

# AFRICA'S TRENDING TRANSFORMATION

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# AFRICA'S TRENDING TRANSFORMATION



REALISING AFRICA'S POTENTIAL



AFRICA'S EXPONENTIAL GROWTH AND RELATIONSHIP WITH ASIA-PACIFIC & THE WORLD



ADOPTION AND LEAPFROGGING OF CLOUD COMPUTING



CHALLENGES FACING AFRICA TODAY AND IN THE FUTURE



PRESENCE OF ICT AND EFFECT ON SOCIAL AND ECONOMIC CHANGE

# AFRICA TODAY



Larger than China, Europe, and the USA combined

- **30,2 million** Square Kilometers
- **54** countries in Africa
- **1.215 billion** people approx
- **15%** of the world's population



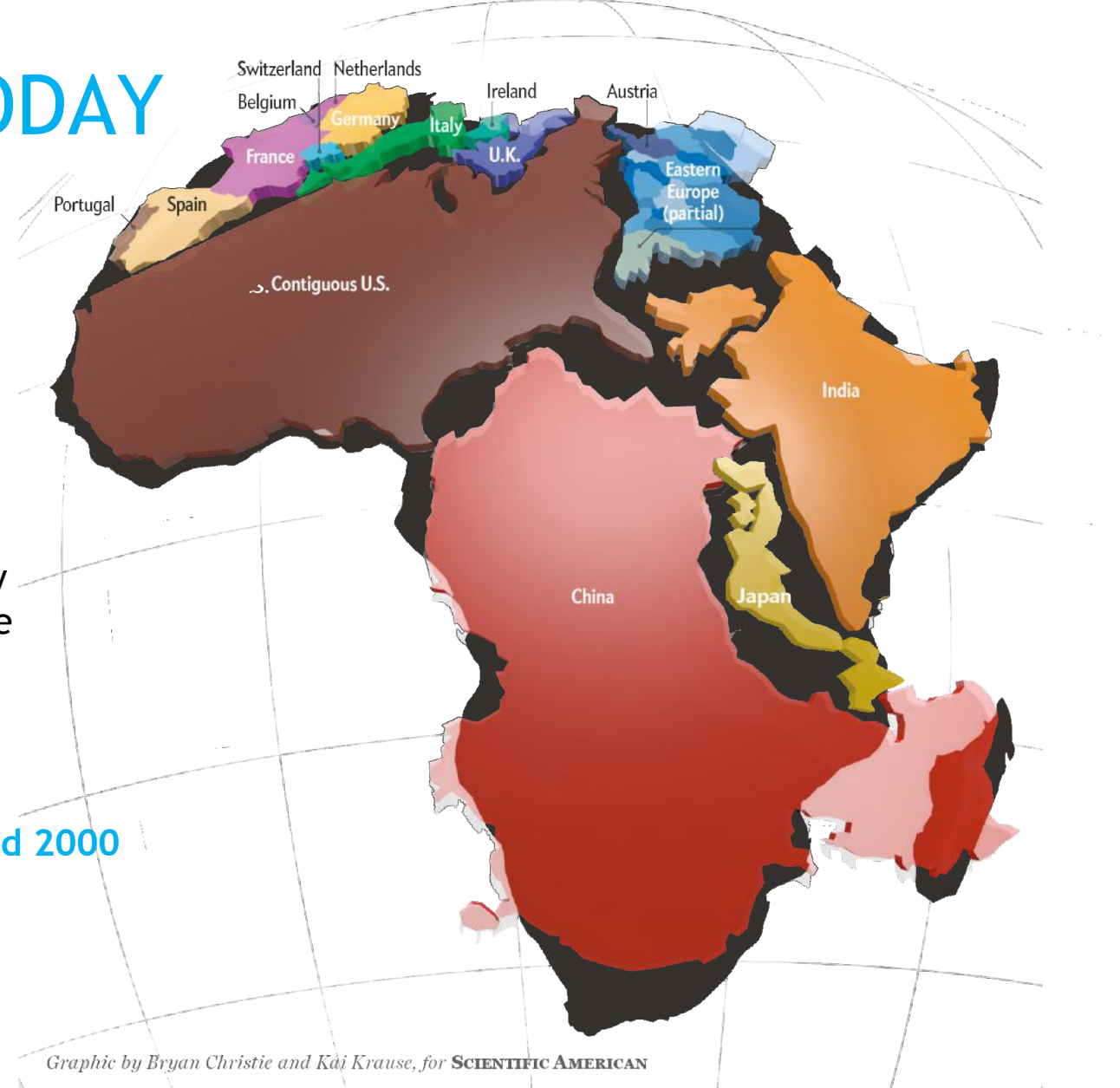
Many parts of Africa suffer from water & food scarcity

- **90%** of the soil in Africa isn't usable for agriculture
- **300 million** Africans deal with water scarcity
- **240 million** suffer from undernourishment



Official number of languages range **between 1500 and 2000**

- **Arabic** is most widely spoken language
- **English** is followed by **French and Swahili**



*Graphic by Bryan Christie and Kai Krause, for SCIENTIFIC AMERICAN*



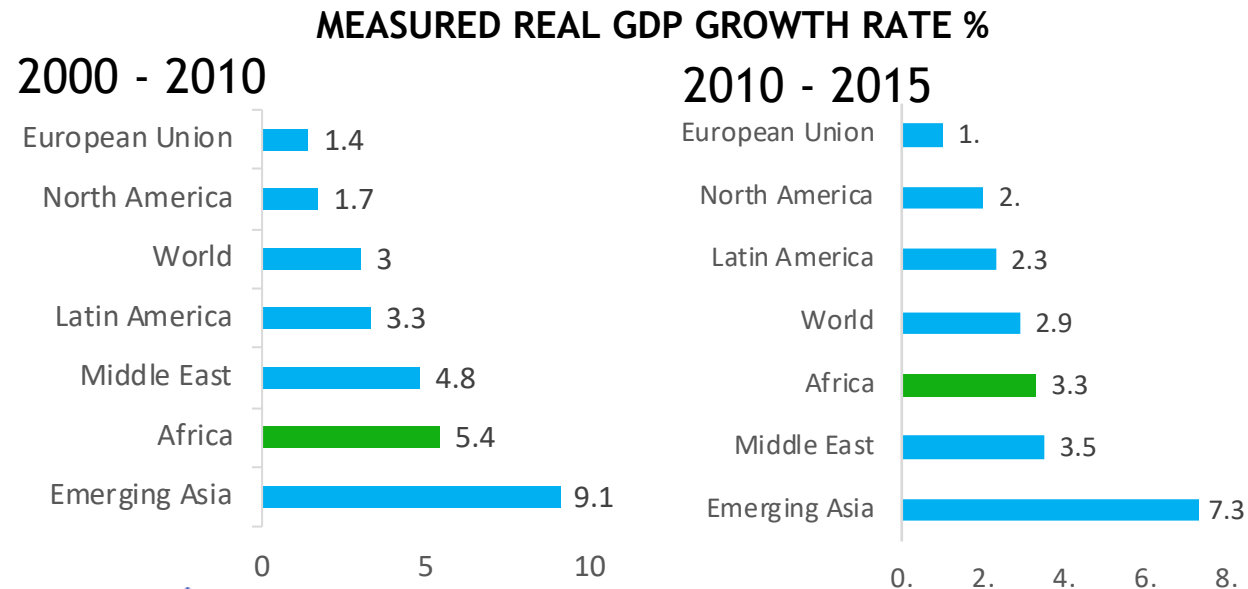
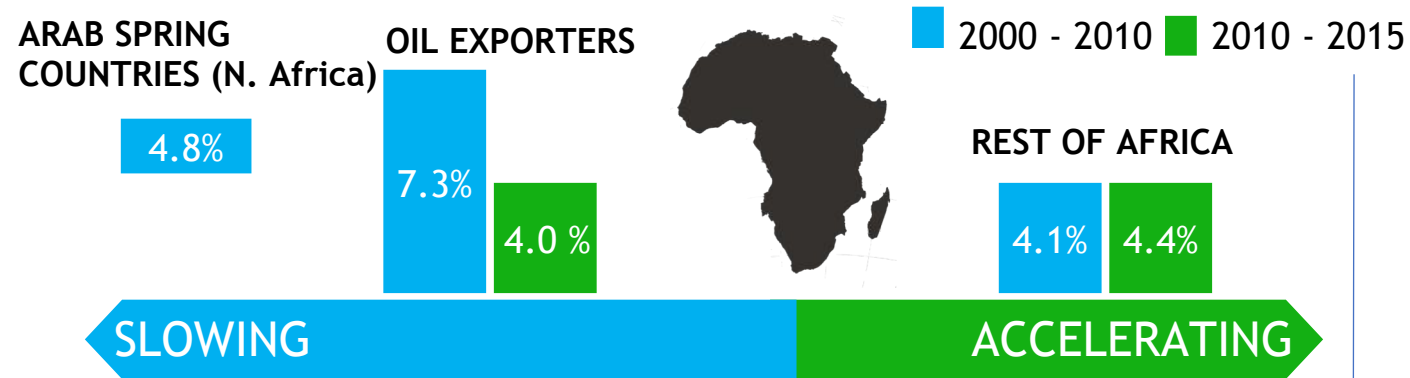
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# REALISING AFRICA'S POTENTIAL



AFRICA NEEDS MORE LARGE COMPANIES TO POWER GROWTH

400+ Companies currently in Africa with revenues over \$1 billion. Companies grow faster and are more profitable than global peers, but there are 0 African companies in the Fortune 500



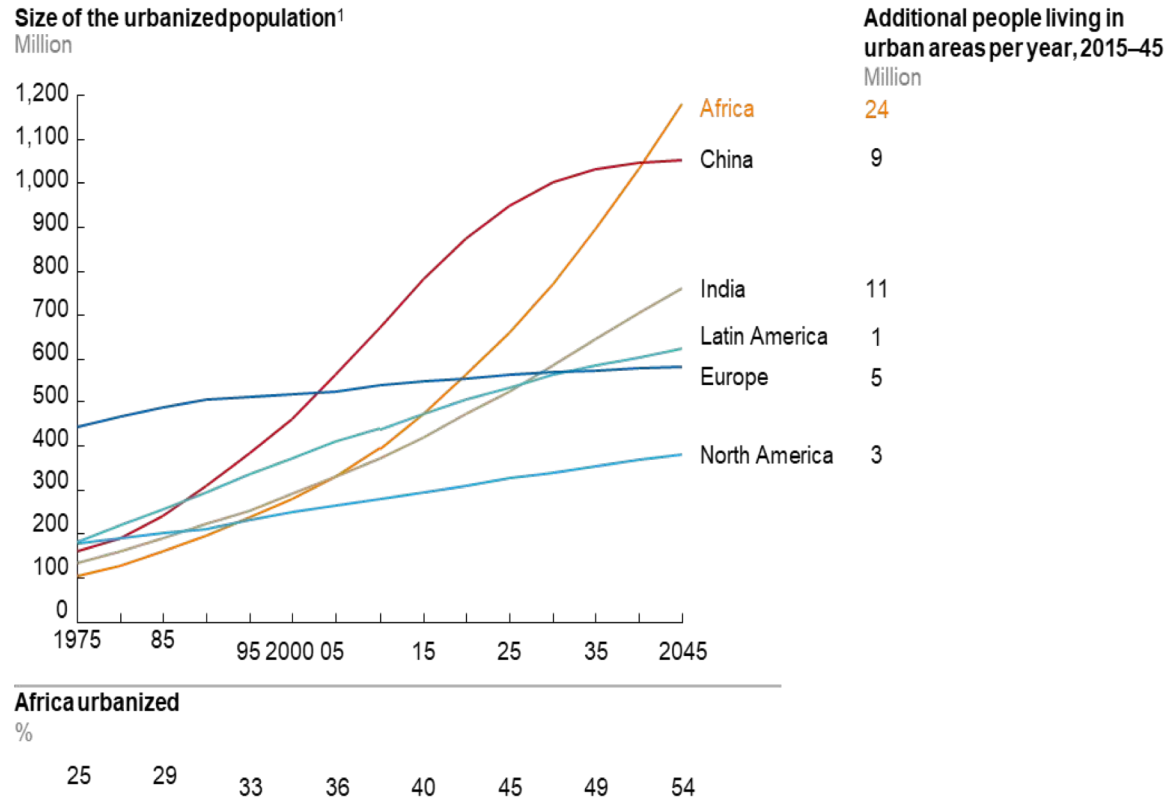
Manufacturing output can DOUBLE from \$500 billion to \$930 billion in 2025

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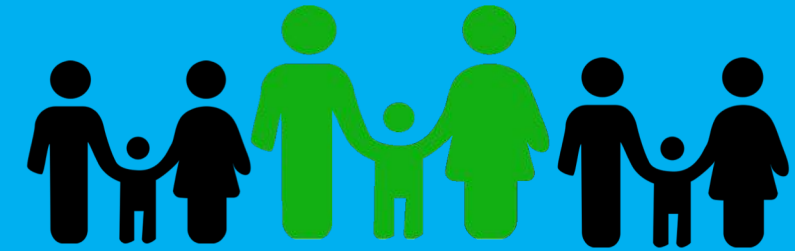
# GROWTH IN AFRICA

Africa is urbanizing faster than any other region: its cities are expected to gain 24 million people each year until 2045



<sup>1</sup> Population living in urban areas. UN forecasts last adjusted in 2014.

BY THE END OF THE CENTURY, 40% OF PEOPLE WILL BE AFRICAN



## FERTILITY RATE

2010-2015

5,10 vs global average 2,51

Year 2100

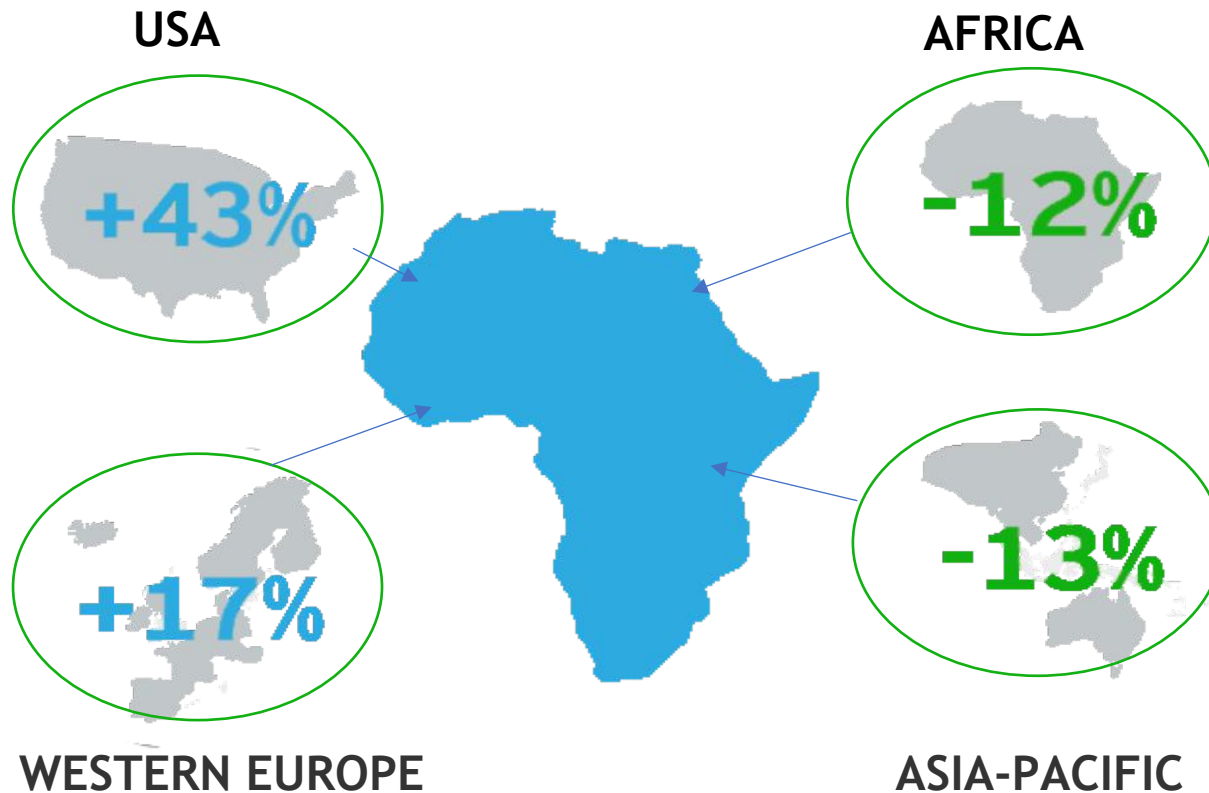
2,18 vs global average 1,99

The international monetary fund projects that Africa will be the world's second-largest economy within the next few years.

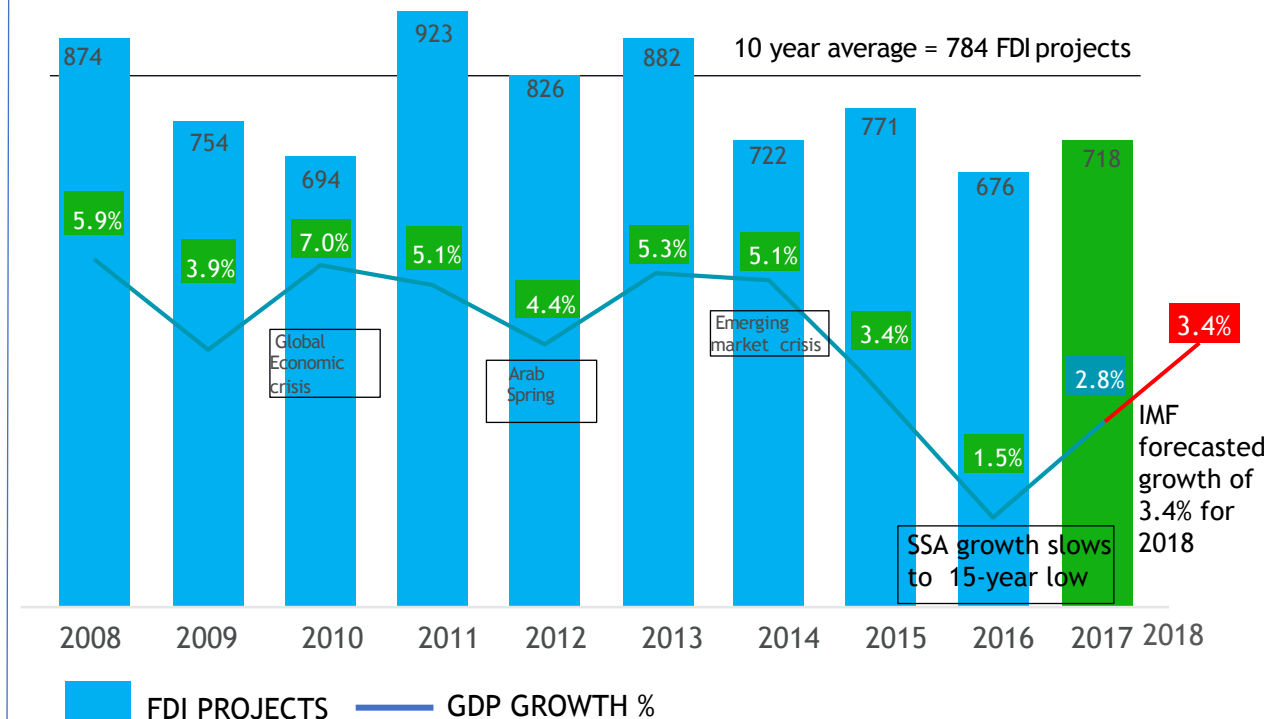
# FOREIGN DIRECT INVESTMENT

The total MEA market is estimated at \$3.7bn and is forecast to grow at 6.7% p.a. to reach \$5.8B in 2025, driven by Africa  
The USA remains the largest investor in Africa

CHANGE IN FDI PROJECTS 2018 VS 2017



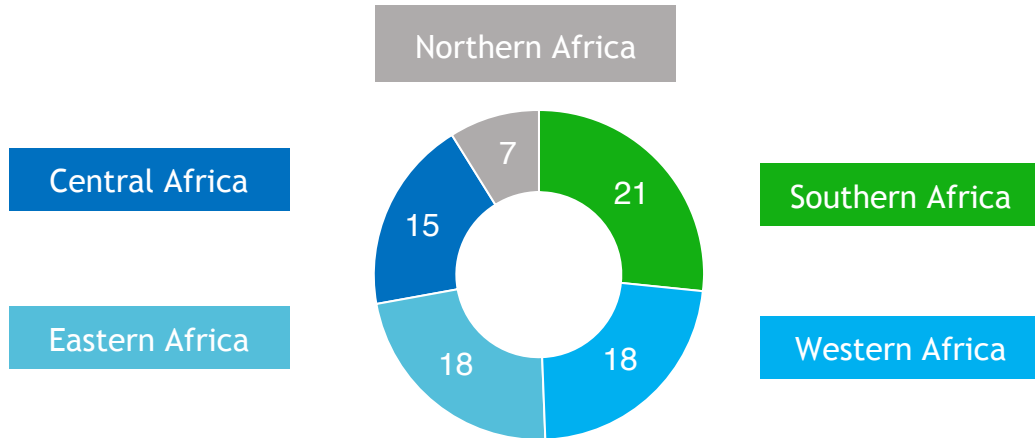
- FDI PROJECT NUMBERS RECOVER, BUT REMAIN 8% BELOW THE 10-YEAR AVERAGE
- FDI PROJECTS IN AFRICA



# ASIA PAC AND AFRICA

China's trade with the continent has soared by 83% from 2009 to 2011 and surpassed \$200B in 2013

2018, FOCAC summit held in Beijing, China announced it set up a new R900 billion (\$60 billion) for Africa's development



- ❑ Chinese leadership: 43 different African countries visits over 10 years
- ❑ Chinese private companies to directly invest plus \$10 billion next 3 years
- ❑ A growing momentum for central African banks to adopt the Chinese currency to facilitate trade
- ❑ In Nigeria for example you no longer need to transfer Naira to USD

## CHINA'S EXPECTATIONS

- ❑ Secured sources of natural resources required for its own rapidly growing economy
- ❑ Large new markets for Chinese manufactured goods and services
- ❑ Large-scale projects for Chinese businesses.
- ❑ New jobs for Chinese citizens; nearly 750,000 Chinese currently work in Africa.
- ❑ Cheap local labour to supplement Chinese labour on infrastructural projects



# GLOBAL ICT TRENDS IN AFRICA



Currently there are  
**122 Million**  
active users of mobile  
financial services in  
Africa

Smartphone connections  
is forecast to double  
from **315 million** in  
2015 to **636 million**  
in 2022

Africa's most populous  
country will account for  
**50% of the 1.6  
billion** mobile internet  
users projected to get  
online by 2025

**Satellite** remains key in  
unlocking connectivity on the  
continent where over **70%** of the  
population remains unconnected

**30 Million**  
Cellular-enabled M2M  
connections by 2020  
(25%/annual growth)

**50%** Penetration  
of smartphones by  
2020 (from only  
18% in 2015)



# THE 4<sup>TH</sup> INDUSTRIAL REVOLUTION

Looking to Africa, tech companies have grand ambitions of leapfrogging



Rwanda - drone delivery service for medicine and blood



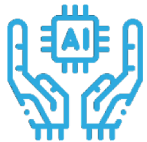
Mobile Banking



Chatbots free up customer service reps



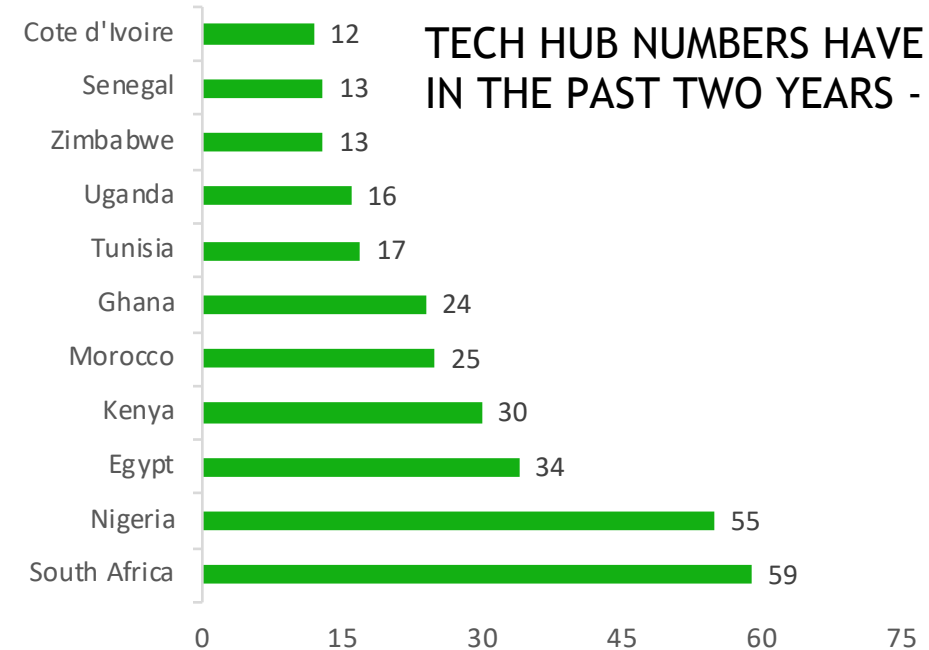
Kenya - blockchain technology assists government with fraudulent land records



Nigeria's AI, alleviated 1:4,000 doctor-to-patient ratio



Number of Hubs (2018)



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# CLOUD COMPUTING IN AFRICA

When it comes to information technology in Africa, analysts will tell you, this continent has an amazing ability to leapfrog

- ❑ Many in sub-Saharan Africa have skipped landlines and desktop computers, and moved directly to onto mobile devices
- ❑ The proliferation of low-cost bandwidth and cloud storage solutions has led to an increased reliance on adoption of these solutions by African countries
- ❑ Data security & confidentiality and data ownership do not differ significantly between Africa, America and Europe



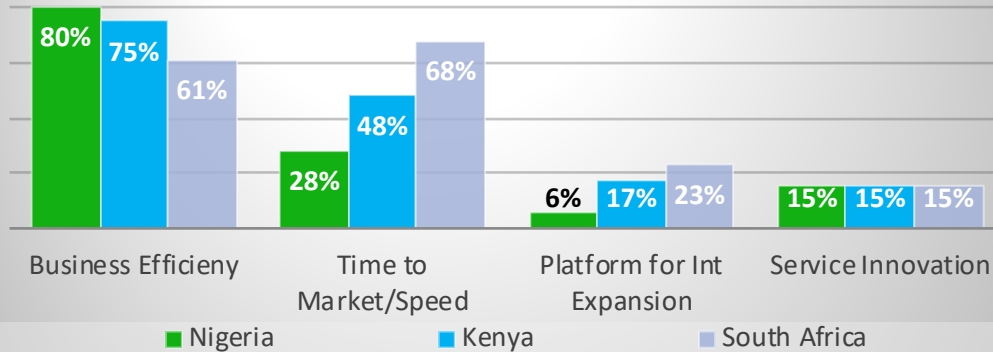
- ❑ Microsoft and Amazon to tap the market to set up data centers, and Web Services in Cape Town and Johannesburg, during 2019 & 2020
- ❑ Chinese telecommunications giant Huawei will begin offering cloud services in South Africa in 2019 with plans to expand further into the continent
- ❑ Alibaba Cloud already has data centers in China, the US, Europe, the Middle East, Japan, Southeast Asia, and Australia, though none in Africa



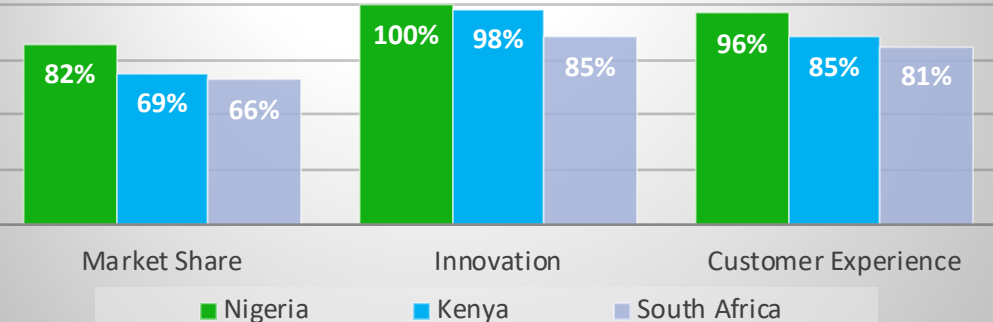
# CLOUD COMPUTING IN AFRICA

The Cloud is here, but its full benefits have not yet arrived

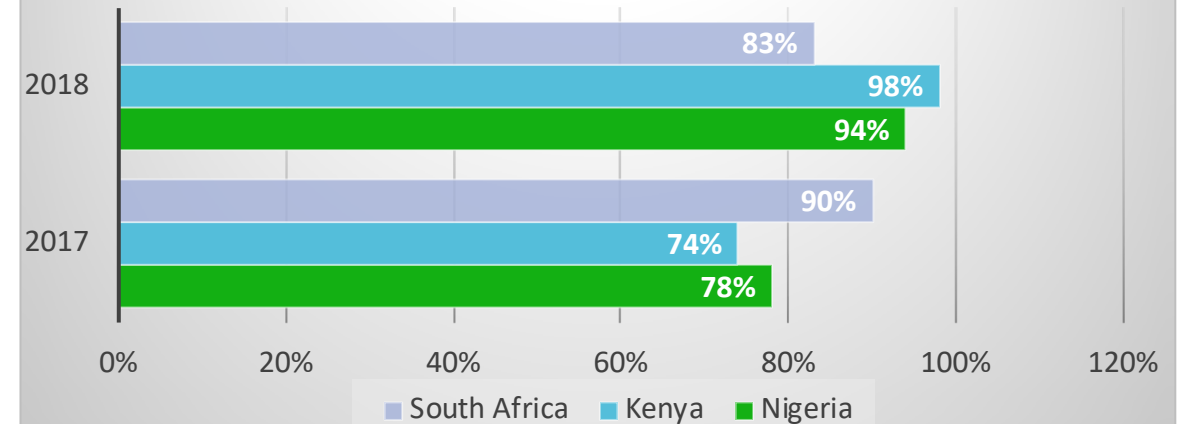
## THE PERCEPTION OF CLOUD



## BUSINESS IMPACT



## CLOUD BUDGET SPEND 2017 VS 2018



- ❑ Cloud computing has taken off dramatically across Africa's major market, but benefits are experienced very differently in each region
  - ❑ As are its budget allocations
  - ❑ Leveraging of in-country resources
  - ❑ Service level agreements vary depending on jurisdiction

# CHALLENGES FACING AFRICA TODAY AND IN THE FUTURE

The lack of basic Telco and grid infrastructure across its 54 countries is probably the continent's biggest weakness

❑ Africa does not have legacy infrastructure on which to grow digital transformation

- ❑ The region's power sector is underdeveloped
- ❑ SSA in particular is starved for electricity
- ❑ Legacy infrastructure is old and expensive to maintain

❑ Africa's weakness can be its strength:

- ❑ By centralizing software applications in hyper scale Data Centers and ensuring Software-as-a-Service
- ❑ Data Centers could be located near deserts, powered by solar or wind



SOLAR PANEL FIELDS IN SENEGAL



Corruption



Unemployment



Poor Governance



Insecurity



Drought



Population growth



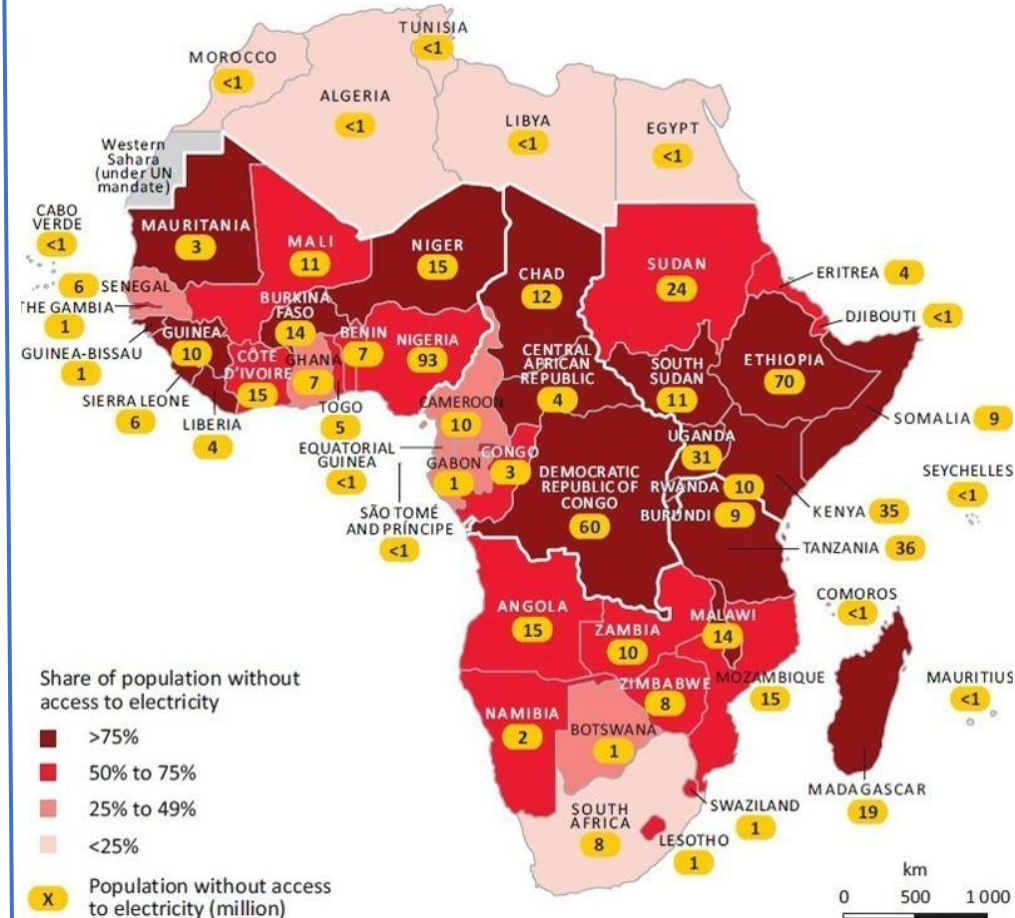
Famine



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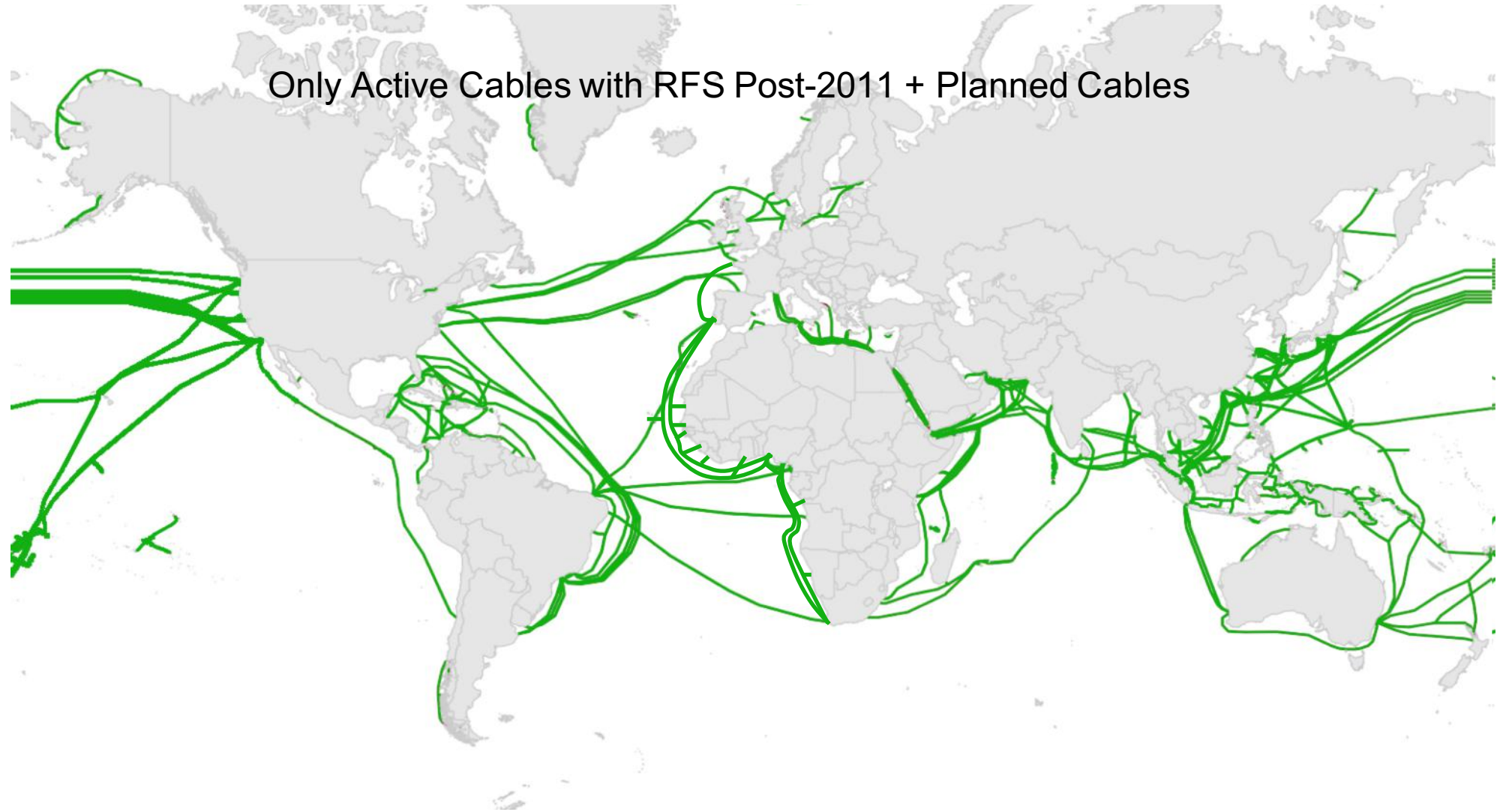


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# UNDERSEA CABLES **TODAY** AND IN THE **FUTURE**



# THE FUTURE OF ICT IN AFRICA

African countries have expressed the desire to bring technology to their citizens as quickly as possible

- ❑ \$134B flows in each year, predominantly in the form of loans, foreign investment and aid,
- ❑ \$192B is taken out, mainly in profits made by foreign companies, tax evasion and the costs of adapting to climate change

Africa's economic potential will only be fully reached if its economies digitize along with:

- ❑ Reinventing skills, education & knowledge
- ❑ Cybersecurity is critical
- ❑ Improve on existing policy frameworks
- ❑ Locally adapted content is a key to growth

# THANK YOU!

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