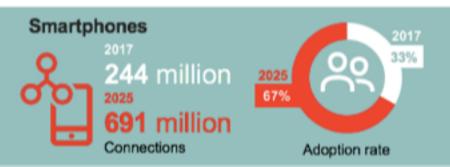


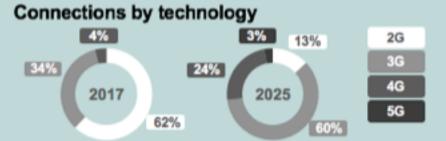


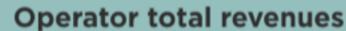
Regional outlook: Sub-Saharan Africa















Capex

\$7.89 billion

²⁰²⁰ \$7.98 billion





NIGERIA MOBILE LANDSCAPE AT A GLANCE

SEPTEMBER 2018

UNIQUE MOBILE SUBSCRIBERS

97.5M,

RISING TO 130M

BY 2025

Around half of unique subscribers also use mobile internet services MOBILE PENETRATION

49%,

RISING TO 55% BY 2025



Compared to fixedline penetration of less than 1% TOTAL CONNECTIONS

151M,

RISING TO 210M BY 2025

Of which 3.2m are cellular IoT connections SMARTPHONE ADOPTION

53 M SMARTPHONE CONNECTIONS

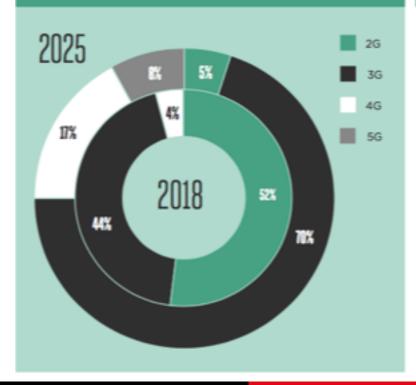
RISING TO 144M BY 2025



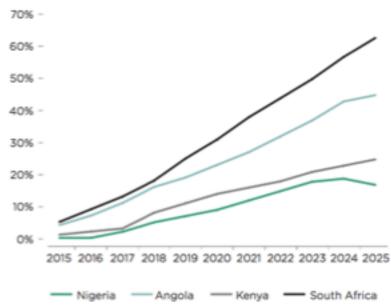
Smartphone adoption rate of 36%



More Nigerians are getting access to mobile broadband...



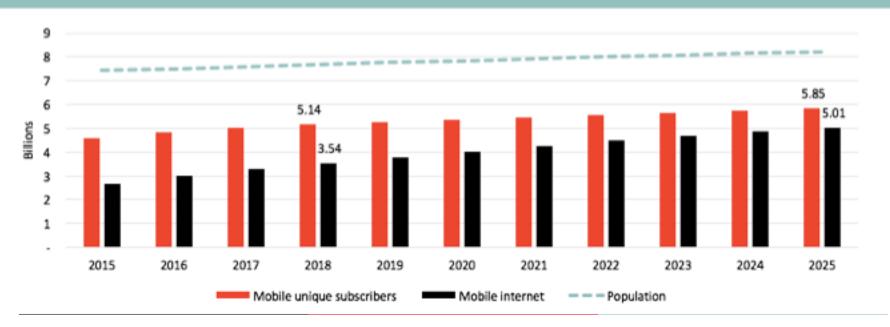
...but the country lags regional peers in 4G adoption. Helping accelerate adoption would set the stage for more advanced services and a bigger positive societal impact.





But Growth is not about technology The dynamic is more about usage than growth

The shift is the rise in mobile internet access. The attachment rate (the share of mobile users also using the internet) increases from 65% in 2017 to 86% in 2025







Mobile Consolidation trend is necessary

To create sustainable levels of network investments and returns for operators

Competitive landscape







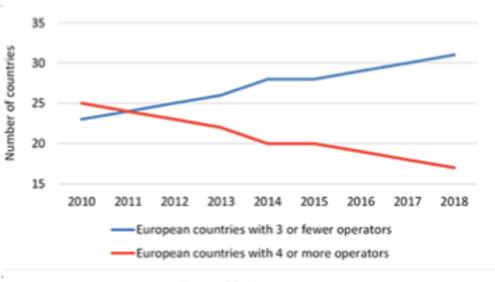














Slowing subscriber growth Digital Gap Opportunity

40% < 134
years
of the population are
driving future growth

opportunity for services that appeal to young consumers.

2025



will remain offline

excluded from the digital economy

Lack of network coverage is a major barrier





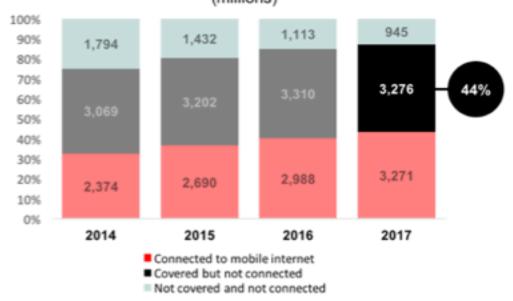
1/3 of the population are not covered by a mobile broadband network





80% of people without internet are covered by 3G/4G: What's the problem?

Connected and unconnected population (millions)



80%

of the unconnected live within range of a **3G** or **4G** signal

In Low-income countries



40% of adults are illiterate



500 MB of data costs **10%** of monthly GDP per capita

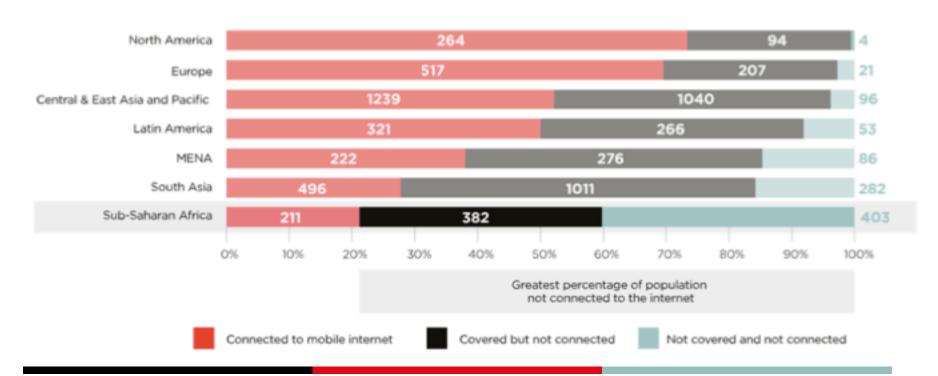


0.2% of all active mobile apps were developed in the countries in 2017

Source: GSMA Intelligence CONFIDENTIAL



Breaking down the unconnected population: How do we make it easier to connect?







An incoming Mobile-only generation Changes the game for digital services

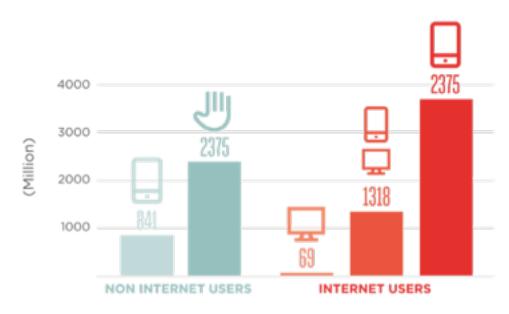


of this growth from China, India, Indonesia, Nigeria and Pakistan. The rest will come from Sub-Saharan Africa and South East Asia

Accessing a large, youthful life services (banking,



Global population in 2025





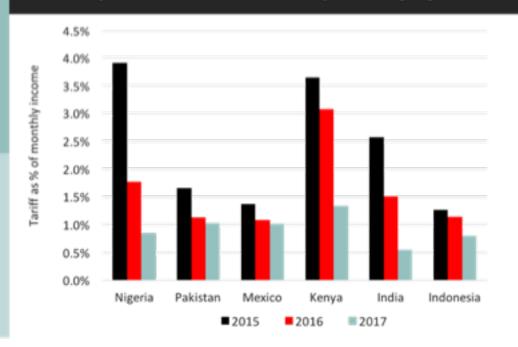
Driven by Low-cost smartphones & falling data prices

SSA Smartphone penetration





Monthly data bundle costs in major emerging markets





5G in Nigeria

5G - latest mobile technology, engineered to greatly increase the speed and responsiveness of wireless networks



- Enhanced broadband connectivity for the home and businesses, given the lack of fixed-line infrastructure
- Enabling platform for innovative enterprises solutions across multiple industries, such as health, manufacturing and logistics
- Allows network and spectral optimisation which could bring capex and opex savings and, in turn, lead to cost effective MBB and better experience for the consumer



- Capital cost of rolling out 5G amid ongoing investment in 3G and 4G coverage, as well as hindrances to 2G shutdown
- Potential delay in regulations creating the licence bundles for 5G, given the delay and litigations that trailed 4G licences
- Low handset penetration and limited content services in the consumer market, and underdeveloped IoT and mission critical uses cases in the enterprise sector

15_m

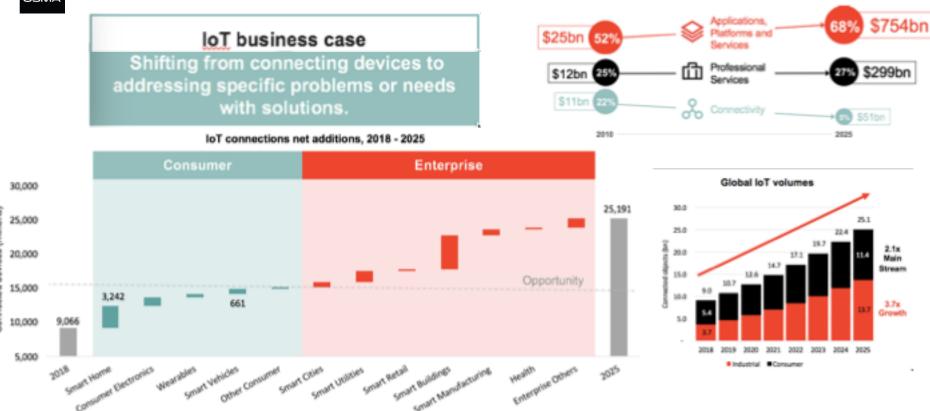
5G connections by 2025, equivalent to

7.5% of total connections

25B Things to be connected by 2025



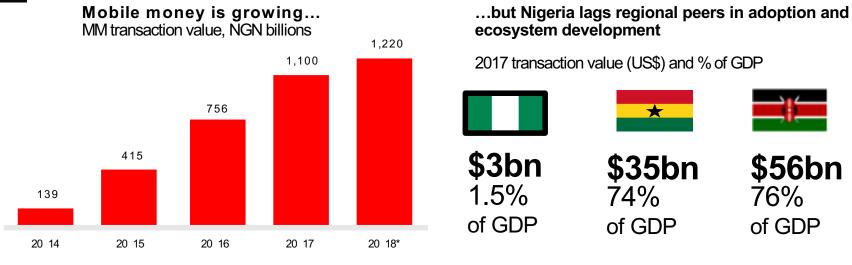
Opportunities for IoT Monetization





Mobile-Money in Nigeria

*Jan-Sep 2018. Source: NIBSS

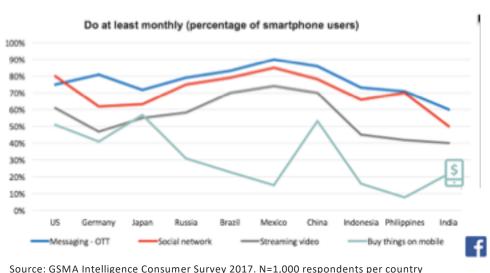


The outlook for mobile money in Nigeria is positive, based on the following key drivers;

- New regulations on Payment Service Banks MTN and Airtel have confirmed plans to acquire licenses
- Rapid rise in e-commerce transactions now worth \$13b and could rise to \$50b within the next decade



Mobile-first play by Social and Messaging E-commerce not yet there.



Social media is redefining content formats and distribution



*Enforced time limit. Instagram currently permits 1 minute, although will expand to 1 hour with IGTV



Mobile Industry in Nigeria Building blocks for sustainable growth

The mobile industry in Nigeria is at an inflexion point:

- Subscriber and revenue growth slowing
- Unfavourable cost-benefit balance for rural expansion
- Rising service cannibalisation by OTT players
- Huge capex requirements for mobile broadband networks

Against this backdrop, an enabling regulatory environment is essential to sustain growth. **This involves**;

- Spectrum reform make spectrum available on terms that can stimulate investment
- Tax reform eliminate telecoms-specific taxes on devices and services which often have a more adverse effect on low income consumers
- Licensing reform: Technology Neutrality, Regulatory Modernisation, Level Playing Field and Regulatory Courage