

STRUCTURAL
TRANSFORMATION AND
DIGITALIZATION OF AFRICAN
ECONOMIES

PRESENTED TO: "AFRICA IN THE
PERSPECTIVE OF G20"
CONFERENCE

MADRID, 27TH APRIL 2017

Grace Obado

Africa 2.0 International
Foundation

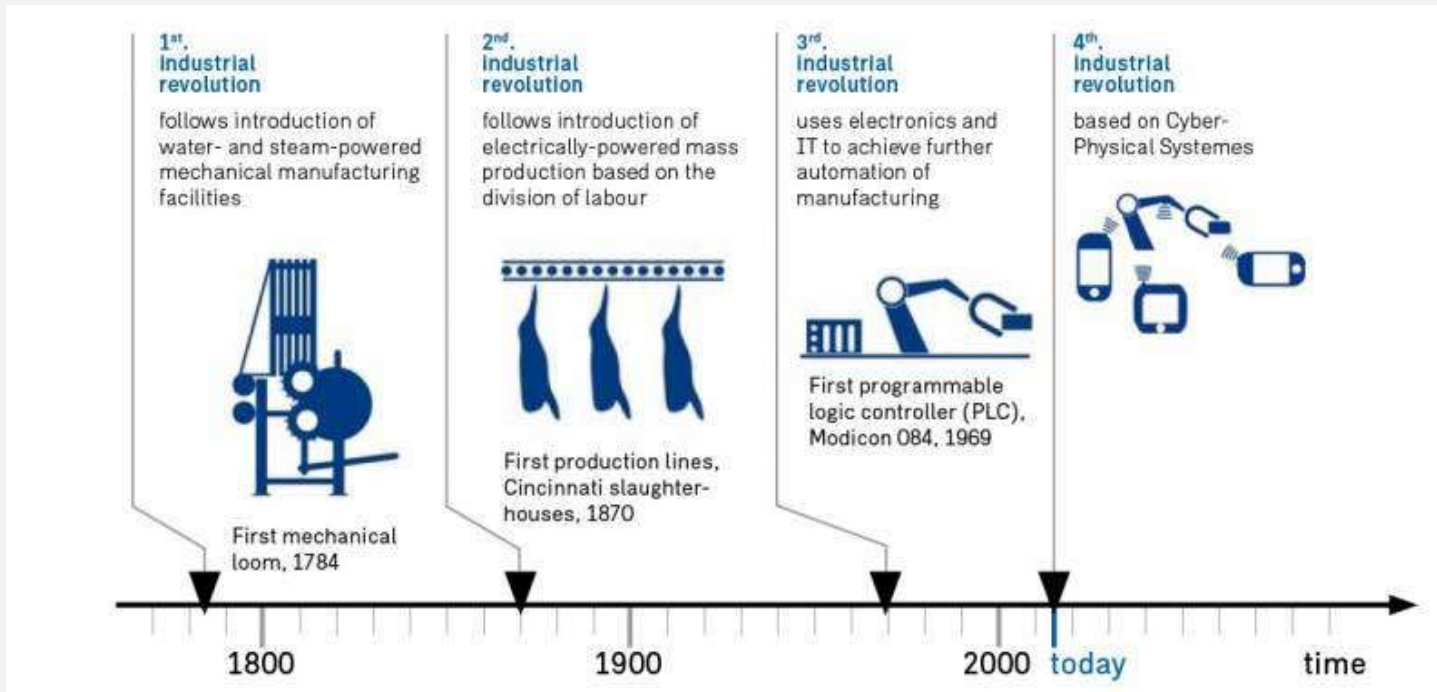
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AFRICA 2.0

WE ARE THE ONES WE HAVE BEEN WAITING FOR

AFRICA IN THE CONTEXT OF INDUSTRIAL REVOLUTIONS



- Unlike the previous industrial revolutions, Africa is now well positioned to take advantage of the numerous opportunities that the 4th industrial revolution presents, to drive inclusive prosperity.
- 1st Industrial revolution: Africa was dealing with Slavery
- 2nd Industrial revolution: Coincided with Colonization
- 3rd Industrial revolution: Africa was focused on decolonization and nation building

DIGITAL ECONOMY

- According to Prof. Klaus Schwab, the digital economy is mainly characterized “by a range of new technologies that are fusing the physical, digital and biological worlds impacting all disciplines and industries”
- Digitalization refers to the use of digital technologies to change a business model and provide new revenue and value-producing opportunities
- Today, the digital economy is a reality in both developed and developing world, including Africa
- 2000-2010, the economy of Africa grew rapidly, in 2010, 7 out of 10 of the fastest growing economies were in Africa. Part of the growth story was / is owed to the accelerating technological and digital innovations.

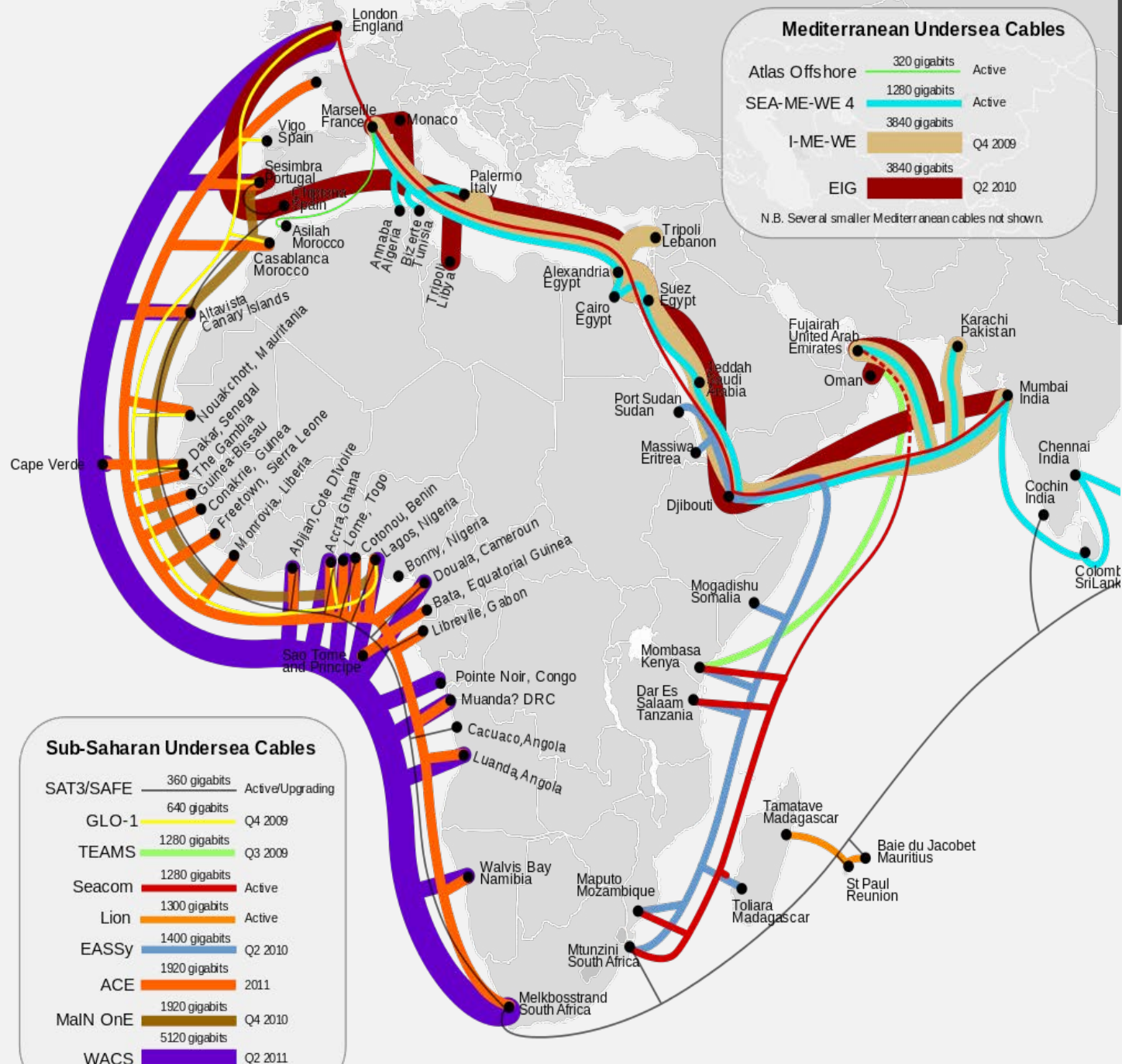
THE INTERNET IN AFRICA

- Today:
- Population : 1.2B
- Internet Penetration : 27.7 %*
- Internet penetration 2012: 16%
- Internet users 346 M*
- Internet users 2012: 167 M
- Internet contribution to GDP: **1.1% in 2012**

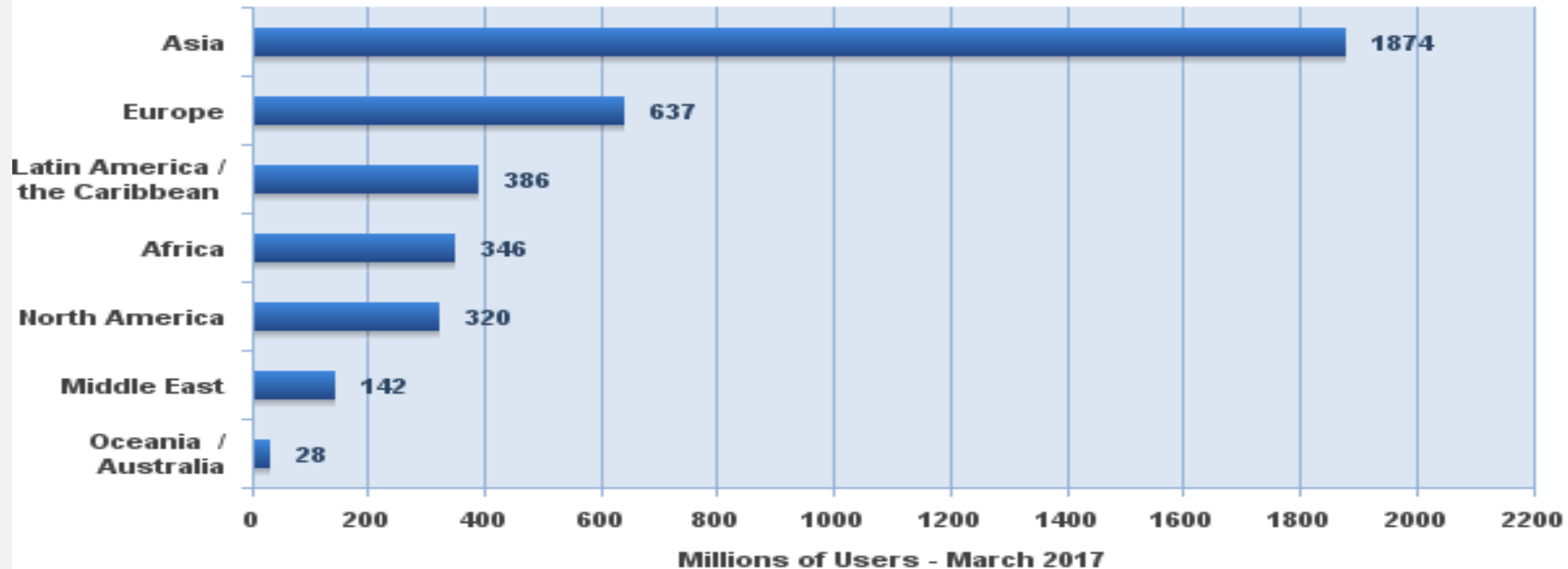
- Potential by 2025:
- 50% penetration
- 600M users
- Internet contribution to GDP: 4%- 5%
- **Approx. \$300 B internet contribution to GDP**
- *Source: McKinsey Global Institute*
- * *Source: Internet world stats*

The Internet could add \$ 300B to Africa's GDP if it continues to grow at the same pace as mobile telephony did, by 2025. McKinsey Global Institute Report "Lions go digital"

INTERNET PENETRATION IS SPURRING THE DIGITAL ECONOMY IN AFRICA



Internet Users in the World by Geographic Regions - March 25, 2017



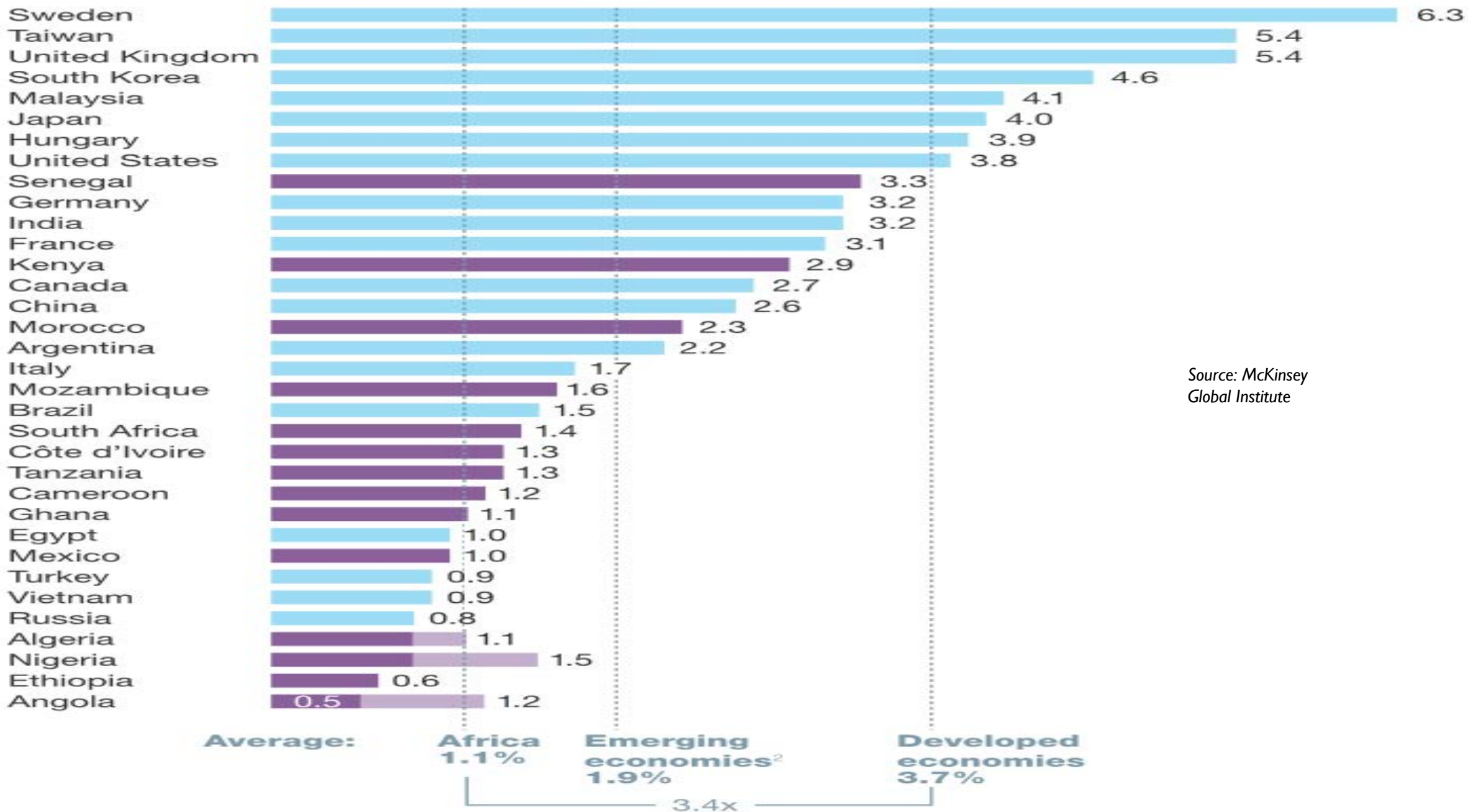
Source: Internet World Stats - www.internetworldstats.com/stats.htm

Basis: 3,731,973,423 Internet users estimated for March 31, 2017

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iGDP (Internet's contribution to GDP) by country, 2012, % of GDP¹

■ iGDP adjusted for oil revenues



Source: McKinsey Global Institute

STRUCTURAL TRANSFORMATION KEY AREAS:

- EDUCATION (INNOVATIVE AND CREATIVE, STEMS)
- FINANCE
- E-COMMERCE
- HEALTH
- INFRASTRUCTURE
- AGRICULTURE

Critical areas:

Education: Promote STEMS and critical thinking and expose school children at an early age to digital education.

Energy: Close the energy deficit through on grid, off grid and mini grid technologies

Legal Frameworks: Enable innovation and use of new technologies (Avoid lagging behind the curve)



STRUCTURAL TRANSFORMATION IN EDUCATION: RWANDA

- On average, in Africa, school enrolment rates have been rising exponentially in the last two decades, but still, most of the systems do not promote creativity and critical thinking; skills that are key to working in the ICT sector.
- However, countries like Rwanda or Kenya have a more action oriented approach to transforming education:
- Today, Only 9 per cent or 531 schools in Rwanda currently have access to internet
- Plans are underway to reach three million students and 61,000 teachers across the country's 3,500 schools by 2020





DRIVING INCLUSIVE GROWTH

- Jobs for all
- Girls have less access to ICT
- Close ICT gender gap
- Encourage girls to study STEMS

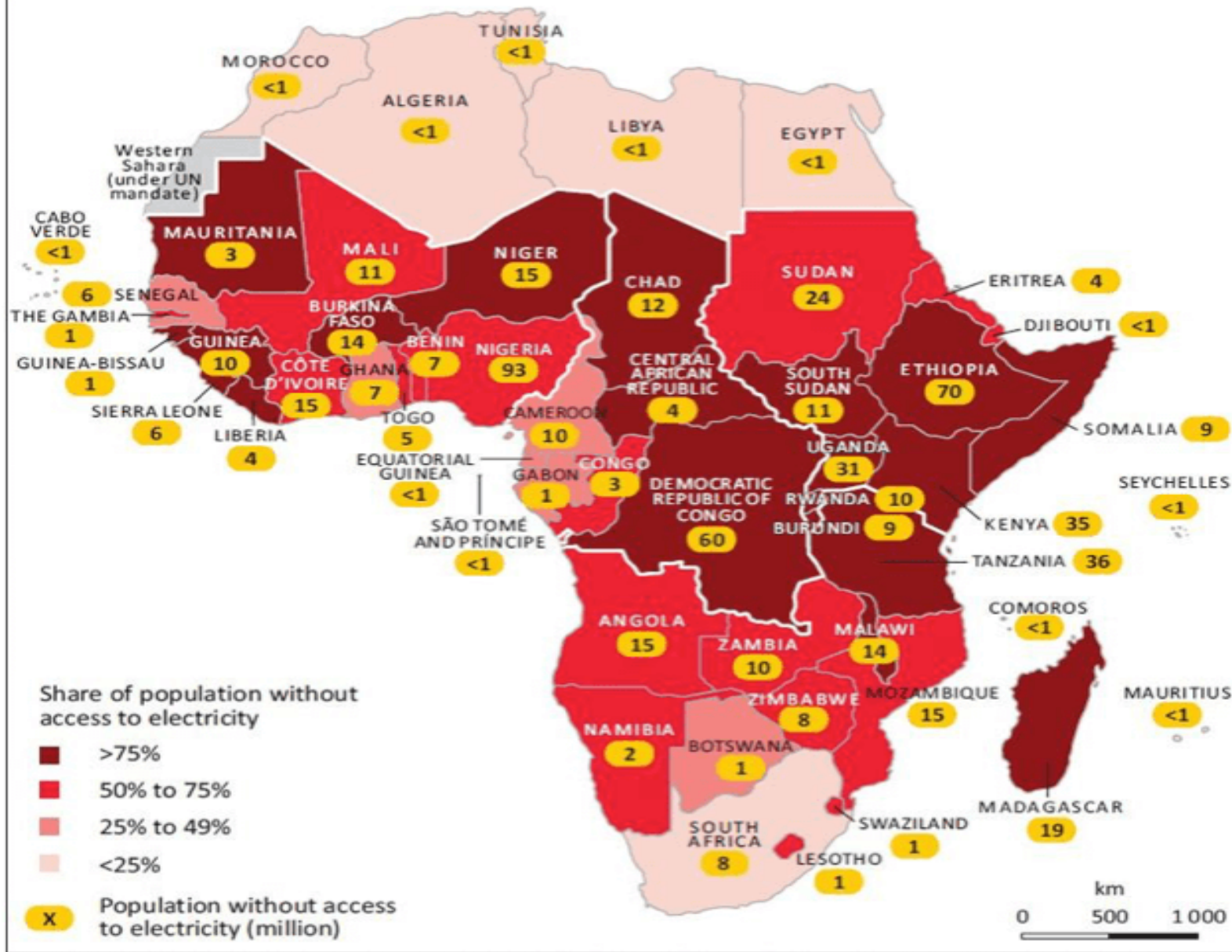
THE INTERNET GENDER GAP

Girls and women are being left behind in staggering numbers compared to men.¹



1. Approximate figures taken from "Women and the Web: Bridging the Internet Gap and Creating New Global Opportunities in Low- and Middle-Income Countries." Intel Corporation, Dalberg Global Development Advisors, GlobeScan, 2013.

ENERGY DEFICIT IN AFRICA: SHARE OF POPULATION WITHOUT ELECTRICITY



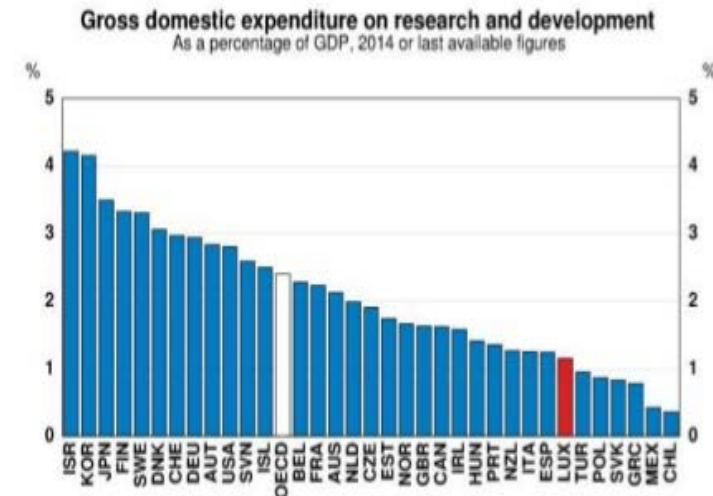
- Ethiopia: 70M
- Kenya: 35M
- Nigeria: 93M
- Approx. 640M HAVE NO ACCESS TO ELECTRICITY
- Approx. 73% HAVE NO ACCESS TO THE INTERNET
- Energy deficit is precluding Africa from participating fully in the digital economy

CAN THE DIGITAL ECONOMY REALLY LEAD TO INCLUSIVE GROWTH IN AFRICA?

- Need to invest more in R&D : Today, Africa spends only 0,1% of its GDP on R&D, with more advanced countries in technology like Kenya spending only 1% in comparison to 3%-4% for the most developed economies.
- Africa to produce technology for local consumption, where necessary, in collaboration with the more developed economies.
- According to recent studies by the OECD, Africa needs to create about 30M jobs a year between now and 2025, to keep up with the number of youth streaming into the job market.
- If the internet continues to grow at the same pace as mobile telephony in Africa, 20M- 30M jobs could be created per year in the digital economy sector alone, based on "Lions go digital report" by the McKinsey Global Institute.
- For the digital economy to translate into inclusive economic growth, challenges such energy deficit, internet gender gap, education systems that don't promote STEMS and creativity should be addressed with urgency.



R&D: spending on research and development is below the OECD average (as % of GDP)



Source: OECD Science, Technology and R&D Statistics database.

Luxembourg
• 1.2% of GDP

OECD average
• 2.4% of GDP

AFRICA 2.0 CONTRIBUTIONS TO STRUCTURAL TRANSFORMATION IN AFRICA

- **Education:**
- 43 Ministers of Education endorsed Africa 2.0 manifesto, that embraces creative and innovative approach to education
- Selected to establish and lead President Obama's Young African Leaders Initiative (YALI) regional leadership center in Ghana.
- Mentorship programs
- **Agriculture :**
- Leveraging technology to connect African farmers and encouraging them to use innovative method to increase yield and protect the environment. (Climate smart agriculture)



PRESENTS

THE 2.0 Connect

S E R I E S

COTE D'IVOIRE NIGERIA KENYA SENEGAL

AGRICULTURE

- Connecting farmers across the continent to promote:
- Climate smart agriculture
- Innovative farming methods
- Attract African youth to farming

WAY FORWARD

- Africa to position itself as a global player
- Foster regional integration
- Partnerships with developed countries to transfer skills and for capacity building
- Widen the base for fiscal revenue collection
- Close digital gender divide

CONCLUSION

With responsive, accountable and thought leadership, Africa can hugely benefit from its bulging youth population, natural resources and digital revolution to create jobs for all and achieve inclusive prosperity.

THANK YOU!



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