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
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
REALISING AFRICA’S POTENTIAL

ARAB SPRING COUNTRIES (N. Africa)

- 4.8%

OIL EXPORTERS

- 7.3%

- 4.0%

SLOWING

ACCELERATING

2000 - 2010

2010 - 2015

REST OF AFRICA

- 4.1%

- 4.4%

MEASURED REAL GDP GROWTH RATE %

2000 - 2010

- European Union: 1.4
- North America: 1.7
- World: 3
- Latin America: 3.3
- Middle East: 4.8
- Africa: 5.4

Emerging Asia: 9.1

2010 - 2015

- European Union: 1
- North America: 2
- World: 2.3
- Latin America: 2.9
- Africa: 3.3
- Middle East: 3.5

Emerging Asia: 7.3

$2.1 Trillion
Household consumption

$3.5 Trillion
Of B2B Spending

$5.6 Trillion

IN AFRICAN BUSINESS OPPORTUNITIES BY 2025

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

Source: IMF, McKinsey Global Institute analysis
The international monetary fund projects that Africa will be the world’s second-largest economy within the next few years.

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.

Source: United Nations population division, Mckinsey Global institute analysis

Source: UNICEF
The USA remains the largest investor in Africa.

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.

Foreign Direct Investment

Change in FDI Projects 2018 vs 2017

- USA: +43%
- Africa: -12%
- Western Europe: +17%
- Asia-Pacific: -13%

FDI Project Numbers Recover, but remain 8% below the 10-Year Average

FDI Projects in Africa

2008: 874
2009: 754
2010: 694
2011: 923
2012: 826
2013: 882
2014: 722
2015: 771
2016: 676
2017: 718
2018: 718

10 year average = 784 FDI projects

Source: FDI Markets IMF, EY
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

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.

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Source: FDI Markets IMF, EY analysis.
Currently there are 122 Million active users of mobile financial services in Africa.

Satellite remains key in unlocking connectivity on the content where over 70% of the population remains unconnected.

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.

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

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

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

### TECH HUB NUMBERS HAVE GROWN 40% IN THE PAST TWO YEARS - 2016-2018

- Cote d'Ivoire: 12
- Senegal: 13
- Zimbabwe: 13
- Uganda: 16
- Tunisia: 17
- Ghana: 24
- Morocco: 25
- Kenya: 30
- Egypt: 34
- Nigeria: 55
- South Africa: 59

Source: GSM Association
Many in sub-Saharan Africa have skipped landlines and desktop computers, and moved directly to 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.

Source 1: Boydon, Source 2: www.ssir.org (Technology)
CLOUD COMPUTING IN AFRICA

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

THE PERCEPTION OF CLOUD

- Business Efficiency: 80% (Nigeria), 75% (Kenya), 61% (South Africa)
- Time to Market/Speed: 28% (Nigeria), 48% (Kenya), 68% (South Africa)
- Platform for Int Expansion: 6% (Nigeria), 17% (Kenya), 23% (South Africa)
- Service Innovation: 15% (Nigeria), 15% (Kenya), 15% (South Africa)

BUSINESS IMPACT

- Market Share: 82% (Nigeria), 69% (Kenya), 66% (South Africa)
- Innovation: 100% (Nigeria), 98% (Kenya), 85% (South Africa)
- Customer Experience: 96% (Nigeria), 85% (Kenya), 81% (South Africa)

CLOUD BUDGET SPEND 2017 VS 2018

- 2017: 85% (Nigeria), 74% (Kenya), 78% (South Africa)
- 2018: 83% (Nigeria), 90% (Kenya), 98% (South Africa)

- 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

Data: Cloud Africa 2018
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  Population growth
Poor Governance  Insecurity  Drought

Source: The African Exponent
ONLY ACTIVE CABLES WITH RFS POST-2011 + PLANNED CABLES

Source: Telegeography Research | www.telegeography.com

PTC'19 FROM PIPES TO PLATFORMS
20–23 January 2019 | Honolulu, Hawaii
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

Source: ICT 2018
THANK YOU!

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