africapractice

DAR ES SALAAM · GABORONE · JOHANNESBURG · LAGOS · NAIROBI

THE **AFRICAN** YEAR
in **2020**

NAVIGATING THE
DIGITAL REVOLUTION

Despite all the positive developments and successes witnessed across Africa in the past decade, the continent continues to face enormous challenges as we enter the next decade. Institutional or structural reforms are lagging in many areas, investor confidence is brittle, debt unsustainability is emerging as a growing concern, while more immediate issues of political volatility or tax and regulatory stand-offs provide additional headaches for senior executives to overcome. Yet Africa's digital revolution has been one of the shining success stories and will remain a key transformational driver in the year to come, helping the continent to tackle some of these more "analogue" barriers faced by business.

Successive telecoms sector liberalisations and a relatively light-touch regulatory approach applied in many countries has enabled innovation to flourish in the past two decades. Connectivity has ballooned, affordability continues to improve, and beneath the headline innovations, a multitude of technology-enabled business models have sprouted. As we enter 2020, the advent of the Fourth Industrial Revolution (4IR) will continue to have profound ramifications for Africa's economic growth and broader development. From wide-ranging e-government solutions, through the ubiquitous mobile money services, to drone blood and medical equipment deliveries, technology is opening up uncharted avenues for solving some of the continent's most persistent issues.
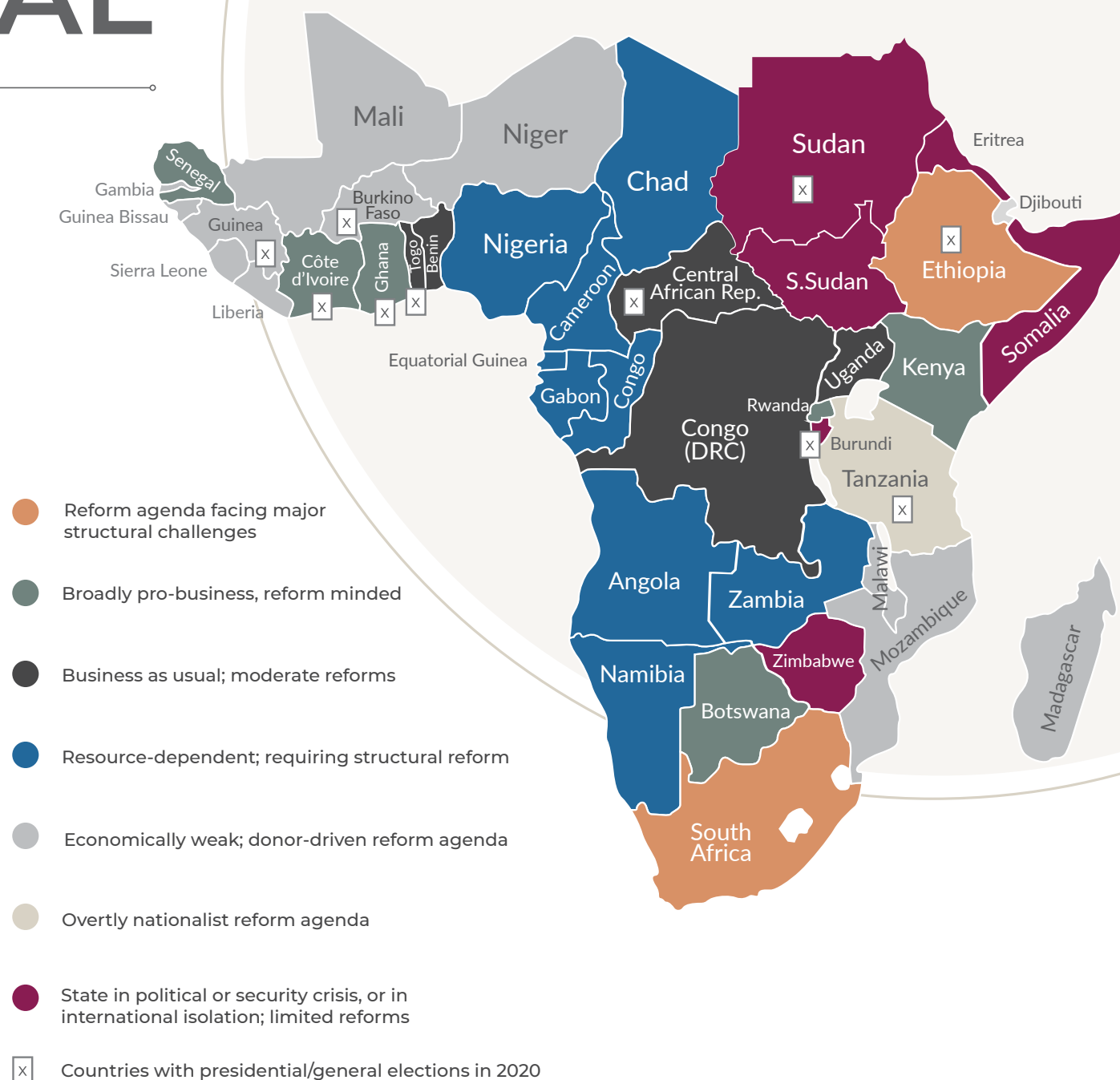
Beyond driving innovation, the digital revolution is also shaking up politics and the way that governments and society interact. As a young and increasingly interconnected population clamours for improved livelihoods and opportunities, technology will both generate greater accountability and be a driver of volatility in Africa's political systems. **Our African Year in 2020 report explores how digital technology and the 4IR will shape risk and opportunity across the continent in the year ahead**

POLITICS GO DIGITAL

Africa's electoral calendar for 2020 is extremely busy with no fewer than **22 countries** heading to the polls (including for legislative elections). Millions of Africans will exercise their democratic rights in an increasingly transparent, information-rich and accountability-driven climate. Yet with accountability also comes volatility. Young urban populations will be able to engage and mobilise like never before, bringing politics into the streets on a regular basis.

● Reform agenda facing major structural challenges

● Broadly pro-business, reform minded

● Business as usual; moderate reforms

● Resource-dependent; requiring structural reform

● Economically weak; donor-driven reform agenda

● Overtly nationalist reform agenda

● State in political or security crisis, or in international isolation; limited reforms

☒ Countries with presidential/general elections in 2020

For some countries like Ethiopia and Sudan, milestone elections will mark major turning points in their political trajectories. Recent developments in both countries have shown how central a role social media and digital communications now play in shaping political outcomes and holding government to account. Across the continent, protest movements increasingly mobilise online, via social media or messaging platforms such as WhatsApp. While inherently democratic and access-enabling, this trend can also serve to escalate situations, not least when misinformation or hate speech are circulated on social channels.

Meanwhile, the benefits of ICT in increasing participation in the democratic process, as well as its general integrity, are indisputable. Digital solutions have streamlined voter registration, the polling process itself, as well as election monitoring, eliminating certain fraud and irregularity risks. Biometric polling cards, used in approximately 30 African countries, are increasingly being adopted. Even countries typically perceived as digital laggards – such as Somaliland and Niger – have managed to implement this measure. In Niger, up until the rollout of biometric polling cards in 2018, less than a third of the population was registered to vote. The impact of this technology will be clearly gauged in the December 2020 general elections in the Sahel country.
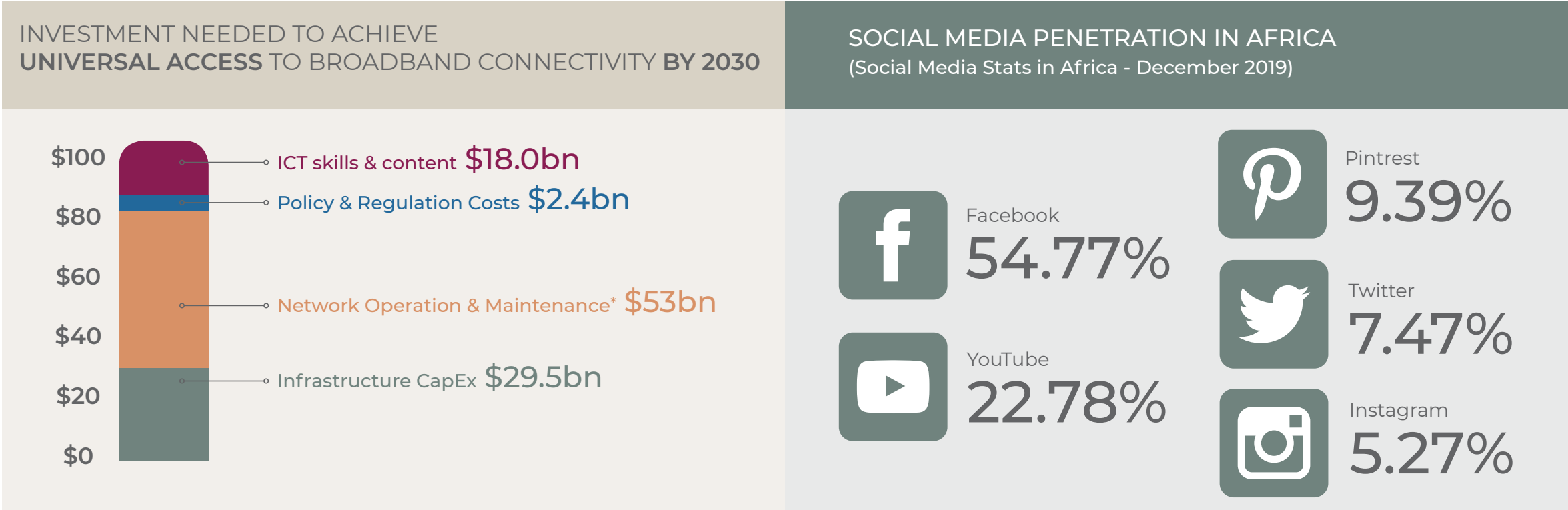
Other countries will also see the digital sphere play a crucial role in shaping politics and campaigning. Ethiopian Prime Minister Abiy Ahmed will have to navigate unprecedented political competition that is unlikely to taint his reformist zeal as he forges a new path for Ethiopia, albeit on shaky ground. Abiy's ambitious reformist agenda has attracted scrutiny and antagonism, exposing ethnic faultlines and fanning violence in some instances. When accepting the Nobel Peace Prize in Oslo in December 2019, Abiy overtly stated that social media is used to instigate *"hate and division"* and could play a derailing role in Ethiopia's complex transition, especially in the run-up to the 2020 general election. With the introduction of a whole new range of political parties in blocs following the fragmentation of the long-ruling Ethiopian People's Revolutionary Democratic Front (EPRDF) coalition, the recent decision to push the elections back to August appears aimed at averting election-related unrest. This will be Ethiopia's first true multi-party election, an equally exciting and turbulent moment in the country's political history from which Abiy is likely to emerge bruised but ultimately, victorious.

Meanwhile in Sudan, the transition from authoritarian rule may provide a false dawn as the country struggles to reinvent itself under weak democratic institutions that have long served the interests of a narrow elite. Recent military unrest is symptomatic of simmering institutional tensions underpinning the influential security forces. There remains an inherent friction between the desire of the Sudanese people to determine their country's future and the insistence of military and intelligence power-brokers in preserving their vested interests and avoiding sanction. Camera phones and social media have already shone a light on Sudanese repression like never before and as the country seeks a new path to peace and democracy, digital communications will play a critical role in supporting this goal.

Ethiopia and Sudan are not alone in facing tough political milestones. Politically volatile Burkina Faso, Guinea, Cameroon, Côte d'Ivoire, Mali and Somalia are also to hold elections this year. Cameroon's legislative elections will occur against a backdrop of festering insurgency and political discord that will continue to shape the remainder of President Paul Biya's rule, creating scope for a volatile and contested transition once the ageing President passes away. The elections will likely see a boycott and violence in the Anglophone region, even if national stability is unlikely to be tested until Biya eventually passes away, paving the way for a contested transition. Meanwhile, despite not quite matching his octogenarian peer's time in office, the 78-year-old Alassane Ouattara could unleash similar troubles in Côte d'Ivoire as he looks to defy his rivals and potentially stand for a third controversial term in office. The bloodshed of 2010/11 feels like a distant memory in the buzzing streets of Abidjan but powerful political actors are bristling in the lead-up to October's elections, creating a combustible situation.

Against this backdrop, developments in the digital sphere have tangible and lasting real-life impacts, especially as the offline and online spaces are becoming increasingly interlocked. Various social media platforms amplify the already mercurial nature of the electorate's sentiments. This new media ecosystem has the potential to mould *(policy)* regimes, as well as citizen attitudes and behaviors.

INVESTMENT NEEDED TO ACHIEVE **UNIVERSAL ACCESS** TO BROADBAND CONNECTIVITY **BY 2030**

- ICT skills & content $18.0bn
- Policy & Regulation Costs $2.4bn
- Network Operation & Maintenance* $53bn
- Infrastructure CapEx $29.5bn

$100
$80
$60
$40
$20
$0

SOCIAL MEDIA PENETRATION IN AFRICA
(Social Media Stats in Africa - December 2019)

Facebook
54.77%

YouTube
22.78%

Pintrest
9.39%

Twitter
7.47%

Instagram
5.27%

2 yrs — Over the past two years, Africa has recorded the highest growth in internet use globally and has the world's fastest-evolving tech ecosystem, according to the World Economic Forum (WEF).

in 2019 — **525 million Africans** accessed the internet, compared to 337 million Latin Americans & 328 million North Americans
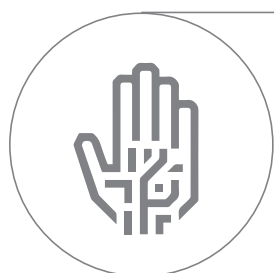
1/3 However, this only represents **1/3 of all Africans**

The World Bank estimates that **USD 100 billion** will be needed to close this connectivity gap by 2030 and enable broader access.

THE HIDDEN HAND OF CYBER-INFLUENCE

Growing attention has been drawn to how the socialisation of political debate has increased risks of interference and manipulation through digital channels. Social media is at the heart of this debate, with key platforms and their regulators facing a battle to stem the tide of fake news and accounts, nefarious campaigning and hate speech designed to distort the democratic outcome or drive unrest. Last year, **Facebook** blocked several Russian-linked accounts said to be interfering in domestic politics and sowing disinformation in eight African countries including CAR, Mozambique and DRC.

While increased Russian cyber activity and electoral interference is a cause of notable concern for Africans and Westerners alike, much of the fake news, disinformation and hate speech that circulates on social media originates domestically and from varied sources, providing a serious headache for those wishing to police the digital space given its growing influence and real-world impact.
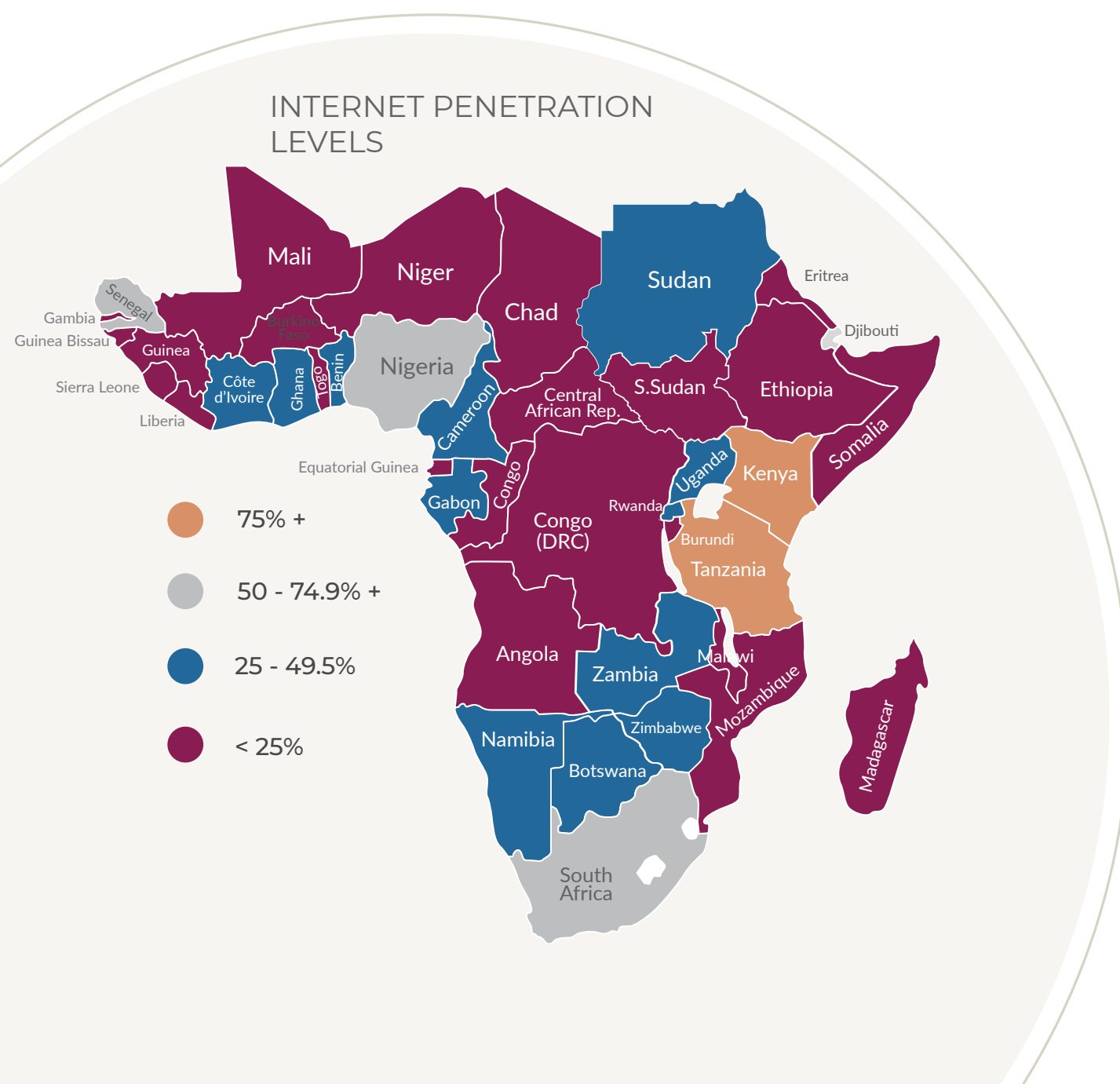
In 2020, we are likely to see tactics evolve and spending in the digital sphere increase. This will range from dissemination of news on social platforms and WhatsApp groups to more targeted campaign initiatives exploiting key demographics and employing opaque campaigning tactics of the kind witnessed in several recent elections not just in Africa, but further afield. Meanwhile, efforts to regulate this space can provide (welcome) excuses for more stringent censorship manifesting the position of those in power and those often targeted by legitimate opposition in the digital space.

NEW FORMS OF CENSORSHIP

Throughout 2019, authorities in **Sudan**, **Ethiopia**, **the DRC**, **Zimbabwe** and **Gabon** controversially implemented internet shutdowns and other restrictions of online access. Addressing volatile situations, potentially exacerbated in and by the digital sphere, they did so ostensibly to prevent insecurity. The protection of those in power, however, is also inherent in such actions as it shields governments from both mounting criticism and opposition online, as well as offline protests. The commercial implications of such action (see below) only add to the democratic cost of such action.

The trend has grown exponentially since the 2011 Arab Spring protests, with at least 26 African countries imposing some form of shutdown or restriction in recent years (see map above). 2020 is likely to be no exception. One country that pioneered the tactic in the early 2000s and may see a revival of shutdowns this year is Guinea where President Alpha Condé is defying stiff opposition to try and push through a constitutional reform.

With legislative elections unlikely to take place in February and amid questions over October's presidential election, should sustained protests occur, the government may seek extreme measures to stifle dissent and force through constitutional reform. A likely standoff with the opposition could see a scenario similar to that witnessed in the DRC evolve when President Joseph Kabila's constitutional term expired with no sign of elections in sight as the incumbent clung onto power.

INTERNET PENETRATION LEVELS

- 75% +
- 50 - 74.9% +
- 25 - 49.5%
- < 25%

International attention has largely concentrated on total internet shutdowns across Africa, but at times partial restrictions can carry more ominous undertones by creating a semblance of freedom of expression within generally repressive environments. In Tanzania, for instance, there have been no blackouts, but the government is known to monitor closely the online space, particularly when it comes to dissenting voices. The Electronic and Postal Communications (Online Content) Regulations, adopted in 2018, requires bloggers to pay operational licence fees of up to TZS 2.1 million (USD 900), whereas the 2015 Cybercrimes Act directed at hate speech allows for far-reaching censorship with high fines against those criticising the government. The legislation also restricts online content and permits state surveillance of cybercafé activity without judicial oversight. As the country prepares for a general election in October 2020 that will largely be a coronation for Magufuli's second term albeit amidst controversy, the online sphere is likely to be increasingly monitored and constricted.
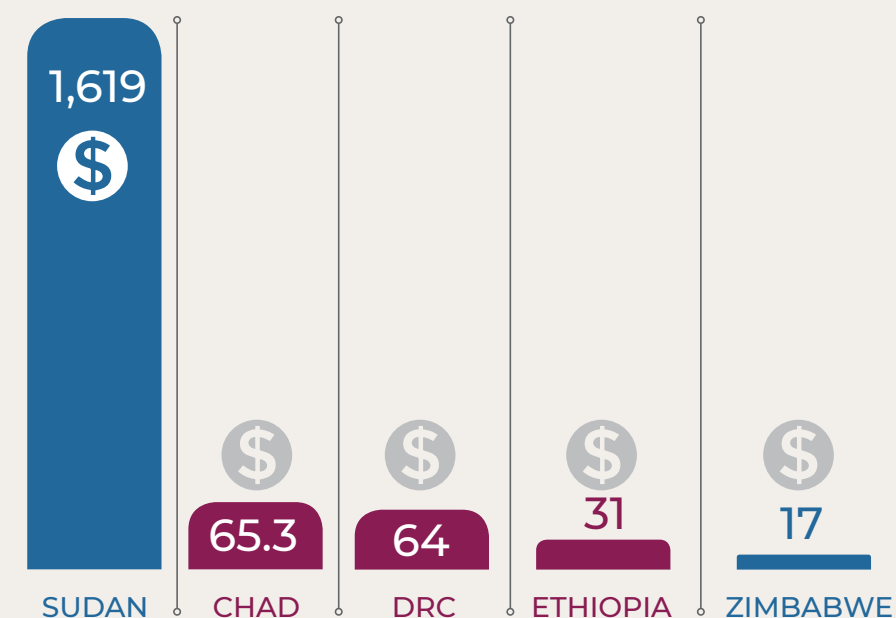
Beyond the overt imposition of internet restrictions, governments can exert population control through the use of digital technology, and notably biometrics. Registration for the Kenyan government's Huduma Namba ("service number" in Kiswahili), for example, is still ongoing, even if most of the population is unclear about the benefits and the purpose of the system. Huduma Numba represents a global trend towards governance utilising big data. Although it has been touted as an efficient and objective method of collecting citizens' bio-data, past experiences in countries such as India point towards the potential for misuse. The legal protections are still minimal and the risk of the government commodifying personal data is tangible, especially considering the mounting pressures of surveillance capitalism.

COUNTING THE COST FOR 2019
Internet restrictions & blackouts (in millions $)

Calculations based on NetBlocks' Cost of Shutdown Tool

SUDAN	CHAD	DRC	ETHIOPIA	ZIMBABWE
1,619	65.3	64	31	17

Source: Security Boulevard, NetBlocks.

HARNESSING DIGITAL
FOR THE PUBLIC GOOD

THE GROWING VALUE OF E-GOVERNMENT

Beyond being the engine behind ICT sector growth in Africa, it is easy to overlook the extent of benefits mobile digital financial services can provide in delivering electronic services for governments. The UN sees e-government as indispensable in the implementation of the 2030 Agenda for Sustainable Development Goals (SDGs). It can help the public express their views and participate in policy-making, creating more transparent and reliable platforms for interaction between citizens, businesses and various government agencies. Governments can also obtain prompt feedback on the quality of public services and provide critical services in a speedy fashion.

Today, most urban areas have millions of 3G and 4G smartphone users who tap into e-government services on a daily basis - something unthinkable when e-government services first emerged in the early 2000s. At the turn of the millenium, Nigeria had 100,000 landlines for a population of 140 million. Today, the country's population is nearing the 200 million mark, approximately an eighth of whom use smartphones. Projections about mobile access over the next five years are certainly promising, as illustrated on the following page.

UNIQUE MOBILE SUBSCRIBERS

456m 2018

44% — PENETRATION RATE — **50%**

% OF POPULATION

623m 2025

4G & 5G

4G | % OF CONNECTIONS

7% 2018   **23%** 2025

5G | **28**m 2025   **3%** OF TOTAL CONNECTIONS EXCL. CELLULAR IOT

SMARTPHONES
% OF TOTAL CONNECTIONS

39% 2018

66% 2025

EXCL. LICENCED CELLULAR IOT

MOBILE INTERNET USERS

239m 2018

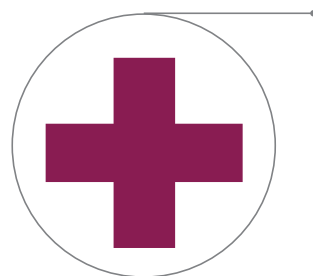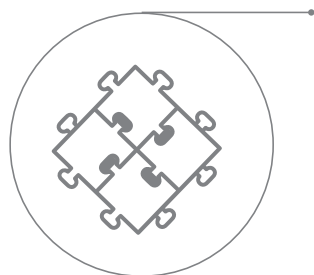**23%** — PENETRATION RATE — **39%**

% OF POPULATION

483m 2025

GHANA is among the most successful pioneers in the e-government space in Africa, having successfully implemented its one-stop platform for public services and information, *http:// dev.eservices.gov.gh/*. Premised on interoperability, it provides services by a host of disparate government agencies, ranging from the police to the food and drugs board. In March 2020, Ghana is also set to conduct its first ever digital census. It will be joining a relatively small group of countries – including **Swaziland**, **Malawi** and **Kenya** – that have already collected such data electronically. Precision in census data gathering has direct implications for expanding the revenue base and improving or tailoring government service provision.

Despite some positive signs, according to the UN's biennial E-Government Survey, as of 2018 Africa is still lagging globally when it comes to e-government implementation. The E-Government Development Index (EGDI) places the continent last on its global index, even though its rating is rising. In fact, the index suggests only six African countries have high levels of e-government development – **Ghana**, **Mauritius**, **Morocco**, **the Seychelles**, **South Africa** and **Tunisia**. As the 2020 EGDI is currently being prepared, monitoring the performance of these trailblazing countries could hint at the potential future of the e-government agenda in different parts of Africa.

DIGITALISED DISASTER RELIEF

2020 will witness the implementation of a new approach to supporting economic activity in disaster-hit or impoverished areas. In November 2019, the **Red Cross** launched a two-year programme using blockchain-backed *"local currencies"* to assist trade among marginalised communities. The goal is to make better use of the USD 1 billion aid distributed annually, in cash or vouchers, by the Red Cross. These currencies rely on mobile phones to transfer credit that can enable individuals to be paid for their labour and subsequently purchase goods or services. The programme was successfully trialled in Ethiopia and Kenya, but is to be rolled out in other African countries such as **Malawi**, **Zimbabwe** and **Cameroon**.
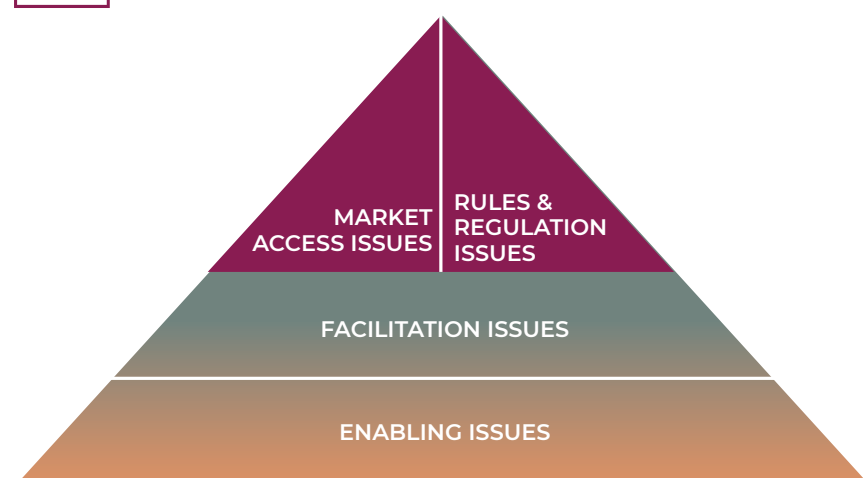
REGIONAL INTEGRATION

With the launch of the African Continental Free Trade Agreement (AfCFTA) scheduled for mid 2020, following its ratification by 29 countries as of January 2020, the establishment of an African single market for goods and services is becoming a reality. The smooth implementation of its key components, including its rules of origin certificate, is unthinkable without robust digital tools and greater digital integration of borders.

Trade Mark East Africa (TMEA), for instance - a donor-funded initiative which seeks to deepen regional integration within the East African Community (EAC) -- has been vocal about the role of technology in reducing barriers to trade. Effective border posts with agencies working collaboratively using the same IT systems, efficient and ICT powered logistic systems, and smart energy grids are all equally important to realising the promise of an integrated African market. At the same time, the AfCFTA is an opportunity to make a concerted effort to develop harmonised regulations that support digital trade and e-commerce on the continent.

As the first phase of negotiations is scheduled to conclude in mid-2020 and the second phase advances, governments will turn their attention to other issues, including digital trade. This will include exploring various options for using the AfCFTA to advance digital trade to power the 4IR and to support intra-African trade through digital solutions. During the AU Summit in February 2020, governments will consider the African Digital Trade and Digital Economy Strategy which will inform deliberations on whether digital trade and e-commerce should be addressed through a stand-alone chapter, a protocol, or existing African Union instruments as part of the AfCFTA - with the sceptic countries that already warned against an early liberalisation of e-commerce on the continent potentially having the upper hand.

PYRAMIDICAL CLASSIFICATION OF E-COMMERCE PROVISIONS IN TRADE AGREEMENTS

SOURCE: KAUKAB (2017) FROM EBRAHIMI DARSINOUEI (2017)

CATEGORIES OF E-COMMERCE ISSUES IN RTAs

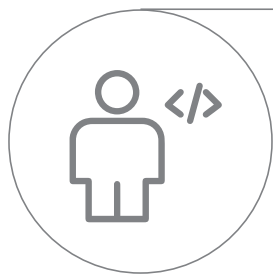| CATEGORY OF COMMITMENTS	EXAMPLES
MARKET ACCESS	Custom duties, valuation issues, movement of natural persons, access to data
RULES & REGULATIONS	Intellectual property rights, protection of personal information, consumer protections, unsolicited commercial messages
FACILITATION	Paperless trade, e-signatures, digital authentication

SOURCE: ADAPTED FROM EBRAHIMI DARSINOUEI (2017)
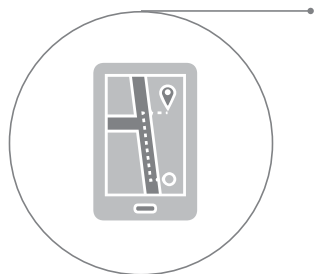
THE PRIVATE SECTOR'S
EMBRACE OF DIGITAL

NEW CONSUMER ACCESS

Amid digital innovation and increased connectivity, African consumers will gain greater access and choice in 2020, including to a wide range of critical services that support sustainable development. Even if the 4IR carries risks regarding Africa's competitiveness and preparedness for significant shake-ups in the means of production, there remain huge opportunities for the continent to craft development and drive growth by embracing technology and its transformative potential. To achieve this end, significant investments are still needed in core communications infrastructure, notably fibre optic cables and mobile towers. Equally importantly, enabling policies will be critical to support these investments and their associated innovations

Still, Africa presents more of a blank canvas for technologies to leapfrog into a new digital era than developed economies do as they try to transform from existing systems and modalities. The convergence of industries in fresh business models is testament to this dynamic and will continue to flourish in 2020, particularly in digital hubs like Kenya and South Africa. Mkopa and other solar home systems firms, for example, have enabled off-grid citizens to acquire solar energy systems through mobile payments. These allow them to charge a phone, study at home after dark, or operate a basic cooker - the very foundations of economic inclusion. Technology can thus be a great leveller in providing opportunity for business models to flourish even where other infrastructure or market deficiencies create challenges that businesses have to overcome to access consumers. Several

governments have realised this potential for the digital industry to create jobs, offer improved services to citizens and expand financial inclusion, bringing the informal economy closer to the formal taxed sector. Kenya and Rwanda, for instance, have led the charge in positioning themselves as regional tech hubs. Many other countries are focusing their efforts to expand sector liberalisation and improve connectivity, with Ethiopia's telecoms sector privatisation likely to be one of the big stories of 2020. Meanwhile, those countries which are lagging – or focusing more on squeezing revenues from the telecoms sector – will likely pay the consequences of more constricted growth.
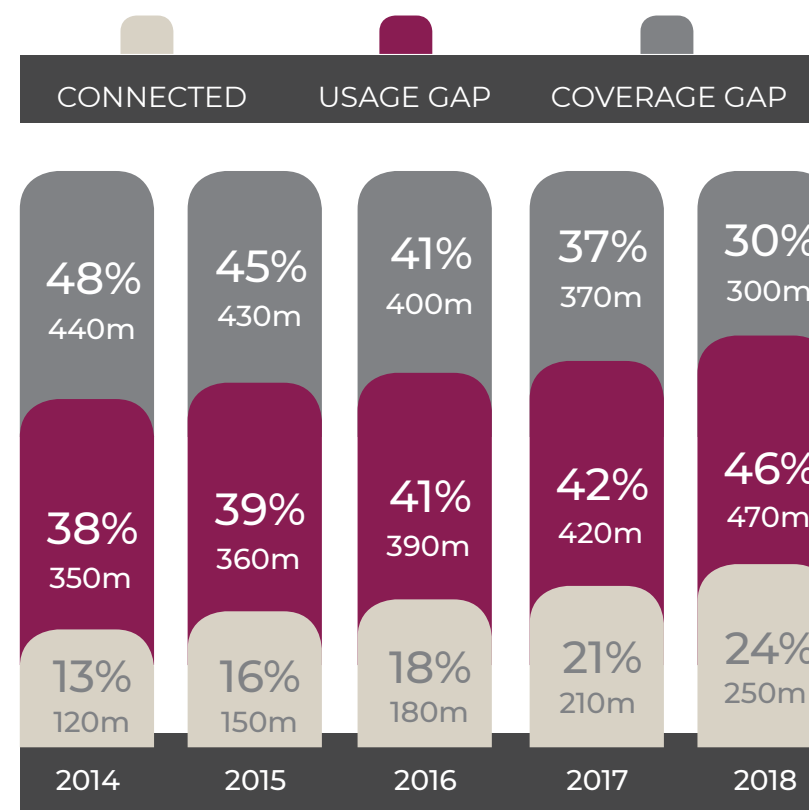
MOBILE FIRST: AFRICA'S ROUTE TO MARKET

The explosion of the mobile phone industry in Africa is at the heart of the new digital era. According to PwC data, mobile phone usage in Africa increased by 344% between 2007 and 2016. Meanwhile, mobile internet adoption rates stand today at approximately 24% of the population – a figure that continues to grow, albeit with many restricted to low data usage levels. Firms seeking to access unserved or underserved markets have wisened up to this potential, with mobile-based services and payment models underpinning many initiatives.

Interestingly, many of the firms or programmes embracing digital are also contributing to the emergence of more sustainable business practices that carry clear social and environmental benefits. Wefarm has created a peer-to-peer farmer network across several African states for sharing key information on farming and veterinary practices. Another firm in South Africa called Peek uses smartphone technology to conduct basic eye examination tests and connects users with healthcare providers to provide low-cost services. Koko Networks is establishing dispensary points across Kenya where customers can purchase clean-fuel cookers and bio-ethanol fuel supplies, reducing the use of dirty fuels with clear environmental and health benefits. These represent just a few examples from a vast network of digitally enabled social enterprises that look beyond pure profit to consider their social and environmental bottom line when addressing Africa's needs.

PERCENTAGE OF THE SUB-SAHARAN AFRICAN POPULATION CONNECTED TO MOBILE INTERNET OVER TIME

CONNECTED	USAGE GAP	COVERAGE GAP

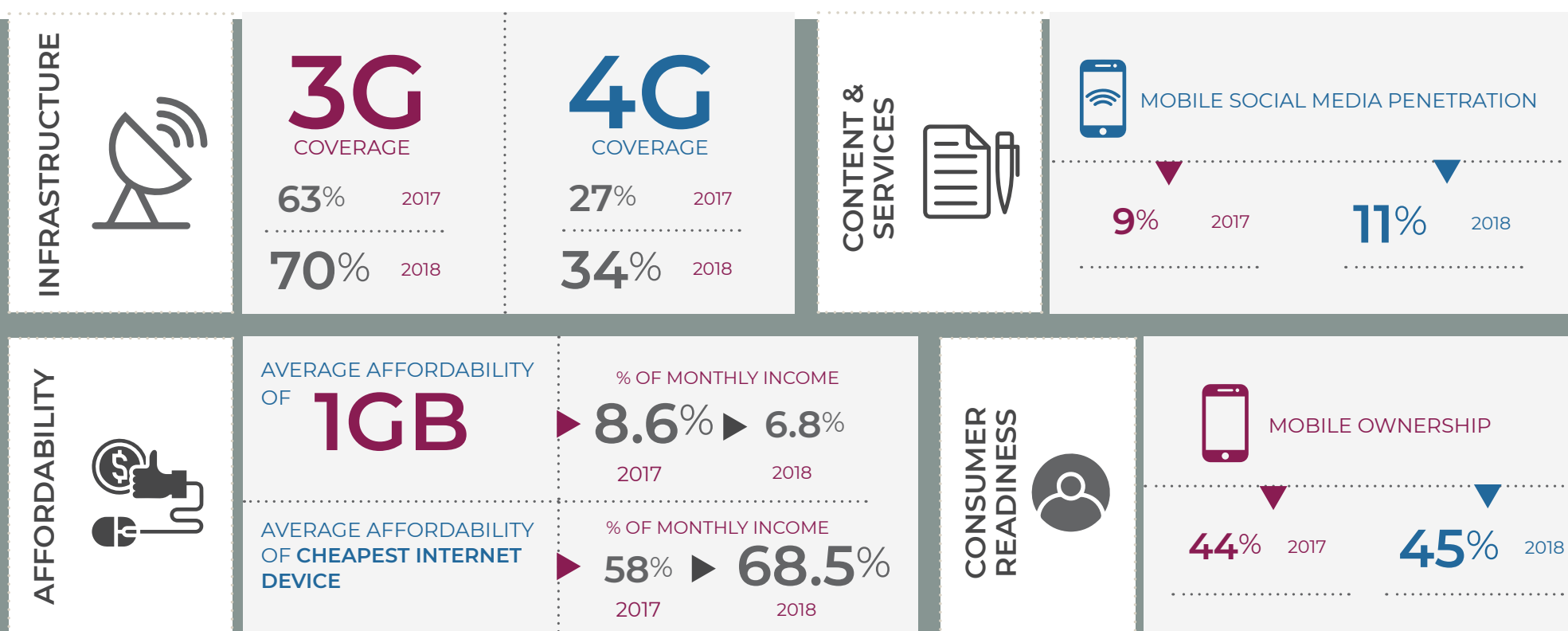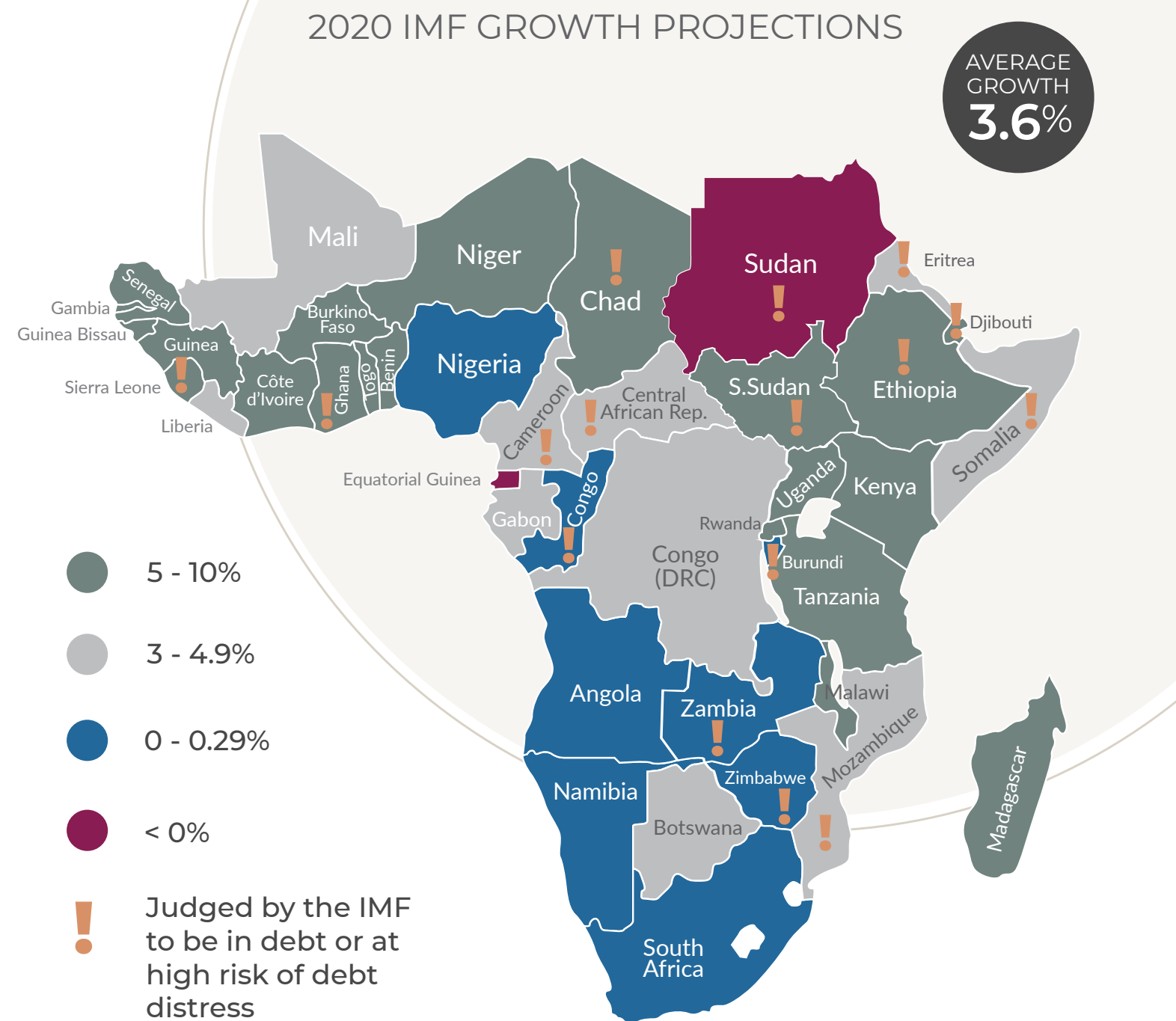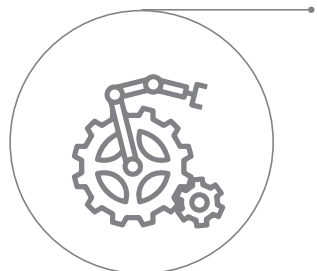|	2014	2015	2016	2017	2018
Coverage gap	48% 440m	45% 430m	41% 400m	37% 370m	30% 300m
Usage gap	38% 350m	39% 360m	41% 390m	42% 420m	46% 470m
Connected	13% 120m	16% 150m	18% 180m	21% 210m	24% 250m

SOURCE: GSMA INTELLIGENCE 2018

While the expansion of connectivity and reduction in costs have enabled these business models to emerge, many firms still face huge challenges in overcoming other market deficiencies. Nigerian headquartered e-commerce platform Jumia has an estimated customer base of almost 6 million people. While some of its services like JumiaPay have been highly profitable, the company faces huge logistical and delivery challenges for its e-commerce activities – particularly for cross-border purchases. Poor roads and transport links, a lack of an address and functional post system, and broader cross-border tariff and non-tariff barriers present huge hurdles for such businesses to overcome. Yet, firms such as What3Words, which geolocates addresses using a wording system, or Nigeria's Trade Depot, which provides an outsourced digitally-enabled logistics business, are popping up to help address logistics challenges.

KEY STATISTICS

INFRASTRUCTURE

3G COVERAGE
63% 2017
70% 2018

4G COVERAGE
27% 2017
34% 2018

CONTENT & SERVICES

MOBILE SOCIAL MEDIA PENETRATION
9% 2017
11% 2018

AFFORDABILITY

AVERAGE AFFORDABILITY OF **1GB**
% OF MONTHLY INCOME
▶ 8.6% ▶ 6.8%
2017   2018

AVERAGE AFFORDABILITY OF **CHEAPEST INTERNET DEVICE**
% OF MONTHLY INCOME
▶ 58% ▶ 68.5%
2017   2018

CONSUMER READINESS

MOBILE OWNERSHIP
44% 2017
45% 2018

Healthcare service delivery and humanitarian relief are also benefiting from the introduction of innovative digital solutions. Since 2016, Zipline has partnered with the government of Rwanda to deliver blood to health facilities in remote areas using drones. The drones have since shortened delivery times tenfold, prompting Ghana to also adopt the technology. In 2019, Zipline launched a medical supply drone delivery programme there, with 600 flights a day serving 12 million Ghanaians. In February 2020, leading global drone companies and regulators will attend the first ever Africa Drone Forum in Kigali. Meanwhile, in Uganda, a mobile medicine supply tracking system, mTrac, has gained traction. The programme, rolled out as a public-private partnership, has enabled tens of thousands of health workers to report drug shortages via text messages.

2020 IMF GROWTH PROJECTIONS

AVERAGE GROWTH
3.6%

Legend:
- 5 - 10%
- 3 - 4.9%
- 0 - 0.29%
- < 0%

! Judged by the IMF to be in debt or at high risk of debt distress

Map labels: Mali, Niger, Chad, Sudan, Eritrea, Djibouti, Gambia, Senegal, Guinea Bissau, Guinea, Sierra Leone, Liberia, Burkino Faso, Côte d'Ivoire, Ghana, Togo, Benin, Nigeria, Cameroon, Central African Rep., S.Sudan, Ethiopia, Somalia, Equatorial Guinea, Gabon, Congo, Uganda, Kenya, Rwanda, Burundi, Congo (DRC), Tanzania, Angola, Zambia, Malawi, Namibia, Zimbabwe, Mozambique, Botswana, Madagascar, South Africa

AUTOMATION

Much attention has been given to how the 4IR will alter the global means of production and this debate will continue in many sectors in 2020. For African governments banking on manufacturing to create the volume of jobs that the continent's burgeoning demographics require to sustain development, the picture is a mixed one.

Manufacturing certainly presents notable opportunities with Africa currently controlling only a small proportion of the value chain from its huge natural resources output. Governments across the continent are now seeking to go beyond agricultural and mineral production by incentivising or regulating local value-addition – sometimes to the frustration of businesses struggling to justify the investments.

Meanwhile, in some countries like Ethiopia, the authorities have sought to entice international manufacturers to offshore production through fiscal incentives in exclusive economic zones supported by functional infrastructure and an enabling regulatory framework. However, Africa's competitive positioning for the manufacturing industry remains patchy, while many multinational manufacturers are increasingly looking to robotics and automation for their next generation production. This means that Africa faces huge hurdles if it wants to mimic the Asian growth story as a core driver of jobs and development.

Continued growth in manufacturing in 2020 and beyond seems likely. But how technology alters the workplace and jobs market is also likely to evolve considerably, creating risks and opportunities that African governments and workforces will need to adapt to. With the growth of technology and data, we are increasingly moving away from an era of central economic planning to one in which free-market forces will drive growth. This requires a greater
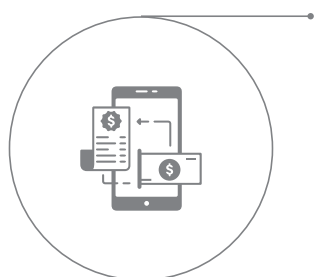
emphasis on experimentation, innovation and flexibility. Governments adopting increasingly statist models, upholding monopolies in strategic sectors, or maintaining prohibitive regulations – including in telecoms where parastatals often have privileged spectrum access or infrastructure control – will lose ground. Meanwhile, pioneering approaches adopted elsewhere could see private sector and government work hand-in-hand to unleash the potential of technology and connectivity in transforming economies.

One interesting example of this in action is the mining sector in Mali where Resolute Mining has built Africa's first fully automated mine. For those warning of the dangers of automation for African jobs, Resolute's Syama mine may provide an interesting counter-narrative. While it employs fewer miners than a typical shaft mine might, it is able to operate as a 24-hour mine, significantly increasing the number of overall staff. Instead of offering dangerous low-paid jobs, the mine trains employees to master the technology that operates the mine, creating better livelihoods and skillsets that may go on to have wider application within the Malian economy. In this manner, investments in technology and technology-training can be force multipliers for development. We are likely to see many more such projects across different sectors in years to come, as digital pioneers forge a new path for investment in an increasingly fluid working environment.

REGULATING
THE DIGITAL SPHERE

DIGITAL TAXATION

As the impact of digital transformation deepens across Africa, a growing number of governments have imposed, or are considering imposing, taxes on digital goods, services or content. The rationale behind the imposition of digital taxes is two-fold.

As the impact of digital transformation deepens across Africa, a growing number of governments have imposed, or are considering imposing, taxes on digital goods, services or content. The rationale behind the imposition of digital taxes is two-fold.

First comes the stark need for additional government revenue. The digital economy is not only growing in size, but is disrupting existing sectors and revenue streams - online retail being among the most illustrative examples. A number of multinational digital businesses and platforms are growing their operations in Africa, but their business models have so far enabled them to avoid the tax net. In this vein, both Nigeria and South Africa have imposed VAT on online transactions. Soon to follow will be Kenya, where the revenue authority is in the process of designing a comprehensive digital tax regime, likely to come into force in the first quarter of 2020. The framework is likely to set the tone for public-private discussions around the issue elsewhere on the continent, and other governments might adopt their Kenyan counterparts' approach.

The second rationale behind digital taxes is political. Social media has given many around the continent a new, more accessible space for engagement on critical issues and participation in broader political debates. In many countries, social

media channels are also used for mobilisation of offline action. As such, over-the-top (OTT) taxes - also referred to as social media taxes -have been introduced as a means for governments to limit the use of some platforms such as WhatsApp, Facebook and Twitter. In 2018, for example, Uganda introduced a tax on accessing OTT services including social media, and similar measures concerning VoIP services were adopted by the governments of Zambia and Benin. While these taxes are primarily politically motivated, they do have deep economic and commercial repercussions. Based on Uganda Communications Commission data, it has been estimated that 5 million local users stopped using the internet due to increased costs.

Despite the backlash Uganda's OTT tax has received since its introduction, the debate on digital tax in Africa is progressing and adoption will spread. 2020 is likely to witness the elaboration of a host of new frameworks, in Kenya and further afield. Businesses will not only need to monitor the landscape, but engage effectively with governments to ensure the format

DATA PROTECTION

Many African governments are still struggling to understand how data will shape their economies and how it can be best regulated. Surging innovation is likely to be met by an increasingly complex regulatory landscape, which firms will need to navigate with equal alacrity. Lack of alignment, harmonisation and compliance with international personal data protection legislation and standards could restrict businesses' operations, preventing them from transferring personal data to third parties outside of the continent. 2019 saw a wave of enactments of national data protection legislation - the **Kenya** Data Protection and Privacy Bill and the **Nigeria** Data Protection Regulation among others. These appear to have been inspired both by the 2018 implementation of the General Data Protection Regulation (GDPR) by the EU and the exponential growth of the tech industry in those two countries.

The club of African states that have taken measures to protect their citizens' data privacy, however, remains somewhat exclusive. Today, only 29 out of 54 countries have some form of data protection legislation. A more harmonised, regional approach is yet to emerge. In 2014, the AU adopted the Convention on Cyber Security and Personal Data Protection (the Malabo Convention), which covers electronic transactions, privacy and cybersecurity. So far, however, only 14 AU member states have signed the convention, which has been ratified by five governments altogether. In 2019, Rwanda became the fifth country to ratify the framework after Senegal, Mauritius, Namibia and Guinea.

FAIR COMPETITION

Regulating the competitive behaviour of global tech leaders is set to become one of the main challenges for African governments and intergovernmental bodies. Currently, there is little if any coordination among competition authorities in the digital sphere. With the regulatory regime only in nascent form in select jurisdictions, attaining regional or continental coordination is likely to emerge as a medium-term goal. The need for enforcing a level playing field, especially considering the global influence of tech giants, however, is much more immediate.

Some tech industry leaders are trying to stay ahead of the curve in influencing the increasingly complex regulatory landscape, particularly as it relates to politics and campaigning. Notably, they are urging the EU not to hold them legally liable for illegal or otherwise nefarious content on their platforms. Twitter pre-empted some of these debates by banning political advertising in October 2019, showing that social media companies could regulate the content on their platforms. 2020 will test the willingness of other social media behemoths to follow suit and embrace accountability more fully, inevitably at significant operational cost.

Meanwhile, in many countries the convergence of competition between industries - most notably ICT and banking - provides a further complicating factor influencing regulatory approaches. With disruptive business models tied to digital service delivery becoming an ever more present feature of the business landscape, regulators may seek to preserve the stake of traditional industries - particularly where influential domestic interests are seen to face threats from these disruptors. Such efforts to preserve vested interests rather than to enable technology, innovation and competition to flourish, will see opportunities to build out transformative industries missed. Yet for those who adopt a lighter regulatory approach and recognise the importance of emerging business models to deliver impact and progress, Africa will represent a fertile territory to drive innovation that tackles some of the continent's pressing needs and develops some of its many commercially viable opportunities.

🌐 **www.africapractice.com**

🐦 **@africapractice**

MARCUS COURAGE (Gaborone)
CEO
✉ **mcourage@africapractice.com**

RODDY BARCLAY (Johannesburg & London)
Director Intelligence and Analysis
✉ **rbarclay@africapractice.com**