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Leveraging digital to unlock the base of the pyramid market in Africa

Waves of digital innovation in financial services

May 2017

Contents

Foreword

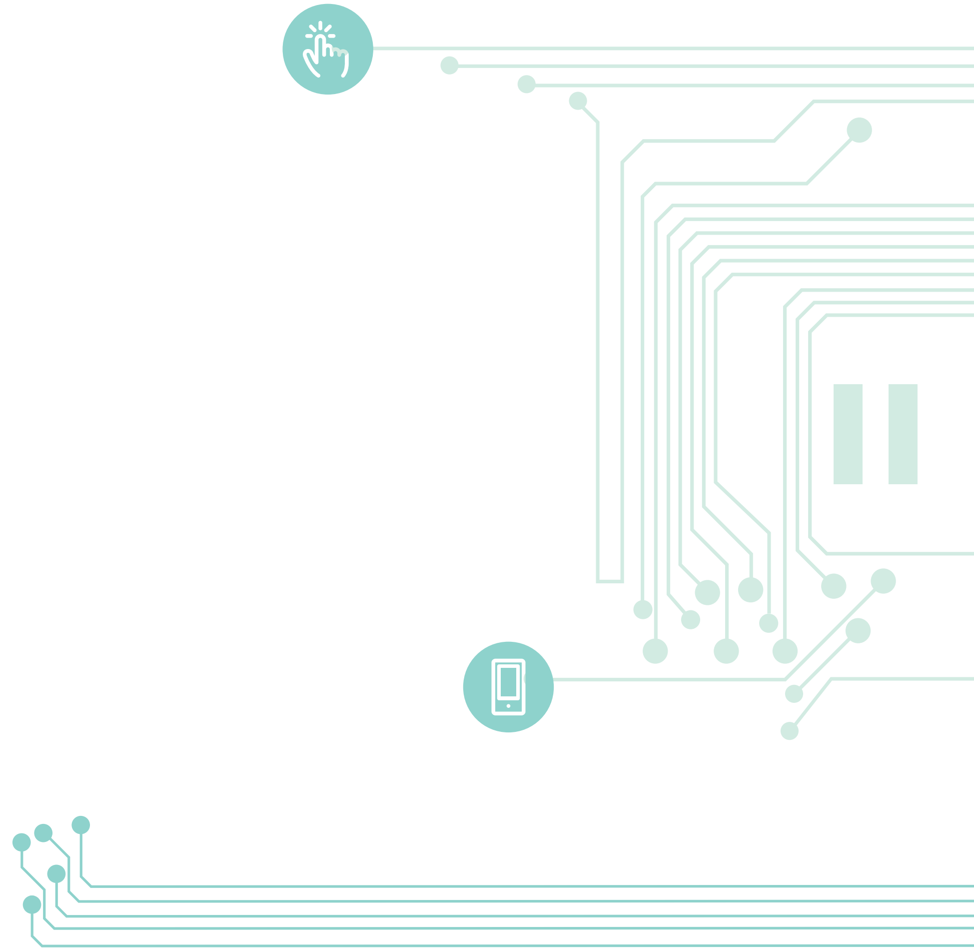
Except for South Africa, the level of formal banking and insurance penetration across Africa remains low. However, the industry's potential – particularly for products that are tailored to the needs of the low-income segment at the base of the pyramid (BoP)[1] – remains largely untapped. Half of South Africa's work force falls into the BoP income bracket.[2] This proportion is likely to be much higher in the rest of Africa.

Although BoP consumers represent the majority of spending power in Africa, their low income has been seen as a hindrance to providing products and services through traditional distribution models. For example, traditional financial service providers (FSPs) that rely on bricks-and-mortar branches, ATMs, and the payment infrastructure of banks, have struggled to capture BoP consumers. This is partly because of high costs linked to their traditional models, as well as an element of mistrust that clouds part of the industry.

New market entrants have started to disrupt traditional business models by introducing digital technology at various parts of the value chain. We have unpacked these in three waves of innovation in Africa's financial services industry. New entrants leverage mobile technology, often through partnerships, cloud computing and advanced data analytics, to bring down costs, achieve reach and increase trust. In particular, partnerships with mobile network operators (MNOs) enable these new entrants to leverage an existing customer base and solutions such as mobile wallets to streamline credit extension, premium collection and claim pay-outs. This is a game changer for the financial services industry and is helping to unlock Africa's mass market.

As a team we welcome your thoughts and considerations on this report.

Roger Verster
Financial Services Industry Leader
Deloitte Africa



Developing a more financially-inclusive Africa

The significant impact that digital technology has played in Africa thus far is expected to gain even more momentum.

This will be a key tool for ensuring that all Africans are financially empowered and able to achieve their full potential. From micro merchants and smallholder farmers, to women and those currently discounted, it is critical that all sectors come together to develop robust digital financial ecosystems. Developing a more inclusive Africa will take a combination of strong partnerships, relevant financial solutions and a willingness for governments to move beyond cash. There are a number of trends currently impacting financial inclusion.

1. Mobile as an acceptance tool
It is fair to say that technology has completely transformed society in a few short decades. Innovations are creating novel ways of engaging with friends and family, but also new ways to do business, both locally and across borders. Mobile in particular is driving innovation in how people transact. Africa is moving to the next level of economic interconnectedness with an increasing appetite for simplifying the bartering process – whether this is lowering the barriers to the formal financial infrastructure, or providing greater access to acceptance solutions. Africans are having their say with their mobile wallets.

2. Digitising key value chains
Recent industry studies showcase the importance of digitising the value chain. Interestingly, executives consider digital design (and manufacturing) to be a critical driver of competitiveness, and believe digital adoption and adaptation is a senior leadership priority. Successful implementation of digital solutions entails fluid digital communication across the value chain. The continuous flow of data is the digital thread. And as the current trend indicates, organisations that do not capitulate to the demands of their customers may cease to be relevant, or even cease to exist, in a few years.

3. Remittance ensuring more secure money transfer solutions
Historically, cross-border currency exchange has been a painful endeavour. Surprisingly, this is how the bulk of Africa operates, as well as several markets across Europe, the United Arab Emirates (UAE), and Asia. Today, however, online money transfers have become one of the safest ways to send friends or family members the support they need; it is exceedingly convenient and involves only a nominal cost. Remittance in Africa is in many cases the only way people can transact, and therefore a lifeline.

4. Electronic identity solutions
We take for granted the fact that we each have a formal identity – a way to prove who we are, empowering us to open up a bank account, or apply for a loan. Many in Africa do not have this basic right, and with many governments this is a key priority. With new electronic ID cards available, this is the future of financial inclusion. It is also providing a safe and convenient way for people to interact with the world around them – giving the financial sector an opportunity to overlay with a payment solution that turns the eID card into a payment tool.

Although digital payments are key to achieving a more inclusive Africa, debit and prepaid solutions are helping to overcome initial barriers and levels of comfort with electronic payments. This is an important first step for many that are unbanked or under-banked.

Raghu Malhotra
President, Middle East and Africa
Mastercard

Digital disruption in the financial services industry is inevitable

Traditional banking and insurance providers face disruption as technology companies leverage digital solutions to the established industry.

Across many sectors, businesses face increasing competition from players outside their industry that are leveraging the power of digital to disrupt traditional business models. This is achieved through the introduction of new technology, which in turn forces the incumbents to change the way they think and operate.

In *Digital disruption – Short fuse, big bang?*,[3] in 2012 Deloitte predicted the extent to which an industry will be disrupted by digital across two dimensions: the size or degree of impact, and the imminence or timing of change. This prediction is coming to fruition.

Degree of impact – the *bang*:
The degree of impact is expressed as a percentage of changes in business. The higher the percentage, the greater the impact. The bigger the bang, the bigger the impact.

Timing of the impact – the *fuse*:
The fuse is the timeframe within which the disruption is expected. The shorter the fuse, the shorter the timeframe.

Like other industries, global banking and insurance are facing disruption by technology players. However, we expect this disruption to be imminent and to be sizeable in impact: short fuse and big bang.[4]

In recent years, technology-driven companies have entered the financial services industry, applying digital solutions to an established and at times sluggish industry, and bringing disruption to different parts of the value chain. Due to the high level of regulation in the financial sector, the room for innovation and change seemed limited for many traditional FSPs. Regulation also led to high barriers to entry, shielding the incumbents from new market entrants.

Digital solutions allow companies to provide services at a lower cost, and to be more flexible and customer-centric. The entry of digital disrupters is accelerating the rate of change and is increasing the impact of change.

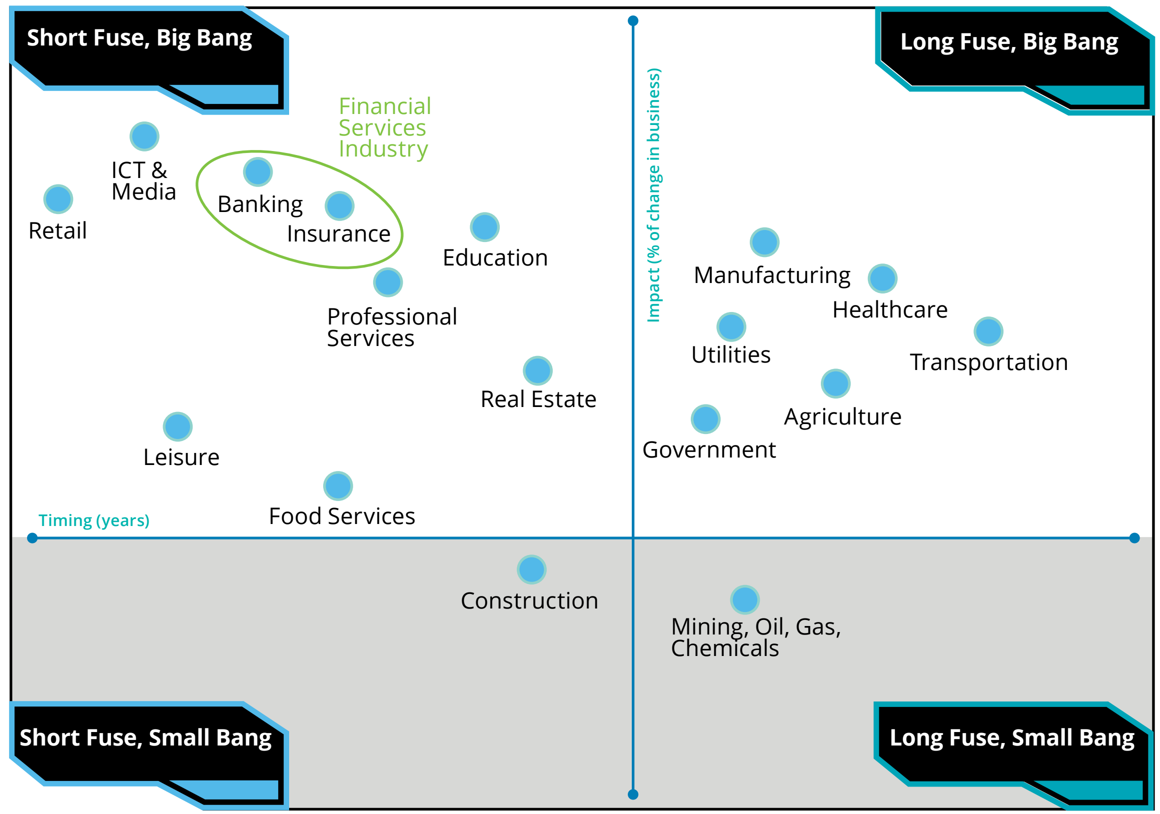
While fintech players are changing the way consumers transact, save and access credit, in the insurance industry, digital is changing the way individuals purchase insurance. There are various ways that digital is disrupting the financial services industry:

- blockchain technology has the potential to provide a fast, cost-effective, and highly reliable alternative to traditional databases in the banking and insurance sector
- data analytics allow companies to gain new customer insights and tailor products to the specific needs of their customers
- digital communications such as chatbots enhance customer engagement by simplifying applications for users.

Companies that embrace digital disruption are well positioned to become leaders in their respective industries and will be able to unlock new markets and improve their margins.

In Africa, these digital disruptors are best positioned to unlock the currently under-serviced mass market.

Figure 1. Deloitte's Global Disruption Map



Source: Deloitte, 2015

Digital disruptors in the global financial services sector

Digital disruptors tend to have different objectives depending on the maturity of their markets.

Developed/ mature markets

Attract customers away from incumbent providers

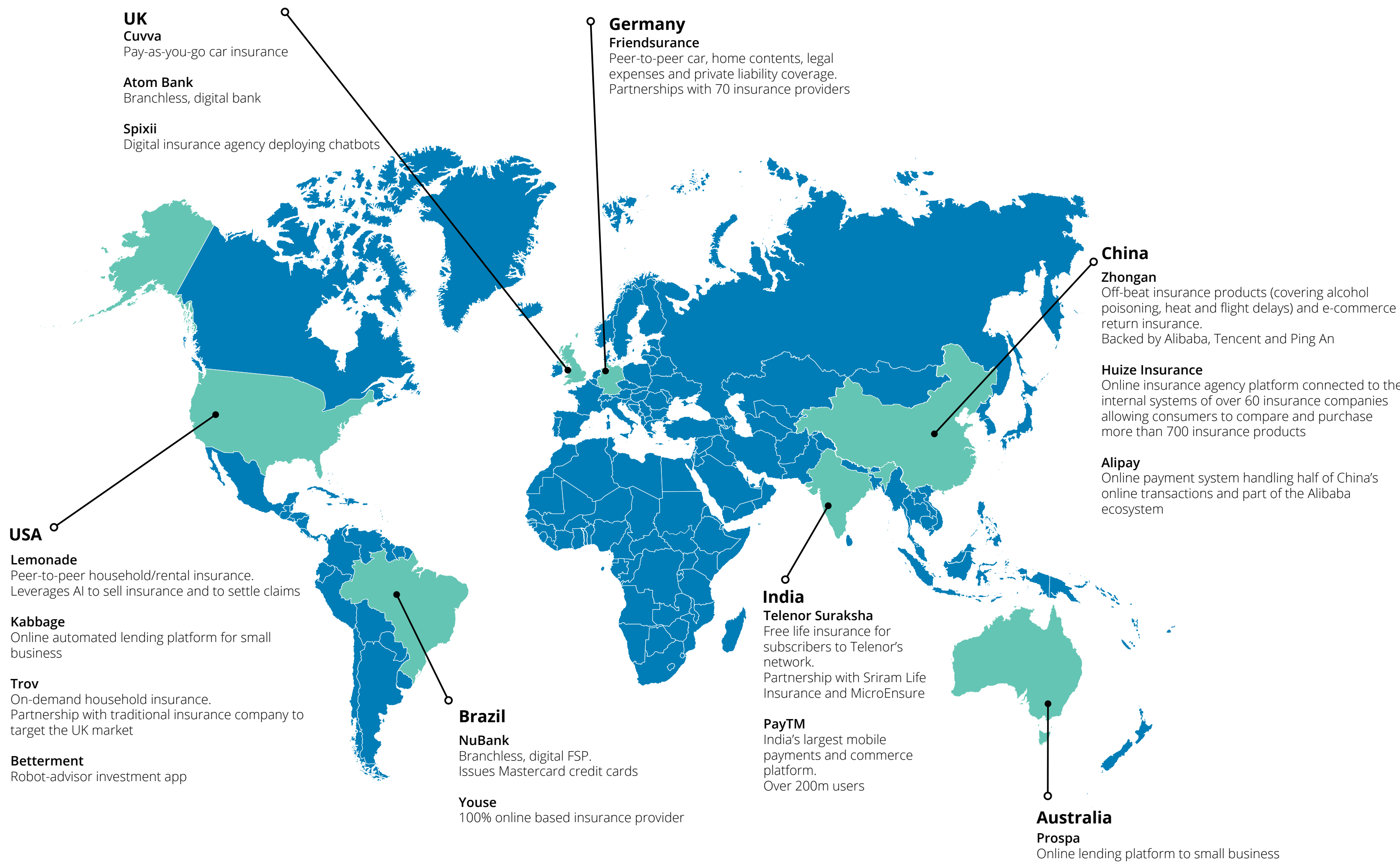
In established and mature markets, new market entrants offering digital products/ services tend to lure customers away from traditional financial service providers due to more attractive prices, more flexible and consumer-friendly models.

Developing markets

Attract unserved first time customers

Digital products/services offered in developing countries tend to have the objective to reduce costs to a level that the products become accessible to low-income groups that are perceived to be not viable for traditional financial products. They also introduce new distribution models and payment channels that tend to make their products more aligned to the needs and requirements of low income consumers.

Figure 2. Examples of digital disruptors in the financial services sector in the rest of the world



Africa's large untapped markets require innovative products and business models

Tech-driven companies and digital business models are well positioned to disrupt the formal financial services market as they offer cost-effective and scalable solutions that can capture the mass market.

Research by the World Bank,[5] The Centre for Financial Regulation and Inclusion (Cenfri),[6] The Mastercard Foundation,[7] Swiss Re Foundation[8] and Munich Re Foundation[9] have shown the positive socio-economic impact of access to affordable financial products such as credit, savings and insurance. These play a crucial role, both in unlocking economic opportunities and in reducing poverty, by helping BoP consumers to mitigate the effects of negative financial shocks, and in doing so reducing vulnerability and avoiding the poverty trap.

In a **first wave** of disruption in Africa's financial services sector, fintech companies started, mainly off the back of telecommunication companies' distribution capabilities, to disrupt the banking sector by developing innovative digital banking and payment solutions. While formal banking penetration remains low in Africa, the robust uptake in mobile wallets as an alternative to traditional transaction services reflects the strong demand for financial products tailored to the needs of the BoP (see Figure 3). The case of Safaricom's mobile wallet, m-Pesa, is well documented and has shown that servicing the BoP can be commercially viable. The model of mobile payment solutions independent from bank accounts has been replicated by other MNOs in various markets across Africa and beyond.

As with banking, insurance penetration remains below 2%[10] in most African markets (see Figure 4).[11] According to the National Insurance Commission of Nigeria, 3 million adults in Nigeria had insurance cover, while more than 14 million adults indicated in a 2014 study conducted by Enhancing Financial Innovation & Access, a financial sector development organisation in Nigeria, that they were interested in insurance cover.[12] This mismatch of cover and interest for low-cost insurance products reflects the sizeable potential affordable insurance offerings in under-serviced markets. The low penetration rate also reflects the inability of traditional insurance providers to service the BoP profitably.

Financial products for the BoP have to consider the unsteady cash flow of low income consumers. Given that affordability is fundamental to unlocking the BoP market, products need to be offered at the right price point and designed to be rapidly scalable. The reliance on bricks-and-mortar branches, ATMs or broker networks undermine the ability of established FSPs to reduce the cost of service and limit the reach these companies can achieve, as new physical branches require sizeable additional investments. Given the low banking penetration, insurance companies are not able to rely on the traditional payment channels provided by banks for premium collection and claim pay-outs.

An additional consideration for the insurance industry is the aspect of trust by consumers in insurance products. This is linked strongly to low levels of financial literacy among BoP consumers, the high complexity of financial products and the cumbersome claims process. Insurance products remain largely 'invisible' to the consumer as they provide a financial promise for the future and the benefit is only seen once an adverse event occurs.

Recognising the potential of the BoP market, fintech companies are designing solutions to overcome these challenges and to capture the largely unserved market in Africa. The use of digital technology enables companies to scale their operations rapidly and efficiently and to extend their reach at lower costs compared to FSPs that rely on physical branch networks.

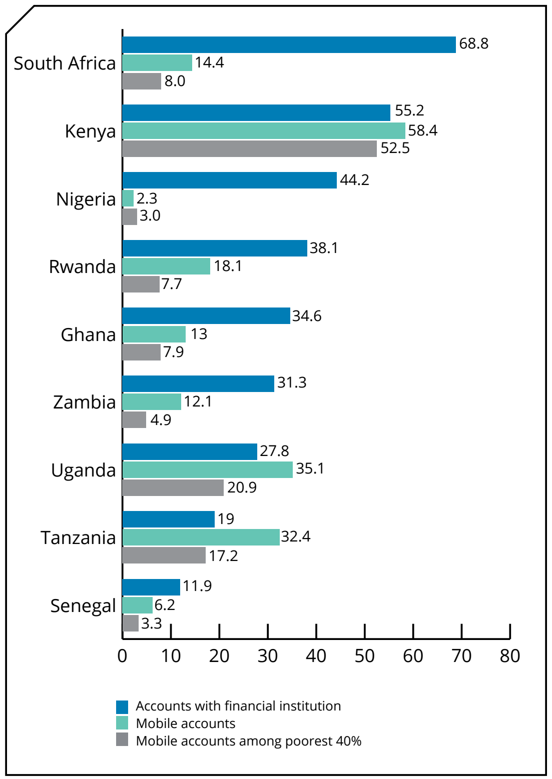
Following in the footsteps of fintech companies, insurtech companies have started to disrupt the insurance market in a **second wave** of disruption, by leveraging some of the innovative technologies from the first wave such as mobile payment systems. Similar to the fintech companies disrupting the payments space, insurtech companies are developing insurance products that are targeted at the BoP. By adopting innovative approaches to risk assessment, distribution, payments, administration and product design, insurtech companies are able to achieve the scale that is required to service the low-income mass market.

The key enabler and catalyst for digital disruption in the financial services sector has been the rapid adoption of mobile phones (Figure 5 and 6). Mobile phones play an important role in delivering digital services to the BoP at more affordable prices. Insurance companies and credit providers can piggy-back on MNOs' mobile infrastructure to more effectively reach customers and use mobile payment channels for premium collection and claim pay-outs or credit extension without being dependent on banks.

Taking into account the dominance of feature phones, players in the industry use basic mobile technology including USSD codes to service the BoP. The increasing adoption of smartphones provides alternative distribution and engagement channels and opens new avenues for FSPs to service the BoP market.

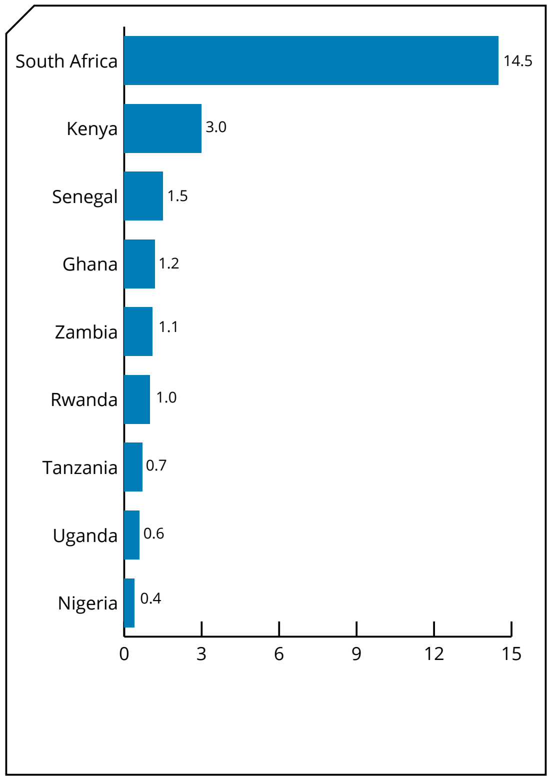
We expect the current models for servicing the BoP will lead to the emergence of a new type of digital disruptor. In this **third wave**, digital disruptors will create marketplaces for FSPs to offer a host of services to an aggregated client base.

Figure 3. Accounts, 2014 (% of population 15 years and older)



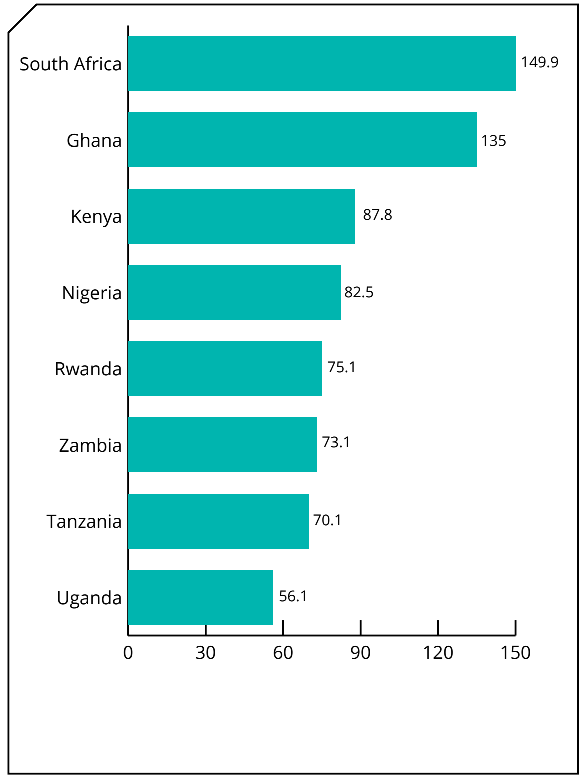
Source: The World Bank, 2017

Figure 4. Insurance penetration, 2016 (%)*



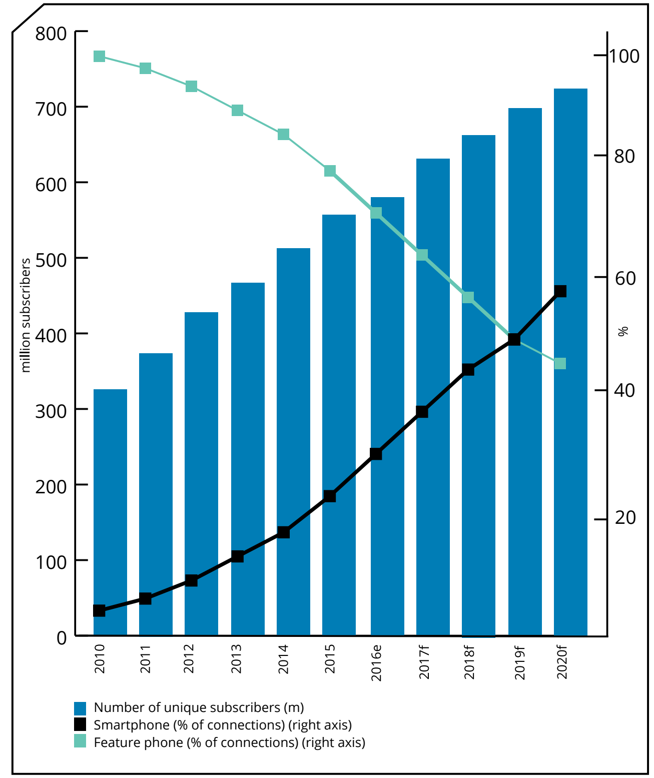
*Insurance penetration is measured as gross premiums as % of GDP
Source: BMI, 2017

Figure 5. Mobile penetration, 2016 (%)



Source: The World Bank, 2017

Figure 6. Mobile phone market in Africa by technology, 2010-20f



Source: GSMA, 2016

Waves of digital innovation at the base of the pyramid

A number of innovative firms are disrupting Africa's financial services industry. We take a look at these companies in three waves.

First Wave

Mobile money – paving the way for future financial innovations

Second Wave

Leveraging First Wave innovations to expand financial service offerings for the base of the pyramid

Third Wave

Platforms – the convergence and aggregation of financial services

Mobile money – paving the way for future financial innovations

Mobile money has been driving financial inclusion at the BoP in Africa by providing basic money transfer and payment services to the unbanked.

In the past, BoP consumers were largely excluded from formal financial services. This impacted negatively on their overall welfare, as they were mostly unable to:

- have access to day-to-day transactions
- remit money to family members
- enable and protect savings
- smooth unsteady cash flow
- fund commercial activities e.g. working capital for small businesses
- plan recurring payments e.g. school fees, utility bills
- mitigate shocks e.g. medical emergencies, death of family member, natural disasters.

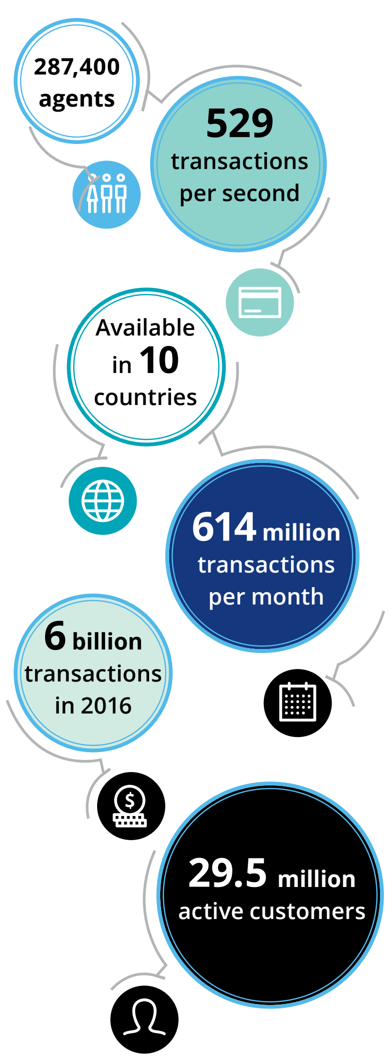
The rapid adoption of mobile phones in Africa enables innovators to provide BoP consumers with basic mobile-based financial services such as mobile payments and savings products. The use of mobile-based services make the dependency on physical banking infrastructure less pronounced.

In 2007, Kenya's Safaricom kicked off the mobile money transfer revolution in Africa by launching its m-Pesa service. This service was the first of its kind in Africa and enabled mobile phone users to transfer money to other users. As the service does not rely on the traditional payment infrastructure of banks or bank accounts, it caters to the needs of the largely unbanked BoP population. Since its launch 10 years ago, m-Pesa has been rolled out in 10 countries and has reached a customer base of approximately 30 million active users.[13]

Given the successful uptake of m-Pesa, mobile money services have been introduced in other parts of the world by a wide range of operators, including leading MNOs such as Orange, Airtel, Tigo and MTN. Globally there are approximately 270 live mobile money services in more than 90 countries servicing close to half a billion users.[14]

Partly due to the low banking penetration, mobile money is attractive in African markets. The continent accounts for more than half of all mobile money providers and close to two-thirds of all active accounts.

10 years of m-Pesa



Source: Vodafone, 2017

According to the World Bank, in 2014 approximately 20% of adults in East Africa had a mobile money account compared to 12% in sub-Saharan Africa (SSA), 3% in South Asia, 2% in Latin America and less than 1% in all other world regions. Mobile money services have contributed to deepening financial inclusion in SSA from 24% to 34% between 2011 and 2014.[15]

Depending on the market, mobile money transfer systems typically rely either on USSD codes or on SIM application tool kit technology which can be accessed on basic feature phones or smartphones. The simplicity of the interface has contributed to the success of mobile money given the low levels of financial literacy.

The uptake of mobile money services varies across countries and is strongly linked to the regulatory environment and the depth of banking penetration. In Kenya and Tanzania, for example, the regulatory environment supported the roll-out of the service, driven by MNOs. This **operator-led model** underpinned the rapid uptake of the service and has led to mobile money penetration surpassing banking penetration (Figure 3).

In other markets, including Nigeria, a **bank-led model** was adopted in which a bank acts as the initiator of the service. The role of the mobile operators is limited to the provision of the infrastructure and hence reduced the incentives for MNOs to develop the technology and drive customer acquisition.

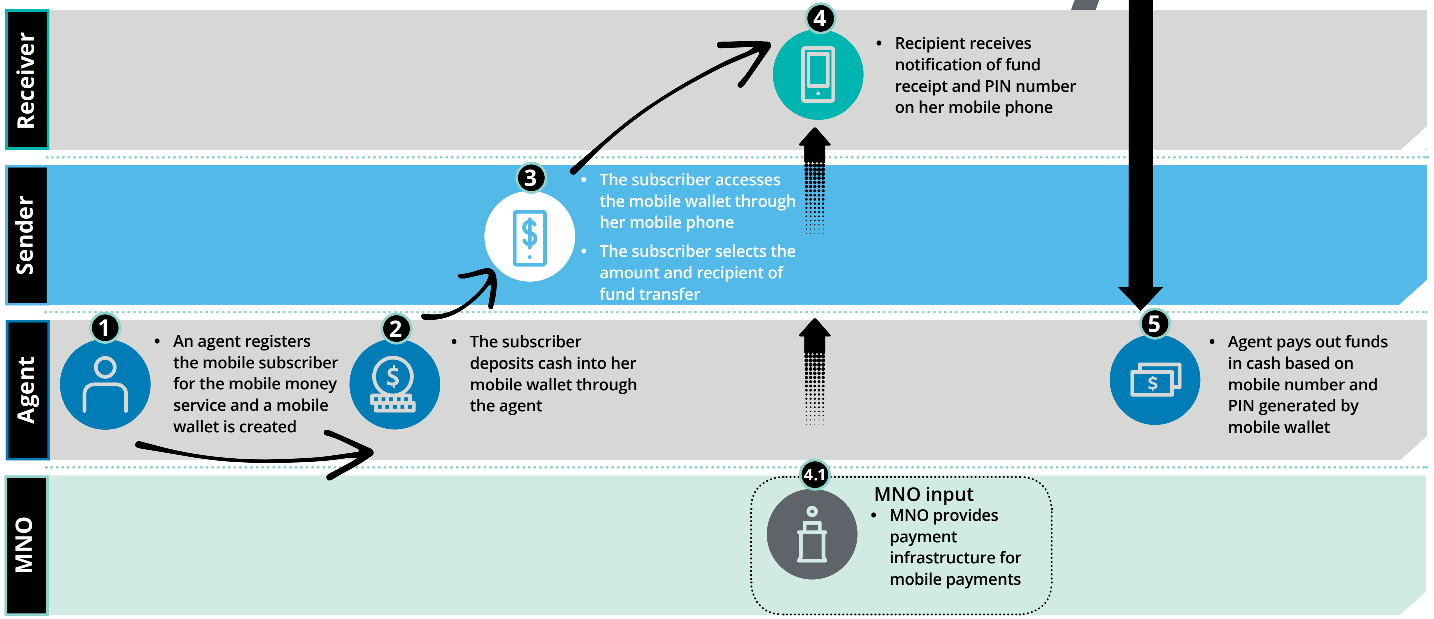
In South Africa mobile money failed to gain traction due to a combination of factors. Firstly, similar to the bank-led model, local regulations require MNOs to partner with FSPs in order to provide mobile money services. Secondly, due to the relatively high banking penetration the need for mobile payment systems is lower compared to markets where banking penetration is much lower. Thirdly, alternative money transfer systems had already been established by, for instance, retailers and the South African Post Office providing direct competition to mobile money services.

Initially designed to facilitate domestic person-to-person (P2P) transfers between mobile phone users and to store money, mobile money service providers have since then added a range of additional functions including cross-border remittances, basic savings and credit services.

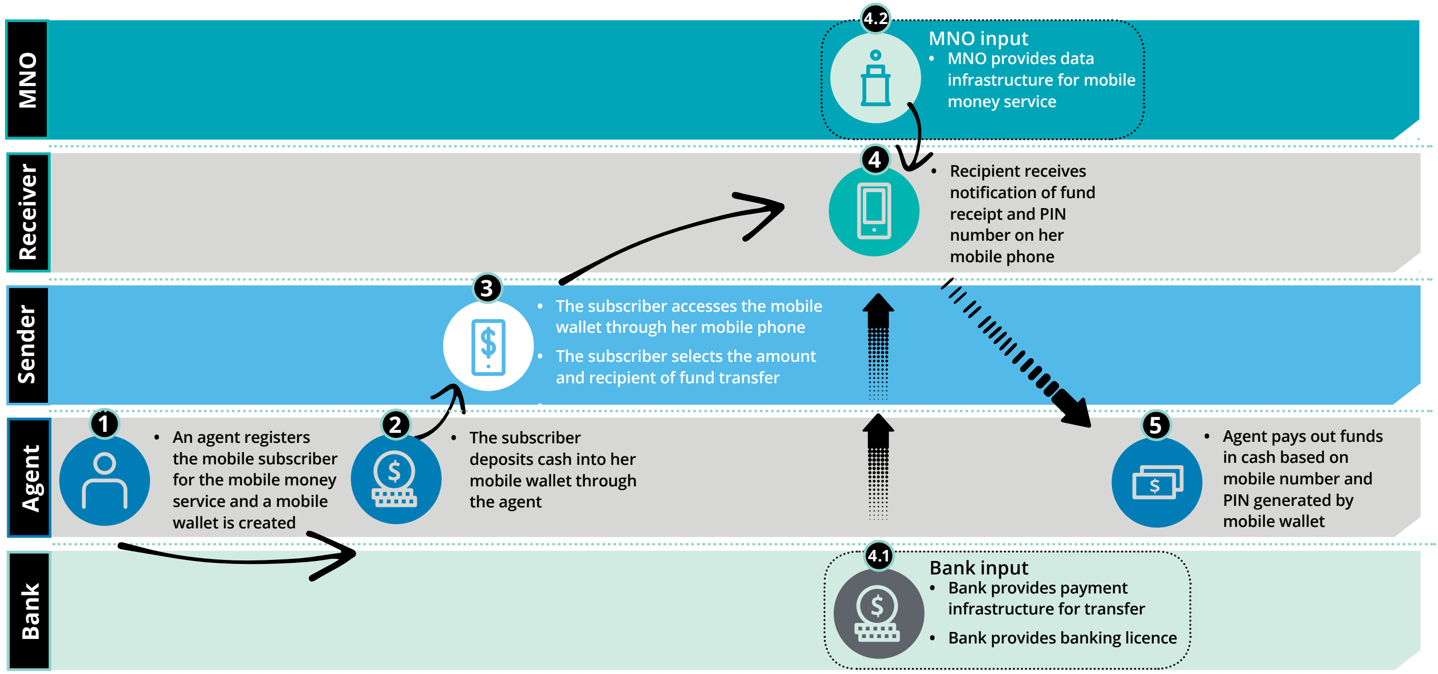
In addition to P2P transfers, payment facilitation for government or municipal services as well as customer-to-business payments are increasingly offered by mobile money service providers.

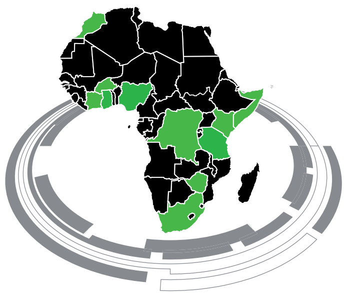
Mastercard for instance is currently rolling out Masterpass QR across Africa. Masterpass QR is an interoperable, mobile-driven person-to-merchant solution that allows small, medium and micro-sized enterprises (SMMEs) to accept secure payments and consumers to make safe, simple and fast payments for in-store purchases. Through its strategic partnerships across Africa with Ecobank, United Bank for Africa, Kopo Kopo and Wari, Mastercard has showcased its resolve in terms of driving a more financially included Africa, displacing cash across the continent and connecting previously excluded consumers to the formal financial sector with a secure and convenient way of transacting.

MNO-led mobile money: How it works



Bank-led mobile money: How it works





HomeSend

HomeSend acts as a link between different payment service providers across countries for affordable cross-border money transfers and payments, helping to displace cash in Africa and globally.

HomeSend, a joint venture between Mastercard, eServGlobal and BICS, provides a safe, convenient and cost-effective way to transfer funds across borders to 54 countries. HomeSend is a channel-agnostic hub that connects money transfer operators (MTOs), MNOs, banks and other payment service providers. It builds on the successful deployment of domestic mobile-enabled person-to-person transfers and provides an extension of these transfer services across borders.

Currently HomeSend links payment service providers in 11 African countries, actively supporting financial inclusion in Africa by ensuring more people have access to a secure digital method of receiving and sending money. Additionally, the remittance solution provides an easy way for micro- or small business owners to receive payment for goods and services, driving efficiency and ensuring cash is a thing of the past.

Users can send money to and from a range of digital endpoints, including mobile money accounts, payment cards, bank accounts and cash outlets, regardless of their location or that of the recipient. Given the inter-operability of its network, HomeSend is able to scale its service rapidly as users can send and receive remittances across different mobile networks globally through their mobile phones. Payments between mobile wallets are made in real time, while payments that involve bank accounts may take one day or longer depending on the turnaround time of the bank involved.

HomeSend acts as the link between different payment service providers across countries. Payments are settled through HomeSend's central account in Belgium. In order to participate as a payment service provider, network participants are required to hold all the necessary licences, authorisations and approvals in the countries they operate in and have to comply with applicable laws and regulations in those countries.

Orange Collecte

Value-add to Orange Money users, providing a 100% mobile crowd-sourcing function.

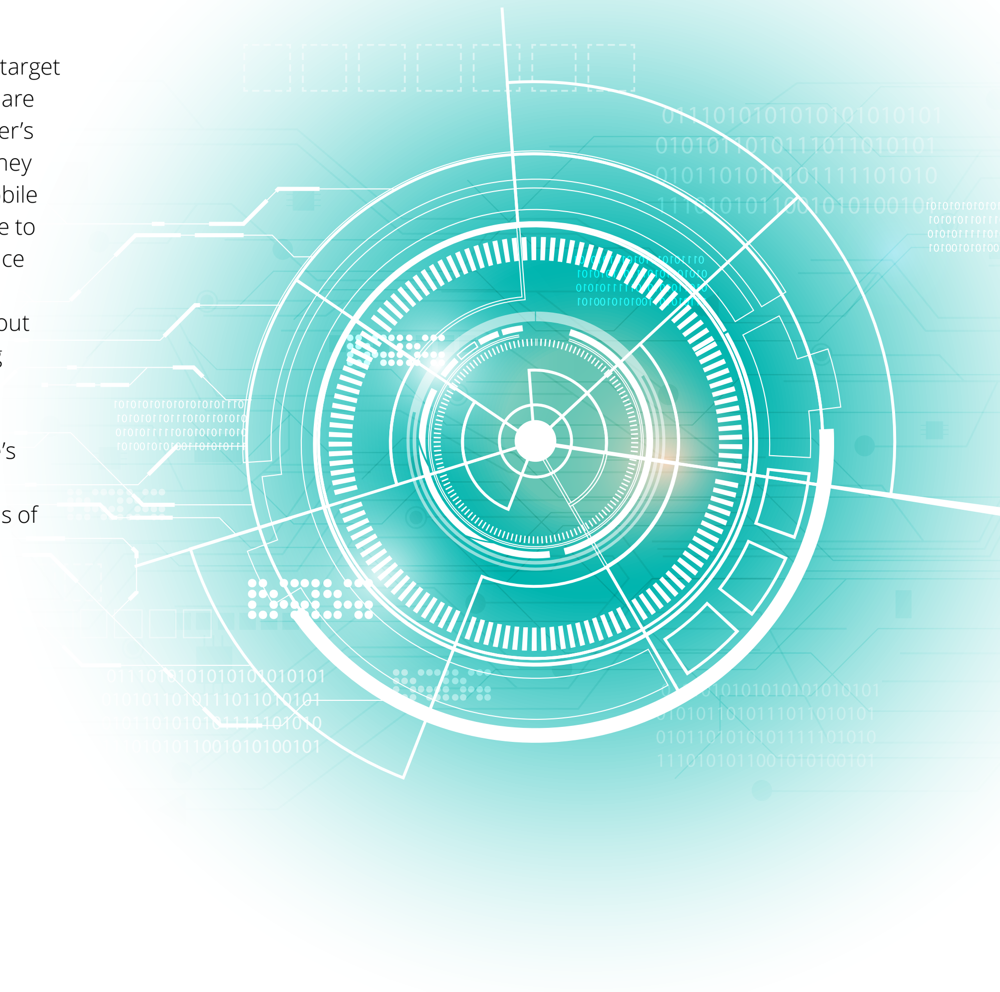
In 2015 Orange, in partnership with HelloAsso, launched Orange Collecte, Africa's first 100% mobile crowd-funding service, in Côte d'Ivoire. HelloAsso is France's leading crowd-funding site for charitable giving that has raised more than €49m for close to 27,000 organisations.[16] Orange Collecte enables users with Orange Money accounts to send and receive funds via their mobile wallets.

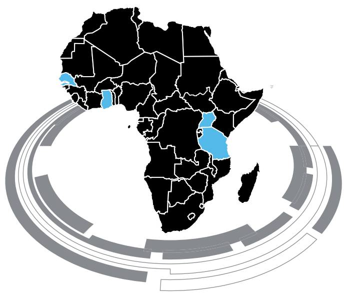
The crowd-funding platform can be used by either private individuals or charitable organisations. A dedicated mobile wallet has to be set up by charities seeking to raise funds through Orange Collecte. Users can set up a fund on Orange Collecte either via an USSD menu or via the Collecte website. The USSD technology provides access to the service for both feature and smartphone users.

All contributions to fundraising campaigns are made via Orange Money mobile wallets. Contributors can choose a campaign and the amount they want to contribute. Users are also able to invite other mobile wallet holders to contribute to the campaign.

Once a pre-agreed donation target has been reached, the funds are transferred directly to the user's or organisation's Orange Money account. By leveraging its mobile money service, Orange is able to offer its crowd-sourcing service to its 12 million subscribers throughout the country without relying on traditional banking infrastructure.

This service is part of Orange's drive to support innovative solutions aligned to the needs of its subscribers.[17]





Life and hospital insurance by BIMA[18]

BIMA delivers simple but quality insurance to BoP consumers via mobile technology, with cover of up to US$1,100 for as little as US$0.30 per month.[19]

Headquartered in Sweden, BIMA's first service was launched in Ghana in 2011. By the beginning of 2017 the firm operated in four African, eight Asia-Pacific and four Latin American markets with approximately 24 million subscribers.

BIMA's service was set up to provide affordable and easy-to-understand life and hospital insurance products that offer great value to low income consumers.

While traditional insurance companies tend to regard the BoP market as unviable, BIMA identified a gap in the market and targets this market segment with tailored and affordable products. BIMA provides insurance cover of up to US$1,100 for as little as US$0.30 per month.

Employing a large and well-trained network of local agents enables BIMA to educate unserved low-income consumers about the benefits of basic hospital and life cover. While more than 95% of subscribers are registered by BIMA agents, the company also utilises mobile technology to sign up customers, verify registration, receive premium payments and pay out claims. BIMA's registration process is fully paperless and can be completed within two minutes.

Its partnership with MNOs provides BIMA with a much larger and more cost-effective reach compared to insurance providers that rely on bricks-and-mortar offices or brokers.

The application of digital technology gives BIMA the flexibility to accommodate the low and unsteady cash flows of its customers by deducting the monthly premiums from subscribers' airtime balances in small increments.

The affiliation with MNOs has also increased customer trust by allowing the firm to pay out claims via mobile wallets within 72 hours.

The firm's strong customer-centric focus ensures that it is able to provide the best value to its customers. This has proved crucial given that BIMA's target client base is usually unfamiliar with traditional insurance products.[20]

93% of BIMA's customers live on less than US$10/day
54% on less than US$2.5/day

75% of BIMA's customers access insurance for the first time

24 million customers in 16 countries, with 60% between 18 and 35 years

Up to **500,000** new customers per month across the global network

+95% of registrations done in person through 3,500 agents

Key success factors

Client-centricity
A client-centric culture ensures delivery of best value for consumers

Customer engagement
Strong focus on customer engagement through well-trained local agents and quality assurance calls

Simplicity of product
Removing product complexity makes the product more acceptable and easier to sell

Partnerships and trust
Through partnerships with MNOs, BIMA gains access to a large customer base

Company and product/ service description

BIMA's target markets typically have an insurance penetration rate of less than 3%, reflecting a significant opportunity for mass market life and hospital insurance offerings. Traditional insurance companies are unable to efficiently provide services to BoP consumers due to cost structures, limited reach, complexity of products and low financial education. BIMA has developed insurance products that are tailored to the needs of low-income consumers, such as life insurance cover at affordable premiums.

Partnerships with MNOs provide BIMA with the necessary reach and allow it to gain consumers' trust. These key partnerships also enable BIMA to use reliable payment channels via airtime balances and mobile wallets to collect premiums and pay out claims.

Through mobile technology BIMA was able to scale its operations and customer base rapidly. The use of digital technology also enables BIMA to deduct monthly premiums in small increments, accommodating the low and erratic cash flow of its customers.

Initially BIMA followed a model that was free of charge for the subscribers of its partner MNOs, which subsidised the product, and cover was based on their airtime spend. This allowed BIMA to build scale, trust and awareness of the benefits of insurance. Later, BIMA moved to a subsidised model where customers could opt to double their cover by contributing to the premium. Today, the products offered are paid for fully by the customers. The transition to a fully-paid-for model has also contributed to removing complexity from BIMA's products as there is now fixed amount of cover that is not linked to airtime spend.

Given the large number of first time insurance buyers, BIMA remains reliant on its own agent network for customer acquisition, but the company plans to strengthen its digital marketing strategy.

Digital solutions

Mobile

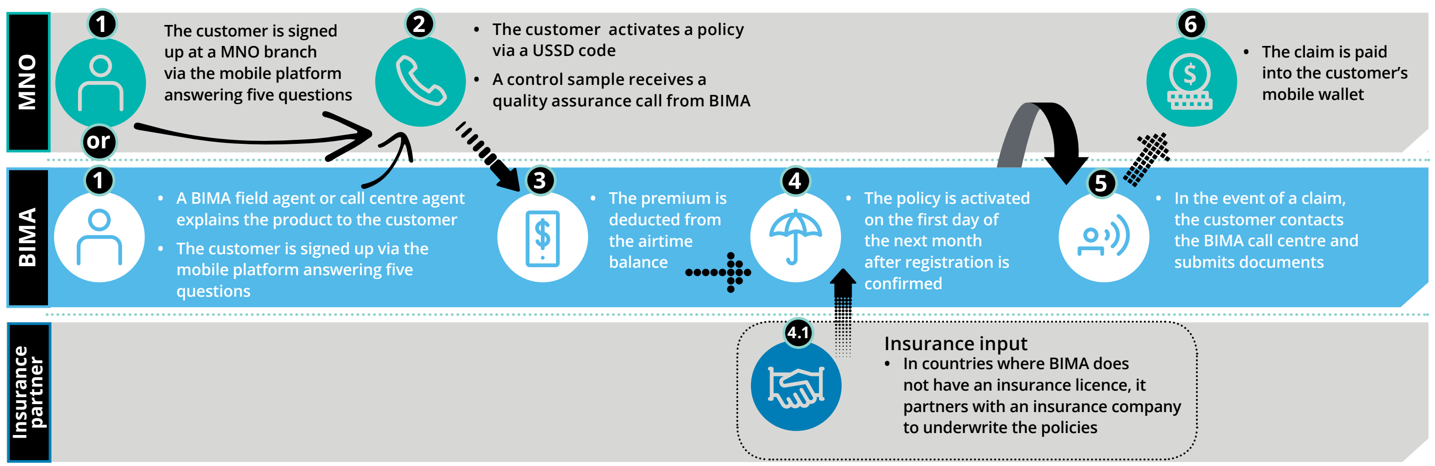
- BIMA's digital technology is integrated into MNOs' systems (i.e. via USSD) allowing BIMA to deduct premiums in small increments from airtime balances, accommodating the cash flow of its customers
- Mobile technology including digital signatures is used to sign up customers
- Communication via text messages is used to confirm validity of registration
- The use of mobile money guarantees pay-out of claims within 72 hours, which has been supportive in building trust in the market
- Mobile technology allows BIMA to offer eHealth services linked to the insurance products

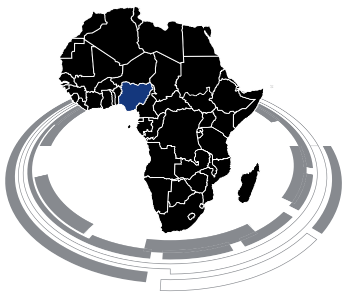
Data analytics

- BIMA uses advanced analytics and payment algorithms to leverage its large emerging consumer database
- Analysis of airtime consumption data is used to identify potential customers to be targeted by call centre agents
- Data analytics are used to track the claim ratio, which is used to enhance the product once a certain minimum threshold is reached

BIMA: How it works

BIMA operates a hybrid model combining physical distribution and education via an agent network, with technology platforms that digitalise the customer experience and drive scale.





Life and hospitalisation insurance by Cornerstone – Airtel[21]

Cornerstone has partnered with Airtel to provide Nigeria's first life and hospitalisation insurance policy to subscribers based on their airtime spend.

Insurance penetration in Nigeria is low at approximately 0.4%, as a common perception in the country is that insurance companies refuse or delay claim payments. In addition, due to strong cultural and religious beliefs, the acceptance of insurance remains low.

Traditionally, insurance companies sold insurance products and services through brokers and agents. This still accounts for the majority of policy sales. However, there has been a shift towards alternative channels and an increase in customer touch points. Cornerstone was the first insurance company in Nigeria to provide customers with an online platform with end-to-end transaction processing for insurance.

The platform was launched in 2013 with car insurance but has since then expanded into other product offerings. Online sales increased by more than 25 times within three years of the inception of the e-platform.

The company has made major headway in penetrating the market, especially for those who previously did not have any insurance cover. Initially, Cornerstone did not specifically focus on low-income earners, but sought to increase insurance penetration on a large scale.

In order to achieve the desired scale and to reduce its dependency on agents, Cornerstone partnered with Airtel in 2014 to launch a life and hospital cash insurance policy open to all subscribers at no additional cost. The size of the insurance cover is based on the amount of airtime spend per month. Registering for insurance cover is done via the subscriber's mobile phone using USSD technology within 180 seconds.

Another important element of Cornerstone's drive to digitalise its services was the launch in 2013 of a platform that eased registration for customers and provided quick transaction time. It processes an online transaction in four minutes.

1.8 million customers successfully signed up within 18 months of launch

First **free** life and hospital cash insurance policy via mobile in Nigeria

Cornerstone launched its platform in 2013. Gross premiums grew by **2,441%** in three years

Key success factors

Partnerships

Airtel has provided a large customer base and increased trust among customers due to high brand equity

Ease of use

The use of the USSD interface enables all qualifying subscribers to register on their mobile phone

Customer service with digital

Development of digital solutions is aimed at increasing responsiveness and reducing turnaround time

Demonetisation

Customers benefit from cover without paying for it directly as premiums are paid for by Airtel

Company and product/ service description

Cornerstone is Nigeria's twelfth-largest insurance company by gross premiums (as at 2015). Like the rest of the insurance industry in Nigeria, Cornerstone used to depend heavily on brokers and agents. This dependency made it difficult to increase reach to the BoP.

The introduction in 2014 of its free life and hospitalisation insurance product in partnership with Airtel has been aimed at improving financial inclusion among low- and middle-income earners. This is done by leveraging mobile technology, which is a much cheaper method of product distribution. The partnership with Airtel provided Cornerstone with access to a large potential market, given Airtel's close to 33 million subscribers who represent approximately 21% of Nigeria's GSM market.

The combined life and hospitalisation insurance is free of charge and available to registered Airtel subscribers between 18 and 65 years of age. Airtel subscribers can register via USSD code. Once a subscriber is registered and recharges with at least N1,000 per month the cover is active from the following month after activation. For post-paid customers the cover is activated by the monthly usages of at least N1,000 in airtime. Insurance cover lasts for one month at a time and is automatically renewed each month when the minimum recharge (prepaid subscriber) or usage (post-paid subscriber) threshold has been reached.[22]

In the first 18 months there were 4.2 million attempts to register for the product, although only 1.8 million were successful. However, Cornerstone was able to follow-up on the 2.4 million unsuccessful attempts as their data was captured through the Subscriber Identity Module (SIM) registration initiative required by the Nigerian Communications Commission (NCC).

Policy holders have to claim via an interactive voice response number and claims are paid promptly via bank drafts, cheques or electronic funds transfers. Last year, Cornerstone paid N3.4bn (US$10.2m) in claims.

Cornerstone is progressing to the paid-for version once it receives approval from the regulator as the free version is no longer active.

Digital solutions

Mobile

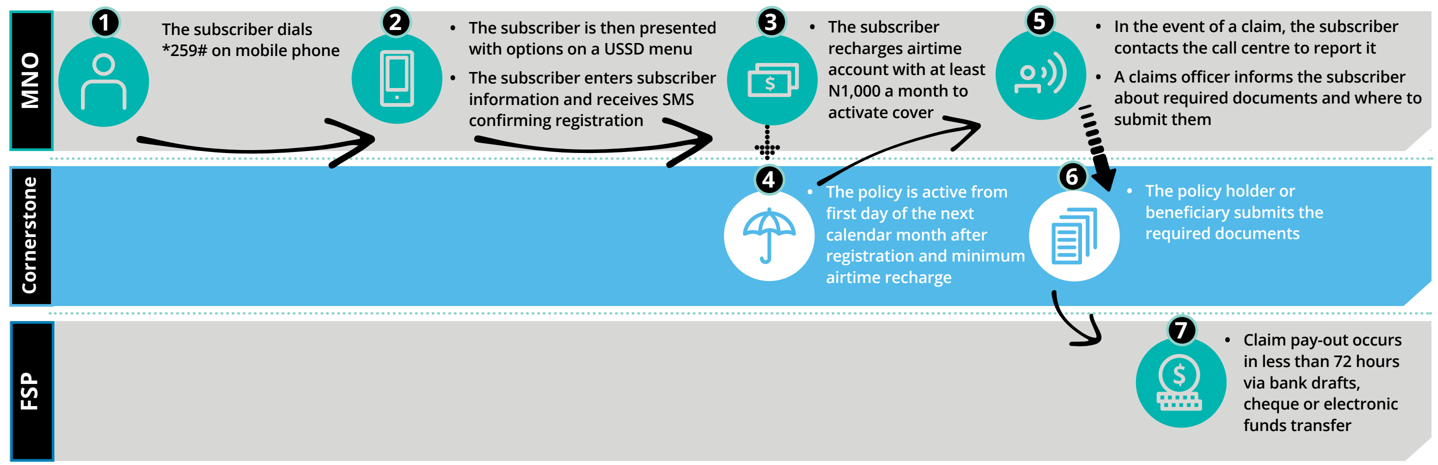
- Subscribers can register via an easy-to-use USSD interface without submitting any supporting documents and regardless of the type of phone used
- Registration and amount of monthly cover are confirmed via text message once a month
- Cover is based on airtime spend or usage and accommodates changing cash flows
- Identification for claim pay-out is done via the mobile number and requires no additional proof of identification
- The use of an interactive voice response system enhances the customer experience by allowing claim officers to call back policy holders

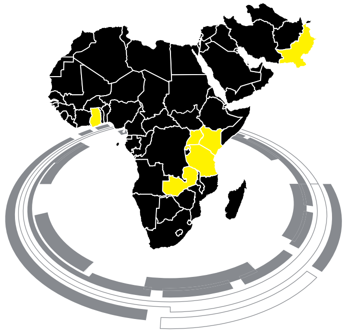
Data analytics

- Cornerstone uses data analytics to track the registration success rate and is able to follow up with subscribers that failed to subscribe via the USSD menu

Cornerstone – Airtel Insurance: How it works

Subscribers use their mobile phones to sign up to free life and hospital insurance. The insurance cover is activated when a monthly minimum airtime spend is reached.





JUMO: Low-cost financial services platform[23]

Launched in 2015, JUMO has provided a mobile platform for the BoP consumer and SMMEs, giving access to savings and credit products, and working capital, contributing towards financial inclusion.

The BoP consumer (i.e. individuals) and SMMEs in emerging markets are under-served by traditional FSPs. Traditional FSPs have failed to create financial products that meet the requirements of low-income consumers and SMMEs, as it is costly to offer loans and savings products at the small value or amount they require. Also, due to their reliance on bricks-and-mortar branch networks, traditional FSPs to date have struggled to acquire BoP consumers effectively.

JUMO, an innovative technology company, is solving these problems by partnering with MNOs and leveraging omnipresent mobile money ecosystems with high penetration among BoP consumers and SMMEs. The company has experienced high levels of growth operating across six African countries and has acquired 5 million active users in just over two years.

The continent’s high level of mobile penetration together with JUMO's strong partnerships with MNOs has been crucial to the success of JUMO thus far. In addition, FSP partnerships have played an important role as JUMO connects its millions of customers to various financial products offered by multi-FSPs.

Geographic expansion and the introduction of new products will see JUMO reaching new customers across the globe. The company is fast becoming a global player, offering its services in Pakistan and with ongoing plans to expand further in Asia. The company is extending its product offerings into new short- and long-term savings products, insurance features based on savings products and longer-term loans which have different repayment methods.

JUMO continues to innovate within the sector, providing solutions that give opportunity to include financially the lowest income consumers and SMMEs. Through its innovations and partnerships with FSPs and MNOs, a low-income consumer is a viable customer.

Staff numbers grew **24 times** to reach 250 in two years

Handles approximately **70%** of Tanzania’s credit flows since inception

JUMO plans to target **1 billion customers** across the globe in the next five years

Key success factors

Partnerships

MNOs and agents have provided a large customer base with FSPs providing the credit to users

High mobile penetration

High penetration provides mobile marketing capabilities and access to a scalable customer base

Regulation alignment

Regulation aligns to JUMO’s ambitions to include individuals and SMMEs financially

Experimental culture

A risk-taking culture, driving innovation and encouraging experimentation, has contributed to success

Company and product/ service description

Approximately 80% of JUMO's customer base had limited or no interaction with formal financial institutions. This is largely due to BoP consumers and SMMEs being unbanked across the continent.

JUMO identified an opportunity to serve BoP consumers and SMMEs through digital technology using a mobile USSD self-service interface. Through strong partnerships with MNOs and FSPs, JUMO provides a mobile based interface to connect SMMEs and individuals to financial products. These partnerships have been a large contributor towards JUMO's success in emerging markets.

The company leverages behavioural data and digital technology in order to develop credit scores of customers that are more accurate compared to traditional FSPs' scores. JUMO developed a method of scoring individuals and small businesses by utilising alternative data points that traditional FSPs do not use. Through better scoring the company has been able to minimise non-performing loans to a rate of 4%. JUMO provides financial products (i.e. savings and working capital) that are better suited to their customers when compared to traditional FSPs.

Through offering such services, the company has experienced high growth rates reaching 5 million active users across six countries since inception in 2015. The average loan size is as low as US$16 with the company providing up to 50,000 loans daily.

Digital solutions

Mobile

- Mobile penetration is high in JUMO's target markets with BoP consumers having access to mobile devices and mobile wallets
- JUMO integrates with mobile money ecosystems to provide customers with a mobile-based interface utilising USSD technology which can be accessed across all cellular devices
- The service is plugged directly into the interface of the USSD menu of the mobile wallet, which allows disbursements of unsecured credit within 30 seconds after approval
- Repayment of the loan occurs via the mobile wallet, creating a cashless process

Data analytics

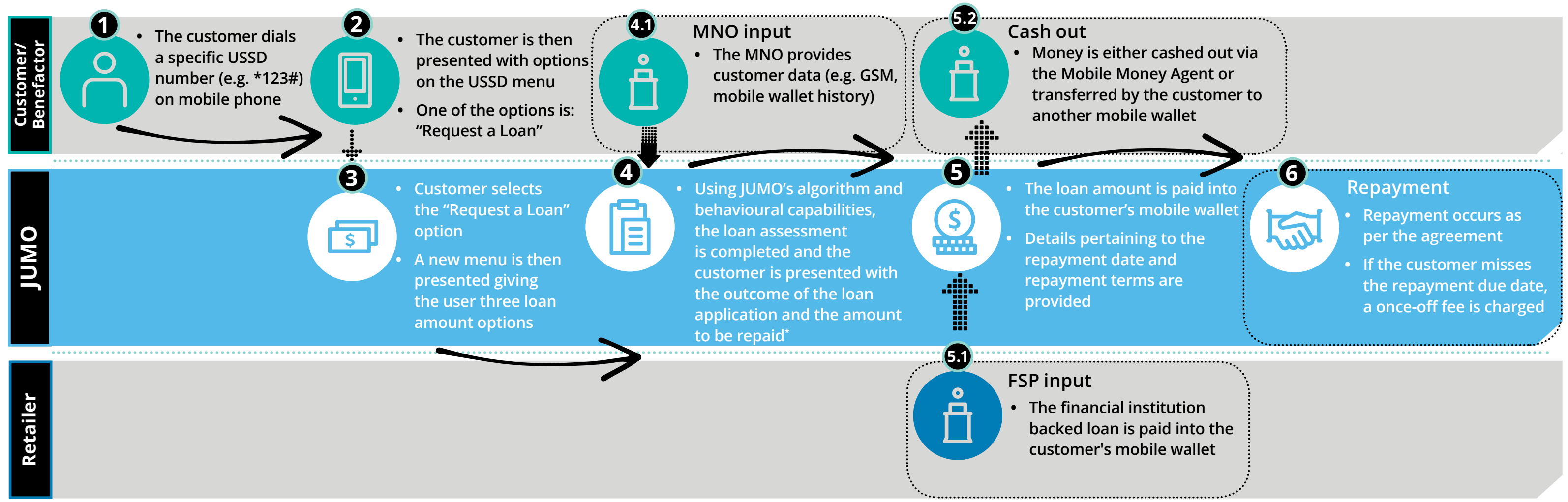
- The use of digital technology gives JUMO the ability to analyse behavioural data such as GSM data (voice and SMS) and mobile wallet transaction history to better understand their customers
- The company has access to a wide range of data points (e.g. location and calling patterns) some of which are not available to traditional FSPs, thus allowing it to generate more accurate credit scores based on this alternative data

Cloud computing

- JUMO has benefited from cloud computing, which has given it the flexibility and scalability to handle high levels of customer growth
- The technology provides an opportunity for scale and cost reduction

JUMO: How it works

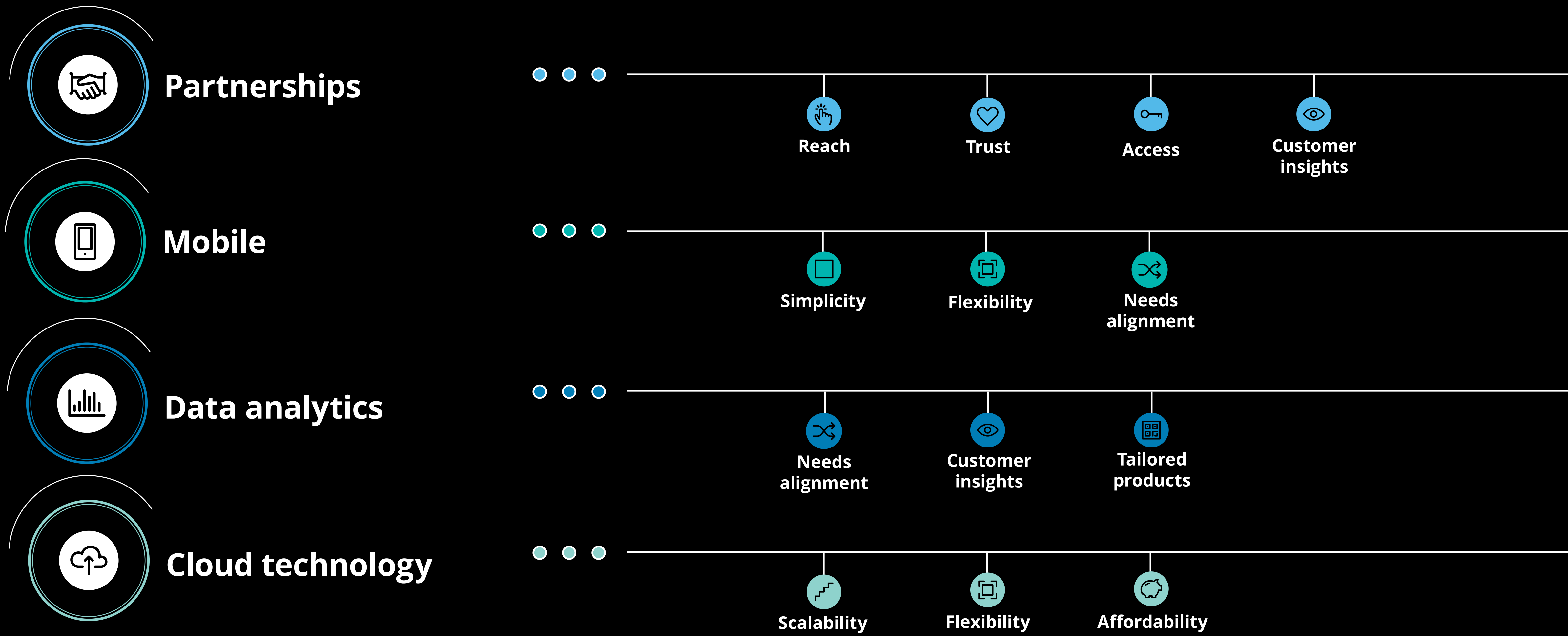
JUMO utilises USSD technology when interacting with its customers and leverages the MNO's brand to create trust throughout the process.



*No interest rates are presented but rather the total value to be repaid.

Success factors

Providing financial services to the BoP requires a business model that focuses on affordability, access, reach and trust. Successful companies tailor products based on customer needs and insights.



By developing partnerships with companies, such as MNOs and banks, fintech and insurtech companies can tap into the partners' existing customer base and quickly and efficiently increase its reach. Partnerships with MNOs also allow fintech and insurtech companies to benefit from the partner's brand recognition and to strengthen trust in the market. Partnerships are beneficial for MNOs as the value-added service of insurance or lending can help to diversify operators' income streams and can enhance loyalty and revenue. Partnerships with MNOs provide digital disruptors access to a new set of data points that can be used to better understand the customers' needs and risk profiles.

Mobile technology such as USSD codes and text messages contribute to the simplification of the user interface and are device and network agnostic. Consumers are familiar with basic mobile technology, and hence the use of it can increase trust and open new avenues of customer engagement. For example, mobile technology provides additional flexibility in the collection of premiums as it is better suited to accommodate unsteady and low cash flows compared to the use of bank transactions. Mobile wallets ensure fast, reliable and cost-effective pay-out of claims or extension of credit without being dependent on traditional banking infrastructure or accounts.

Insurance and credit providers are exposed to information asymmetries as consumers tend to have more information about themselves than the financial services provider. Data analytics combined with first principle thinking allows fintech and insurtech companies to reduce the asymmetry by using non-traditional data points to create a better picture of the customer. It allows companies to better understand their customers and to tailor products to the customers' needs.

Traditional banks and insurance companies rely on physical infrastructure to service their customers. Companies that embrace digital technology are able to scale their operations quickly and efficiently by leveraging cloud technology. Cloud technology provides flexibility and drastically reduces capital expenditure costs as it is scaled in case demand rises and does not require major investments in hardware. Cloud-based technology also allows companies to replicate their business models in new markets at low cost.

Concluding remarks

The examples of the three identified waves of innovation demonstrate that it is possible and viable to design financial products and services for the BoP.

Part of their success is that engagement and distribution channels, pricing and premium structures as well as payment channels are aligned to the needs and circumstances of low-income consumers in their respective target markets. By leveraging the power of digital innovation these companies have managed to increase access, affordability, reach and trust.

Going forward, we expect digital disruption to gain further momentum and to lead to exciting new business models in an increasingly converging industry. A glimpse into the future shows that platform companies will emerge as key industry players creating marketplaces for a host of financial services and blurring the lines between financial services and technology providers.

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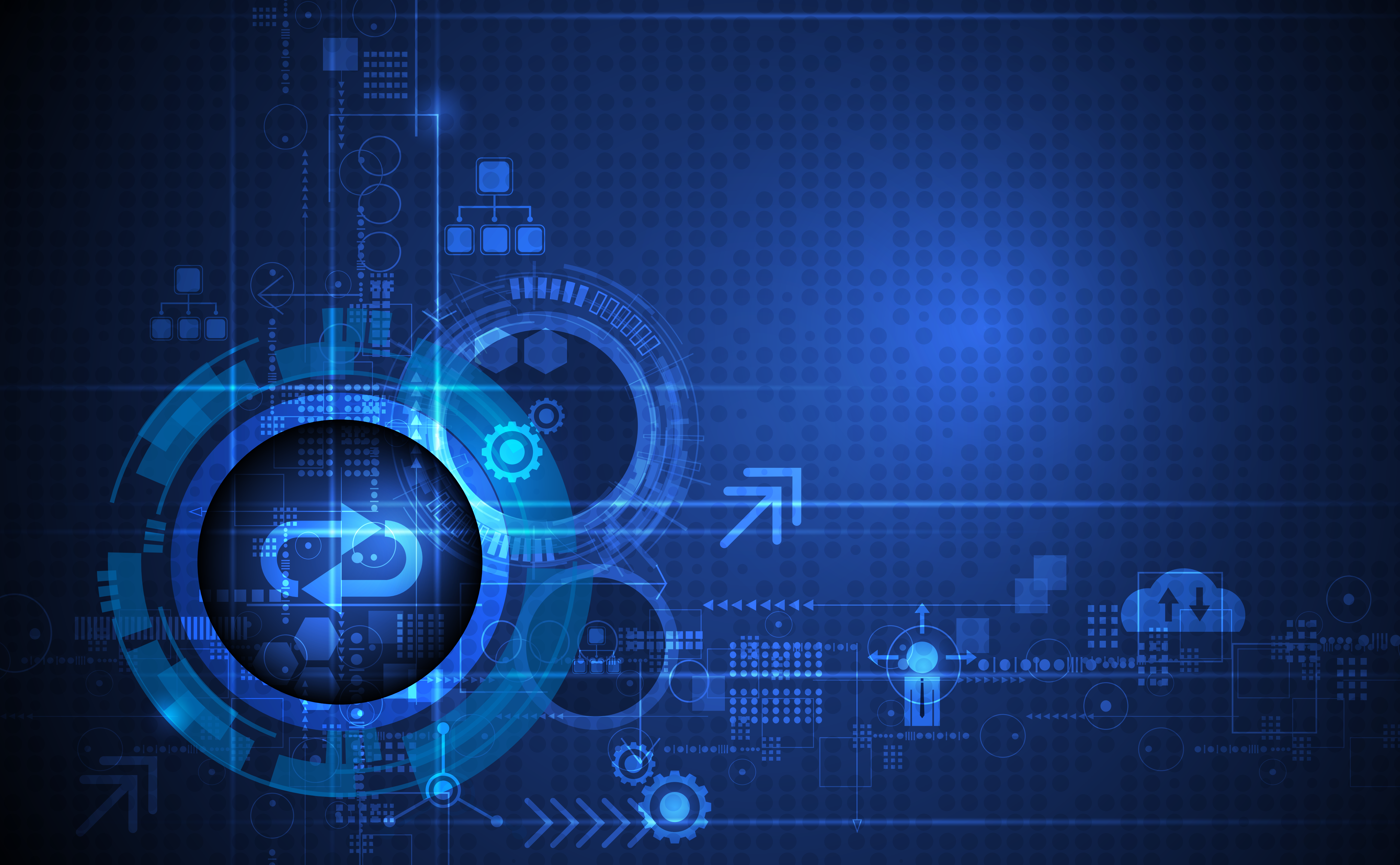

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