is an excellent facility to help cope with the shortage of qualified medics.

Mobile health facilities have been available for some rural areas in Africa for several years now and for specialist treatments such as eye and cataract treatment. But it is the development of a network of health advice, guidance and diagnosis via mobile communications that is important here. To provide access points in remote areas linked by cable, fibre optic, wireless or satellite to a central command and control point for health, such as a major city hospital.

If every African country builds a telemedicine network, it would be possible to connect them to each other and to other countries throughout the world to benefit from modern AI health condition diagnosis or to link with a doctor or other health professional.

In the March/April 2019 edition of Southern Africa Wireless Communications, the work of Médecins Sans Frontières was highlighted. Working in the Democratic Republic of Congo their Telemedicine Team can work remotely yet access and consult a network of medical experts, whenever they are confronted with a case that exhibits symptoms, they are unsure about. In order to provide a functional service, it must be available 24/7, coordinators work with their counterparts across the globe to diagnose and treat patients as soon as possible.

Having available internet access by satellite or mobile allows for images and film to be sent to anywhere in the world for medical analysis. The use of portable satellite receivers and satellite phones allows data to be sent quickly and securely.

Without improved access to health care to ensure a healthy working population Africa will not be able to achieve its full economic potential. ■

Anil Krishnan, head of Africa region, Comviva Technologies

// Comviva has transformed its business successfully in Africa over the past two decades with greater focus on the market and learnings from our key customers," says Anil Krishnan, head of Africa region at Comviva." We are betting big on some of the key growth levers of data analytics, digital payments, sales & distribution and enterprise messaging.

In addition to consolidating business within key accounts in the region, we have been making forays into newer markets within Africa and focusing on Telcos outside the major groups in the SADC and WECA regions." In the recent past, Comviva has expanded its presence in these regions with some significant wins in markets like Senegal, South Africa, Angola, Equatorial Guinea, etc.

As far as 2019 was concerned, Krishnan says operator revenues from international calling have declined with cheap availability of data spawning VoIP. "The usual challenges of other markets like plateauing of voice revenues, VAS revenues, etc. are reflected in the African market as well," he continues. "The growth of data and mobile money services provide hope to telcos in the region. Telcos are watching the enterprise segment very closely, with aspirations of tapping into this market by enhancing value through the Data, Analytics and A2P messaging."

Hence, Comviva sees telcos making significant investments in enhancing infrastructure in these areas to push for growth. Krishnan says the promise of high-speed connections will help operators leverage multiple untapped applications, especially in a market like Africa. However, all this will depend upon improving connectivity in the continent.

"Low ARPUs, capex investments in network expansion, 4G/5G, etc. will be the key challenges going forward as well," he continues. "This is also the reason we are seeing less of greenfield players. The competition from larger group opcos and QOS expected by regulators would pose problems for the smaller players in a fragmented market and therefore we are seeing consolidation of telco operations in some of the markets and will probably hear more such announcements in the coming months."

"Low ARPUs, capex investments in network expansion, 4G/5G, etc. will be the key challenges going forward as well"

When it comes to 2020, Krishnan says Comviva is looking at sustained growths within existing markets and push into newer markets where we were not active earlier through direct or partnership route.

The company is also confident that it's "robust suite of digital offerings" along with its industry expertise will continue to resonate with telcos having digital transformation on the top of their agendas. "In the last few years, we've successfully transitioned telcos with legacy customer engagement systems into digital front and back office operational systems with sales and distribution transformation," he says. "As telcos continue to transition into the digital space, we hope for many such successful transformation initiatives in the future. Similarly, we have launched a new age digital platform, which will help telcos to manage their digital services end-to-end. We expect major developments on this front in the region, as telcos take incremental steps to cater to the increasing demand for digitization from their customers as well as enterprise customers." Similarly, in mobile money, Comviva has identified new technologies that will help it reinforce its position in the continent.

At an organizational level, we have identified key growth levers from within our product portfolio based on the addressable market and are looking at an aggressive push in these product areas in the coming quarters. Comviva has fine-tuned its geo-focus and is in the process of consolidating its markets in Asia and Africa and growing its markets in Latin America and Western Europe. We plan to implement this through a combination of organic and choice inorganic initiatives, where we are looking for more M&As in digital payments, data analytics and enterprise messaging space. It is expected that the sum total of Comviva's growth strategy will lead to growth of 14% CAGR in the next 4 years with industry leading profitability metrics.

Samantha Naidoo, SAP industry value advisor, services & telco industries, EMEA south

The year ahead: Telcos that harness new developments and invested in value added services will see return on investment as well as the creation of new business value. By embracing the transformation smartly in collaboration with the right partners, Telcos stand to become a key enabler and provider of a differentiated customer experience by embracing products and services that will provide that one stop shop to customers.

Pieter de Villiers, CEO & founder, Clickatell

Apart from South Africa winning the Rugby World Cup, 2019 yielded other good memories for Pieter de Villiers, CEO and founder of Clickatell.

"It was one of our biggest years as we rolled chat commerce and chat banking for some of the leading brands in Africa," he says. "It means that just a year ago things like WhatsApp Business API weren't available. In the last 12 months from that becoming available, all of a sudden a telco like MTN has made a big investment on its app and we extend that investment to a channel like WhatsApp - all of a sudden it reaches many more consumers."

De Villiers says the "China trade war/Huawei debacle" has been a disappointment because it slows things down and makes people uncertain with regards to investment in the telecom space.

"I also think that the Africa renaissance hasn't really come to fruition, because many African countries have been struggling with challenges," he continues. "I saw some light toward the end of 2019 where there was investment in infrastructure and 5G. However, 5G creates some challenges in urban areas with regards to how you roll these things out."

As far as 2020 is concerned, de Villiers says Clickatell is very much leveraging the power of automation, AI and bots to help large consumer brands, particularly telcos, banks and utilities to reach and serve consumers. "So, the power of chat commerce is that for the first time ever, we can take the consumer brand and put it right inside of the address book of their customers, right next to their friends and family," he adds.

In a global context all markets are complicated in different ways, says de Villiers. "For example, If you're a communications company trying to roll out in Africa, it's hard because of the initial infrastructure investment you need," he continues. "We do more than 45 million transactions a month in Nigeria – a very complex market – so we're thriving."

"In the last 18 months there's been a tipping point where consumers spend more time on chat than any other platform, so we believe it's the time of the chat economy," he says.

"It was one of our biggest years as we rolled chat commerce and chat banking for some of the leading brands in Africa"

Shantanu Kulkarni, head of NG OSS/ BSS, business unit, Sterlite Technologies

// We've seen a solid performance as a company, our growth is great. Of course, we can always be better but with the double-digit growth rates in the market and the environment we operate in is phenomenal and speaks about company and our relationships in the three areas we are involved in. As we look to the future, everyone has a cliché as to what data is, but we know it's growing. We do fibre and cable, network services and we do software.

In each one of those three areas we've got a different set of competition. However, one key thing to keep in mind is there is no company in the world that does all three things in the way that we do it. From fibre to software, we are positioned uniquely.

There is different competition - legacy competition and merging competition. The former is based on fear, uncertainty and doubt in the minds of customers. The latter is more about futuristic solutions, which is much more focused on the customers what they need.

We have to deal with the inertia in customers related to legacy but we are more about modern software products and people.

Inderpal Singh Mumick, founder, chairman, CEO, Kirusa

// Messaging has become the most utilised channel of communication," says Inderpal Singh Mumick, founder, chairman and CEO of Kirusa. It has evolved and transitioned from SMS to data messaging, which is also known as IP (Internet Protocol) messaging. IP messaging is a two-way messaging channel over the internet (mobile data / Wi-Fi). It includes OTT (over-the-top) apps and RCS (Rich Communication Service). OTT apps include WhatsApp, Facebook Messenger, WeChat, Skype, Viber, etc. while RCS is the telecom carrier supported evolution of SMS, that works in the built-in Android messages app."

Mumick says these channels have the advantage of a huge, ever-growing user base of individuals which is now being leveraged by enterprises for A2P (Application-to-Person) and P2A (Person-to-Application) messaging.

He adds that with the advent of IP messaging, appealing services and features that enable real-time communication and sharing of rich media content like never before has become achievable. These include sharing of images, audio & video files, location sharing, group chats, read receipts, provides transactional details and performance metrics. "In 2019, IP messaging has started to significantly impact enterprise messaging, in particular how enterprises communicate with their customers," says Mumick.

"There has not been enough clarity on the potential and capabilities of various IP messaging channels, how it can help businesses and the kind of impact it can have"

Kirusa Konnect is a cloud-based Communications Platform as a Service (CPaaS) offering for enterprises designed to bolster customer engagement using instant, two-way and interactive communication over multiple channels including messaging, voice and rich media bots. It enables enterprises to reach customers effectively over mobile channels. An enterprise has various reasons for communicating with their audience, and Kirusa Konnect offers multiple channels to help enterprises achieve their objectives in an efficient and pocket-friendly way.

"In 2019, we launched services to help enterprises move to IP messaging. These services include designing rich conversational experiences, developing IP Messaging applications, developing omnichannel bots combining the most important channels for users, integrating with existing applications such as SMS and IVR, and helping implement RCS," Mumick says.

There were some big challenges too and Mumick says while IP messaging is gaining popularity in different parts of the world, the adoption rate for this new channel has been slow, especially for RCS. "There has not been enough clarity on the potential and capabilities of various IP messaging channels, how it can help businesses and the kind of impact it can have. RCS has been facing the challenge for its adoption by carriers across the globe, and lack of universal availability of an RCS capable messages app on the handsets," he continues. "As messaging apps in more handsets will start supporting RCS, and as more carriers will enable RCS, this channel will become more acceptable in the market."

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Hugh Muller,
account director,
Openet SA

"The past year has been particularly interesting for the African telecoms space," says Hugh Muller, account director, Openet South Africa. "We've noticed an uncomfortable trend whereby resellers come on board, complete a few sales and then abandon the operator without rhyme nor reason. We've also seen a gap in the market whereby previous equipment vendors have installed legacy BSS solutions, but have since pulled out of the market, leaving many African operators without an adequate BSS solution."

Muller says Openet wants to "address this clear need" for better BSS and help operators across the continent deliver the right services for their subscribers. "This is one of the reasons why we have recently opened a new office in Johannesburg," he adds. "Africa is of unique interest to us as our agile, digital BSS portfolio lends itself well to a region where digital services, such as media streaming and online banking, are becoming more popular."

However, this isn't Openet's first venture into Africa. It has a successful track record, providing BSS solutions to a number of African operators. Given its previous success, the move into Africa's tech-hub is therefore an obvious decision and the company is are excited to benefit from having localised knowledge and employees on the ground to build long-term relationships with existing and future operator customers, "giving them the right level of support" and offering solutions that meet their needs today and tomorrow.

Muller adds: "2020 will be a year of change for African telecoms, and while all of our solutions are 5G ready, we also recognize that 3G and 4G services continue to play an important role in Africa. We want to ensure we deliver the right BSS solutions to support this evolution of services, and eventually see more and more African operators deploy 5G services."

Keith White,
CEO & founder,
SellApp

SellApp is a peer-to-peer (P2P) premium marketplace platform that is mobile-centric operating in Nigeria. It enables sellers of high-quality items (fashion, smartphones, electronics, cars and more) to sell to premium buyers fast, easy and secure.

Keith White, founder and CEO says the company's big achievement in 2019 was securing investors in Nigeria and launching SellApp on Android as well as achieving a really low cost of customer acquisition in Nigeria.

"As our users number in Nigeria grew rapidly month-over-month we had to search for more capital fast"

What about the biggest challenges? "Recognising that the size of our mobile app was too large and ate into some of user's data plans," he says. "As our users number in Nigeria grew rapidly month-over-month we had to search for more capital fast."

White says the big push for 2020 is to scale the SellApp platform to other African countries and run its backend on a mega data centre on the continent.

"Africa will continue to see growth in the digital media space, mobile and desktop advertising spend and revenues," White adds. "Africa will become the frontier for double digit growth and the mobile and online eco-system will serve as key foundations for transforming economies and increasing productivity within nations."

Biju Nair,
president & CEO,
Hyla Mobile

Africa remains an incredibly important market for secondary devices, according to Biju Nair, president and CEO of Hyla Mobile.. "While much of the developed world is deploying 5G networks, many people in Africa still depend on 2G and 3G networks, and the legacy devices which connect to these networks. However, smartphone adoption in Africa is on the rise, and having doubled over the last three years, it is a market with huge potential," he adds.

In the last year, Hyla has seen various attempts to fill the demand for cheap, yet smart devices—but these attempts have largely been unsuccessful. Nair says Smart devices which can connect to newer networks are required to access a plethora of services, from streaming video services better supporting extended healthcare services and education as well as gaming and social media. "But in Africa, the high cost of even the most basic smartphones makes them unattainable to the average consumer. While we have seen the introduction of the "smeature" phone, a cheaper hybrid smart-feature device at a reduced cost—even this cost has been too high for local consumers," he says..

With developed countries deploying 5G networks and launching 5G devices to match, there is soon set to be a deluge of 4G smartphones. While these devices may be considered old and outdated in developed markets, they are in perfect condition to live a second life in a market like Africa where 4G network coverage is increasing and an important step for a future 5G. High quality pre-owned devices are usually a better alternative to low cost devices for such countries where voltage fluctuations and environmental elements tend to be harsh on electronic devices. The better quality components in higher grade devices are able to withstand these factors better than low cost devices with cheaper components.

Looking forward to the coming year, the main talking point for the mobile device industry is of course 5G. We are seeing operators globally deploy expensive 5G networks and scrambling for use cases other than "enhanced connectivity" to realize a return on investment. There is huge incentive for operators to get customers to upgrade to 5G devices, as they can't monetize the network without subscribers on it.

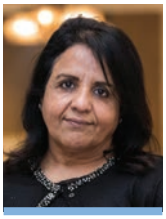
Even in the U.S., according to our research, consumers today are holding onto devices longer averaging close to 3 years before they upgrade to a new model. And, with the price of 5G devices costing in excess of $1,000, operators, retailers, and OEMs will need to help consumers get there through incentives and leveraging programs such as trade-in towards purchasing 5G devices that can place them on the new 5G networks.

For HYLA Mobile, combining its unparalleled access to the secondary device market with new insurance provisioning technology is also a priority for the year ahead. HYLA recently announced a new partnership with Admin Plus, a provider of short-term insurance in South Africa, which is utilizing HYLA's patented Machine Learning (ML) technology. This technology remotely determines whether a mobile device is functional and free of screen

"While we have seen the introduction of the "smeature" phone, a cheaper hybrid smart-feature device at a reduced cost—even this cost has been too high for local consumers"

damage prior to insuring, thereby significantly reducing its risk of exposure to fraud.

Looking ahead, 2020 should be another year of growth for the secondary device market. By maximizing the life of pre-owned devices, not only can consumers become better connected, but with enhanced offerings like device protection, those owning pre-owned devices can ensure that they are able to protect them. Together, this will save the environment from e-waste, save consumers money, generate revenues for operators and insurance providers by lengthening the life of devices within the circular economy.



Padma Ravichander, CEO, Tecnotree

Tecnotree is proud to have served the African market for over a decade now, says Padma Ravichander, company CEO. She says the company does so by enabling communication service providers (CSPs) across the continent with its full stack digital business management product and service, Tecnotree Digital BSS Suite 5.

"We are a trusted partner of several local CSPs, though we have a long-standing partnership with MTN Group," she adds. "Tecnotree serves as the MTN Group's primary BSS provider in many of their operating countries including Ghana, Nigeria, Uganda, Cameroon, Ivory Coast, Rwanda, Swaziland, Benin Guinea Conarky, Congo, Zambia & Sudan. We also serve CSPs in the African sub-continent in Zimbabwe, Malawi, South Africa, and Namibia with our platforms and products."

Ravichander says Tecnotree is committed to ensuring that it employs local talent in each of these countries. As a result, it does its utmost to provide training so that these employees can be upskilled and educated in the firm's technologies, providing them with the chance to work in a global company.

She adds that Africa is a rapidly growing market for Tecnotree. "We see the penetration and adoption of smartphones, mobility and the use of data increasing rapidly across Africa – and this is crucial," Ravichander adds. "The increase in the use of connectivity and communications alone will bring the benefits of a more modern, connected life for all countries in Africa, be it through financial inclusion, education, access to modern health benefits or employment creation and hence economic growth."

With regards to the next 12 months, Ravichander says the challenges are many, but they are not necessarily different to any other emerging market. "The availability of basic amenities like drinking water, energy, access to basic goods as well as clean, hygienic environments and medical facilities is challenging," she continues. "Similarly, there are problems because of a lack of financial inclusion and very little quality infrastructure. These problems need to be resolved expeditiously and in a massive way before we see genuine digital transformation on the continent."

"We see the penetration and adoption of smartphones, mobility and the use of data increasing rapidly across Africa – and this is crucial"

Tecnotree is in the business of empowering digitally connected communities that will help Africa leapfrog into the 21st century ahead of some of the most established players in the global market. Ravichander says this is because of the way the African ecosystem is embracing the use of communication and connectivity. "Tecnotree is delighted to partner with customers in Africa, as we know we can strategically help them to achieve their main aim: a digitally connected Africa," she says. "Through our technology, we believe our customers will be able to improve the lives of local African communities with better connectivity and access to bigger markets. This will create economic growth, financial inclusion, and lead to better services like healthcare, education and employment in Africa." Ravichander says Tecnotree welcomes working in the African market and take pride in the small part it has to play in its success.

Mountasser Hachem, CEO, Monty Mobile

Our main mission at Monty Mobile is to help operators maximise their revenues and to support them through innovative revenue-generating products," says CEO Mountasser Hachem. This is reflected through all our offered services and products, especially with our newest and most diversified VAS portfolio that is guaranteed to boost Operator's revenues. The African market has always been a major player in the telecom business, and thus a big focus for us."

With this said and with more than 20 years of experience within the telecom industry, Monty Mobile, Hachem says, has always found that many African Operators have a lot of lost opportunities, mainly when it comes to customer data, value added services (VAS), mobile advertising and financial services among others. "This is why we have worked hand in hand with many of them to help them discover their hidden gems and find the best way to monetize them," he continues. "Lately, we have been fully focused with our African clients on services such as MVB (mobile virtual banking), our latest innovation within the Fintech industry, transforming operators into virtual banks; in addition to our M-Wallet that allows the banked and unbanked customers to make money transactions anytime, and directly from their mobile phones."

Hachem says Monty has also been investing in other VAS services such as call completion, call lending and story RBT, all of which enhance the subscriber's experience and offer call facilities, thus enhancing the operator's total profits.

"We look forward to ground-breaking changes within the telecom field in 2020, especially in terms of Fintech and IoT sectors," he says. "We are constantly developing our portfolio to grow with the technology changes and to fit Operators' needs." Consequently, this year, Monty is offering a variety of IoT devices and solutions, in addition to our M-Analytics platform, game portal, health care and other mobile applications that help operators adapt to the world of digital transformation and move their businesses forward. ■

"We look forward to ground-breaking changes within the telecom field in 2020, especially in terms of Fintech and IoT sectors"