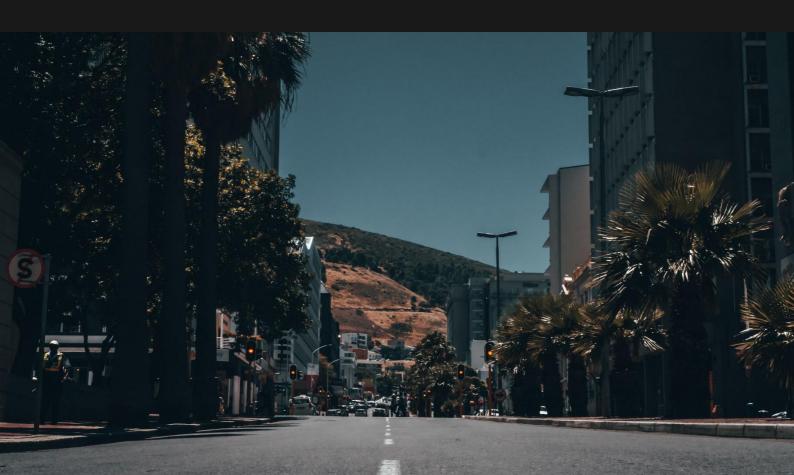


AFRICA: THE WORLD'S NEXT ECONOMIC FRONTIER?

How innovative and new business models are shaping Africa and influencing the global and regional economies



AFRICA: ON THE CUSP OF AN INNOVATION REVOLUTION

Innovation in Africa can be viewed as the next frontier in the world economy. Across Africa, business leaders in start-ups and multinational corporations, investors, and governments seek to identify and evaluate novel approaches to businesses. The business opportunities and growth potential in Africa are the catalyst to springboard efforts to map and analyse the innovation scene and identify key trends.

INTRODUCTION

Innovation across Africa is centred around business model innovation and can be characterised into three main themes. **First**, innovative and novel approaches to addressing Africa's mass markets of both consumers and the informal business sector are gaining ground. The agent model has proved to be successful in addressing mass markets in several industries including telecom, banking and industrials. **Second**, the *digitalisation* of business models and customer journeys is taking place across sectors. Most notably within financial and payment services, e-commerce and supply chain platforms, and a general trend towards digitalising customer interactions. Companies are also leveraging the widespread adoption of mobile communication, which offer them ample opportunities to engage with customers and launch new services. Third, as many African countries do not have a long institutional and structural history, they offer interesting opportunities for selected countries to be used as a *testing ground* for new innovations. An example is to work with authorities to develop the regulatory framework in new and non-regulated industries such as drone use.

AIM OF THE REPORT

Our findings indicate that several markets in Africa offer significant opportunities for innovation; both to grow the existing market, but more importantly, to enable companies to stay relevant today but also to actively create and build the offerings of tomorrow. Customers, in the form of businesses as well as individual consumers are ready for digitalisation. The continent of Africa offers plenty of opportunities to identify the next innovation that will lower your service costs as well as increase your market share.



ANDREAS GIALLOURAKIS

Trade & Invest Commissioner Kenya and Market Area Director Africa

andreas.giallourakis@business-sweden.se

GROWTH & INNOVATION IN AFRICA

With expectations of continued digitalisation, the adoption of new technologies combined with high population growth and rapid urbanisation, Business Sweden strongly believes that African economies are growing and developing in the right direction. Now is the time for Swedish companies and organisations to act in Africa.

Africa is a continent with 54 countries, and it has a landmass larger than China, India, contiguous US and most of Europe combined. Most business decision makers instinctively under-estimate the size and market potential while overestimating the challenges.

In the past few years, Africa has taken significant steps on its economic journey:

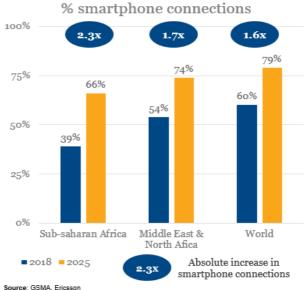
- The African Union launched the African Continental Free Trade Area (AfCFTA), trading under the agreement is set to begin in January 2021
- The South African government announced the launch of a new Affiliate Centre of the World Economic Forum's Centre for the Fourth Industrial Revolution (C4IR), and
- The World Economic Forum has launched the Africa Growth Platform, an initiative aimed at helping start-up enterprises grow and compete internationally.

SHORT-TERM CHALLENGES, LONG-TERM OPPORTUNITIES

Several countries in Africa rank among the fastest growing economies in the world. Despite being negatively impacted by the Covid-19 crisis, the underlying trends that drive long term growth remain. The population is projected to grow to 1.7 billion by 2030, up from the current 1.2 billion; the urbanisation rate is the fastest in the world, with 50 percent of the population expected to live in urban areas by 2030.

In our work with Swedish companies, the business and start-up community as well as academic institutions, we encounter numerous interesting and potentially gamechanging ideas and innovations. With this in mind, we set out to explore what is happening in the African innovation scene and how companies can leverage it to create a competitive edge.

Smartphone connections set to double in SSA by 2025



INNOVATION IN AFRICA IS CENTRED AROUND BUSINESS MODEL INNOVATION

We have carried out extensive research and conducted interviews across the spectrum of the economic community. Our findings are based on the input of business leaders, entrepreneurs and investors, as well as NGOs and the public sector. In our research we have also considered existing academic research and publications in the fields of innovation and entrepreneurship. Through these, we have found that the main areas of innovation in Africa centre around business model innovation and novel ways of using technology and improving processes to solve pressing issues on the ground; These include e-commerce, digitalisation, improving the financial sector, mobile communication, sustainability, and access to healthcare and education.

THREE KEY INNOVATIVE BUSINESS MODELS USED TO DRIVE GROWTH AND CUSTOMER SATISFACTION ACROSS AFRICA:

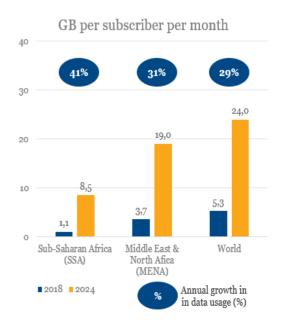
A very successful approach is the agent model, uses large numbers of agents or representatives to reach end consumers in both of Africa's mass markets: consumers and individuals and small businesses in the informal business sector. These approaches are particularly addressing those present in rural areas but also those in large urban dwellings.

- The use of technology and digitalisation of business models and customer journeys is taking place across sectors, most notably within financial and payment services, as well as distribution and supply chain processes where the use of mobile communication can provide mass market services.
- Using Africa as a testing ground for new innovations, including setting standards and regulations where they are not present, either in traditional or emerging industries, such as unmanned aerial vehicles (UAVs). The continent lacks the legacy and is less built into existing structures found in many other places around the world.

While testing new business models in Africa can reduce business risk and enable fine tuning before launching globally, it is important to do this in an informed, sustainable and ethical way. Pinpointing the right region to test a product or solution is important because of the diverse cultural practices and experiences, while implementing short and long-term sustainability actions that set and adhere to standards both locally and globally is imperative.

There is a strong indication that for long-term success leading companies in the region are and should effectively use a combination of the models to maximise their impact.

Data usage in SSA will grow almost eightfold by 2024



NEW DISTRIBUTION MODELS TO ADDRESS THE MASS MARKET

- THE AGENT MODEL

The 2019 UN report, 'World Population Prospects', found that, with a projected addition of over one billion people, countries of Sub-Saharan Africa (SSA) could account for more than half of the world's population growth between 2019 and 2050. The region's population is also projected to continue growing through to the end of the century. In this report, the United Nations also state that urban areas are expected to absorb virtually all of the world's future population growth and Africa is following that trend.

Rapid urban growth presents an important opportunity, but it also poses challenges to the implementation of ambitious urban development agendas that seek to make cities and human settlements inclusive, safe, resilient, and sustainable. This opens up opportunities for businesses with innovative solutions to tap into new emerging middle-class populations in cities around the continent.

To address this challenge, several companies have developed an agent model to concentrate on under-served populations as well as the informal business sector in both rural and densely populated urban areas. Banks across Africa have adopted an agent model where they enrol agents to offer basic services in the far and hard to reach places. Banks using this model include:

- Ecobank, in several countries across Africa
- Equity Bank in East Africa
- Postal Bank and Stanbic Bank in Uganda, and
- Letshego in Mozambique

Similarly, TelCo players spread out access to their services by making use of agents. Safaricom in Kenya is one supplier that use agents to sell scratch cards to refill calling credits and for their mobile payment solutions, M-PESA. M-PESA is a market leader in mobile payments with more than 11,000 agents in Kenya, 40 times the number of ATMs in the country, and capitalises on the country's mobile money penetration rate of over 70 percent.

Leading off-grid solar energy company PEG Africa, based in West Africa has also made use of agent models to help drive their "pay—as—you—go" business model in Ghana, Cote d'Ivoire, Senegal, and Mali. Agency models have proven to increase penetration of service delivery through lowering the cost to serve for the company using it, as well as providing additional income to the agents. By adopting an agency model, new segments that would otherwise be too costly to serve can now be reached via the agents and enabling sales growth.

The key to success is the recruitment and training of the agency network to find reliable and locally trusted agents to work with. An additional benefit of the agency model is that the process between the agent and the company can be digitalised, reducing cost to serve further while also delegating most of the end-user administration to the agents.

DIGITALISATION OF BUSINESS MODELS AND CUSTOMER JOURNEYS

The adoption and development of new technologies as well as digitalisation of business models and customer journeys are the strongest innovation forces currently in play. The companies that get it right grow faster than competitors while also increasing customer satisfaction.

This is relevant to all companies, both manufacturers and service providers, and there is great potential for interaction within the core processes that are digitalised:

- Financial and payment services
- The sales and supply chain infrastructure with the rise of e-commerce and digitalisation of people and goods transport
- Customer interaction, and
- Mobile based services

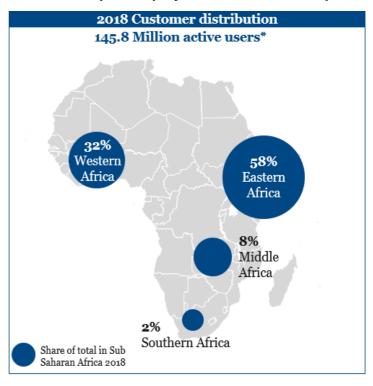
These areas can be leveraged across sectors to improve the customer offering and serve new market segments both stand-alone and in combinations.

FINANCIAL AND PAYMENT SERVICES

According to the World Bank, only 35 percent of Sub-Saharan Africa's population are listed as "banked". A global World Bank survey listed the barriers to financial inclusion as affordability, bulky documentation, the need for capital to set up payment infrastructure, and the lack of consumer education as some of the key barriers to accessing financial services.

The widespread use of mobile phones and the internet, which is higher than electricity connectivity, has given rise to a new generation of financial services in Africa. Sub-Saharan Africa has become a leader in mobile money adoption, usage and innovation.

Mobile money has grown ~40% per annum and spread rapidly across East and West Africa



FinTech start-ups have attracted a high calibre of global and local investors by raising close to USD 2 BN in 2019. In the B2B, innovation within financial and payment services also provides large opportunities to reach more customers and digitalise payment and financial processes.

Financial services innovation in Africa took off with mobile money mainly driven by the telecom sector. The most notable example is Safaricom in Kenya with M-PESA, launched in 2007. Last year Kenyans moved nearly half of the country's GDP through their mobile phones, underpinning the growing importance of digital wallets in the economy. Since the launch of M-PESE, mobile money has developed and spread across Africa with more than 500 million mobile money accounts and ~ 150 million active users.

The financial sector is also experiencing rapid transformation through innovative FinTech. It has redefined the way money is stored, saved, borrowed, invested, moved, spent and protected*. The unique environment for financial services in Africa is fertile ground for innovative players to capitalise on the opportunities to disrupt established business models to make financial services more affordable, accessible and profitable.

ALAT, for instance, in 2017, Wema Bank Plc was set up in Nigeria as Africa's first fully digital (branchless and paperless) bank. During its first year, the bank acquired more than 250,000 customers. The move from cash to digital payments is driven by shifting user payment preferences, rapid growth in e-commerce, and government facilitation. According to the World Payment Report 2019 by Cappemini Research Institute, it is estimated that non-cash transactions will have a CAGR of 21.6 percent between 2017-2022 across the MEA region.

Several FinTech start-ups such as DPO, Interswitch, Cellulant, and Flutterwave have built payment ecosystems that enable rapid digital integration. Global payment giants such as Visa, MasterCard and PayPal have also invested in the sector. Equity Bank, a leading bank in East Africa, has consciously worked on their digital transformation, in addition to their agent network, to enable them to access more customers at a lower cost.

In 2018, 96 percent of all cash transactions took place outside of the branch network, primarily via mobile platforms and the agency network. In 2015, Equity Bank launched Equitel, a virtual mobile network enabling bank transaction. All data is used in the customer segmentation.

An example of a Swedish company successfully using local financing and mobile trends is a Swedish industrial equipment company that has implemented an innovative solution that combines agents, mobile money (M-PESA), and a micro payment scheme to address the informal sector of motor garages. These garages make up a large customer segment, however they often lack access to credit to buy the most effective solutions. The company's solutions offer these customers access to a more effective solution and enables the company to penetrate a market that would otherwise not be able to afford their products.

E-COMMERCE AND SUPPLY CHAIN PLATFORMS

Across key markets in Africa, e-commerce has shown high double-digit growth for several years in a row, albeit from a low base. E-commerce is predominately embraced by the urbanised upper middle-class and currently makes up 0.5-2 percent of formal retail spending. Although it was pioneered by Jumia and Konga, today there are numerous smaller players as well as significant purchases being made via Amazon and AliExpress.

The rise of e-commerce, large underserved markets and huge inefficiencies both for people and goods-transport has led to the establishment of global online platforms. Uber, Bolt and Glovo, as well as a significant number of local start-ups use technology and process optimisation to link buyers of goods and services.

Most of the players offering online platforms are still young and currently unprofitable, however they offer valuable insights; Africa is digitally ready, it presents the possibility to serve new markets, and form interesting partnerships.

CUSTOMER INTERACTIONS

Digitalisation of customers' journeys and disruptions to the existing way of engaging and doing business is taking place across numerous sectors as outlined, but it is also being leveraged in more traditional sectors including health care and agriculture. There is vast potential to increase efficiency and customer satisfaction as seen by the work carried out by the AstraZeneca African Cluster who are digitalising their engagement with healthcare professionals (HCP) across Africa as well as their internal way of working.

This includes the launch of flexible digital platforms to allow for different user preferences and early engagements with HCPs and local partners to speed up the change journey. AstraZeneca's preparedness enabled them to grow digital engagements by 900 percent during the first months of the Covid-19 pandemic and to increase the level of satisfaction of these digital touchpoints among HCPs.

MOBILE BASED SERVICES

Thanks to the large mobile phone penetration in Africa (>80 percent), it is possible to use SMS and USSD services to reach almost the entire population, even those in remote areas. This has, in addition to the rise of mobile money, spurred innovation across sectors from weather or price services for farmers, to health care platforms and product information (PIM) services.

Sustained development and roll out of new networks, and increased smartphone adoption will continue to drive innovation and new opportunities. Digital tools, especially mobile based solutions for dissemination of information to farmers, such as weather forecast, market prices, agronomic advice, and certification standards are set to be the tools that unlock the potential in the agricultural sector.

Ericsson is driving digital transformation through mobile services and advanced analytics in numerous areas. One example is the Ericsson Weather Data solution which measures rainfall using technology that is more accurate and timelier than existing methods like radar and satellite. This innovative technology utilises signal disturbances in microwave networks to monitor real time rainfall intensity.

The solution is a cost-efficient alternative to rainfall monitoring, especially in regions without radar coverage. Applications range from precise rainfall monitoring for water services, to information for insurance providers, and to farmers to use to implement control measures for disease outbreaks.

Another issue that can be addressed with innovation is how falsifying impacts individuals, societies and economies around the world. While the economic costs are huge, the human cost is enormous. Fake medications kill approximately one million individuals annually, while fake horticultural sources of information upset profitability and keep small-hold ranchers in destitution, as a result diminishing food security and conceivably exacerbating starvations.

A solution for this has been developed by mPedigree, where buyers can use their cell phone to determine if a product is genuine or not. They just scratch off the proof marker attached on the product and get a mobile response. A rich overlay of machine learning enables full supply chain visibility. Consumers in Africa, South Asia, and the Middle East know quickly if they have encountered fake merchandise; not after a diabetic has developed severe hypoglycaemia or a farmer's crops have come up short.

Talamus in Nigeria, Ghana and South Africa aims to resolve the fragmentation and reliability issues in healthcare. It was developed to ensure that the doctor/patient relationship is reinforced. Using their mobile healthcare platform, patients can make physical and video appointments with doctors, receive appointment reminders, laboratory and imaging results, store medical records, and pay medical bills with ease using their phones.

AFRICA AS A TEST GROUND FOR NEW INNOVATIONS

Africa is an ideal place to test new innovations and business models as there is often a lack of system legacies found in other parts of the world. Africa offers the opportunity to explore new ways of working, building new solutions and to address real problems with a lower cost to serve.

As an example, Rwanda is providing a business-friendly environment where companies are encouraged to use the country as a test ground for new ideas. Volkswagen has set up a plant in Kigali and are piloting a scheme to offer vehicles in a car-sharing system that will allow people to book rides using their smartphones. Volkswagen is also testing electric cars to be used in this local ride hailing service.

The use of drone technology is not a new concept and is being widely used globally. Zipline is utilising the same technology to improve health access through distribution of supplies. The interesting parts is that Zipline works with governments in Africa to develop regulations, and at the same time, deliver critical and lifesaving healthcare products precisely where and when they are needed; safely and reliably.

Zipline currently operates in Rwanda and Ghana. The average delivery time within an 80km radius is forty-five minutes. They handle quality storage of healthcare commodities and deliver as and when needed through its elaborate network. As of 2019, more than 65 percent of blood deliveries in Rwanda outside Kigali used Zipline technologies.

In Ghana, the company began using drones in April 2019 to deliver vaccines, blood and medicines. Drone usage also opens a wide range of possible adaptations including bedside medication delivery, transporting samples for lab tests, as well as enhanced home care especially in collaboration with telehealth. Zipline technologies were also used during the Covid-19 outbreak in Ghana, reaching rural areas with drones and delivering samples to hospitals to contain the spread, with a remarkable success rate.

African countries have also developed or are exploring solutions in regulatory and supervisory technology. Project Khokha initiated by the South African Reserve Bank (SARB), is proof of concept that simulated a "real-world" trial of a distributed ledger technology (DLT)-based wholesale payment system using a tokenised South African rand.

References:

United Nations, Department of Economic and Social Affairs, World Population Prospects 2019: Highlights
Capgemini Research Institute, World Payment Report 2019
GSMA, 2019
Ericsson, 2019
WeeTracker, Venture Capital Africa 2019 Report
Partech, Africa Tech Capital Venture Report 2019
*Scan, Dickerson, and Gagliard, 2016

KEY RECOMMENDATIONS

Across Africa, the digital revolution and corresponding business model innovation is being fuelled by mobile solutions, a growing start-up sector, and leading global companies adopting innovative technologies to address new markets.

Concrete actions recommended are:

- Ensure your digital strategy is in place and put it into action in specific markets in Africa, including mobile phone-based solutions.
- Digitalising your customer journey and engagement today; a large share of both B2B customers and consumers are ready for it. The readiness has been further amplified by the Covid-19 outbreak.
- Identify the key business model innovation that you can leverage to increase market share or lower your cost to serve and add them to the existing strength in your offering and business model. <
- Use Africa as a test ground for new business models. The challenges in remote areas and the rapidly growing megacities provide unique opportunities to identify novel and disruptive ideas on how to serve customers better, at lower costs.

Business Sweden's expert teams on the ground in Africa can help with assessing your readiness level.



We help Swedish companies grow global sales and international companies invest and expand in Sweden.

BUSINESS-SWEDEN.COM

BUSINESS SWEDEN in Nairobi Eden Square, 3rd floor, off Westlands road, 00800 Nairobi, Kenya T +254 20 374 9760 F +254 20 374 1788

BUSINESS SWEDEN in Johannesburg
Fourways Golf Park, Roos Street, Royal Troon Building, 1st Floor,
2068 Johannesburg, South Africa
T +27 11 300 5600 F +27 11 513 0388

BUSINESS SWEDEN in Casablanca
Section Commerciale de l'Ambassade de Suède Résidence Mouna 1,
197, Boulevard Mohammed-Zerktouni (angle rue Chella),
20100 Casablanca, Morocco
T +212 522 36 25 10 F +212 522 36 24 63



LINKEDIN.COM/COMPANY/BUSINESS-SWEDEN



TWITTER.COM/BUSINESSSWEDEN



