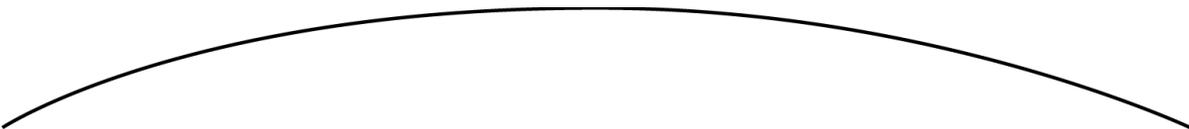


L'Afrique Digitale, Paris - Ibrahima Guimba-Saidou

Connecting the Unconnected



Internet Users in Africa Today... and in 2025

16%

Internet Penetration in Africa today



167m
Internet Users



67m
Smart phones



over 51m
Facebook Users



More than 400m
Beyond the reach of terrestrial fiber nodes



More than 50%
Of urban residents are online

~50%

Internet Penetration in Africa



600m
Internet Users



360m
Smart phones



over \$75 billion
In annual e-commerce sales



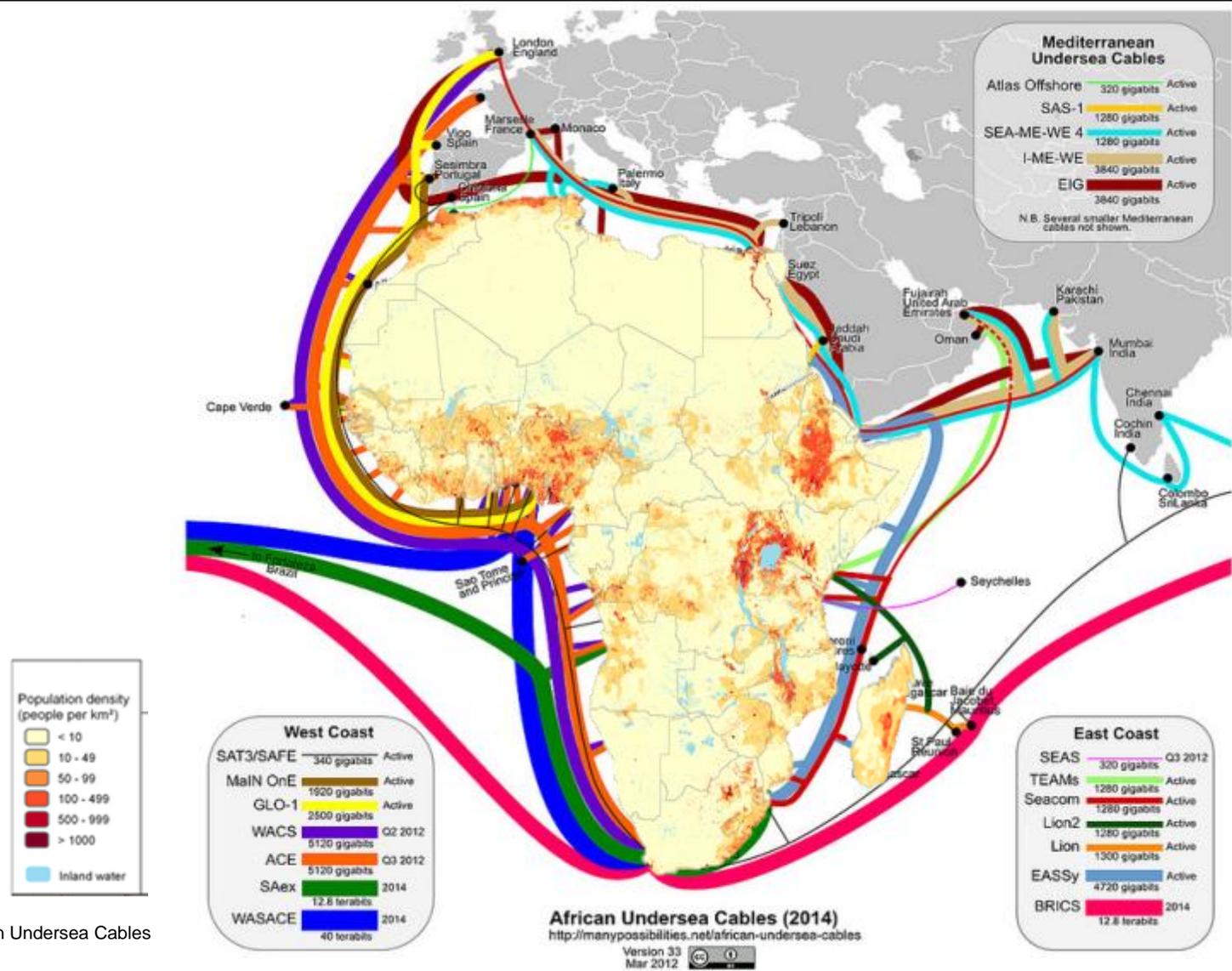
More than \$300 billion
Productivity gains in key sectors



\$300 billion
Internet contribution to GDP

....Still does not bridge the digital divide

Reach



Source: African Undersea Cables



Transforming lives in Africa



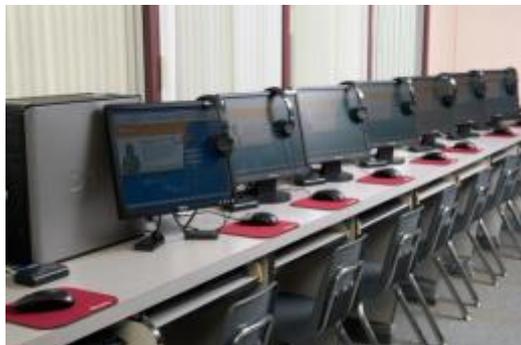
Broadcasting



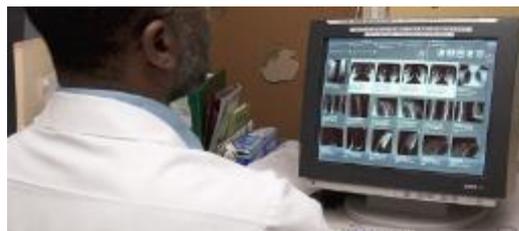
Broadband



“WiFi hot spot” for rural communication



e-Schools



e-Health



e-Government

e-Education

- ▲ Developing a satellite ICT (Information and Communication Technology) solution to support three main activities contributing to overcome isolation and lack of terrestrial infrastructures among different African communities:
 - **Rural Radio**
 - Assisted radio services to support agricultural development in DRC
 - **Space4Edu**
 - eLearning service to support education in rural schools in South Africa

- ▲ SES provides:
 - **Broadband infrastructure to access e-Government content**
 - **The end-user equipment (CPEs)**
 - **The satellite capacity for:**
 - Broadband connectivity to a network of 66 SES Broadband terminals.
 - Multicast content delivery to the terminals



SES provides Internet connectivity to communities in isolated areas granting access to ICT and e-Government services

e-Health

▲ Sub-Saharan initiative for Telemedicine (SAHEL)

- Demonstration project in Kenya and Senegal to promote satellite-enhanced eHealth for Africa.
- Cornerstone for the development of a future Pan-African telemedicine network.
- Supported by ESA and funded by the European Commission

▲ Main applications and objective:

- **Medical e-Learning**: providing continuous training for healthcare professionals in rural settings
- **Clinical e-Services**: linking dispensaries and isolated medical centers to clinical institutes of excellence that can provide assistance for diagnostics and the treatment of patients
- **Computerized health management system**: to manage patients' files and record, collect medical data and quick identify and react against pandemic



SES Services provides Internet connectivity to the pilot sites in Kenya and Senegal, in co-operation with local NGOs, ISP and the e-Health content providers

SATMED e-Health platform

SATMED improves e-health access, simplifies e-health use

- ✓ Enhanced interoperability between e-health components by integrating tools into one single access platform
- ✓ Satellite connectivity where mobile and terrestrial internet is lacking
- ✓ Easy intuitive use of different tools



The initial roll out of this platform in Africa took place in Sierra Leone in support of the fight against Ebola.

e-Finance

Microfinance institutions are a fast growing market in developing countries but remote sites are not well served with adequate telecommunications means:

- ▲ Challenge to offer same level of QoS in remote sites as in main cities
- ▲ Concern with IT security and reliability of their communication network
- ▲ Remote sites are often too small to justify the investment in a classic corporate VSAT and terrestrial mobile services are not adapted for business-critical transactions
- ▲ A major constraint is the availability versus price

SatFinAfrica is a joint initiative between SES, ESA and local ISP to develop a pilot project with African partners with the aim to offer a corporate service, tailored to the needs of financial institutions

The project addresses the three main following applications:
 Money Transfer, ATMs and VPN



Satellite Communication for Universal Broadband Access

10%
more broadband = **1.38%**
increase in GDP for
developing nations



Satellite also has the advantage of reach, providing an efficient way of connecting the majority of the 700 million unconnected or poorly connected people

\$300 billion
Internet contribution to GDP



Thank you!

