

SPURRING DIGITAL REVOLUTION FOR DECENT JOBS IN SUB-SAHARAN AFRICA: A COMPARATIVE ANALYSIS OF COTE D'IVOIRE AND KENYA

BY



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**PRESENTATION AT WIDER DEVELOPMENT
CONFERENCE, IN PARTNERSHIP WITH UNESCAP, 11-
13 SEPTEMBER, 2019. BANGKOK, THAILAND.**

PRESENTATION OUTLINE

- The Emergence of Digital Revolution around the World
- Global Digital Revolution and Implications for Decent Jobs
- Africa's Economic Transformation and the Digital Revolution
- Digital Revolution and Prospects for Decent Jobs in sub-Saharan Africa
- Digital Revolution and Decent Jobs: A Comparative Analysis of Cote D'Ivoire and Kenya
- Concluding remarks & Recommendations

The Emergence of Digital Revolution around the World

- The global economy has embraced a paradigm shift in innovation practices, driven in large part by digital technologies, which are shaping enterprise and national competition strategies, with various emergent techniques and business models (Carmichael, 2016).
- According to the International Monetary Fund (2018), only three previous technologies are associated with this trend: the steam engine, the electrical generator, and the printing press. The previous transformations, like the digital economy, are accompanied by enormous long term benefits.
- Internet transactions in the United Kingdom accounted for about one-fifth of retail sales, excluding gasoline; up from a paltry one-twentieth in 2008, according to the IMF report.
- The emergent universal digital inclusion under way in parts of the developing world has empowered poor people to participate in formal networks, enabling them to communicate, transact, and access basic financial services; as well as to obtain information; and claim rights and recognition (Brookings Institution, 2016).
- Indications are, however, that the digital divide within countries can be as high as that between countries. The World Bank (2016) reveals that, worldwide, nearly 21% of households in the bottom 40% of their countries' income distribution lack access to a mobile phone, and 71% also lack access to the internet.

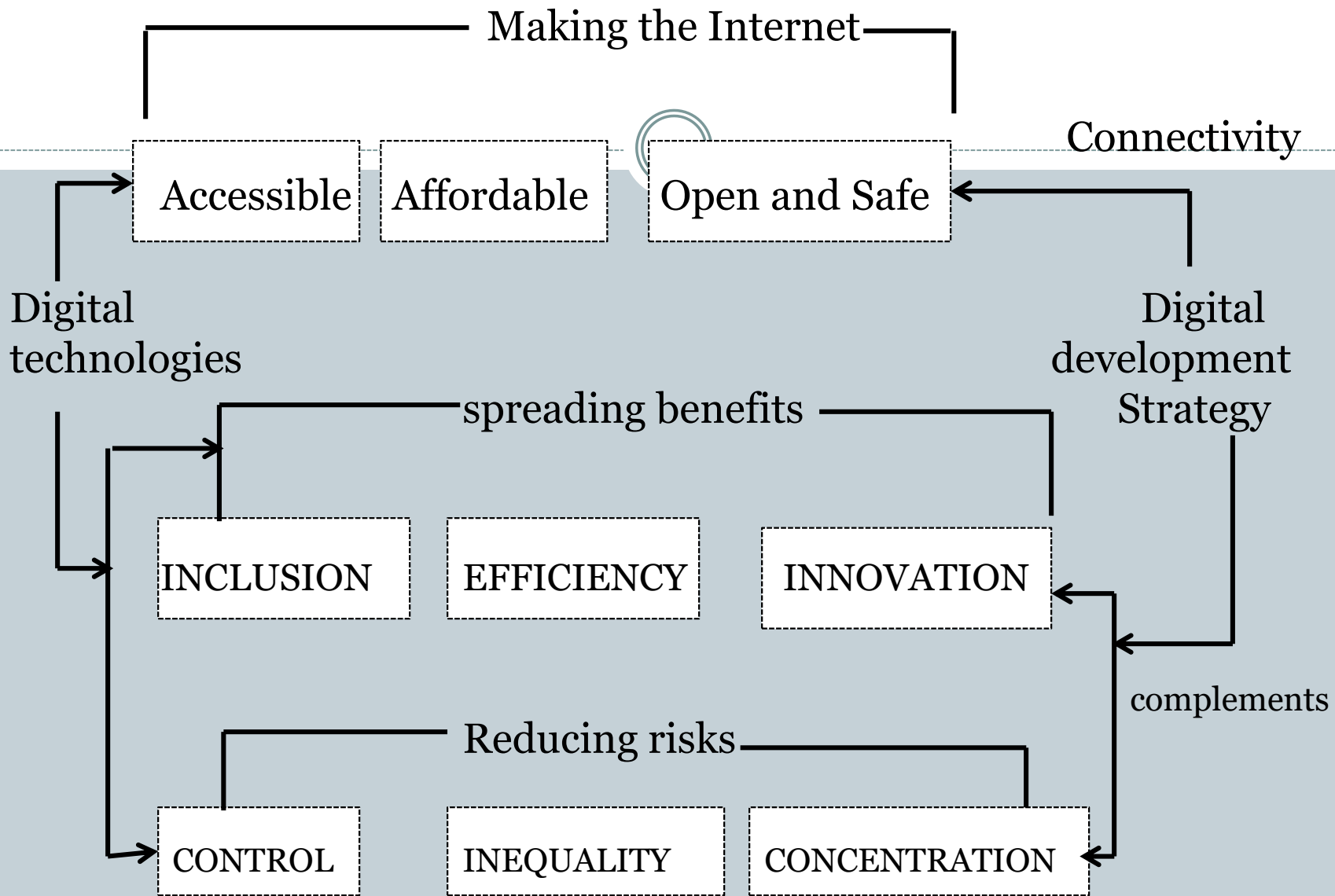


Figure 1: Why Digital Dividends Are Not Spreading Rapidly – and what can be done
Source: World Bank (2016)

Table 1: The Gross Domestic Product Impact from Digital Optimization in Selected Developed Economies, by 2020.



Country	Change in 2020 gross domestic product (%)	Change in 2020 gross domestic product (US\$ billion, 2015 prices)
Australia	2.4	34
Brazil	6.6	120
China	3.7	527
France	3.1	80
Germany	2.5	90
Italy	4.2	81
Japan	3.3	146
Netherlands	1.6	13
Spain	3.2	43
United Kingdom	2.5	84
United States	2.1	421

Source: Accenture Strategies and Oxford Economics (2016).

Digital Revolution and Implications for Decent Jobs



- The digital revolution is accompanied by the transformation of jobs across the world. While the number of direct jobs created by digital technologies is relatively modest, the number enabled by it can be large (World Bank, 2016).
- In developing countries, the Information and Communication Technology (ICT) sector accounts for a paltry 1% of the workforce on average: less than 0.5% in Bolivia and China, and just under 2% in Columbia and Sri Lanka.
- On the other hand, in the Organization for Economic Cooperation and Development (OECD) countries, about 3-5% of employment is in this sector.
- However, ICT jobs are usually accompanied by good pay, with each high-tech job generating 4-9 additional jobs in other sectors in several economies.
- In Kenya, the M-Pesa digital payment system is a source of additional income for more than 80,000 agents. Additionally, China's State Information Centre estimates that the emergent boom in the country's e-commerce sector has generated 10 million jobs in online stores and related services, or about 1.3% of the country's employment.

Africa's Economic Transformation and the Digital Revolution

- Africa is embracing the digital revolution, driven in large part by mobile technology, which has helped to transform lives across the continent.
- McKinsey & Company (2013) reveals that while only 16% of Africa's populations were online; the trend was set for a dramatic transformation, triggered by the continent's rapid urbanization and robust economic growth.
- The report revealed that Africa's major cities, where the emergent middle class has experienced increasing disposable income, more than half of the population has internet-capable devices, as well as 3G networks that drive the technology.
- The trend is also complemented by significant infrastructure, including increased access to mobile broadband, fibre-optic cable connections to households and power-supply expansion.
- While the contribution of the internet to GDP remains low (at 1.1% in 2013); McKinsey and Company (2013) projects a significant rise to 5 or 6% by 2025, matching that of such leading economies as Sweden, Taiwan and the United Kingdom.

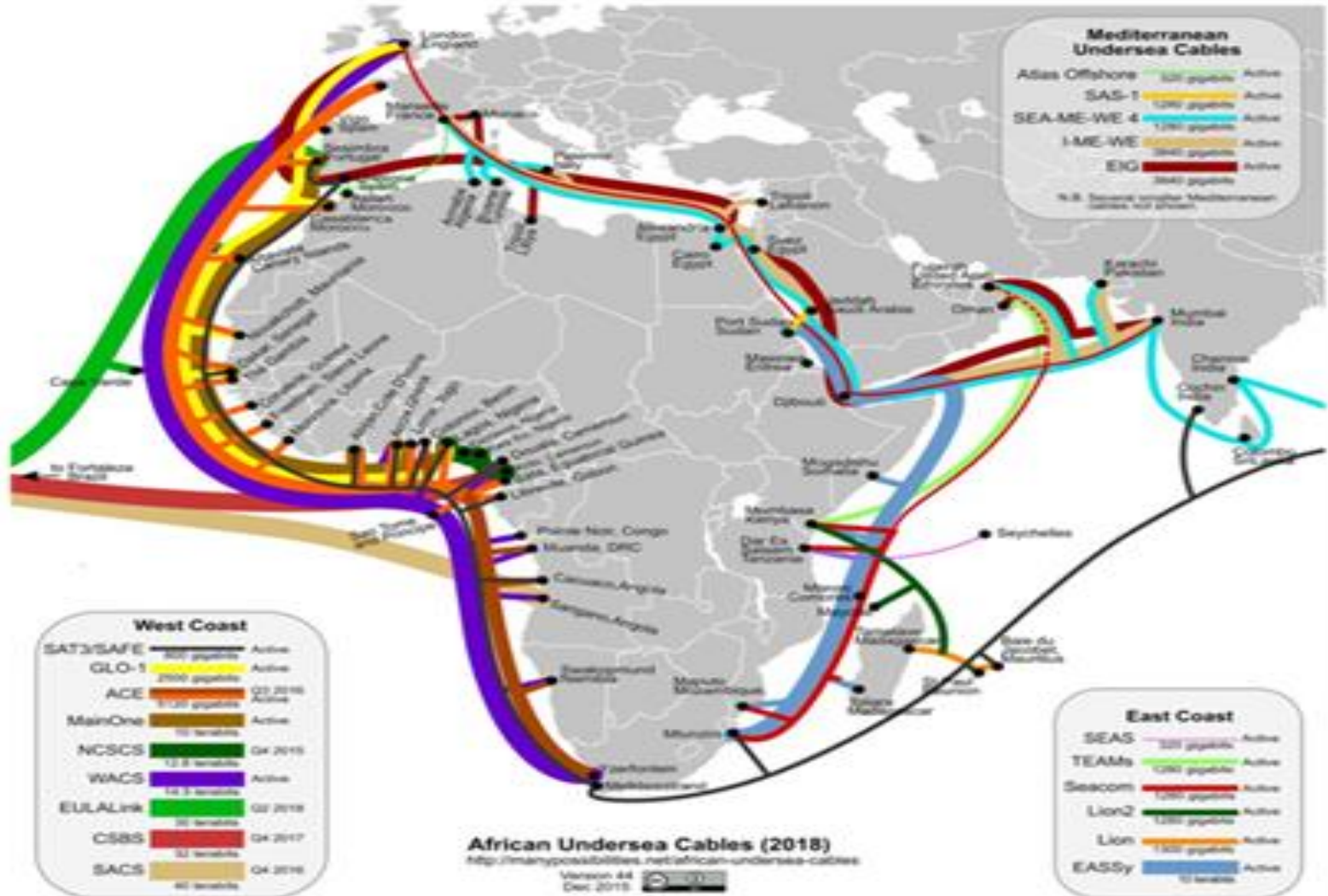


Figure 2: Undersea Fibre-optic Cables Connecting Africa with the World
 Source: World Economic Forum, 2016.

Digital Revolution and Decent Jobs in sub-Saharan Africa



- Sub-Saharan Africa, spurred by the imperatives of the digital dividend, is increasingly connected to the world and reaping the benefits.
- The digital economy in sub-Saharan Africa presents opportunities for Africa's youth to leverage digital technologies for decent jobs in virtually every sector of the economy, including Business Processing Outsourcing (BPO), from external and internal sources associated with small and Medium Enterprises (SMEs).
- As the digital economy develops across the region, the Internet of Things (IoT) and Big Data analytics provide prospects for the region's young job seekers (Ndemi, 2017).
- Hjort and Poulsen (2018), in a study of the relationship between the arrival of fast internet and employment generation in Africa, shed light on employment prospects associated with the digital economy in Africa.
- Relying on three different databases in 12 countries across the region, accounting for a combined population of about 500 million people; findings reveal a significant and large relative increase in employment rate in connected areas associated with the emergence of fast internet.
- Findings further reveal that fast internet lowers (un)employment inequality across educational attainment levels in Africa.

Digital Revolution and Decent Jobs in Cote D'Ivoire

- Cote D'Ivoire has embraced the digital revolution, accompanied by its dividends that are increasingly transforming every sector of the economy for inclusive growth and development.
- The momentum that drives the digital revolution was unleashed in Cote D'Ivoire in 1995, with the granting of the first mobile license. While the pace of growth was slow initially, with 11% of the population subscribing to mobile phones by 2005; the trend was reversed, with a rapid increase in subscription rising over the next 10 years to 53% of the population.
- The penetration of the mobile industry was driven by the launching in 2012 of the 3G services, broadening internet access from 3% of the population in 2010 to almost 25% by 2015 (GSMA, 2017).
- The financial industry as emerged as a major beneficiary of the digital revolution in Cote D'Ivoire, deepening financial inclusion across the country.
- While the proportion of the adult population operating an account at a formal financial institution stagnated at 15% between 2014 and 2017; the proportion of adults with mobile money account increased by at least 40%, with between 34 and 38% of the adult population operating a mobile money account by 2017.
- This is acknowledged as the highest rate of penetration in the West African Economic and Monetary Union (Riquet, 2018).

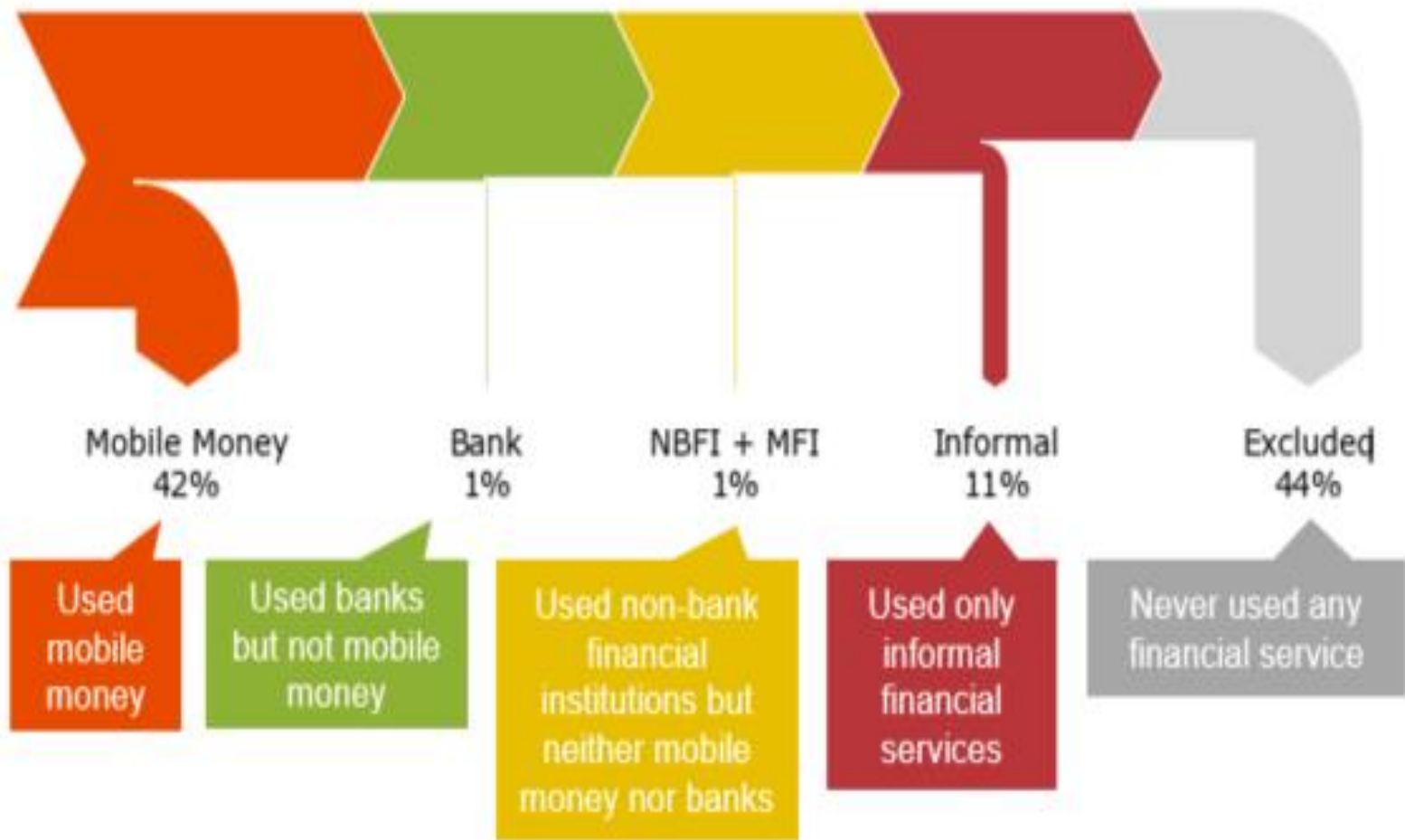


Figure 3: The Profile of Financial Sector Inclusion in Cote D' Ivoire
Source: Consultative Group to Assist the Poor (CGAP), 2018.

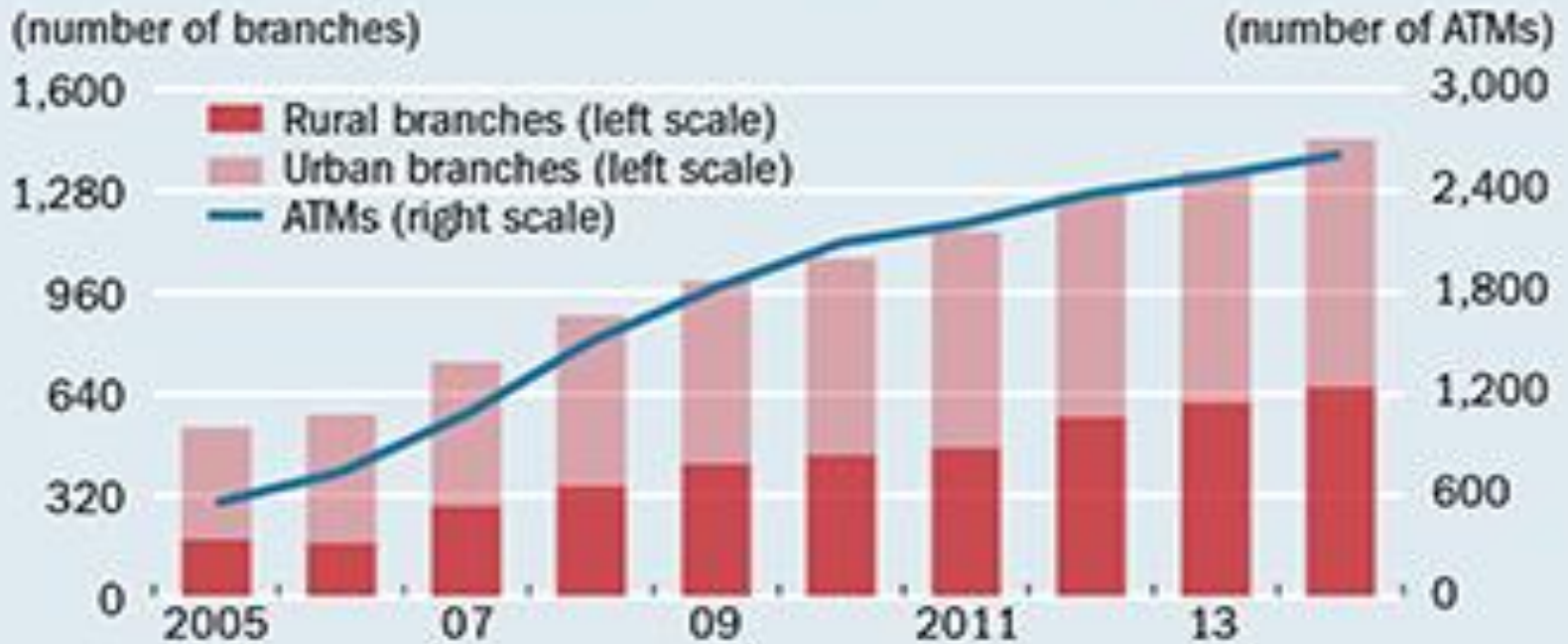
Digital Revolution and Decent Jobs in Kenya



- Kenya is acknowledged as a cradle of the digital revolution in Africa, characterized by an emergent crop of skilled developers and programmers that operate in innovation hubs, incubators and accelerators across the country, leveraging information and telecom solutions to transform the economy (Ndemo, 2016).
- The momentum for Kenya's digital revolution is traceable to two key developments: a paradigm shift in policy, focusing on the development of ICT infrastructure, as well as the laying of the first fibre-optic submarine cable on the Eastern seaboard of Africa.
- On 30 September, 2016, Kenya launched a nationwide rollout of its Digital Literacy Programme, culminating in the distribution of over one million devices to more than 19,000 public primary schools by 2018.
- Indeed, Kenya has embraced the digital revolution in all sectors of the nation's economy. In the public sector, for example, e-government has emerged, providing solutions to previously burdensome manual processes, including the provision of a new national identity card or driver's license (Mangi, 2017). Digital healthcare has also emerged in Kenya, although the uptake is slower than in some other sectors of the economy.
- Perhaps, no other area of the Kenyan economy has reaped the digital dividend more than the financial sub-sector, with mobile-phone-based technology, M-Pesa, providing financial services across the country.
- With M-Pesa, a tool for financial inclusion has been unleashed to capture the segments of the population that have been excluded from financial services.
- Kenya has emerged as a market leader in mobile-phone-based money, with an exponential growth, rising from zero to more than 75% of the adult population in less than 10 years.

Exponential growth

Banks have expanded their networks in urban and rural areas.



Source: Central Bank of Kenya.

Figure 4: The Exponential Growth in Bank Networks in Kenya, 2005-2014.
Source: Central Bank of Kenya.

Digital Revolution and Decent Jobs in Cote D'Ivoire and Kenya: A Comparative Analysis

- Cote D'Ivoire and Kenya provide illustrations about sub-Saharan Africa's approaches to the digital revolution.
- While the two countries have adopted similar strategies in several ways, differences remain in national objectives and outcomes.
- The foundation of the digital revolution in Cote D'Ivoire is traceable to 1995, with the structural reform of the Telecommunications sub-sector while preliminary work actually began in 1991. The objective was to open up the industry to private sector participation and restore its productivity and competitiveness following its perennial management and control by the public sector (Kouadio, 2010).
- On the other hand, Kenya's ICT-driven digital revolution is traceable to various pieces of legislation, including the Kenya Communications Act of 1998, the Science and Technology Act, Cap 250 of 1997, as well as the Kenya Broadcasting Act of 1998. Also, the National ICT Policy (The Kenya Gazette, 2006) was part of the regulatory framework driving the nation's ICT policy (Waema, Adeya and Ndung'u, 2010).
- The digital revolution in Kenya arrived early in comparison to several other African countries, driven by the deployment of submarine fibre-optic cables around Africa in 2010, ushering in an era of low-cost internet connectivity and broadband facilities for mobile devices (Ndemo, 2017a).
- In the case of Cote D'Ivoire, penetration of the internet and mobile phones was slow initially, constrained by political instability and civil war. However, over the past few years, with the restoration of political stability; the digital revolution is grounded in Cote D'Ivoire, underpinned by considerable penetration of low-cost internet connectivity, mobile phones, as well as 3G tele-communications services (GSMA, 2017).

Concluding Remarks

- The digital revolution has risen since the late 20th century to transform people's lives across the world. An element of the fourth industrial revolution, the digital revolution is driven in large part by the internet and mobile telecommunication devices. The development has spawned innovations across the sectors of the economy, ranging from agriculture, healthcare, financial services and the manufacturing industry, among others.
- While Africa was largely by-passed by the first and second industrial revolutions; it has leap - frogged digital technologies to access products and services associated with the fourth industrial revolution.

Recommendations

- The following recommendations are presented to spur digital revolution in sub-Saharan Africa for decent jobs:
- Introduce ICT in the Educational Curriculum
- Expand Access to the Internet
- Deepen Penetration of Mobile Phone
- Support Entrepreneurship
- Embrace Public-Private Partnerships
- Create enabling environment for Foreign Direct Investment, and
- Establish Government-University-Industry Linkages



THANK YOU