



WHITEPAPER

Towards a flourishing digital economy for all – a spotlight on Africa

How the mobile industry and its partners are working to open up a \$180bn market opportunity

Published by

MOBILE
WORLD LIVE

In partnership with



Department for
International Trade

Contents

1. The FCDO and the GSMA: a decade of collaboration

How the two organisations have worked together to improve digital infrastructure across Africa, and open up its markets to international trade.

2. Digital infrastructure

Africa is now laying the foundations that are needed to support digital commerce. Still, there are challenges relating to connectivity, digital identity and postal addresses.

3. Mobile connectivity and internet access

Africa is mobile-first, and many of its inhabitants do not yet use smartphones. Therefore, the continent's digital future depends on the speed, reach and affordability of its cellular networks.

4. Mobile money

With so many unbanked inhabitants, African countries have developed innovative ways to pay online. Mobile wallets play a key role in the evolution of digital commerce.

5. Social exclusion and the 'usage gap'

Even when there is affordable mobile connectivity, many inhabitants remain locked out of the digital economy. GSMA research has highlighted the usage gap attributed to digital literacy, educational barriers and cost.

6. Channels to mobile commerce

For all the barriers, local companies are building a viable digital economy in Africa now.



Introduction

Digital trade is a driver of business growth all over the world. A good example of this is e-commerce. It has been changing the way people spend and shop since the 1990s

E-commerce has spurred innovation and created the infrastructure on which entire new industries have been built.

And then came the pandemic. It sped up this transformation dramatically.

As a result, eMarketer predicts that online sales will soar from \$3.3 trillion 2019 to \$6.2 trillion in 2023 and \$7.4 trillion by 2025.

It estimates the latter total will represent 24.5 percent of all retail sales.

Much of this growth will come in developing markets. In these regions, young tech-savvy citizens are embracing digital behaviours. Connectivity is rising fast. Where the network infrastructure exists, the cost of going online is falling.

Indeed, according to the United Nations Conference on Trade and Development (UNCTAD), internet business in Africa could add US \$180 billion to the continent's GDP by 2025.

Clearly, these markets represent a huge opportunity for local companies and their overseas partners.

As long ago as 2013, the UK's Department for International Development (now part of the UK Foreign, Commonwealth & Development Office – FCDO) teamed up with the GSMA to create the Mobile for Development initiative to drive innovation in digital technology across Africa and improve connectivity/inclusion for the underserved.

It was the first of many more partnerships.

Why GSMA? Because digital commerce in Africa is largely mobile commerce. Africa is a mobile-first continent. For millions of Africans, the phone is the primary channel for accessing the internet (given the lack of fixed broadband infrastructure), and in many regions – it is also the dominant electronic payment and identity platform too.

Mobile-centricity makes Africa different from developed economies. This can be a challenge for companies more used to transacting in a world of laptops, websites and credit cards.

And even when the mobile user experience is accounted for, there

are further challenges relating to Africa's infrastructure, regulation and social inclusion.

Nevertheless, there is widespread belief that Africa's tech community can overcome these barriers. We are confident that the private and public sector can work together to help Africa become a flourishing hub for digital trade.

In this paper, we will explore the African digital economy in more detail. We will focus on the continent's four most developed markets – Egypt, Nigeria, Kenya and South Africa. And we will review the progress and the work to be done in the following areas:

- Digital infrastructure
- Mobile connectivity and internet access
- Mobile money
- Social and digital inclusion
- Mobile commerce

Finally, we will highlight some of the companies, products and services that are opening up these exciting new markets both to African businesses and to partners overseas.



FCDO and the GSMA: a decade of collaboration

Trade between nations has been growing the global economy since the 1700s. Three centuries later, it still is. But today, it's digital trade that presents huge opportunities for business

To take the UK as an example, cross-border e-commerce sales of goods and services in the same year were worth £118.2 billion. In fact, the UK is the second-largest services exporter in the world.

For all this progress, there are still many obstacles to doing e-business in some of the world's fast-growing regions.

The UK is working hard to open up trade in international digital

services. The Rt Hon Anne-Marie Trevelyan MP, President of the Board of Trade and Secretary of State for International Trade, set out the government's position in the Digital Trade report published in November 2021.

She said "Digital trade needs champions who will make the case for a free, open and competitive international digital economy underpinned by common rules on digital trade that promote growth

and the free flow of data, while also protecting businesses and individuals."

One of the key international partners referenced in the report is the GSMA.

This is because many of the world's fastest growing digital markets are mobile-first. For this reason, the FCDO has been working closely with the GSMA to accelerate mobile connectivity and reach.

2013

Mobile For Development

A wide-ranging scheme that promotes mobile technology as a channel through which to promote economic growth, fund innovation and develop infrastructure – as well as address societal issues such as inclusion and gender inequality.

2016

Partnership to Fight Global Poverty

A joint project to provide financial support for new technologies that can improve response to natural disasters, help women obtain financial services and boost access to safe water and clean energy across the developing world.

2019

The 'Partnership for Inclusion, Innovation and Scale'

The partnership provides £38 million in funding for the Mobile for Development work in the areas of rural connectivity, energy, water, sanitation, identity, the mobile gender gap, disability and CleanTech.

2020

The GSMA Innovation Fund for Mobile Internet Adoption and Digital Inclusion

Set up to tackle the barriers preventing 3.4 billion people from adopting mobile internet services. The fund was launched in April 2020. It received 598 applications from start-ups and SMEs in 44 countries across Africa and Asia.

GSMA Mobile Internet Skills Training Toolkit

The GSMA Connected Society programme developed this set of resources to promote digital literacy, help people use the mobile internet more safely and ensure they have the skills required for a digital future.

2021

The Mobile Disability Gap Report 2021

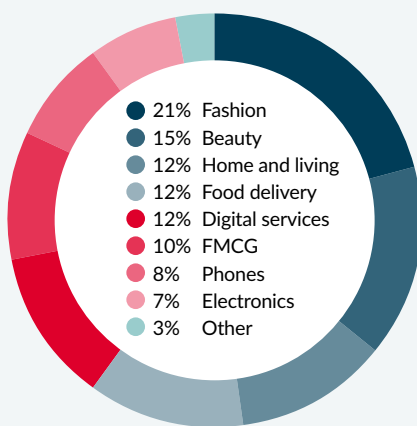
GSMA research shows that many persons with disabilities remain unconnected and digitally excluded. This report provides insight into the ownership and usage of mobile by these groups in low and middle-income countries.

E-commerce: what are Africans buying?

Across the continent, a cohort of pioneering businesses are already creating a vibrant market for e-commerce. They have developed innovative solutions to Africa's challenges around payment, identity and delivery addresses.

So, what are they selling? Here is some data released by Jumia, which is active across 11 countries.

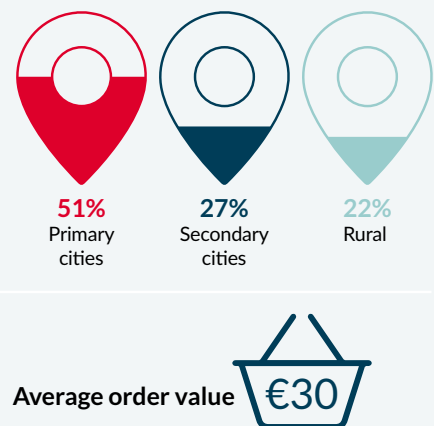
Split by number of items sold



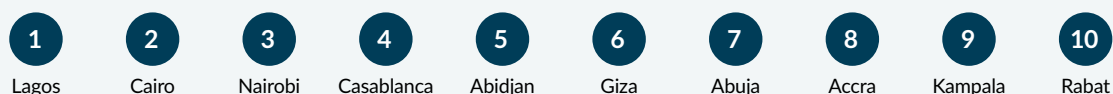
Best-selling products



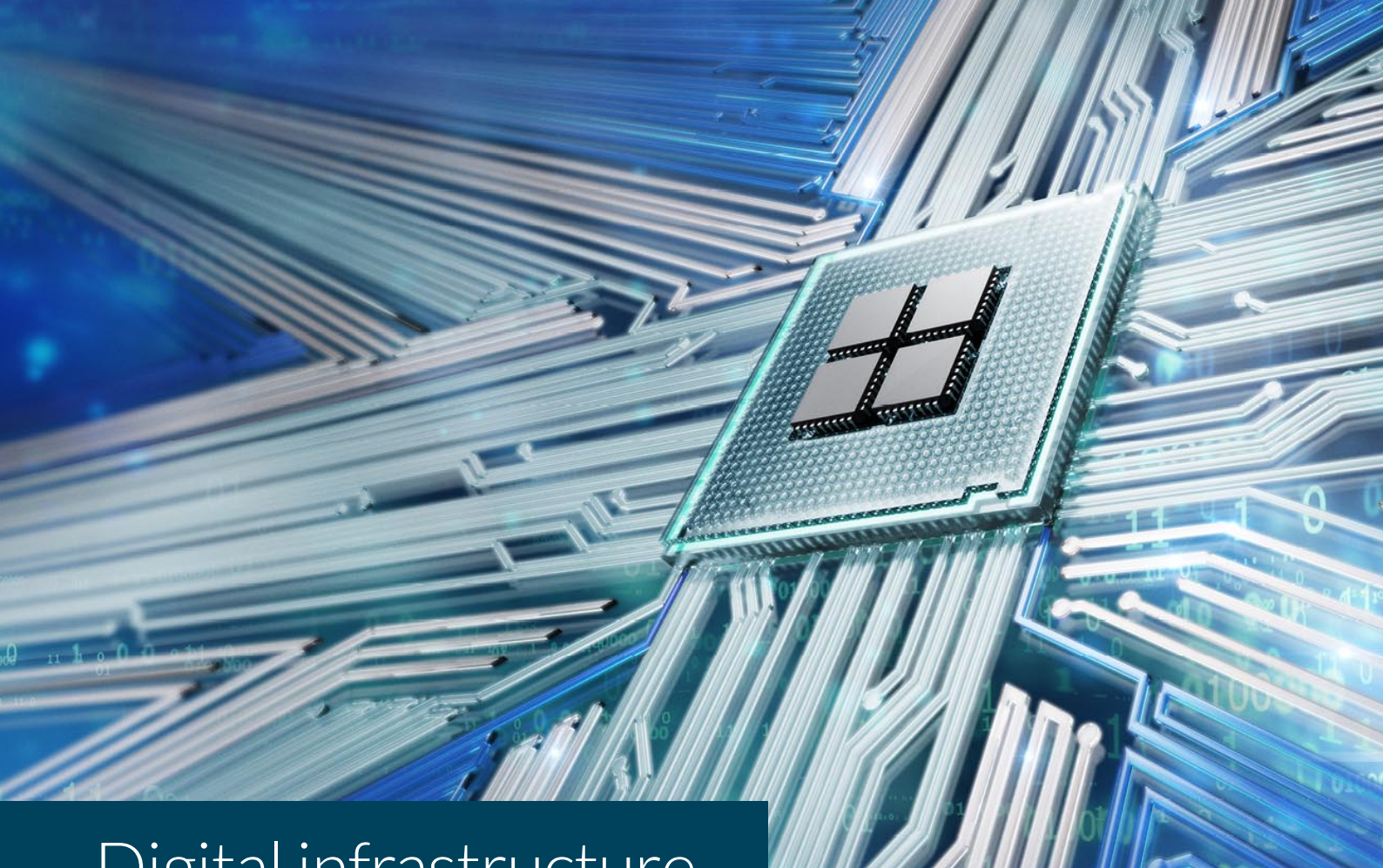
Orders by destination



Top cities by order volume



Source: Jumia Africa E-commerce Index 2021



Digital infrastructure

A thriving digital economy requires a strong base of connectivity, customer identity and last mile delivery. How can Africa overcome its digital infrastructure deficit?

In recent years, it has become clear that Africa is taking its digital economy seriously. Two specific initiatives show why.

In 2019, The World Bank started the Digital Economy Initiative for Africa (DE4A). Its stated aim is: “Every African individual business and Government to be digitally enabled by 2030”. The project brings together African finance and ICT ministers, central bank governors, tech and telecom giants, local internet platforms, think tanks, thought leaders and digital entrepreneurs.

The DE4A has since produced a series of Digital Economy Country Assessments, which summarise the state of a country’s digital infrastructure. This is used as the basis for national strategies.

Then there’s the African Union’s Digital Transformation Strategy for Africa (2020-2030). The initiative is aiming to create a collaborative digital single market, building on the wider trade initiative: Africa’s Continental Free Trade Area (see on page 8).

The end goal is to enable the movement of digitised services and internet access across the continent. And since this internet access will be largely via smartphones, the emphasis will be on encouraging mobile connectivity.

Both schemes implicitly recognise the unique opportunity available to African countries in the digital economy and the sizeable challenges they need to overcome.

So what is unique about Africa's digital future?

Firstly, Africa is a mobile-first region. For most Africans the mobile internet is the internet. E-commerce marketplace Jumia, which has 7.3 million active customers across Africa, says 75 percent of its customers use smartphones to shop on its platform.

On a positive note, Africa's mobile-centric infrastructure means it is also unencumbered by many of the legacy technologies that slow progress in the rest of the world. It doesn't have the ageing infrastructure of Europe or the US. Because it is mobile-first, it can build infrastructure from scratch to facilitate wireless smartphone-oriented services.

According to the African Union:

- About 58 percent of the population now live in areas covered by 4G networks.
- Africa has over 480 million mobile money accounts, more than all other developing regions combined.
- More than 500 African companies provide fintech services. Their collective valuation exceeds one billion US dollars.
- Over 640 tech hubs are active across the continent.

Another point of difference for Africa is its youthful population. In 2020, the median age in Africa was 19.7 years. It is the youngest continent in the world with 41 percent of its population under 15.

And it already has a young entrepreneurial class that is creating digital solutions to uniquely African problems.

This is the positive spin. Needless to say, bringing all of Africa's inhabitants into this digital future will be a considerable task.

The same African Union report details these hurdles. It says most digital success stories remain exceptional, and that innovations rarely trickle down to the real economy and create too few jobs. There is also a connectivity deficit: only 26 percent of rural dwellers use the internet regularly, compared with 47 percent of urbanites.

There is also an affordability gap. In 37 African countries, more than 50 percent of the population cannot afford 1GB of data per month. Only 31 percent of all African firms have a website.

Besides the challenges of cost and coverage, there are other fundamental challenges.

One is the issue of identity

In the world of physical commerce – especially in a cash economy – identity is not really a barrier to making a purchase. But when commerce goes digital, this changes. How can a retailer trust a customer it cannot see? How can it know the recipient of the product is the same person that placed the order?

In developed countries digital ID generally centres on a combination of bank card, phone, address, email and so on. But in Africa, many of these elements are unavailable. It is

estimated that 29 percent of adults in Sub-Saharan Africa have no way of identifying themselves. And the percentage is much higher among women, youth, and the very poor.

To address this, many African countries are trialling digital ID programmes that are robust and workable despite the absence of bank accounts and even postal addresses.

Egypt was the first nation to launch a national ID programme using vein biometrics. Kenya's answer is to give every person in the country a unique "Huduma Namba" – the Swahili for 'Service Number' – which will allow them access to all government services. However, the scheme has been delayed thanks to legal challenges. Ironically, Huduma Namba also requires applicants to prove their identity (with a birth certificate for example), which many lack.

In Nigeria, the government launched a national identity card in 2015. It contains a chip that securely holds the National Identification Number (NIN), address, name, and other details. It also supports fingerprint recognition. Most important for digital commerce, the card gives previously unbanked Nigerians a tool for payments.

Related to this identity challenge is another obstacle unique to developing nations.

Millions of Africans do not possess an official postal address

Without an official postal address, delivery inevitably becomes an issue. Take Kenya for example. Kenya's Digital Economy report revealed that 40 percent of e-commerce users face challenges in receiving deliveries. Needless to say the same issue affects many African economies to a greater or lesser extent.

Efforts are underway to rectify this. Google is using satellite imagery to create an Open Buildings dataset. This is an open-access data resource containing the locations and footprints of 516 million buildings with coverage across most of the African continent.

UK company what3words has developed a more unconventional approach. It has divided the world into a grid of 3m x 3m squares and given each a unique address made

up of three random words. For example, its own headquarters is filled.count.soap.

Many African companies and state bodies have adopted what3words' tech. In 2020, Vodacom South zero-rated what3words for its 43 million subscribers. Meanwhile Zulzi, an on demand grocery delivery company in South Africa, has integrated what3words into its delivery process.

Other tech startups are applying themselves to workarounds that locate customers in the absence of an official address. In Kenya, companies such as Lori Systems, Kobo360 Amit Truck and Sendy have raised millions in VC money.

Sendy, for example, is a fulfilment company that takes care of all logistics and delivery for e-commerce businesses. Its app coordinates contract drivers who own their own vehicles.

Other providers use imaginative techniques to locate their recipients. Some issue one-off passwords,

which customers disclose to drivers. Some instruct drivers to contact recipients by text or WhatsApp to establish the location for a pick-up. And there is also a movement to establish trusted pick-up centres. In Kenya, there are now 80 Pick-Up Mtaani outlets. They are linked to the country's M-PESA mobile payment platform, and use a text message with a unique code to verify an order.

Summary and considerations

Africa clearly has some structural issues to overcome as it builds out its digital infrastructure – many of which don't really exist elsewhere. These include challenges around cost of access, financial inclusion, customer identity and last mile delivery (postal addresses). Domestic companies are doing impressive work to innovate solutions to these problems. Stakeholders must continue to support these efforts in addition to addressing the fundamentals.

Creating a single digital market for Africa

Throughout history, it has been proven that dismantling barriers to trade benefits everyone. This is certainly the thinking behind the African Continental Free Trade Area (AfCFTA). This scheme, signed in 2018, will create the largest free trade area in the world measured by the number of countries participating. Its reach also extends to digital commerce.

AfCFTA will connect 1.3 billion people across 54 of 55 African Union countries with a combined

gross domestic product (GDP) valued at \$3.4 trillion. Its architects believe it has the potential to lift 30 million people out of extreme poverty.

The agreement will eliminate 90 percent of tariffs, focus on outstanding non-tariff barriers, and create a single market with free movement of goods and services. It will reduce red tape and simplify customs procedures, ease the movement of persons and labour,

competition, investment and intellectual property.

It is not the only such initiative. The Smart Africa alliance was founded by seven heads of state in 2013. It has enlisted the support of international organisations and private sector players in a quest to create a single digital market in Africa by 2030. The Alliance now has 32 member countries, representing over 815 million people.

Key data: mobile subscriptions, internet access, bank inclusion (2021)

E-commerce is booming across Africa, but four nations, Nigeria, Egypt, Kenya and South Africa have made the most progress. Needless to say there are significant differences between these markets.

For example, Nigeria is home to a thriving content production sector (Nollywood etc), which is driving a strong market for digital products. Kenya's market has been shaped by the success of its mobile money platforms. Kenyans now use M-PESA and others to make cashless payments at retail, pay utility bills and buy insurance and savings products.

South Africa is different again. It has a much higher percentage of banked consumers, which has reduced the need for mobile money platforms. Its MNOs are also playing a key role in the evolution of its digital economy.

Notwithstanding these differences, it is still useful to set out the key data for these four important nations. Here are the 'big picture' numbers.

| | Nigeria | Egypt | Kenya | South Africa |
|---|---------|--------|-------|--------------|
| Population | 208.8m | 103.3m | 54.3m | 59.6m |
| Mobile connections | 187.9m | 95.7m | 59.2m | 100.6m |
| % of population with a mobile connection | 90% | 92.7% | 108% | 168.5% |
| Internet users | 104.4m | 59.2m | 21.5m | 38.2m |
| % of population using the internet | 50% | 57.3% | 40% | 64% |
| Social media users | 33m | 49m | 11m | 25m |
| % of population using social media | 15.8% | 47.4% | 20.2% | 42.9% |
| Device used by internet owners (Smartphone) | 99.2% | 96% | 99.7% | 98% |
| Device used by internet owners (Laptop) | 54.1% | 56.8% | 60.2% | 85.4% |
| % of population unbanked | 60% | 67% | 44% | 31% |

Sources: DataReportal, Merchant Machine



Mobile connectivity

Africa's digital future and internet access depends on the speed, reach and affordability of its cellular networks

As we have established, internet connectivity in Africa is mostly mobile connectivity. This raises the question: how good is mobile coverage across the continent?

The answer is: it depends.

By the end of 2020, 495 million people in Sub-Saharan Africa had a mobile subscription. That's 46 percent of the population. There will be around 120 million new

subscribers by 2025, taking the total number to 615 million.

But that's just subscriptions. The more useful number for the purpose of this analysis is mobile internet connectivity.

Overall, connectivity has increased sharply across Africa in recent years – though the speed of connection varies greatly from country to country. In the more advanced

regions, the majority of those connected are on 3G. For example, GSMA Intelligence data for 2020 shows 61 percent of mobile internet users in Nigeria are on 3G, and 57 percent of those in Egypt.

Meanwhile 2G connections are still significant in some countries (Kenya: 43 percent), but 5G is yet to arrive aside from in very small numbers in South Africa.

Mobile connectivity by network generation

| | Nigeria | South Africa | Egypt | Kenya |
|---------------------------|---------|--------------|-------|-------|
| Unique mobile subscribers | 104m | 40.2m | 70.4m | 28.4m |
| 2G subscribers | 30% | 20% | 17% | 43% |
| 3G subscribers | 61% | 46% | 57% | 46% |
| 4G subscribers | 9% | 34% | 26% | 11% |

Source: GSMA

Still, for all the progress, Africa remains the least connected region in the world.

The GSMA State of Mobile Internet Connectivity 2021 report revealed a third of people in Sub-Saharan Africa will be using mobile internet by 2022, rising to nearly 40 percent by 2025. But as of 2020, one in five people (210m) had no mobile broadband coverage.

A key reason for this is that they live in remote and rural locations. However, connecting them is less of a technical challenge and more of an economic one. In these settings, the cost of building and maintaining network infrastructure can be double that for urban deployments – while revenues can be ten times lower.

The GSMA is applying itself to this challenge

In its report, Closing the Coverage Gap: How Innovation can Drive Rural Connectivity, it explores innovative approaches to base station, backhaul and energy. Possible solutions include lighter towers, wide-area

coverage solutions, satellite technologies, microwave and fuel cell.

However, lack of coverage is not the only thing stopping inhabitants from using the mobile internet. There is also a lack of awareness and a shortage of skills. This is the ‘usage gap’, which stands at 53 percent in Sub-Saharan Africa.

In other words, more than half of inhabitants don’t use the mobile internet, despite living within the footprint of a mobile broadband network.

Why is this?

Smartphone ownership is a factor

In Sub-Saharan Africa, smartphones account for fewer than half of total mobile connections. The cost of an internet-enabled handset is an enduring problem. Sub-Saharan Africa has the least affordable handsets of any region. The global median cost of the cheapest internet-enabled handset as a percentage of monthly GDP is 19 percent. In Sub-Saharan Africa it is 26.5 percent.

One possible solution to this problem is the smart feature phone. Chinese companies such as Tecno have launched these hybrid models, reducing the price of an entry-level internet-enabled handset to \$28 in 2020.

Another workaround is pay-by-installment. Today, a number of schemes offer this purchase method with the innovation that software in the phone will lock it if the subscriber defaults on a payment. Safaricom’s Lipa Mdogo Mdogo programme is an example of this.

Affordable data is a similar obstacle. The affordability of 1 GB has remained relatively stable across all low to middle-income countries (LMICs) since 2018, and for 5 GB it has improved significantly. Still, in 2021 the poorest 7 percent of people would expect to spend two thirds of their monthly income on a data plan. In Sub-Saharan Africa, this increases to 15 percent.

Aside from issues of coverage and affordability, there are also social and demographic factors. These are explored in chapter 5: social exclusion and the ‘usage gap’.

Smartphone penetration by African region

| Region | Central African States | West African States | Southern African Development Community | North Africa |
|----------|------------------------|---------------------|--|--------------|
| % (2019) | 44 | 49 | 51 | 54 |
| % (2025) | 64 | 65 | 68 | 75 |

Source: GSMA: The Mobile Economy Middle East & North Africa. GSMA: The Mobile Economy Sub-Saharan Africa 2021

Summary and considerations

It’s already the case that 75 percent of all e-commerce in Africa is mobile commerce. So clearly Africa’s digital future depends on the reach and affordability of its cellular networks. Connectivity is expanding, but there are still gaps. The mobile industry must address the economic factors inhibiting its activity in remote locations. It must also explore ways to make handsets more affordable and to educate those that lack the skills to navigate the digital world.



Mobile money

Mobile-only wallets help unbanked people make online payments – even if they only have feature phones. Africa is the home of these mobile money ecosystems

The story of mobile money might be the best proof of Africa's innovative approach to overcoming its digital and financial challenges.

Today, Africa leads in mobile money deployments by some distance. As of 2020, there were 171 live services supporting 562 million registered accounts in the region. 161 million accounts were active on a monthly basis. Their collective transaction value for the year was \$495 billion. In African markets where mobile money is available, one in four adults is now an active user.

In terms of distribution, mobile money agents in rural areas and hard-to-reach places continue to play a pivotal role in the digitisation of cash in many African markets.

So what is mobile money?

Perhaps it's best to start by explaining why it exists. People in developing markets need a channel through which to make virtual payments. In the absence of bank accounts and digital identities, mobile wallets make this possible.

Here's how the process works. A mobile subscriber creates an account, typically by purchasing a scratch card. They can then top up the account by paying cash at an authorised agent. With funds loaded on the phone, the user can then send money to a friend. With more and more businesses supporting mobile money platforms, users can also pay for goods this way. After a transaction both the recipient and the sender receive a confirmation message.

Usually, this is sent by USSD message. USSD is the channel through which mobile operators send simple messages to their customers – typically to confirm a top-up or show remaining minutes etc. USSD is preferred because it is real-time and doesn't require an internet connection. It works on any handset.

All mobile money transactions are protected with a PIN number in a similar manner to using a bank card to provide protection to customers. For users with smartphones, some wallet providers now provide the option of scanning a barcode rather than entering a USSD number.

Most mobile money schemes are run by mobile operators, since they

control the subscribers' SIM cards and own/run chains of agent outlets. However, some are controlled by banks or by partnerships between banks and mobile operators.

The best-known example of mobile money comes from Kenya

Today, M-PESA has 50 million monthly active customers, and is available in Kenya, Tanzania, Mozambique, the Democratic Republic of Congo, Lesotho, Ghana, and Egypt.

Interestingly, M-PESA was brought to life by the UK Government's former Department for International Development (DFID). It observed that Kenyans were transferring mobile airtime as a proxy for money, and joined forces with Vodafone (via the DFID Challenge Fund) to develop the concept of a dedicated mobile currency.

In 2007, Vodafone and DFID ultimately made matching investments of £1 million. Eventually, Kenyan mobile operator Safaricom acquired the service outright.

Services such as M-PESA deliver a number of benefits to their user bases. These include:

- The ability to make easy person to person transfers
- The ability to make business payments and pay utility bills
- Secure storage for cash
- Fast money deposits and withdrawals
- The option to buy 'new' products such as savings and insurance
- The ability to make digital payments even in remote rural areas
- The reduction of cash-related crime and theft

While M-PESA is the leader in mobile money, other providers have been successful too. MTN Mobile Money (MoMo) has 41 million registered customers across 15 countries, Orange Money has 16 million across 14 countries, and Tigo Money has 8 million across five African countries.

Bank-led partnerships with MNOs have also enjoyed some success. One example is Equitel, a partnership between Equity Bank and Airtel with over two million customers in Kenya.

Mobile money platforms are evolving into genuine ecosystems

While mobile money systems started as channels through which to top up airtime or make small payments to friends, they quickly evolved into ecosystems. The platforms grew their agent networks and opened up their APIs. This enabled businesses, retailers, government and non-governmental organisations (NGOs)

to adopt mobile money for their purposes.

These innovations have led to an explosion of new products and services. Mi-Life is a good example. It is available through MTN's Mobile Money platform in Ghana and provides users with the opportunity to buy life insurance via their mobile phones.

Still, mobile money has not taken off everywhere

Early attempts of mobile money in South Africa failed, perhaps due to the higher percentage of banked citizens and also to shortcomings in the agent network. Both MTN and its South African-rival Vodacom shut down their mobile money offerings in 2016. That said, MTN re-launched MoMo in 2020 and has since attracted more than 3 million users.

In Nigeria, mobile money has had a similar journey. The initial failure was caused by the decision of the regulator to licence banks rather than mobile operators. This limited the incentive of the telcos to develop the technology and the agent infrastructure.

However, as with South Africa, the market is now accelerating. Today, a number of fintechs compete with banks and telcos in a flourishing space. They include Opay, MTN MoMo, FirstMonie, Kudi Mobile, UBA Moni Agent and Polaris Sure Padi and Paga Mobile.

One remaining hurdle facing mobile money providers in some regions is tax policy.

Taxation on mobile money payments has taken several forms, from excise duties on service fees to sector taxes

on total revenues or transaction taxes on the underlying amount. Some observers – including the GSMA – have highlighted the risk that poorly designed tax policy can nullify gains in financial inclusion.

GSMA is now liaising with governments on this question. It has also launched other initiatives to ensure a successful future for mobile money products. These include the GSMA Mobile Money Certification – an independent assessment of a provider's ability to deliver secure and reliable services, and protect the rights of consumers.

Then there is the GSMA Mobile Money API. This represents an attempt to make it easier for different providers to work with each other. It allows any third party to implement a common solution which will work with all mobile money platforms which implement the API.

There's a detailed overview of the region's mobile money ecosystems in GSMA's State of the Industry Report on Mobile Money 2021.

Summary and considerations

Mobile money is a major African success story. It exemplifies how innovation can solve what was regarded as a structural barrier (financial exclusion) and become an engine of growth. Stakeholders should be aware that mobile money is a regional phenomenon; it has not succeeded everywhere. But where it is a factor, it can be transformative. New ecosystems are growing up around mobile money platforms. Any company wishing to participate should understand the reach of these ecosystems and what they make possible.



Social exclusion and the ‘usage gap’

Digital illiteracy and social factors prevent millions from using the mobile internet – even if affordable network coverage is available

The GSMA's State of Mobile Internet Connectivity 2021 asserts that one of the factors that limits networks from investing in mobile broadband is a lack of user demand.

It argues that millions of Africans don't use the mobile internet even though they live in a 3G connected region. And it is not just an issue of cost. Just as likely, it is to do with a lack of knowledge.

The report says: “In Sub-Saharan Africa, as in other regions, affordability of handsets and data, and a lack of literacy and digital skills are the most cited barriers to mobile internet adoption and use.”

It cites three main barriers to mobile internet adoption and use:

Awareness

Nearly a quarter of adults in surveyed countries are not aware of mobile internet and its benefits. For example, in Nigeria, rural populations are 19 per cent less likely to be aware of the mobile internet than urban residents.

Literacy

According to a 2020 GSMA Consumer Survey, “reading and writing difficulty” is one of the top barriers preventing them from using the mobile internet. And even when a person can read and write, they may be limited by possessing a language that is not widely spoken.

Lack of digital skills

Internet-enabled handsets can be confusing even for the literate. Challenges include:

- Icons and images that don't make sense in the local context
- Different default language and/or alphabet – and not knowing how to change it
- Not knowing about accessibility features available that can help, such as voice search
- Lower confidence levels, especially with unfamiliar technology

In order to address the problem of digital exclusion, the GSMA teamed up with the FCDO and the Swedish International Development Cooperation Agency (SIDA) to create The Connected Society programme. It is part of the much wider Mobile for Development scheme.

The Connected Society comprises a series of initiatives, policy considerations and market reports, which explore solutions that can bring millions of people into the digital economy.

They include the GSMA Mobile Internet Skills Training Toolkit (MISTT). It uses a 'train the trainer'

approach and consists of short lessons available in PDF and video format that can be easily adapted to local needs and languages.

Meanwhile, the Mobile For Development programme has also made funds available to encourage local innovators to tackle digital exclusion.

The GSMA Innovation Fund for Mobile Internet Adoption and Digital Inclusion was launched in April 2020 with support from the FCDO and others. It received 598 applications from start-ups in 44 countries across Africa and Asia.

Summary and considerations

For millions of Africans digital exclusion has nothing to do with connectivity or the cost of a smartphone. It is a skills gap. There's plenty of evidence that being able to buy and sell online can transform lives, so it's incumbent on stakeholders to unlock the potential of this excluded population. The mobile industry has launched many initiatives to improve digital skills and also to make technology easier to use. It must continue this work and reach out to other stakeholders to help bring millions into the digital economy.

E-commerce. A tool for closing the gender gap?

There's plenty of evidence that the digitization of the economy can create exciting opportunities for women in developing countries.

E-commerce erases many of the physical barriers to transacting, sourcing materials, dealing with suppliers, marketing and selling – all can be done from one location (often at home). This flexibility presents an open door for groups that previously faced social restrictions on starting a business.

According to Jumia's Africa E-Commerce Index 2021 report, women comprise 51 percent of

active sellers on the marketplace in Nigeria and Kenya. In the Ivory Coast, it's 31 percent.

There's a growing belief that this rising wave of female entrepreneurship could help accelerate wealth creation and poverty reduction in developing regions.

Indeed, another report by Jumia, Women and E-commerce in Africa, states that "If the gap in sales between female and male vendors is closed, over \$14.5 billion could be added to the value of the African e-commerce market between 2025 and 2030."

Obviously, there will be challenges. These include cultural gender bias, a lack of representation and unequal access to funding, among others. However, many organisations are working to address these issues.

The United Nations Conference on Trade and Development (UNCTAD) has launched an eTrade for Women initiative to advance the empowerment of women through information technology. Among its many initiatives are masterclasses that offer training, peer-learning and inspirational sessions to female entrepreneurs.



Channels to mobile commerce

Local companies are overcoming Africa's digital deficit and building a viable e-commerce market now

In the previous chapters we have looked at the state of the digital economy in Africa's key markets – and some of the remaining challenges to growing this economy.

Still, the fact is that African innovators are working around these obstacles now. They are building systems that take account of a mobile-first internet, unbanked customers, a lack of postal addresses and the unsolved problem of digital identity.

Here is a selection of the region's key players.

E-commerce providers

Jumia

Jumia is probably the best-known of Africa's 'homegrown' digital commerce players. It is active across 11 countries and runs a marketplace connecting thousands of sellers to millions of consumers, with integrated logistics and digital payment services.

In Q3 2021, Jumia processed more than 2 million orders worth \$238 million. It has 7.3 million active customers.

The company is publicly traded, and is often called the 'Amazon of Africa'. Like Amazon, it has begun to recently extend its services beyond D2C commerce. In 2021, it started to offer its payment services to third party online sellers.

Konga

Konga is another key player in the digital commerce space in Nigeria. The company offers a range of services alongside its virtual store. These include KongaPay, a one-click payments wallet created in partnership with Nigeria's banks, and Konga Express.

The latter comprises a network of logistics centres and delivery drivers. It promises delivery inside three days. And Konga has also reached out to third party vendors. Konga Marketplace has made it possible even for roadside sellers to try e-commerce.

Jiji

Nigeria-based Jiji operates in Kenya, Uganda, Tanzania, Nigeria, and Ghana. It is not a direct seller, but an online/classified marketplace for individuals and small businesses. It has 2.5 million monthly active buyers.

Takealot

Takealot is a major South African e-commerce firm, which also owns Superbalist and Mr D Food. Its revenue surpassed \$600m in 2021. The company has built its own network of collection points to mitigate the problem of a lack of official postal addresses. As of March 2020, it had more than 1.8m customers across nine South African provinces.

Kilimall

Kilimall has emerged as one of Kenya's most successful e-commerce services. It is actually Chinese-owned, and the majority of its sellers are located in China.

Payment and platforms

Sky.Garden

Kenya's Sky.Garden is a software-as-a-service (SaaS) platform designed for African sellers and adapted to suit the continent's informal shipping network.

Its pitch is that it helps sellers without any tech background do e-commerce by outsourcing all the backend processes to Sky.Garden: hosting, payments, deliveries etc.

Flutterwave

In 2021, payment processor Flutterwave raised a US\$170 million funding round – then the largest ever secured by an African tech startup. Investors were attracted by the fact that Flutterwave had processed 140 million transactions worth more than \$9 billion for more than 290,000 businesses.

The company's API makes it easier for companies to process payments on their e-commerce sites and apps. As an African-focused company, Flutterwave supports 150 currencies and multiple payment modes including mobile wallets.

It also helps businesses outside Africa to expand their operations on the continent. Clients include Booking.com, Flywire and Uber.

PayFast

PayFast provides an online payment processing solution for individuals and businesses in South Africa. It supports eight payment methods and 80 plus shopping cart platforms.

Opay

Opay was founded in Nigeria in 2018, and helps unbanked and underbanked users to send and receive money and pay through a network of agents. It raised \$400 million in financing led by SoftBank in 2021. Reports say Opay's monthly transaction volumes are more than \$3 billion.

Social commerce (WhatsApp for Business)

Doing business through social channels is now an option for hundreds of millions of individuals and small companies.

It is certainly gaining momentum in Africa. This makes sense given that social media and especially social messaging apps – are so popular across the continent. In fact, WhatsApp adoption is all but universal in some countries. According to one report, it is used by 97 percent of all mobile-connected Nigerians.

WhatsApp, of course, has been working hard to make its service a channel for commerce. Its WhatsApp for Business platform lets companies create a greeting message, answer frequently asked questions, add a link button on a website and share rich content (PDFs, videos, locations, photos, voice recordings and more).

WhatsApp for Business has become popular across Africa. However, a limitation of social commerce channels – including WhatsApp for Business – is that they cannot process payments. Vendors therefore have to find other ways to complete transactions started on the platform.

Digital content, music and video streaming

Africa has played host to a thriving digital content market for well over a decade. In the absence of widespread broadband, its mobile-first populations have been enthusiastic consumers of 'basic' products designed for feature phones without access to data: chat services, ringback tones, quizzes.

More recently, however, the adoption of smartphones and the roll-out of 3G/4G has made richer digital content services available to the mass market for the first time.

According to Digital TV Research, Africa had 4.89 million subscription video-on-demand users in 2021 – and this could rise to 13.72 million by 2027.

It expects Netflix to have the highest number of subscribers, but says the market is wide open for local services such as Showmax and iROKO as well as those run by MNOs such as MTN and Etisalat. Africa has a vibrant market for domestic content product – not least Nollywood – and these companies are well-placed to license and even fund it.

Financial backers recognize this opportunity. A report by Disrupt Africa revealed that digital content startups raised \$13.9 million in 2020, almost 19 times the total for 2019.

Summary and considerations

Africa is already home to a growing cohort of dynamic e-commerce businesses. They are adapting their services to address the specific challenges of the African market: unbanked customers, the lack of reliable identity credentials and last mile delivery issues. Meanwhile, specialist digital content companies are competing with global giants to meet the huge demand from Africans for local entertainment content. Overseas companies should be aware of the opportunity to partner with these services. They are proving that Africa is not a market of the future. It is real now.

Conclusion

Digital commerce is growing fast all over the world. It is a force for good. By removing physical barriers to trade, it increases choice for millions of people. It also frees up time to pursue other activities.

This is especially the case in developing economies. Indeed, the United Nations says internet business in Africa could add US \$180 billion to the continent's GDP by 2025.

However, Africa is a mobile-first continent; its leading digital vendors say 75 percent of their transactions are made via smartphone. So it's clear that stakeholders must focus on mobile as the foundation for future growth. This means extending coverage to rural regions, continuing the rollout of 4G, making smartphones more affordable and improving digital literacy among marginal groups.

These are real challenges but there are also very real opportunities. The UK government believes that the mobile industry and Africa's vibrant tech and entrepreneurial community can work together with its partners to address these challenges. International collaboration between the private and public sector could be the key to unlocking the immense opportunity for mobile-driven digital trade on the continent.

If you would like to discuss any of the areas covered in the paper or partner with the UK's Department for International Trade, please contact the department's Digital Commerce & Ecommerce team (see page 22 for details).

Great Technology

is reimagining our world

From helping emergency services save lives to facilitating drone deliveries, what3words has revolutionised the way we address the world in 193 countries. Just one example of life changing UK innovation. Join us and see things differently.

[///cherry.free.fancy](http://cherry.free.fancy)



GREAT
BRITAIN & NORTHERN IRELAND

Appendix

Market data

emarketer: Global Ecommerce Forecast 2021

<https://www.emarketer.com/content/global-ecommerce-forecast-2021>

Jumia Africa e-Commerce Index 2021

https://drive.google.com/file/d/1_KqWqzwAVVHHRtWPPOOCE0qiNWxLHeOt/view

Women and E-commerce in Africa

<https://www.ifc.org/wps/wcm/connect/47361305-6ebe-431a-8dd9-db2290919823/202105-digital2equal-women-and-e-commerce-africa.pdf?MOD=AJPERES&CVID=nCGRGTr>

Statista: Proportion of selected age groups of world population in 2021, by region

<https://www.statista.com/statistics/265759/world-population-by-age-and-region/>

OECD: Africa's Development Dynamics

<https://www.oecd.org/dev/africa-development-dynamics-2021-launch.htm>

Kenya's Digital Economy: A People's Perspective Report 2021

https://digitaleconomy.ke/assets/download/Kenyas_Digital_Economy_Full_report_Aug_2021.pdf

DataReportal: Africa

<https://datareportal.com/reports/?tag=Africa>

Disrupt Africa: African Tech Startups Funding Report 2020

<https://disrupt-africa.com/funding-report/>

Digital TV Research: Africa OTT TV and Video Forecasts

<https://digitaltvresearch.com/african-ott-to-generate-2-billion-in-2027/>

UK Board of Trade report: digital trade

<https://www.gov.uk/government/publications/board-of-trade-report-digital-trade/board-of-trade-report-digital-trade-html-executive-summary>

GSMA reports and market insights

The Mobile Economy Sub-Saharan Africa

<https://www.gsma.com/mobileeconomy/sub-saharan-africa/>

State of Mobile Internet Connectivity 2021

<https://www.gsma.com/r/somic/>

Closing the Coverage Gap: How Innovation Can Drive Rural Connectivity

<https://www.gsma.com/mobilefordevelopment/resources/closing-the-coverage-gap-how-innovation-can-drive-rural-connectivity/>

GSMA: The Mobile Economy Middle East & North Africa

https://www.gsma.com/mobileeconomy/wp-content/uploads/2020/11/GSMA_MobileEconomy2020_MENA.pdf

The State of the Industry Report on Mobile Money 2021

https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2021/03/GSMA_State-of-the-Industry-Report-on-Mobile-Money-2021_Full-report.pdf

The Causes and Consequences of Mobile Money Taxation

https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2020/06/GSMA_The-causes-and-consequences-of-mobile-money-taxation.pdf

Mobile for Development: Consumer Survey

https://www.gsma.com/mobilefordevelopment/blog-2/making-mobile-internet-more-accessible-for-people-with-reading-or-writing-difficulties/#_ftn1

GSMA: The Mobile Disability Gap Report 2021

<https://www.gsma.com/mena/resources/the-mobile-disability-gap-report-2021>

Appendix

GSMA developing market initiatives

GSMA Mobile Money Certification

<https://www.gsma.com/mobilefordevelopment/mobile-money/certification/>

GSMA Mobile Money API

<https://www.gsma.com/mobilefordevelopment/mobile-money/mobile-money-api/>

GSMA Connected Society Programme

<https://www.gsma.com/mobilefordevelopment/connected-society/>

GSMA Mobile Internet Skills Training Toolkit

<https://www.gsma.com/mobilefordevelopment/resources/mobile-internet-skills-training-toolkit/>

FCDO and GSMA joint initiatives

Mobile for Development

<https://www.gsma.com/mobilefordevelopment/>

Partnership for Inclusion, Innovation and Scale

<https://www.gsma.com/mobilefordevelopment/blog/inclusion-innovation-and-scale-the-focus-of-our-new-gsma-dfid-partnership/>

GSMA Innovation Fund for Mobile Internet Adoption and Digital Inclusion

<https://www.gsma.com/mobilefordevelopment/gsma-innovation-fund-mobile-internet-adoption/?ID=a6g1r000001QJb6AAG&JobID=714188>

Pan-Africa digital development projects

World Bank: Digital Economy Initiative for Africa

<https://www.worldbank.org/en/programs/all-africa-digital-transformation>

Africa's Continental Free Trade Area

<https://www.worldbank.org/en/topic/trade/publication/the-african-continental-free-trade-area>

African Union: Digital Transformation Strategy for Africa

<https://au.int/sites/default/files/documents/38507-doc-dts-english.pdf>

Smart Africa Alliance

<https://smartafrica.org/>

The United Nations Conference on Trade and Development (UNCTAD)

<https://unctad.org/about>

UNCTAD: eTrade for Women

<https://unctad.org/topic/ecommerce-and-digital-economy/etrade-for-women>

UNCTAD: eTrade for Women Masterclasses

<https://unctad.org/meeting/etrade-women-masterclass-unlocking-power-digital-entrepreneurship-uncertain-times>

Companies

Jumia

<https://group.jumia.com/>

Jiji

<https://jiji.ng>

Takealot

<https://www.takealot.com>

Kilimall

<https://www.kilimall.co.ke>

Sky.Garden

<https://sky.garden/home>

Flutterwave

<https://flutterwave.com>

Payfast

<https://www.payfast.co.za/>

Opay

<https://www.opayweb.com/>

Showmax

<https://www.showmax.com/eng/welcome/gb>

iROKO

<https://irokotv.com/>



Department for International Trade

Department for International Trade

The UK Department for International Trade (DIT) is a UK Government department working with businesses based in the United Kingdom to ensure their success in international markets, and encourage overseas companies to look to the UK as their global partner of choice. DIT offers expertise and contacts through its extensive network of specialists across England, Wales, Scotland and Northern & Ireland as well as in British embassies and other diplomatic offices in over 100 markets around the world. The DIT network helps overseas businesses to source British products and services and connects them with the right UK partners.

Digital Commerce & Ecommerce Team

DIT's Digital Commerce & Ecommerce team are a group of dedicated professionals and industry experts providing tailored trade and investment advice to UK and international companies on digital commerce. The team also works with international organisations to create mutually beneficial initiatives that help businesses benefit from the opportunities that digital trade offers.

For more information on how DIT can help your organisation or to discuss strategic partnership opportunities, please contact digital-exporting@trade.gov.uk

MOBILE WORLD LIVE

Mobile World Live is the premier destination for news, insight and intelligence for the global mobile industry. Armed with a dedicated team of experienced reporters from around the world, we are the industry's most trusted media outlet for breaking news, special features, investigative reporting, and expert analysis of today's biggest stories.

We are firmly committed to delivering accurate, quality journalism to our readers through news articles, video broadcasts, live and digital events, and more. Our engaged audience of mobile, tech and telecom professionals, including C-suite executives, business decision makers and influencers depend on the unrivalled content and analysis Mobile World Live provides to make informed business decisions every day.

Since 2016, Mobile World Live has also had a team of in-house media and marketing experts who work directly with our brand partners to produce bespoke content and deliver it to our audience in strategic yet innovative ways. Our portfolio of custom work - including whitepapers, webinars, live studio interviews, case studies, industry surveys and more - leverage the same level of industry knowledge and perspective that propels our newsroom.

Mobile World Live is published by, but editorially independent from, the GSMA, producing Show Daily publications for all GSMA events and Mobile World Live TV - the award-winning broadcast service of Mobile World Congress and home to GSMA event keynote presentations.

Find out more at www.mobileworldlive.com

Disclaimer: The views and opinions expressed in this report are those of the authors and do not necessarily reflect the official policy or position of the GSMA or its subsidiaries.

© 2022