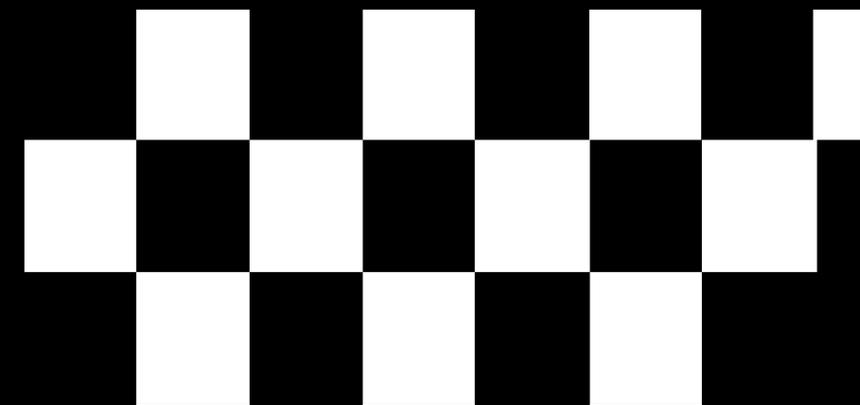


**AFRICAN INDUSTRIES**  
Influenced by technology



**I See Africa Report**

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# INTRODUCTION

## **An overview of where we are and possibly going in this decade.**

As we move into a new decade, Africa is expected to have a 33% youth increase by the year 2030. The continent will have about 251 million children of Primary school age by the end of this decade.

Considering that we are expected to have the biggest youth bulge by 2050, many of the business movements of this decade will have a big influence on how the continent deals with the large youth working population.

Aside from the need for future jobs, urbanisation in the continent is moving at a fast rate. By 2030 six of the largest 41 mega cities in the world will be in Africa. These economic city hubs will be Cairo, Kinshasa, Johannesburg, Luanda and Dar es Salam. A report on the future of Africa titled *The Africa Future Paper* also stated that the largest city in the continent will be Lagos with an expected population of 30 million by 2035.

On the business side of things the drivers of change within the near future will be African governments paying more attention to the potentials of small, medium business sector as an engine for economic growth. In 2019 Togo was noted as one of the top global improvers by the World Bank Group's Doing Business report. The World Bank 2019 Doing Business Index also found that five of the ten most improved countries economically were in Africa. Much of the funding in the various coming years will be directed towards technological innovation that brings change to socio economical challenges in the continent.

The African Industries report unpacks the influence of technology in leading industries namely fintech, agribusiness, health sector, mobile economy and edtech. As start-ups continue to tackle socio economic challenges the mentioned sectors will play an important role in increasing people's access to necessary services and industry growth. Moving forward the development of incubations and the tech start up culture in Africa will continue to grow as the start-up culture will be a commodity.



# INTRODUCTION

Thus the influence of technology will play a big role to address issues in various regions. Microsoft has already put this to the test with the opening of their research facilities of AI, machine learning and mixed reality in Kenya and Nigeria.

The rising interest of international digital leaders towards the African start-up culture will result in Africa being a competitor's playground with large groups of untapped potential consumers. We have bared witness to Alibaba's Jack Ma, Facebook's Mark Zuckerberg's interest and investment in young African innovators. In 2020 we will see the likes of Twitter and payment terminal Mark Squarer CEO Jack Dorsey's live in the continent for six months.

Looking into 2020 and beyond many of the start-ups will play on the global business stage, time will illustrate how many African tech unicorns the continent will birth.



# Agriculture: Agritech

## *'Agriculture is at the centre of wealth'*

Dr Akinwumi Adensia- President of African Development Bank

African Investment Forum 2018, projects that agribusiness in the continent is estimated to be worth US \$ 1 trillion by 2030. The use of agritech is increasing its value and interest in the sector. The use of technology in the sector sees start-ups focus on the use of data to make agriculture more accessible as well as reduce the gap between farmers, consumers and wholesalers. The agri sector in the continent will continue to gain funding especially from China. In 2018 the Chinese President Xi Jing pledged USD 60 billion in financing projects in the agri sector across Africa. One of the main focus areas will be the funding of 50 agricultural assistance programmes.

## Leading country

The Technical Centre for Agricultural and Rural Cooperation (ACP- EU) CTA has labelled Kenya as the leading country in the continent using technology to boost agriculture. The country's efforts have also been noted by tech corporations.

Microsoft 4Afrika has pledged to support the One Million Farmers platform. The One Million Farmer program was launched by The World Bank and aims to enrol a million Kenyan farmers onto digital platforms by 2022. Through the 4Afrika initiative Microsoft will provide technical and business support to 14 Kenyan innovators selected to develop technology solutions for the platform.

# Agriculture: Agritech

## Innovation to look out for

The use of drone technology in the agriculture sector will continue to have a massive impact in the collection of data and assistance with harvest. The agriculture drone market is expected to grow by CAGR of 31.3% from 2019-2026. Blue Weave Consulting also reported that the global drone market is predict to increase its net worth from USD \$1.1 billion in 2019 to USD 4.7 billion by the end of 2026.

## What to look forward to

Africa's first Agritech Africa Exhibition and Conference. The event aims to accelerate agricultural innovations and advancements in the continent. The event is expected to draw in crowds from across the continent and the world ;who will be exposed to the latest developments and solution based innovations that tackle issues such as climate change, food security and job creation.

**Where:** Cape Town, International Convention Centre, South Africa

**When:** 17-19 June 2020

# Education: edTech

The advancement to the world of work will see countries place much emphasis on improving and investing in education. This will mainly be towards achieving the United Nation Sustainable 2030 goals. As well as cultivating a workforce that is able to evolve and adapt to the digital methods of business.

In 2019 the United Kingdom government established an edtech hub. The aim of the hub is to boost digital skills in less technologically advanced regions in the world. The eight year initiative will bring together British universities, research companies and education experts to assist children, teachers and governments with new technology in their classrooms.

## Leading Country

Nigerian edtech start-ups are gradually gaining influence in the continent. The Nigerian start-up Edves has become Africa's first company to take part in the Go Edtech Accelerator program. The initiative is run by Mind CET and was developed to assist young companies in raising capital and business growth. Edves is an academic portal that automates admission and transcript operations in schools and colleges. The start-up also provides services that enable tracking class attendance and preparing classroom lessons using artificial intelligence.

Ulesson a Nigerian based start-up secured funding of USD 3.1 million. The start-up provides culture specific curriculum and a network for secondary schools in Nigeria. Access to the platform can be attained via mobile phone.

Tai Solarin University of Education is an institution passionate about improving education in Nigeria. This will be achieved through research on mechanisms of modern curriculum development and adaption mainly focused on children with special needs.



# Education: edTech

## What innovation to look out for

The growth of Tanzania's Ubongo across the continent.

In 2019 Ubongo won USD 25 000 prize money from the Next Billion Edtech pitch contest. The start-up aims to invest in providing educational content to children in remote areas without electricity. The organisation's marketing manager Lipumba stated that the prize money won would go to investing in the growth of the company which included interactive voice responses (IVR) and SMS service. The company also opened an office in Johannesburg, South Africa. This will assist the company in expanding its language offering to include Hausa, Kikuyu and Twi in 2020.

## What to look out for

2020 will mark the fourth cohort of Africa's first edtech incubator and investment program Injini. The program caters to start-ups focused on education in the continent. The incubator provides the opportunity for candidates to access financial and bespoke advisory support from industry experts. Since the launch of the program 23 start-ups have participated in the five month incubation which is based in Cape Town, South Africa. The fourth cohort will start in March 2020



# Health: mHealth

mHealth is one of the sectors that is attaining gradual growth with regards to investment. The year 2020 will see much of the innovation in this sector focused on increasing access to some form of medical care and the continuous efforts for the development of medication along with the unfailing efforts to tackle some of the illness affecting the continent and the world.

## Leading Country

Senegal has taken drastic action to tackling the rise of cancer cases in the country. As an attack against the increased cancer cases as well as the expense that coincides with cancer treatment. The government announced their plan to provide free chemotherapy in state hospitals. For women diagnosed with breast and cervical, two of the most common cancers affecting the Senegal's female population.

This plan forms part of the state's initiative to reimburse 60% of the cost for all other types of cancer treatment to its citizens in the capital Dakar. The government is also working to providing universal healthcare to all its citizens. Since 2014 ,1 in 5 people in the country have access to health care coverage, President Macky Stall wants to achieve 100% health care cover by 2022.

# Health: mHealth

## Innovation to look out for

Malaria is one of the most deadliest and stubborn diseases impacting Africa. The disease claims more than 400 000 lives annually, while two thirds of those deaths inflict children under the age of 5 and most of these cases are in the continent.

Malawi, Kenya and Ghana are participating in a pilot program that is said to 40% effective against the disease. The pilot is targeted towards young children as experts expressed that the vaccine is worth trying, as continuous progress against defeating this disease in its totality stalls.

## What to look out for

The impact of 54gene.

A biotech start up based in Nigeria aims to provide information on African DNA .The company which was founded by Ene Obong in 2019 .Has since collected close to 40 000 samples of Nigerians DNA to develop a biobank which will provide better understanding of the impact of medication and illness on African people.

Obong stated that a lot of medication is not made with Africans in mind. Pharmaceutical companies often manufacture medication for the Western market and send generic variants to the continent. However, Obong believes that one way to change this, is by making more genomic data from the African population more accessible. The company aims to expand its reach throughout Africa and conduct research on illness such as sickle cell which is mainly affected by black Africans.

# Finance: Fintech

Fintech is one of the fastest growing sectors in the continent. A report by PWC estimates that fintech investment in Africa will be valued at USD 3 billion by the end of 2020.

In 2019 China placed big bets in Africa's digital sector and greater investments are expected. Global Fintech Index City Rankings 2020 placed African countries Ghana, Nigeria, South Africa and Kenya in the top 100 of fintech hubs globally.

## Leading country

Nigeria has unofficially been labelled as Africa's capital for fintech investment and start-ups. The country has seen much growth come to their fintech start-ups. Lagos fintech firm Flutterwave will continue to expand its business in the coming years. Flutterwave has partnered with Chinese ecommerce giant Alibaba's payment platform Alipay to offer digital payments between Africa and China.

PalmPay, Nigeria based start-up is gradually getting close to becoming Africa's largest financial service platform. In 2019 Palm Pay entered a partnership with its lead investor Transsion, this partnership will see PalmPay pre-installed in Transsion's mobile device brand Tecno in Africa



# Finance: Fintech

## What innovation to look out for

What may soon be deemed as one of Africa's unicorn start-ups, InterSwitch is expected to expand its reach. The Nigerian fintech company confirmed its USD 1 billion valuation after Visa took a minority stake in the company. Many are expecting the fintech start-up to list on a major exchange

## What to look forward to

Formerly known as Dot Finance Africa, Fintex Africa is the continent's flagship event on fintech and banking innovation. The event is a gathering for more than 300 industry leaders from more than 25 countries across the continent.

**When:** 12-13 February 2020

**Where:** Kigali, Rwanda



# Mobile Economy

A report by GSMA titled *The Mobile Economy sub-Saharan Africa 2019* found that sub-Saharan Africa continues to have the fastest growing mobile economy. The report projects that the region will add 167 million mobile subscribers from 2018-2025 reaching a total of 623 million by 2025. Many of the new subscribers are expected to connect from Nigeria, Ethiopia, DRC, Tanzania and Kenya.

This growth will be reflected in the mobile ecosystem which will contribute to various African countries economies. At the GSMA Mobile 360 Africa conference it was reported that sub-Saharan Africa mobile ecosystem contributed USD 185 billion in 2018 and is said to increase to USD 623 billion by 2023. Furthermore smart phones account for 39% of mobile connection in the continent. This will increase by two thirds by 2025.

## Leading Country

In 2019 one of the world's largest closed telecom markets was opened. The Ethiopian government announced its plan to offer a minority stake of the stated owned Ethio Telecom, monopoly firms and foreign firms were encouraged to bid.

The state also stated that they would issue two new licenses to telecom networks, this would provide citizens with more network options. The telecoms that receive the license will be expected to be operational before the end of 2020. Telecom giants such as Safaricom and parent company Vodacom Group will be some the major players in the bid for operating in the country.



# Mobile Economy

## What innovation to look out for

In 2019 the Head of sub-Saharan Africa for GSMA Akinwale Goodluck stated that 3G will overtake 2G as the leading mobile technology in the continent from 2019. However by 2025 4G will account for almost one in four connections. With this in mind mobile operators are expected to invest close to USD 60 billion on network infrastructure and services from 2018-2025. Almost a fifth of these investments will be towards 5G networks.

In 2019, Africa bared witness to the first made in Africa mobile phone. Owned by Rwandan company Mara Group the phone comes with built in features such as biotech features to unlock the phone. The phone goes for USD 159 general version and USD 290 for high end. Mara opened a plant in South Africa, the company is planning on opening its third plant in Nigeria. The company's phones are sold in 46 countries including America.

## What to look out for

Africa's 'digital natives' – first time phone buyers

A report by GSM Association reported that the emergence of first time youth mobile subscribers will continue Africa's momentum as the fastest growing mobile region. The Mobile Economy report further states that over 160 million new subscribers will come online by 2025 this increasing the continents mobile users to 623 million from 456 million in 2018.



# In Closing

The impact of technology in the last decade has seen the creation of many industries and the dismantling of many traditional business structures. In the context of Africa the flourishing of the mobile economy has seen many people gain access to services literally at their fingertips. Moving into a new decade where the concepts of 5G and IoT will be the buzz words, much evolution in the mentioned industries in this report will be expected.

However, businesses, organisations and innovators will need to ensure that the creation or development of tech influenced products/ services will be easily accessible to people in remote or rural areas. Also ensuring that the innovations can adapt to different languages and lingo across the continent. The start-up culture will definitely be the driving force for the development of industries in the continent. The goal for many of the current and emerging start-ups will be seeking success across the continent. Such aspirations will see many organisations, governments and businesses working with start-ups to increase consumer reach across African.

Many of the start-ups disrupting various industries in this coming decade will largely be focused on providing access to people through their product or service. This is mainly due to the need of solution based innovation as well as the opportunity that lies in tapping into under catered market.

