

3

The KINGS of Africa's Digital Economy

Eric M.K. Osiakwan

Introduction

The twentieth century saw the economic rise of Asia through the significant economic rise of the “Asian Tiger” countries (Kojima 2000; UNCTAD 1996).¹ But the twenty-first century has been dubbed the African century (Wikipedia 2016). Tech Crunch, renowned technology media company, recently published an article entitled “The Future Is African” (Nash 2015), which aptly described how Africa is unleashing innovation by combining mobile and web technology to lead the world in the twenty-first century.

The digital economy in Africa started in Cape Town, South Africa, in 1995 when Mark Shuttleworth built Thawte, a leading certificate authority, and sold it to Verisign when Vodacom championed prepaid airtime. The wave then moved to Ghana in 2001, when, together with Mark

¹ The Asian Tiger economies consist of Hong Kong, Singapore, South Korea, Taiwan, and Thailand.

E.M.K. Osiakwan (✉)
Chanzo Capital, Quatre Bornes, Mauritius

Davies and others, BusyInternet was built—a multipurpose tech hub through which I started the Ghana New Ventures Competition in partnership with the MIT \$50K Competition, bringing about www.smsgh.com. The tech wave is now moving through Kenya and has produced some of the country's and the continent's leading tech innovations—for example, Erik Hersman's iHub and Safaricom's M-PESA (made possible because of Vodacom's prepaid airtime). The wave is now making its way to Lagos, Nigeria, and Abidjan, Ivory Coast. In my view, the wave's route across and within these countries—namely, Kenya, Ivory Coast, Nigeria, Ghana, and South Africa (KINGS)—is worthy of exploration.

Like the Asian Tigers, these five countries lead the continent's technology innovation and will be referred to throughout the chapters as Africa's "KINGS," an acronym I coined² to label not only the fastest-growing economies on the continent but also the pillars of innovation and high-tech entrepreneurship. The KINGS, it will be shown, are the countries leading the development of the digital economy in Africa and setting the pace for the rest of the continent.

The World Economic Forum asked the question "Is Africa Leading the Innovation Revolution?" (Moosajee 2016); *Fortune* magazine also focused on "Why Africa May Be on the Verge of an Internet Boom" (Bright 2015); the *Wall Street Journal* suggested that Africa may very well be harboring the next Mark Zuckerberg (Johnson and Aboyeji 2015); and business news site Quartz Africa published "African Startups Are Defying the Global Tech Slowdown" (Kuo 2016). Buttressing the observations made in these articles, Quartz Africa also reported that the KINGS are receiving the most investments, adding that these countries have built and supported the ecosystems required to power start-ups. These innovative new companies then develop into the small- and medium-size enterprises that create jobs, pay taxes, and eventually create wealth in local economies.

The purpose of this chapter is to describe the key developments in digital innovation in the five KINGS countries, providing anecdotal evidence and proof to support the argument that their economies have the potential to develop Africa's unicorn businesses (i.e., companies with

²For more about the launch of the term, see the video of the author: <https://www.youtube.com/watch?v=vNURlCNUiil>

almost vertical growth). It will be shown that in the same manner that Asia produced Alibaba, the biggest tech company of the twentieth century, Africa is well on its way to producing the tech giants of the twenty-first century.

Symbolically, the label KINGS takes its inspiration from the concept of kingship in African culture. In the African traditional governance system, the king is the revered leader who sets exemplary standard for others to follow (Ayittey 1991). African kings were—and in some countries, still are—the highest authority, the leading light in our traditional establishment. Just like these kings, the KINGS leadership models offers good examples of growth and transformation to be emulated by the rest of the continent.

Africa Rising

The “Africa Rising” narrative is underpinned by an “Africa Tech Rising,” which was jump-started by the mobile revolution as Africa leapfrogged the world from a few landlines to massive mobile phone use in just a decade.

In 1998, there were fewer than four million mobile phones on the continent. By 2011, there were more than 500 million (Fox 2011). This exponential growth was led by private mobile companies that started from scratch, some in partnership with foreign operators. These enterprises have today built world-class mobile operators, such as South Africa's MTN, Kenya's Safaricom, Airtel Africa (which bought Celtel, a local company started by Sudanese billionaire Mo Ibrahim), Orange (which bought a number of local operators like Sonatel in Senegal, Sotelma in Mali, and others), Econet Wireless (started by Zimbabwe billionaire Strive Masiyiwa, who is still the chairman), Glo (started by Nigeria billionaire Mike Adenuga, also still the chairman), and many others. A report by Freshfields Bruckhaus Deringer (2014) revealed that investments in the telecom, media, and technology sector in Africa over the last decade earned 19 % annualized returns, higher than the Africa MSCI Index of 11 % and higher than revenue from the oil and gas sector at 6 %. This suggests that while most of the African growth story is

focused on natural resources, the telecom, media, and technology sector made more than double the return.

The title of the Freshfields Bruckhaus Deringer report (2014) was “Africa Is Poised for Tech Take-Off”—and aptly so, because mobile growth has laid the foundation for Africa’s tech renaissance, a point also underscored by the BBC in 2014 (Wall 2014). The arrival of submarine and terrestrial cables brought broadband to the masses and catalyzed the digital economy. Increasingly, Africa’s millennials and digital natives, instead of looking for jobs overseas or another way to vacate the continent, have caught on to the development of African mobile and web applications and are unleashing their creative juices and entrepreneurial prowess to disrupt traditional markets and address problem areas for both rich and poor customers.

Africa’s population is 70 % youth (18–35 years old) (Hinshaw 2015), a segment that is transforming itself into an asset class—asking less about who will help them and more about what problems they can solve and which businesses they can build, thus creating value through employment and taxes (Jackson 2015a). By leveraging the internet, this generation is developing programming and business skills—sometimes without any formal education—and, coupled with their need to survive, is expressing itself through innovative software and other product solutions. Economist George Ayittey calls these individuals the “Cheetah Generation” and argues that they could be Africa’s salvation.

In monetary terms, the mobile ecosystem contributed USD102 billion to the GDP of the Sub-Saharan Africa region in 2014, a figure projected to rise to USD160 billion by 2020 (GSMA 2015). More generally, McKinsey & Company reported (Manyika et al. 2013) that the internet will contribute USD300 billion to Africa’s GDP by 2025. This is significant because, according to the World Bank (2009), mobile and broadband have more impact in developing economies than in developed economies. While developed countries have been transformed by information, communications, and technology, the transformation in the developing world is often even deeper, benefitting not only the wealthy, but also middle- and lower-income citizens. According to McKinsey & Company, economic activities at the bottom-of-the-pyramid markets, brought about through technological innovations, are enabling many

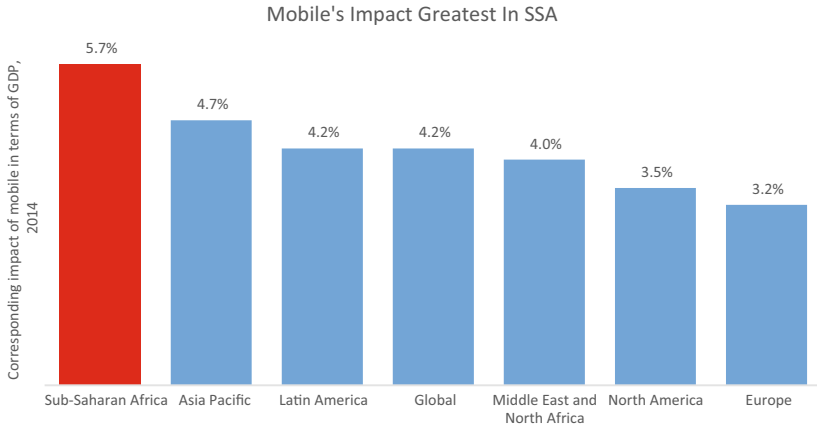


Fig. 3.1 Mobile phone impact by regions (Source: GSMA 2015)

poor people to join the emerging middle class (Manyika et al. 2013). The development of mobile money, for instance, has created significant financial inclusion for many (which was not the case earlier), as pioneered by Kenya's Safaricom with the M-PESA brand (Stahl 2015). Mobile phone services account for 5.7 % of the continent's GDP and are forecast to hit 8 % by 2020 (GSMA 2015) (Fig. 3.1).

Characteristics of the Kings

Digitally, the KINGS economies have led the rest of the African continent by laying a strong foundation through increased broadband penetration and development of pro-innovation public policies that facilitate innovation by digital natives and millennials. The *Harvard Business Review* included Kenya, Nigeria, and South Africa in its global list of the fastest-moving digital economies (Chakravorti et al. 2015).

Certain characteristics—economic growth, entrepreneurial ecosystems, vibrant telecoms, tech infrastructure, and supportive policies—distinguish the KINGS economies from others on the continent. The balance of this chapter explores how these unique features have enabled a thriving digital economy.

Economic Growth

The economies of the KINGS are vibrant, robust, and among the fastest growing on the continent. Ivory Coast, which suffered civil unrest after the 2010 elections, has stabilized and its economy is growing. According to the World Bank (2015a), the country is close to experiencing a double-digit economic growth rate (10.7 %, 8.7 %, and 9–10 % in 2012, 2013, and 2014, respectively). Additionally, Ivory Coast was ranked among the ten best reformers in 2014 and 2015 in the World Bank's *Doing Business* report.³

Kenya, like Ivory Coast, bounced back from the 2007–2008 post-election violence within two years. According to the World Bank (2015b), devolution was the biggest gain emanating from the new constitution promulgated in August 2010. The report said that the economy grew by 5.4 % in 2014, and the World Bank projected an economic growth of 6 % in 2015. Although Nigeria just overtook South Africa as the largest economy in Africa (The Economist 2014), Nigeria is growing at a rate of 5.4 % while Ghana's rate is 7.1 % for the same year.

This economic growth is underpinned by high mobile penetration rates (90 %) and widely available broadband. Lower smartphone and broadband prices have boosted penetration and access. The youth bulges in these countries mean that they have a critical mass of youthful people creatively leveraging the mobile web platform to create solutions for businesses and solve social problems, some of which may become global role models. Just as major tech giant Alibaba came from Asia in the twentieth century, it would not be too much of a surprise if the current century's next giant came from Africa (Jackson 2015b).

Entrepreneurial Ecosystems

The KINGS economies have multiple tech hubs, co-working spaces, incubators, and accelerators that serve as their centers of innovation, creativity, and entrepreneurship. The iHub in Kenya, Orange Fab in

³ For regular updates, check <http://www.doingbusiness.org/rankings>

Ivory Coast, Leadpath in Nigeria, Meltwater Entrepreneurial School of Technology in Ghana, and 88mph in South Africa are examples of spaces where millennials and digital natives work to unleash their innovations (Kelly 2014). These innovations are attracting investment to these countries as more investors are putting more into the creative industry. As these spaces gain momentum, the building of technology parks is next in line, led by the government, the private sector, or in some cases, public–private partnerships. Further, these countries have strong academic and research institutions, capable of producing the human resources required to fuel their digital economies.

Vibrant Telecoms

The information, communications, technology, and telecom sectors in these countries are very competitive. On average, each of them has at least three operators in the mobile sector, and their incumbent postal, telegraph, and telephone (PTT) firms have liberalized their own sector. According to Lancaster (2015), Telkom Kenya lost control of the telecom sector to Safaricom and gained competition from Airtel Kenya and Orange (which bought Telkom Kenya). Unfortunately, Yu (a brand of Essar Telecom and the fourth operator in the market) recently folded, partly because of market-dominant practices by Safaricom, which together with Airtel Kenya, agreed to split Yu's license, assets, and customers. Statistics on subscriber numbers reported by Kenya's Communications Authority in December 2014 indicated that Safaricom controlled 67.4 % of Kenya's telecoms market and that rivals Airtel and Orange controlled 22.6 % and 10 %, respectively (Business Daily 2015).

The first mobile virtual network operator (MVNO), called Equitel, was recently established in Kenya as a partnership between Equity Bank and Airtel (Tredger 2015). Equitel is expected to compete with Safaricom in the mobile money space. In Ivory Coast, Orange bought out the country's incumbent PTT, which had significantly lost the landline business but is the market leader after rebranding as Orange Ivory Coast with stiff competition from MTN, Moov (which is the Etisalat brand for Francophone West Africa), Comium, and Green SA.

Nigeria's mobile market is led by Glo, with stiff competition from MTN, Airtel, and Etisalat; other Code Division Multiple Access (CDMA) operators like Starcomm, Visafone, Multilinks and ZoomMobile are also active in the market. Ghana's incumbent PTT was bought by Vodafone to enter the market, but MTN is still the market leader, with other competitors being Airtel, Glo, and Tigo. Telkom South Africa, the incumbent PTT in South Africa, is still strong in the fixed-line business. Telkom South Africa has a mobile business called Telkom 8ta, but Vodacom is the market leader in the mobile space, with competition from MTN, Cell C, and MVNO Virgin Mobile.

Tech Infrastructure

The KINGS economies and their broadband experience are driven by a multiplicity of submarine cables. Kenya uses The East Africa Marine Systems (TEAMS) (2009), followed by SEACOM (2009), EASSy (2010), and LION2 (2012) submarine cables (Commonwealth Telecommunications Organisation 2012). The dramatic increase in international bandwidth not only ended Kenya's dependence on expensive satellite bandwidth, but the 90 % decrease in the cost of broadband access ensured that services have been made affordable for a large population, including those at the bottom of the pyramid (Lancaster 2015).

Ivory Coast has a number of cables—namely, the SAT3, WASC, and ACE. MainOne and GLO will be introduced soon. Nigeria and Ghana have SAT-3, WASC, Main One, ACE and GLO-1 submarine cables—while South Africa has SAT3, SEACOM, WASC and EASSy (Song 2015). The KINGS economies also have multiple terrestrial fiber networks connecting people to broadband through mobile networks. The Kenyan government has the National Optic Fiber Backbone Infrastructure (NOFBI), and the Kenya Power Company, together with the government, owns terrestrial fiber networks running on power pylons. Jamii Telecom, KDN, and Wananchi have their own local fiber networks. Competition among these local terrestrial fiber networks has significantly reduced the cost of broadband in Kenya.

In Ivory Coast, Orange and MTN are the main competitors. However, the launch of three additional operators between 2006 and 2008—Moov,

KoZ, and Oricel's Green Network—has accelerated market growth and pushed mobile penetration well above the African average (Lancaster 2015). Orange dominates the national fiber network, which it is using to hold back the market. The government is therefore in the process of building a competing fiber network under the auspices of the National Agency of Universal Service in Telecommunication/ICT (ANSUT). MTN has built some of its own local fiber to mitigate the actions of Orange.

Vodafone, on the other hand, inherited the national fiber network when it took over Ghana Telecom and has since been using it to hold back the market in Ghana, thus compelling MTN and Airtel Ghana to build their own local fiber networks. The government of Ghana recently launched the Eastern Corridor long-distance terrestrial fiber network connecting Ho in the South-East to Bolgatanga in the North-East and plans are underway to provide the same on the Western Corridor under an open access model so that all players can access the fiber infrastructure under similar terms and conditions. The national power company, GRIDCo, is about to commercialize its fiber network on its power pylons on the national grid. Google has also launched Project Link fiber in Ghana, which provides access on a wholesale basis to its fiber network, which covers Accra, Kumasi, and Takoradi, with plans to expand nationwide.

In Nigeria, Glo, MTN, Multilinks, and Airtel have extensive national fiber networks, and there are also specialized fiber networks such as Phase3 and Suburban Telecom. South Africa similarly has local specialized fiber operators like DFA and Fiberco, while Telkom and Vodacom also have their own fiber networks. These specialized fiber providers operate on an open-access model, which means they sell equally to all operators at the same price without discrimination, thanks to an absence of vested interests.

Supportive Policies

Finally, the KINGS economies have been able to develop their digital economies because of their pro-innovation public-policy agendas. When regulators do not put restrictions on mobile transactions, it spurs

innovation. In Kenya, for example, Safaricom launched M-PESA, the mobile money platform, with minimal restrictions from the country's Central Bank.

M-PESA subsequently filled an important gap for the large numbers of people without bank accounts by providing them with an electronic money-transfer option. Today, a farmer in a rural area is able to make electronic payments using mobile money. Of particular significance to this development is that mobile money is building an inclusive financial ecosystem that enables noncash transactions at the bottom of the pyramid. Mobile phones are indeed the primary means both to access information and to communicate for those at the bottom of the pyramid. In South Africa, the government allowed Vodacom to innovate by offering prepaid airtime, and this became the basis for the mobile money innovation in Kenya several years later.

All five countries have explicit government ICT policies and, in some cases, implementation plans. At the national level, they all also have experts who advise the presidents on ICT and telecom industry matters. They have further revised the mandates of their various government ministries and departments to include ICTs and have set up specialized government agencies that are responsible for implementing the policies.

Kenya has the Kenya ICT Authority (KICTA), Ivory Coast has La Société Nationale de Développement Informatique (SNDI), Nigeria has its National Information Technology Development Agency (NITDA), Ghana has its National Information Technology Agency (NITA), and South Africa has its National Information Technology Agency (SITA) to implement ICT policies. These countries have also enacted regulations that govern the smooth operation of the ICT sector and have established regulatory institutions, some of which are very independent. Kenya has the Communication Authority of Kenya (CAK), Ivory Coast has the Autorité de Régulation des Télécommunications/Tic de Côte d'Ivoire (ARTCI), Nigeria has the Nigeria Communications Commission (NCC), Ghana has its National Communications Authority (NCA), and South Africa has the Independent Communications Authority of South Africa (ICASA).

These regulatory institutions perform the function of enabling equity and fairness in the industry. ICASA and ARTCI are perceived to be least

Table 3.1 Profile of KINGS countries

Country	Population	GDP Growth (%)	Mobile Subscriber	Internet Subscriber
Kenya	44.35 M	5.7	32.2 M	16.2 M
Ivory Coast	20.32 M	8.7	17.9 M	5.6 M
Nigeria	173.6 M	5.4	133.2 M	70.3 M
Ghana	25.9 M	7.1	29.53 M	14.62 M
South Africa	52.98 M	1.9	59.5 M	21.73 M

Sources: WorldBank, ITU, Buddecom, Telegeography, Country Telecom Regulator websites

independent; CAK, NCC, and NCA are perceived to be more independent and do exert some nongovernmental control over their respective industries in the countries in which they operate. The development of sound institutions is fundamental to the growth of any democratic economy, and creating independent regulatory institutions builds investor confidence and makes for a level playing field.

As Table 3.1 shows, these unique attributes of the KINGS economies make them stand out from the other 54 countries on the African continent:

Profiles of the KINGS

Although the KINGS are drawn from a number of regions on the continent, West Africa has the greatest representation in the group. Ivory Coast, Nigeria, and Ghana (the ING of KINGS) have unique features that justify their inclusion in the group. The combined population of the three ING economies is 300 million, equivalent to that of the USA, and yet, they occupy just one-third of the US landmass. Further, the ING economies, representing both Anglophone and Francophone Africa, are closely knit and within a 45-minute flight from each other.

These groupings are strong and can facilitate an examination and understanding of Sub-Saharan Africa's various subregions. Kenya and Ivory Coast, for example, have proven that it is possible for countries to recover from election crises; Nigeria recently established its democratic credentials, having been able to successfully hand over power through the ballot; Ghana is recovering from various setbacks, such as the current

electric infrastructure and currency risk crises; and South Africa, though also suffering from electric infrastructure and currency risk crises, offers infrastructure of world-class standards with a technology ecosystem that is the most sophisticated of all the five countries. South Africa could be considered a “soft landing” for any international market player coming to Africa for the first time.

A more detailed focus on each country shows what makes them tech leaders.

Kenya

Kenya leads the KINGS because it is at the forefront in three critical areas:

1. An aggressive and conscious government program to develop a broadband infrastructure;
2. Two critical innovations—mobile money and a crowdsourcing platform; and
3. The development of a tech incubator and accelerator model for the continent, catalyzing the innovation agenda that has swept through Africa like wildfire.

In a clarion call to government, researchers, academia, and the private sector to make it a reality, President Uhuru Kenyatta declared that Kenya is a “start-up nation” (Government of Kenya 2015), and since making this statement, several events in Kenya confirmed it. In 2015, the country hosted its first ICT Innovation Forum as a catalyst to accelerate collaboration and growth in the ICT sector. In the same year, US President Barak Obama visited Kenya to open the Fifth Global Entrepreneurship Summit, which recognized Kenya as a center of tech entrepreneurship. Confirming the “Africa Tech Rising” narrative, Obama said, “I wanted to be here because Africa is on the move... young people are harnessing technology” (Euronews 2015).

In a clear message of Kenya’s commitment to ICT growth, President Kenyatta appointed two industry champions to key positions: Joe Mucheru as Cabinet ICT Secretary and Victor Kyalo as Principal

Secretary (Kenya Current 2015). Mucheru co-founded Wananchi Online (now Zuku) and was among the very first staff of Google Africa. Kyalo was instrumental in building up the KICTA and the Kenya Educational Network (KENET).

Microsoft chief executive officer (CEO) Satya Nadella followed up the Global Entrepreneurship Summit with the global launch of Windows 10 in Nanyuki, Kenya. When asked why he chose Kenya, he said that he wanted to listen and learn from the Kenyan innovators on the ground who are building amazing start-ups from the bottom up and are not big multinationals (Madowo 2015). These developments point to the fact that Africa in general, and Kenya in particular, is getting the attention of the world when it comes to entrepreneurship and high-tech business opportunities. Kenya made Africa proud by hosting the summit and the Windows 10 launch, which is being perceived as the turnaround operating system for the software giant (Gosier 2015).

Kenya also spearheaded the mobile money revolution through the introduction of M-PESA, which currently constitutes roughly 20 % of the country's transaction flow (McKay and Mazer 2014). Kenya also gave the world Ushahidi—a disaster-management platform based on crowdsourcing now used for monitoring disasters in countries around the world, from Haiti, Chile, and Pakistan to Congo, Philippines, Peru, Kenya, China, and Russia (Halliday 2010).

Kenya currently has one of the fastest internet connections on the continent because of an entrepreneurial government policy initiated in 2007 under the leadership of Professor Bitange Ndemo (former Permanent Secretary in the Ministry of Information and Communications). Professor Ndemo, with the support of Minister Mutahi Kagwe and President Mwai Kibaki, effectively navigated through bureaucracy and vested interests that stifled growth in Kenya's telecommunications sector. Their efforts paid off, and Kenya became the home of M-PESA, the world-famous mobile-money platform that enjoys staggering success in advancing financial inclusion as well as cutting down transaction time for Kenyans.

In addition to M-PESA, the Kenya government entered into a public-private partnership to build the first submarine cable, TEAMS, and a terrestrial fiber infrastructure, the NOFBI. These projects laid

the foundation for other submarine and terrestrial fiber networks to be built by private operators, resulting in a competitive environment that drove down the cost of broadband and increased connectivity speeds.

The convergence of the availability of broadband with the creative ingenuity of digital natives and millennials has resulted in new ventures applying high-tech solutions to real problems. Kopo Kopo's system, for example, allows merchants on its network to increase revenues, NikoHapa offers a customer loyalty reward system that uses QR issued codes, Weza Tele provides mobile solutions in commerce, and M-Farm connects farmers and buyers. Others ventures include MPrep, an e-learning platform; the PesaPal payment aggregation platform; Uhasib, a web and mobile cloud-based accounting system for accountants and small- and medium-size enterprises; Arifu, an SMS-based learning platform for individuals and corporates; Sprint Interactive, a digital agency with a unique storytelling approach; and Elimu, an award-winning, engaging, and fun interactive application for children learning and preparing for their exams in the Kenyan Primary School system (iHub Research 2013).

According to *Business Daily* (2015), Weza Tele recently sold to AFB for USD1.7 million—the first exit in the nascent tech industry in Kenya (Jackson 2015c). Most of these entrepreneurial activities take place on Ngong Road in Nairobi, which is likened to America's Silicon Valley.

To buttress the growth of a technology economy, the Kenyan government has set aside 5000 acres of land to set up Konza Techno City—a USD9.4 billion undertaking envisioned as a smart technology city where innovation, technology, knowledge, and research come together to create wealth (MIT Technology Review 2015).

An example of a next-generation company from Kenya is Cellulant, which Kenyan Ken Njoroge and Nigerian Bolaji Akinboro founded in 2002. The company has won wide recognition as a mobile financial services provider and is considered to be Kenya's biggest export to the rest of Africa. Jenkins writes that the *Financial Times* recognizes Cellulant's provision of a mobile payment system across 10 countries, including Kenya, Zambia, Botswana and Gambia, with plans to expand to another 13 countries in the next 15 months (Jenkins 2015).

There are other new-generation Kenyan innovative companies like Mike Macharia's Seven Seas Technologies, a leading provider of

integrated business and technology solutions; John Waibochi's Virtual City, a leading provider of innovative mobility solutions that simplify lives; Segeni Ngethe's Mama Mikes, an online shopping platform for Africans in the diaspora; and Craft Silicon, a financial solution provider of software for banks, microfinance, mobile, and switch solution in the global market (Adar 2015).

Ivory Coast (Côte d'Ivoire)

Ivory Coast, the second country in the KINGS economies, has mobile penetration of 90 %, with the creative economy beginning to emerge in places like Plateau and Cocody. The government put together a huge investment forum in 2014 as part of its plans to showcase the country and attract investment. A well-patronized event, it resulted in Entrepreneurial Solutions Partners putting together the first national business plan competition, which rewarded 10 start-up businesses with cash investments and the opportunity to engage with investors at the forum as well as develop their businesses.

The African Development Bank has moved its headquarters back to Abidjan after a temporary relocation to Tunisia attributed to the post-election violence. The institution apparently prefers Abidjan for its headquarters despite offers from other countries to host it—a move that provides a significant boost of the city's economy in terms of the financial transactions and the employment and trade activities generated.

SocialSpot is a leading Ivorian start-up focused on providing social services via a Wi-Fi mesh hotspot network in strategic locations in Abidjan and beyond. Its founder, Bacely Yorobi, is a leading light of the next generation of entrepreneurs. La Régionale is another interesting start-up, co-founded by Christophe Kaiser with the mission of delivering premium news content via SMS alerts directly to mobile handsets. Eric Kacou of Entrepreneurial Solutions Partners and Franck Berthod of Focus Group are seen as local champions of the start-up ecosystem in Ivory Coast because of their leadership in the start-up activities in Abidjan. The former organized the national business plan competition, provides consulting to start-ups; the later organized the first Global Entrepreneur Week in 2015, and has recently set up ADN Accelerator in the Plateau

business district for tech start-ups. The accelerator plans to start a six-month cohort program in which select entrepreneurs are groomed to create start-ups with funding from a proposed national angel network.

Orange, the leading mobile operator in the country, has set up Orange Fab, an incubator and accelerator for nurturing start-ups that currently serves as the nerve center for the local start-up ecosystem. It houses start-ups such as Sportif 225, an online platform that provides content and events for sports; Syceliman, an IT company specialized in development (web and software), computer systems, and networks; Smartsell, a point-of-sale management system; and ICT4D, an e-agriculture start-up. These start-ups are effectively disrupting existing markets in the local economy.

Seedstars World hosted its first start-up pitch competition in Ivory Coast in August 2015. Of the ten start-ups that pitched, Airshop, a duty-free preordering app, won the prize to represent Ivory Coast at a global pitch competition in Switzerland, proving that though the start-up ecosystem in Ivory Coast is relatively new, it has the potential to produce globally competitive businesses. The government plans to build a technology park along the coast in Grand Bassam, 30 minutes outside Abidjan, as part of a new urbanization plan.

Simplex Anoh's Digital Afrique Telecom is an example of a next-generation business from Ivory Coast. It provides mobile value-added services and has a presence in 27 African countries where agreements have been signed with 40 mobile operators to provide premium-rated short codes for SMS/IVR/USSD services. The company also has a content distribution platform and is able to carry out loyalty or campaign management services on behalf of its numerous clients, which are predominantly in Francophone countries in the West, Central, Eastern, and Southern regions of the continent. The company's current consolidated revenue is about USD3 million from the various countries it operates in.

Nigeria

Nigeria sits symbolically in the middle of the KINGS group of economies because it holds the key to how fast Africa will rise in the twenty-first century. Nigeria is one of the MINT (Mexico, Indonesia, Nigeria, and Turkey)

countries identified by Jim O'Neill of Goldman Sachs (who also created the term BRICS, referring to Brazil, Russia, India, China, and South Africa) as the next global economic giants. After rebasing its gross domestic product (GDP), Nigeria recently overtook South Africa as the largest economy in Africa and followed that with its first democratic alternation of power.

Nigeria's start-up ecosystem is dominated by e-commerce ventures and is recognized as the e-commerce capital of Africa, with start-ups such as Sim Shagaya's Konga, Jumia (which raised USD150 million to expand into other African markets), Chris and Tope Folayan's Mall for Africa (which raked in USD17 million in sales in 2014), and Raphael Afaedor's Supermart (specializing in grocery deliveries and more). Jason Njoku built iROKOTv, a successful platform for video-on-demand content from Nigeria's Nollywood, and has attracted huge investments that have enabled him and his business partner, Bastian Gotter, to launch Spark—a company building and incubating other start-ups. Spark is enabling the next generation of start-ups like Hotels.ng, which recently raised USD1.2 million from Omidyar and EchoVC partners after being seeded with USD250,000 by Spark three years ago. Olumide Soyombo and Kazeem Tewogbade built Bluechip Technologies, a business intelligence company, from scratch and are now using the proceeds to seed the next generation of entrepreneurs through their accelerator and seed fund called Leadpath.

Considered Nigeria's Silicon Valley, the start-up ecosystem built in Yaba, a suburb of Lagos, is home to a number of educational institutions like the University of Lagos, Queen's College, and Yaba Institute of Technology. CC Hub, IdeaHub, Leadpath, and Passion Incubator are some of the many co-working spaces, incubators, and accelerators located in the city. Yaba is also home to many tech companies (Akwagiyiram 2015), such as Paga, Jobberman, Easy Taxi, and others. The Lagos Angel Network is rising to the challenge of feeding the ecosystem with capital and has so far invested in two start-ups. Like Kenya, the Nigerian government is constructing an idyllic campus called Technology Village outside the capital, Abuja, 400 miles north of Lagos.

Jason Njoku's iROKOTv is an example of a next-generation company and has been described as the Netflix of Africa (Iwuoha 2016). The company purchases the rights to Nigerian films and distributes them online. Its subscription platforms stream music and movies in 178 countries.

According to Jason, he started the company to satisfy his own desire to be able to find online the Nigerian movies available on DVDs on the streets of Lagos. Having grown up in the UK, he figured that if he could get these movies online as Netflix had done, people would subscribe to watch or buy them. iROKOTv has since built a global audience, especially among Nigerians in the diaspora and other Africans who prefer to access their content via web-enabled devices. Not too long after its launch, the company secured USD8 million from investors to scale up the platform to target a global audience. Major American music and film outlets now use iROKOTv to distribute their digital content in emerging markets.

Interswitch is another next-generation business from Nigeria. It is in line to become Africa's first public tech unicorn, with announcements to list on both the London and Lagos stock exchanges (Bright 2016).

Ghana

Ghana's reputation as a safe destination for investment attracted Mark Davies in 2001 to set up BusyInternet, a multipurpose tech hub that started incubating start-ups. Hosted at BusyInternet, I started the Ghana New Ventures Competition that begot SMSGH—the leading value-added service provider that made USD5 million in revenue last year. SMSGH celebrated its tenth anniversary in 2015 with the opening of its own ultramodern office built without external investment or debt.

In 2008, the Meltwater Entrepreneurial School of Technology was set up as a two-year software training school, which then accepted students' ideas in its incubator program. Meltwater Entrepreneurial School of Technology has so far invested USD15 million in more than 20 early-stage companies, some of which are Retail Tower; Dropifi, a customer support widget by the first Ghanaian start-up to be accepted into the 500 start-ups accelerator in San Francisco; Nandimobile, a business directory service; Leti Arts, a games developer focusing on African characters; ClaimSync, an electronic medical claims processing company (which was acquired by Genkey, a biometric solutions providers); and Saya Mobile, a mobile street messaging platform that was acquired by Kirusa of the United States (Nshehe 2014).

The start-up ecosystem is not only building up in East Legon (where Meltwater Entrepreneurial School of Technology is located alongside two other incubators, Mobile Web Ghana and ServLed), but also in Osu and Labone, where co-working spaces Impact Hub Accra and iSpace, respectively, are located. These incubators and co-working spaces constitute the nerve center for the start-up ecosystem in Ghana.

mPedigree and Sproxil are leading Ghanaian start-ups that have gone global with technology that allows one to authenticate medications and other materials via SMS. Farmerline and Esoko have similarly gone global with mobile web technology that allows farmers to communicate among themselves in their local dialect, get weather updates, access markets directly, and negotiate prices for their produce. Ghana's SMSGH has expanded into three African markets and is increasingly global (Venture Burn 2015).

The government's effort to channel capital into the ecosystem resulted in the establishment of the Venture Capital Trust Fund, a fund of funds managed by third-party fund managers, and recently started the Ghana Angel Investor Network to enable early-stage investments. The government plans to build a technology park in the free-zones enclave in the port city of Tema to enable business process outsourcing and provide for additional development of technology companies. In addition, there is the Ghana Cyber City initiative, a private sector-led effort to build Ghana's Silicon Valley, which would be located in East Legon, nestled between the University of Ghana and the Ghana Institute of Management and Public Administration close to where the current start-up ecosystem is developing.

SMSGH is a model of a next-generation company with an interesting story. It was started by Alex Bram and Ernest Apenteng, childhood friends who attended the Kwame Nkrumah University of Science and Technology in Kumasi. The university was built by Ghana's founding father, President Kwame Nkrumah, to advance the cause of science and technology education. Like most Ghanaian families, Alex's and Ernest's parents expected them to complete their university education and get white-collar jobs. However, in their penultimate long university vacation, they decided to enter the Ghana New Venture Competition instead of going to London to earn some money from a part-time job.

The Ghana New Venture Competition program—according to Gregg Zachary (1997), author of *Endless Frontier: Vannevar Bush, Engineer of*

the American Century—was a revolutionary movement to activate the entrepreneurial spirit of the Ghanaian youth. In the afternoons of the three-month-long program, the program brought in successful Ghanaian entrepreneurs to tell the participants their life stories and how they made it on their entrepreneurial journey. According to Alex, it was during one of these sessions that he decided to become an entrepreneur.

After college, he partnered with his friends Ernest and Leslie Gyimah to start Urban Hive, which later became SMSGH, a mobile value-added service provider that focuses on communication, content, and commerce. The company has been growing year on year for the last ten years, earning USD5 million in revenue in 2014. SMSGH is a role model in many ways and proves that although the entrepreneurial environment is tough, it is possible to break through and build a great business from nothing, with no investments or debt. The company is a market leader with a great execution team of 42 employees and an exceptional chief technology officer in the person of Kwadwo Sienti, who joined later. The company now has expansion offices in Kenya for East Africa, Cameroon for Central Africa, and Nigeria for the greater West African market. The company's next 10-year plan is to become Africa's most useful mobile applications company by blending communication, content, and commerce into a mobile-cloud platform that works for 200,000 businesses, serving 250 million people across the continent by 2025.

Ghana has other innovative next-generation companies such as Rancard Solutions, a multinational mobile telecom software and advertising business; DreamOval, a data science enterprise software and cloud services company; and Farmerline, a platform that empowers small-scale farmers with innovative mobile technology and information services.

South Africa

South Africa is the only African representative among the BRICS economies that are deemed to represent the world's emerging markets and act as a counterweight to the G8 and G20 economies. South Africa has long been a leading light in showcasing political stability and the diversity of the African continent. The country successfully hosted Africa's first World Cup, which helped change the global perception of the continent,

and it has been leading the innovation space with the introduction of prepaid airtime by Vodacom.

Before that, Mark Shuttleworth built Thawte in 1995 and sold it to Verisign in 1999 for more than half a billion dollars, opening the way for others to establish themselves from his investment vehicle. Fundamo, a mobile money financial services platform, which was partly owned by HBD (Mark Shuttleworth's investment vehicle), was acquired by Visa for USD110 million in 2011, and in that same year, Twango was acquired by Groupon for an undisclosed amount.

Earlier in 2015, Garmin, the satellite navigation multinational, bought iKubu, a backtracker bicycle radar technology company, and in May, Automattic, the parent company of WordPress, acquired Woothemes, a WordPress plug-in, for USD30 million. These acquisitions made South Africa the country with the most acquisitions among the KINGS' economies and confirm South Africa's leadership in building global technology companies.

Cape Town has been dominant in tech innovation, both in Stellenbosch and now in Woodstock, an old industrial estate that recently emerged as South Africa's Silicon Valley. Johannesburg has been experiencing its own regeneration and is inching into the tech innovation space with locations in the Maboneng Precinct and 44 Stanley. The Innovation Hub in Pretoria is the government's innovation cluster, which houses all kinds of innovation activities, from water technology to any form of high tech.

Section 12J of the Income Tax Act of South Africa allows investors to write off 100 % of their investment capital against their taxable income in the year in which they make an early-stage investment. The policy has resulted in the formation of a venture capital fund called Grovest that is investing in early-stage companies using the tax write-off as an incentive for its investors.

Invenfin, AngelHub Ventures, 4Di Capital, Team Africa Ventures, Silver Tree Capital, and Knife Capital are some of the other funds that have been seeding early-stage tech companies. They target start-ups in incubators, accelerators, and hubs such as JoziHub and Seed Engine (in Johannesburg) and Bandwidth Barn and 88mph (in Cape Town).

Naspers is a model of a successful next-generation South African company. With a market capitalization of more than USD66 billion, Naspers is regarded as the largest company in Africa. It recently became the biggest publicly traded company by market value in Africa through the sale of bonds to fund emerging market internet acquisitions. It has been making

global acquisitions as consumers make the switch to mobile and smart devices for activities such as shopping and banking. Naspers already has an impressive portfolio that cuts across internet media, television, internet services, and the print media with companies such as OLX, Flipkart, Allegro, Ibibo, SuperSport, MultiChoice, MWEB, and Media24.

Industry Events

In addition to the policies, acquisitions, and partnerships that have accelerated Africa's tech innovation, industry events have also contributed in catalyzing the continent's digital economy.

Angel Fair Africa brings selected start-ups to pitch to investors. It was launched in South Africa in 2013, and the second event was held in Nigeria the following year. In the 2015 Ghana event, two deals were announced on the spot for the first time. The event took place after the Africa Technology Summit, with active participation from Silicon Valley and European investors that follow Africa tech.

Demo Africa is another start-up industry event that serves as a launch pad for start-ups in Africa. It is the African version of Demo, the annual US event. Demo Africa has helped launch a number of African start-ups since it began in 2012 in Nairobi. The event was moved to Lagos after two successful events in the East African city. The event is a flagship of the LIONS@FRICA partnership led by the US State Department.

Pivot East is East Africa's premier mobile start-ups pitching competition, held annually since 2011 and led by the mLab consortium of East Africa. The event brings selected start-ups to pitch to an audience, including investors. Currently in its fifth year, the event has produced a significant number of start-ups in the region.

Seedstars World is a global start-up competition out of Switzerland that takes place in emerging markets with the focus of enabling entrepreneurs through providing investment dollars to the best start-ups to build their business. Last year's event had a major focus on Africa, with events in Cairo, Gaborone, Algiers, Dakar, Dar Es Salaam, Luanda, Nairobi, Kampala, Kigali, Accra, Lagos, Maputo, Gaborone, Cape Town, and Abidjan.

Conclusion and Recommendations

It is clear from my case studies of the KINGS economies that Africa is the twenty-first century home of tech innovation. Innovations in these countries have the capacity to add immense value to their respective economies through job creation, taxes, and creating efficiencies in the economy.

Other African countries should follow suit and try to position themselves to capture the innovation wave by considering the following recommendations:

1. Build strong local infrastructure to enable broadband availability and accessibility. Governments and the private sector need to invest in submarine and land-based fiber networks and wireless last-mile connectivity to bring mobile and broadband to the masses.
2. Create an enabling environment for strong competition in the telecom and technology ecosystem. Regulators need to take the lead in creating a level playing field that allows for equity and fairness in the marketplace, and this must be backed by policies that discourage incumbency and market-dominant practices.
3. Build independent regulatory institutions and match them with the requisite public policy agencies. Governments, through acts of parliament, must build regulatory institutions that are independent and under the supervision of parliament or some bipartisan national institution.
4. Use a pro-innovation public policy agenda that empowers each country's digitally inclined natives and millennials to lead the charge. Governments should place technology innovation and creativity at the center of their economic development agenda and foster innovation policies that allow the youth to lead the national agenda.
5. Ensure that there is a community of practice among the key stakeholders (government, academia, researcher, the private sectors, and civil society). Innovation thrives best when there is a coalition of actors who work together while playing their individual roles effectively. Governments must champion this strategy as they lead from behind.

Final Remarks

Steve Case, co-founder of AOL and now chairman of Revolution LLC, and his wife Jean Case, CEO of the Case Foundation, recently visited three of the KINGS economies — Kenya, Ghana, and Nigeria. Impressed by the entrepreneurial ecosystems they saw, Steve said, “The most exciting thing I’ve seen is great entrepreneurs...they really have great ideas. Some of them are going to be great businesses that change the world and create a lot of value and create a lot of jobs. It has been encouraging” (Ventures Africa 2015).

For her part, Jean added, “You know I have also tried to underscore that the other area that is very impressive here is the degree of participation by women in the entrepreneurial sector. Everywhere we’ve gone, we’ve seen amazingly talented strong women really bringing it and building some really great new enterprises” (Egbedi 2015).

Eghosa Omoigui, managing partner of EchoVC, said, “Our ideal entrepreneur has a Nigerian hustle, a Ghanaian integrity, and a Kenyan smoothness” (Baird 2015). Allow me to add Ivorian persistence and South African diversity as additional ingredients for making a start-up successful.

The KINGS countries are therefore an embodiment of smoothness, persistence, hustle, integrity, and diversity. And Africa—led by the KINGS—is truly on the move.

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Conversation #3

Changing the Game: Building Mindsets of Hope and Possibilities in Africa's Future Leaders — One Game at a Time

Anne Githuku-Shongwe of Afroes



Anne Githuku-Shongwe was recently appointed the UN Women Representative in South Africa for multiple countries in the region. At heart, Anne is a social entrepreneur, a digital innovator, and has been a thought leader and pioneer on the future of digital learning and digital work for Africa's youth. She founded Afroes in 2010 to create innovative ways to help equip African youth for more promising futures. She and

Afroes have received multiple awards, including the prestigious Schwab Foundation World Economic Forum Social Entrepreneur of the Year 2013 Award and the National Award: Order of the Grand Warrior from the President of Kenya. Other awards include the PEACEApp award of the United Nations (UN), Meffys Award in London, and Netexplo Award in Paris. Before starting Afroes, she was an international development professional for 20 years, including 15 years with the United Nations Development Programme on the African continent and with management consulting firms in the USA.

What is the story behind Afroes?

Afroes (the name comes from a play on “African heroes and heroines”) was inspired by conversations with my own children. I worried that they were not being exposed to any positive African media content and that their ideas and aspirations for Africa were being influenced by the Western media’s pervasively negative messages about the continent. I got tired of complaining about it and decided to do something to change that.

My vision was to revolutionize social skills learning in Africa through edutainment platforms that would embed values and shape new mindsets of hope and possibility in the youth market across the continent. Watching my own children playing computer games gave me the inspiration I needed. I realized that kids were captivated by computer games and had the opportunity to learn complex skills in a fun yet subtle way—and I knew that there had to be a way to harness computer games to inspire the change to African children that I desired.

The business challenge for Afroes was recognizing that to reach mass numbers of children in Africa, mobile phones were the only viable medium to deliver computer games en masse. Today, with reach of over 450,000 users, Afroes has created a series of mobile games designed to shape new choices and stimulate challenging conversations for children and young people in Africa.

Our Moraba is an award-winning mobile game addressing difficult questions about gender-based violence and challenging the user to

contemplate what she or he believes about sexual relations and sexual violence. The game provides valuable information to the user, empowering them to make informed choices. Another powerful game, Haki: Chaguo Ni Lako (“Justice: The Choice is Yours”) was designed to inform, inspire, and empower Kenyan youth, helping them make considered choices as they went to the polls in 2013.

Afroes has developed a design approach that engages young mobile-game users in the co-creation of the mobile application, with social enterprise partners including the Nelson Mandela Children’s Fund and Child Rights partner organizations; UN Women and Gender-Based Violence stakeholders; the Tuvuke Initiative for a Peaceful, Inclusive, and Just Society; the Ford Foundation, as well as the Rockefeller Foundation, Microsoft, Intel, Nokia, and Vodacom.

What is the underlying motivator, the driver behind your life trajectory and the various projects you are engaged in?

I have always been driven by the belief in an Africa of great promise as defined by Africans and not dictated by the West. In all my years working in the development and multi-lateral sector, I noticed that we were stuck! We focused obliviously on copying the Western or even Eastern models without recognizing that we were actually selling out our continent’s destiny.

One of the real turning points for me was a moment as we (United Nations Development Programme colleagues and African governments) were working with colleagues from the government of Singapore. One of them, a woman from the government of Singapore, turned to us as we were debating what lessons to take back to Africa from our trip, and she asks candidly, “Why are you Africans always so willing to give up your destiny for others to define it for you?” And she was right. For too long, this had been the play in Africa. I sat there and felt a combination of insult and paralysis. I felt challenged, and then I realized that yes, she was right. That is the core of it all. The public servants from my delegation who were very senior and smart were really only interested in a quick, simple fix that would somehow bypass the 40 years of Lee Kuan Yew’s work that had resulted in today’s Singapore. It bothered me

that these smart public servants never once asked about the transformational investments in the mindsets of Singaporeans that had begun when they were six years old. So deeply embedded was the mindset of possibility, excellence, and patriotism that every Singaporean from street sweeper to cabinet minister spoke the same language and understood the vision of the nation. I have hardly seen this anywhere else in the world.

I mean, Singapore was no different from us in the 60s! They did not develop suddenly and dramatically. No! They went through struggles similar to ours in Africa so that in the 60s, for example, they had high levels of corruption in the public sector. Under the astute leadership of Lee Kuan Yew, they made a dramatic and transformational decision that Singapore would never be great unless they started by investing in a new generation that would emerge with the right values and mindsets to shape a different future. The results that we see today are the result of 40 to 50 years of investment in the right mindsets and values that have shaped their nation.

I am dreaming of a future when youth of my village will not run in hope at the sight of a Land Cruiser with a foreign agency logo on the car door—only to turn away dejected by yet another broken promise of their finally being saved by the Land Cruiser guy. Instead, I have dreamed that the youth of my village will be so invested in ensuring that they not only define and shape their own destiny but also will build their own Land Cruisers! But I knew this was not going to be easy, given that the mindsets were already distorted, and therefore there was urgent need to invest boldly in those young ones who were not yet a lost cause.

That triggered my thinking, and I embarked on asking one important question: How do we begin to invest in the mindsets of young Africans? How do we create mindsets that are built on the foundations of hope, possibility, and integrity? And how do we do this en masse? Afroes was my response to this, given that mobile today is the most powerful educational platform on our African continent.

Where do you think that mindset is coming from?

This is a complex set of theories that we cannot do justice to here. However, there are two that I feel are inarguable and that, to me, have really shaped our mindsets. One is what I would call a “village chief” mental model. The village chief mental model is built on a convoluted mesh of cultures that took the African traditional leader and superimposed the poll tax administrator from colonial administrations. This resulted in a perverted leadership model that vested all power in the hands of a chief who at a whim could determine the fate or fortune of his “subjects” and direct the resource flow as he chose. It is a model that I believe we have never been able to break out of. It reveres authority and promotes strong patron–client relationships that determine the flow of resources and one’s economic or political destiny. We see these patterns perpetuated in the way we choose our political leaders and how our leaders conduct themselves once in office.

The “development savior” mindset in all its forms—whether external or internal—has also perverted the mindsets of many in our countries who have given up their power to investments that have often highly distorted our political and economic landscape. One of the greatest ills of the development savior has been its perverse intentions and external value system. Rather than invest in the core agenda of a nation, it is mostly designed to serve external agendas that create islands of pilots and projects—some even excellent at times. But rarely does it invest in building the mindsets and value system of the potential leaders of the future in any meaningful way that could result in real long-term nation building. One of its biggest problems, just to mention an example, is its absurd impatience, its short-term goal orientation, and the fact that the objective, even if well intended, is ultimately defined by the aid giver. I worked for the UN previously and have since returned to lead the work of UN Women in Southern Africa. The UN is less about aid. The UN is more about normative principles signed by member states, working alongside a government and enabling governments to implement these normative standards. In practice, however, the less developed a country is, the more the UN and development partners are tempted to define, almost take

over, the role of its government. At the end of the day, the mindsets that have been shaped by the development industry include dependency and distorted priorities. It reminds me of this famous adage: He who pays the piper, calls the tune.

What is your approach to changing that?

During my work with united nations development programme (UNDP), we worked with a team that invested in mental models as the catalytic capacity required for public service and development. We learned so much from our partnership with the Singaporeans, particularly how they owned their own vision and agenda. They would never allow another government to influence how they shape their own policy. Never! Their mindsets were steeped in excellence, integrity, possibility, and growth.

In Kenya, and I dare say in many of our African countries, our mindsets are our weakest link! Mindsets of “scarcity” rather than abundance; mindsets of “eat now” rather than invest and preserve our future; and mindsets of “homogeneity” that perpetuate inequality across gender, ethnicity, and class—mindsets that hold us back from our destiny. The sad truth is that these mindsets have been transferred to our youth, who argue that their choices and posturings are in line with their survival! In Kenya, people talk about the hustle. It is always my hustle. It can be read positively: “I am hustling to do my thing,” or I am just struggling and surviving. It frustrates me when I see someone who cannot see the massive opportunities in front of them. Many public servants epitomize this mindset and were just marking time, just surviving. It is about the paycheck, never about the citizens. Too few exhibit the heart of public service. Service, for me, is another aspect of the mindset that is very important.

For us, the core of who we are as Africans—and we demonstrate it when the chips are down—is that we are an engaged collective. When the chips are down, somehow in Kenya, we are able to bring it up. When there was drought four to five years ago and the Kenyans4Kenya initiative came through, now, that was incredible! The way people responded when the Westgate shopping mall attack happened, where the very Somalis who were being implicated were out there feeding each other. That is the

core of what we have to go for. And I fear that because of the impact of the media, this notion of the collective is getting rapidly eroded.

How do you build the mindset that has a collective response rather than an individual one at its core? It starts by looking for assets where you are. It starts with the insight that we ourselves are our own resource. We have lost some of that. The thinking was that our assets and resources come from somewhere else. So as a logical consequence, I will have my own asset and resource, you will have your own asset and resource, and we will end up not sharing any of that.

Can we invest in a generation that will emerge with some of these values embedded in them? You have to think about this as a 30-year journey so that a new generation comes to fruition that can make the real transformation happen. I searched for a platform that could deliver these values in a simple, covert, and fun way. It was here that I got motivated by my own son, who was playing computer games for hours on end. As we argued about his “addiction” to games, I had the opportunity to observe him play—“Come see what I’m doing!” That is when I recognized that there was a bigger picture to games and the power that it brings along. I started doing research and found out that there was a global network called GamesforChange. This network filled me with confidence to go out and build Afroes—using games as a tool to deliver complex but important messages to our youth.

Now I know it is much tougher than I thought. The process of investing and figuring out how to build games, how to make them work well enough, and how to penetrate existing structures is much harder than imagined.

What are some of the difficulties when it comes to profoundly affecting and shaping mindsets?

I thought the school system would be the natural partner with Afroes, but despite their expression of excitement, the Ministries of Education were really not very open to change. In my experience, schools are very traditional and very conservative, and so change is slow. The school that we work with is the African Leadership Academy, which invests heavily in mindset

change. In their model, the academy invests two to three years in an individual. That is obviously the best model! However, I truly believe that there is a place for mass pop culture-based learning built on simple mobile phones. I am now concerned with how we can create these kinds of experiences for every African child, even if it is just for a few days, so they can start seeing the real possibilities rather than the problems. The idea was to create that content and place it in the hands of young people who individually or as a group would learn new values and skills via this mobile platform.

How do you reach youth? And why does gaming have such importance?

First, gaming is a platform. It is not the end. If we want to have any legitimacy in what we do, then we need to talk with the youth on their own terms. At Afroes, we spend a lot of time doing facilitated conversations with young people. We use the games to enter into a conversation. Play a game on gender-based violence, and then all of a sudden, it gives you an inroad to really start having conversations about things like “So how do you feel about gender-based violence? Where are you on this issue? What is your value system? How do you feel about relationships between you and young women? Do you value women? How do you value yourself as a woman?” And you start having conversations that you would never been able to have. For example, in one of our games, we have focused a lot on young peoples’ understanding of rape, gender-based violence, and the abuse of young women and men. We realized that young men in particular abuse young women without realizing it. They think that this is just how relationships work, because this is what their role models taught them.

We started a campaign for 12 months. Young people who played the game created conversations and shared comments on their own experience. One young man pointed out in the comments section, “I did not know until I played this game that I am a rapist.” He said, every time a young girl said “No,” he thought that what she actually meant was “Yes,” because that is what his socialization had taught him. For him, a “No” simply called for more persuasion from him, and he believed that crying was part of the “game” between men and women. This man was suddenly shocked to learn with our game that girls who say “No” mean “No.” It spurred a whole lot of new thoughts in him, and he realized that

he lost his girlfriend because of the way he treated her. It was incredible to see the realization process and the way his mind opened. This is a beginning, but it is an example that shows the power of games in shifting mindsets.

How can the minds of Africans be affected at scale?

For scale, we have to go through the public school system. The president talked about ethics and corruption classes in school. That is exactly what will make the difference. The tools we use can be manifold. However, we have to confront ourselves with the behavior change in a communal context. What does a new behavior look like collectively, not individually? Circles of dialogue that leverage technology, inside schools and outside of schools, can become a fruitful way to bring about a mindset shift at scale. Not all of us have the privilege of attending a college or academy for two years. If we use the opportunities of mobile learning and gamification and embed them in the public school system, then we can imagine a new way. We need a large cohort of leaders, particularly young and women leaders, equipped with new mindsets of possibility, abundance and hope—who can get us even sooner to Kenya’s vision 2030.

Having said all this, especially in the eight years since I left the UN, remarkable developments have taken place. What is striking is that the African narrative has changed dramatically for the better, with many young ones who have had global and African exposure plus a new breed of heads of state and business leaders defining a new, hope-filled, and African-led agenda. We need to continue that journey.

Thank you, Anne!



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