



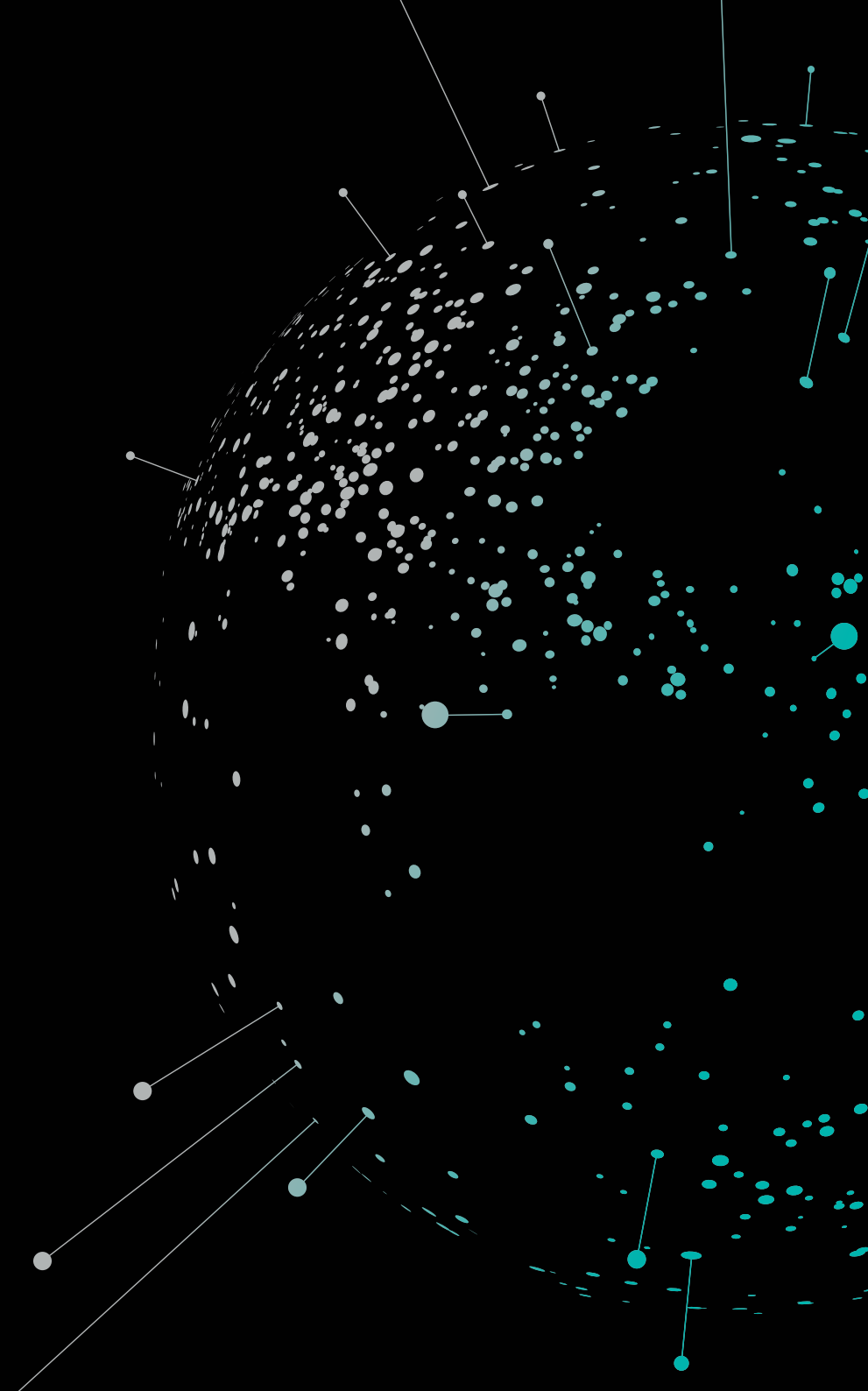
**Unlocking new markets**

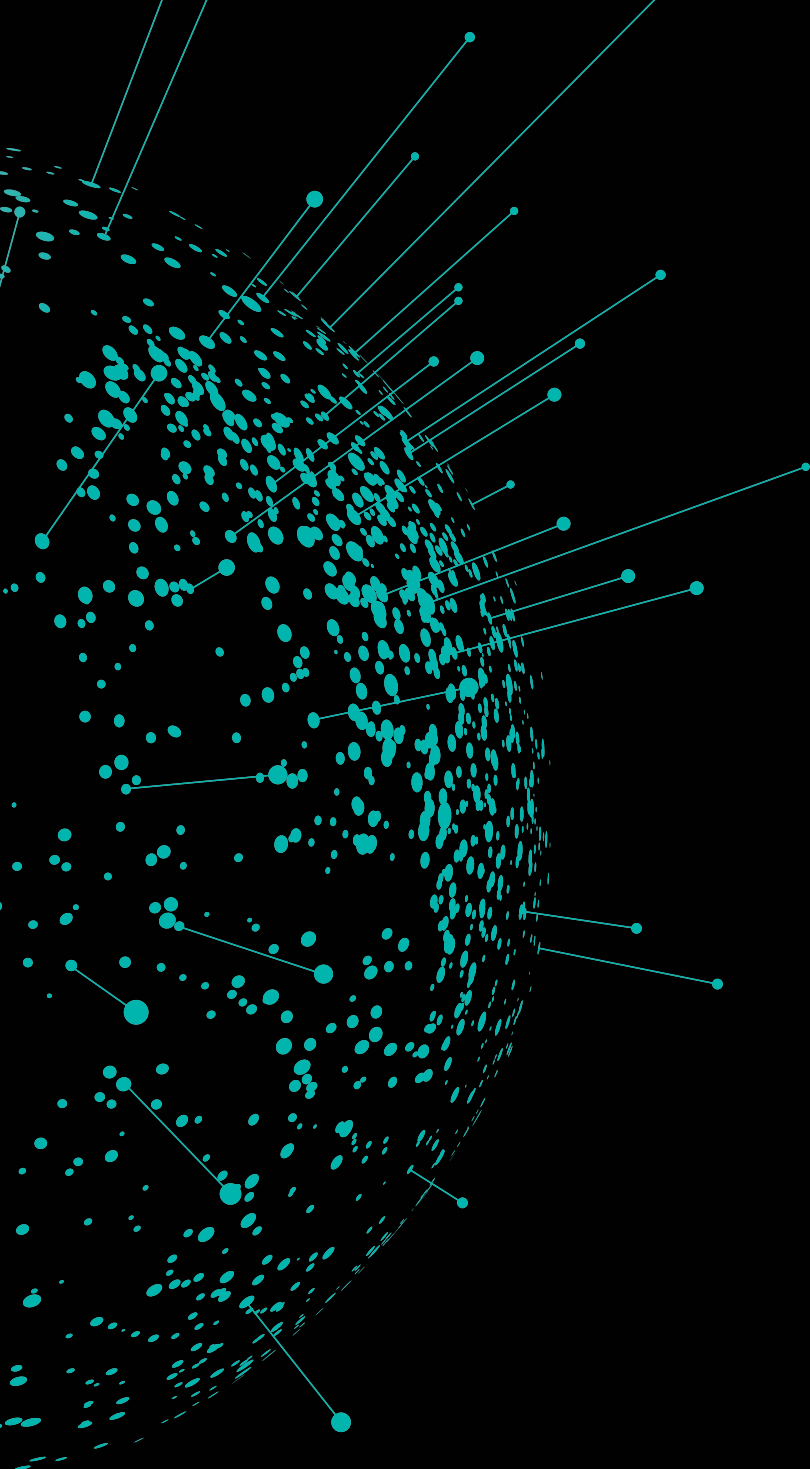
Digital innovation in Africa's  
insurance industry

August 2017

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# Foreword

Insurance is widely recognised to be a valuable and effective tool to mitigate the negative impact of unexpected shocks. Without access to affordable insurance low income households at the base of the pyramid (BoP)<sup>1</sup> remain susceptible to adverse weather conditions, accidents, illness or death of a breadwinner.

Traditional insurance providers struggle to break into the BoP market due to factors including a lack of affordability and access, low levels of financial literacy and trust in insurance companies. Incumbent providers rely on costly legacy systems which are centred around bricks-and-mortar branches, broker networks and bank-based payment channels.

Providers eager to expand their market penetration beyond their traditional market segments need to understand the importance of reach, access, affordability, simplicity, flexibility and scalability.

Deloitte regards digital innovation as a key to unlocking new markets. The adoption of digital technology enables insurance companies to reduce the cost of servicing clients, to tailor products to the needs of specific income groups, and to streamline internal processes.

In order to successfully apply and leverage innovative technology along the insurance value chain, technology needs to be embedded into a digital mind-set that focuses on agility, collaboration and flexibility.

This requirement has seen the entry of technology-driven companies accelerating disruption in the insurance industry. In our research we came across a number of disruptive insurtech companies that regard themselves as technology companies that 'happen to offer' insurance products.

Combining innovative technologies with a digital mind-set holds great potential for insurance providers to achieve growth and to develop new business models and services that are geared towards unlocking the BoP insurance market.

As a team we look forward to engaging with you to align your digital strategy to trends and developments in Africa's insurance industry.

**Andrew Warren**

Advisory Lead: Insurance Sector  
Deloitte Africa

# Africa's large untapped insurance markets require innovative solutions

Digital solutions allow innovative companies to overcome key delivery problems and help to increase insurance inclusivity.

Most low income households are unable to recover from unexpected financial shocks such as sudden loss of income or unforeseeable and uncontrollable expenditure increases due to illness or adverse weather conditions. While middle class consumers tend to reduce financial vulnerability by means of insurance, BoP consumers often do not have access to or cannot afford insurance products.

Research by The Centre for Financial Regulation and Inclusion (Cenfri),<sup>2</sup> Swiss Re Foundation,<sup>3</sup> Munich Re Foundation<sup>4</sup> and United Nations Office for Disaster Risk Reduction<sup>5</sup> have shown the positive socio-economic impact of affordable insurance products. These play a crucial role in mitigating the effects of negative financial shocks and in doing so reducing financial vulnerability.

Apart from South Africa, which has one of highest insurance penetration rates in the world,<sup>6</sup> insurance penetration remains very low in most African markets (see Figure 1). South Africa accounts for more than 80% of the continent's total gross premiums.

Total gross premiums in Morocco, Africa's second largest insurance market by premiums, are equivalent to less than one-tenth of South Africa's (see Figure 2).

While in South Africa life insurance accounted for about 80% of the country's total gross premiums in 2016, in other large insurance markets such as Kenya, Morocco and Nigeria, life insurance accounted for around one-third (see Figure 3). Within non-life insurance, motor vehicle insurance tends to be the dominant segment (see Figure 4). The low penetration rate in African markets reflects the inability of traditional insurance providers to service the BoP profitably.

This is, firstly, as insurance 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.

Secondly, the reliance on bricks-and-mortar branches or broker networks undermines the ability of established insurance providers to reduce the cost of service and limit the reach these companies can achieve as new physical branches require sizeable additional investments.

Thirdly, 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.

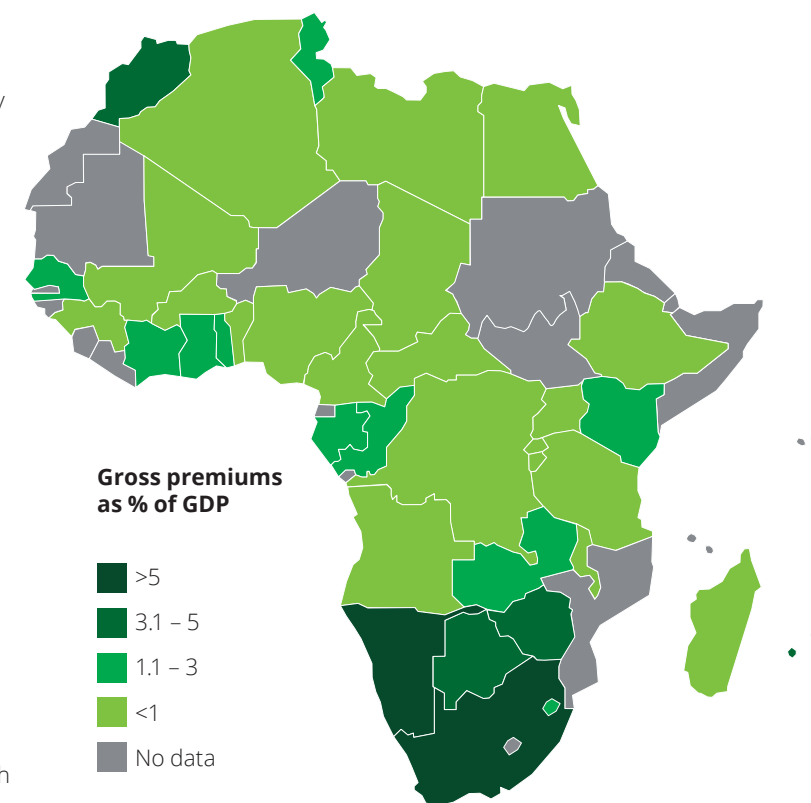
Fourthly, an additional consideration for the insurance industry is the aspect of trust by consumers in insurance products. This is linked strongly to low levels of financial literacy among BoP consumers, the high complexity of financial products and the cumbersome claims process. Insurance products 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, insurtech companies are designing solutions to overcome these challenges and to capture this 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 insurance companies that rely on physical branch networks.

As we highlighted in *Leveraging digital to unlock the base of the pyramid market in Africa*, the introduction of mobile money payments systems has paved the way for innovation and growth in Africa's insurance sector. Rwanda – countries with relatively high penetration rates of mobile money accounts – have seen strong gross premium growth over the last decade.

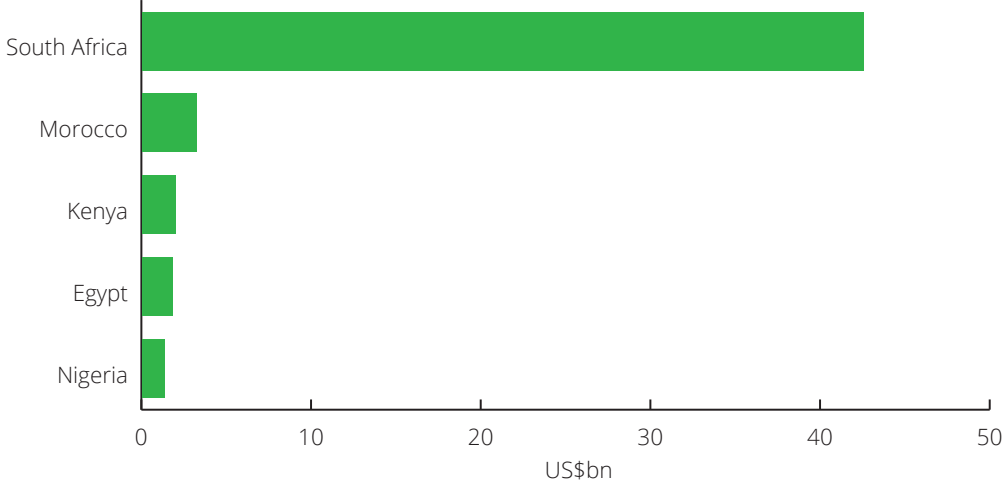
Between 2007 and 2016 gross premiums in Africa (excluding South Africa) grew almost twice as fast as the region's GDP, reflecting an improved uptake in insurance (see Figure 5).

**Figure 1**  
Insurance penetration, 2016e (%)

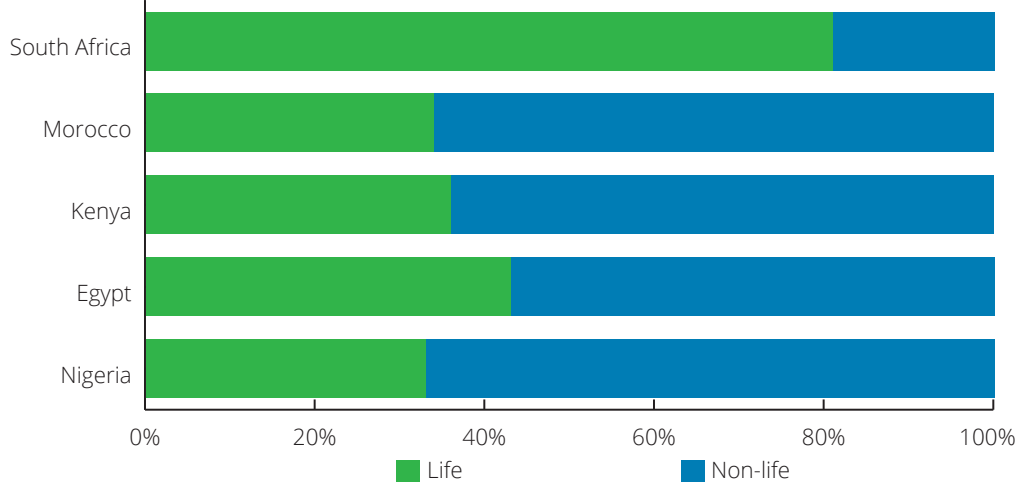


Source: BMI, 2017

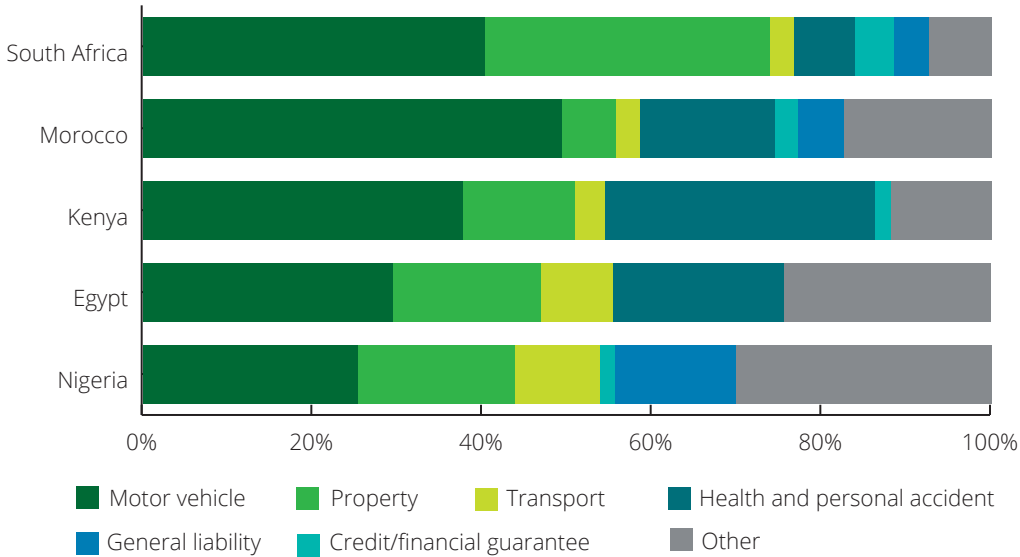
**Figure 2**  
Total gross premiums, 2016e (US\$bn)



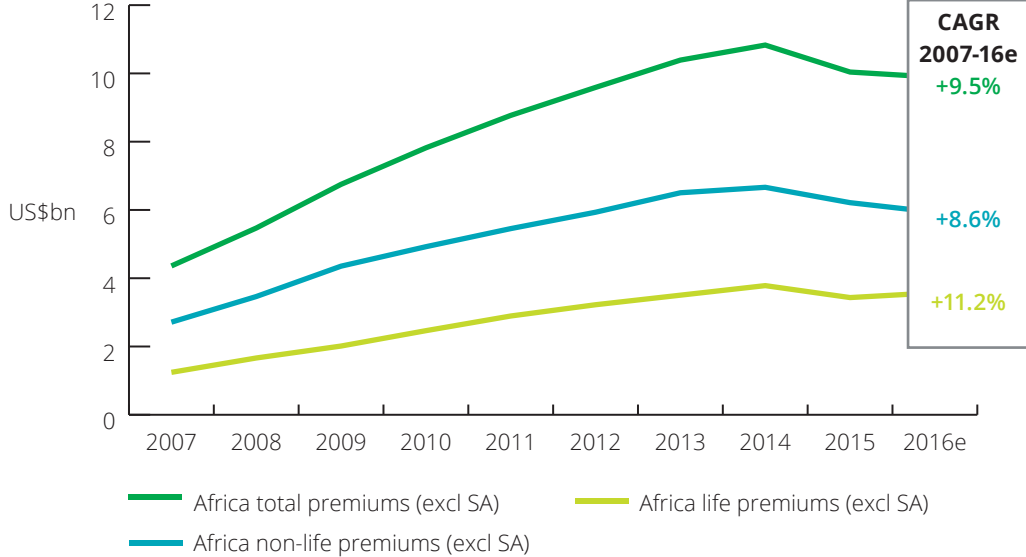
**Figure 3**  
Life vs non-life premiums in largest markets, 2016e (% of total)



**Figure 4**  
Breakdown of non-life premiums in largest markets, 2016e (% of non-life)



**Figure 5**  
Premiums in Africa (excl SA), 2007-16e (US\$bn)



Source: BMI, 2017

# Innovative models in the global insurance market

Digital innovation has led to the emergence of new business models and products that aim to be more customer-centric and to accommodate new forms of consumption.



## Peer-to-peer (P2P) insurance

P2P insurance is an insurance model that is based on a group of associated or like-minded individuals that pool their premiums together to share risk, instead of paying a traditional insurance provider to insure their risk individually.



## Episodic/on-demand insurance

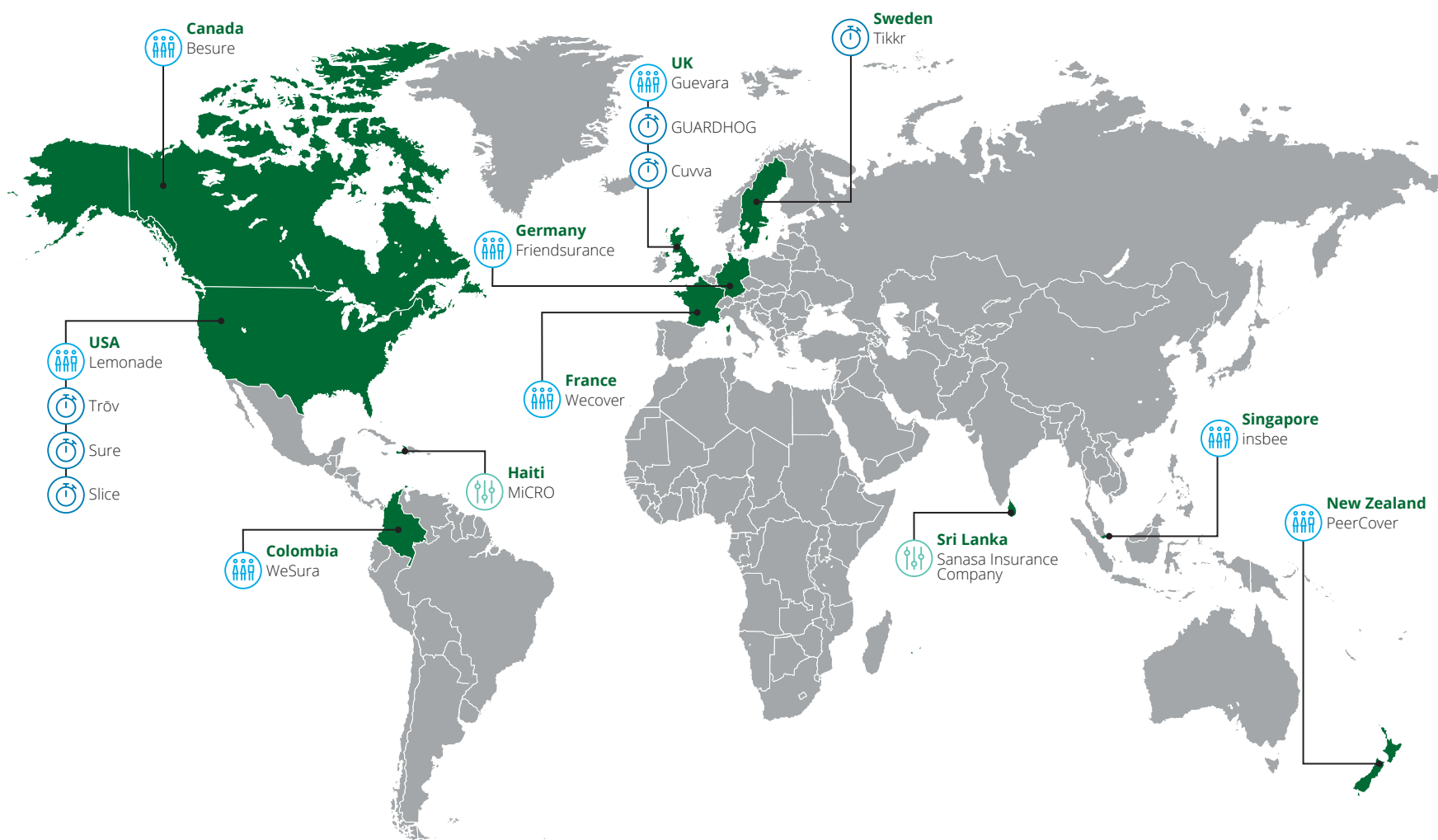
Episodic insurance provides insurance cover on-demand when insurance protection is required. The insurance cover lasts for a set period. This model is attractive for the sharing economy in which users do not own the assets but use them for a limited period.



## Index insurance

Index insurance is designed to pay out benefits on the basis of a predetermined index, e.g. insufficient rainfall levels that will result in loss of harvest. This model allows quicker payouts as it does not rely on cumbersome and costly claims assessment processes. This type of insurance is often backed by donors.

**Figure 6**  
Examples of innovative models and products in the global insurance market



# Targeting the base of the pyramid insurance market in Africa

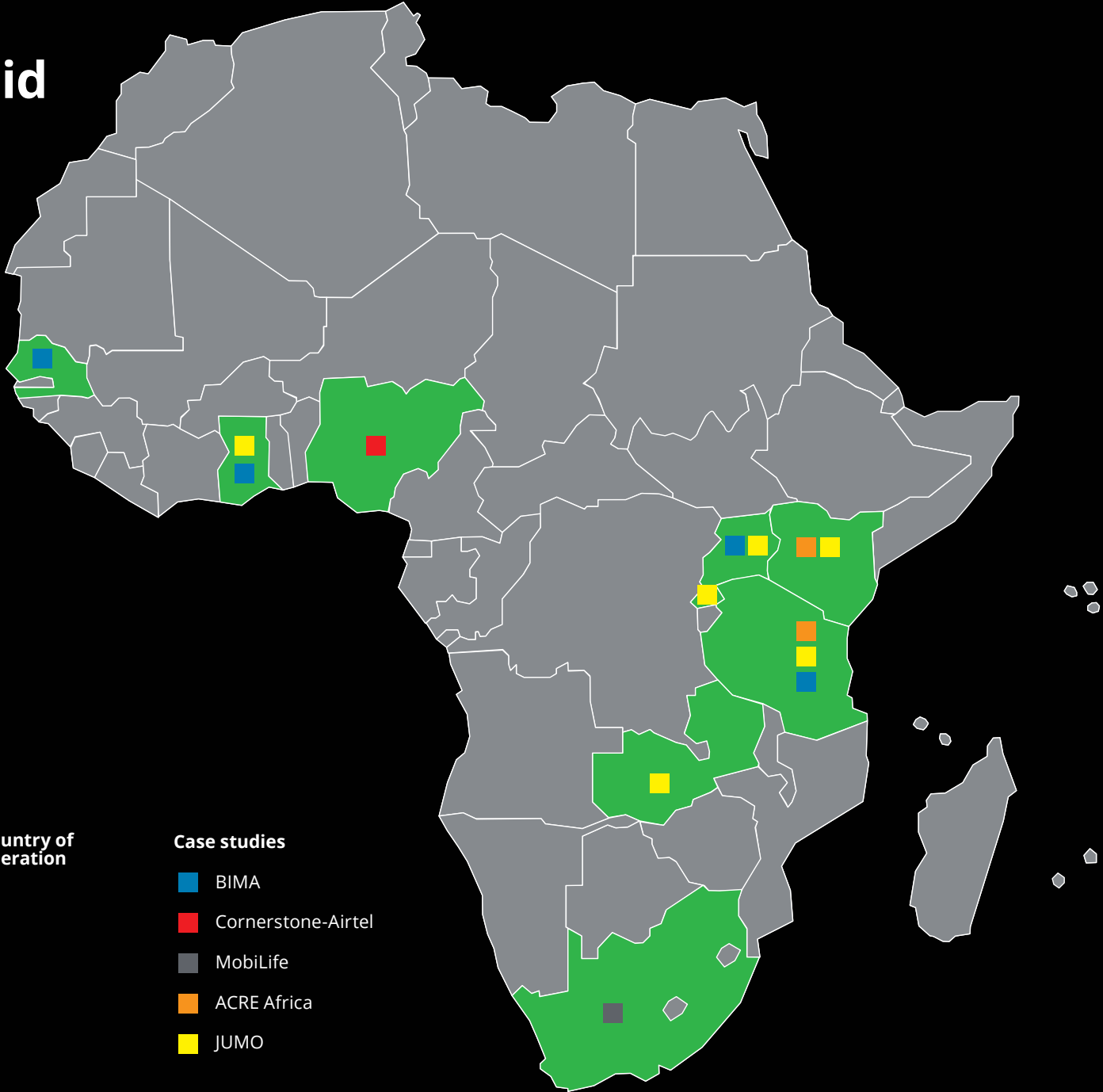
Digital innovation has enabled financial services companies to tap into the previously underserved markets by offering more affordable and better tailored products.

Innovative companies align their engagement, distribution and payment channels, pricing and premium structures to the needs and circumstances of low-income consumers.

By leveraging digital innovation and by embracing a digital business culture these companies are able to design business models and products that are less reliant on costly legacy infrastructure.

This allows them to offer more affordable products and to access previously underserved market segments.

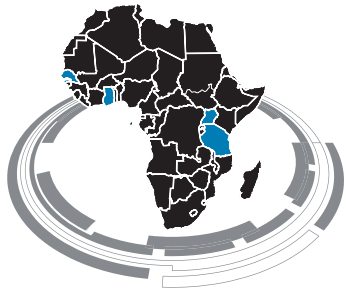
In the following we explore five case studies that leverage digital innovation to unlock new markets.



Country of operation

Case studies

- BIMA
- Cornerstone-Airtel
- MobiLife
- ACRE Africa
- JUMO



# Life and hospital insurance by BIMA<sup>7</sup>

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.<sup>8</sup>

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.<sup>9</sup>



## 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

**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



### 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

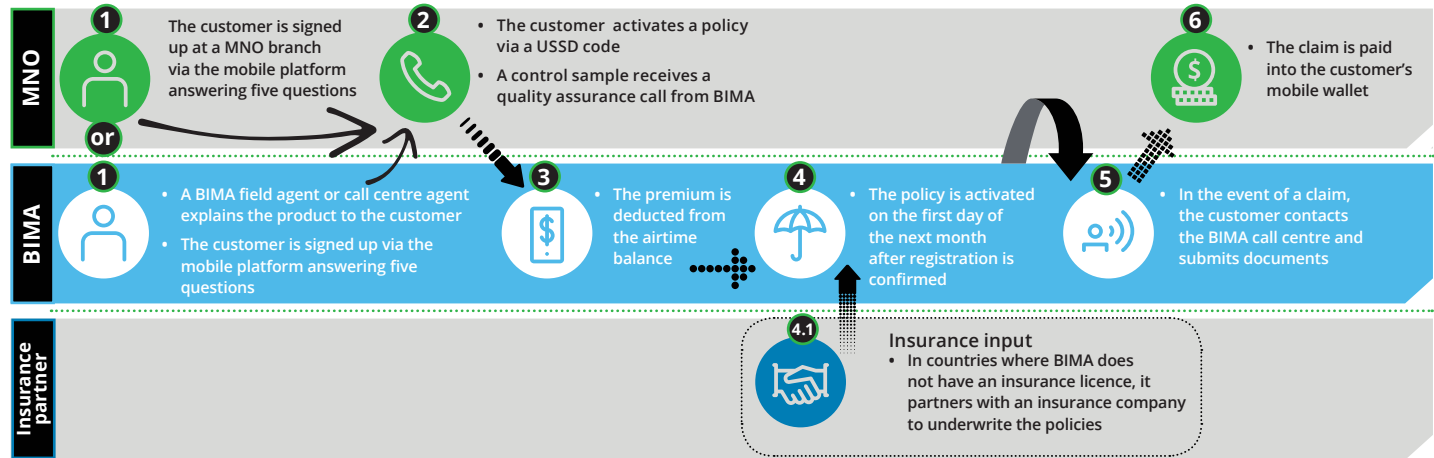
- BIMA's digital technology is integrated into MNOs' systems (i.e. via USSD) allowing BIMA to deduct premiums in small increments from airtime balances, accommodating the cash flow of its customers
- Mobile technology including digital signatures is used to sign up customers
- Communication via text 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 hospital insurance by Cornerstone–Airtel<sup>10</sup>

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** for customer 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.<sup>11</sup>

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

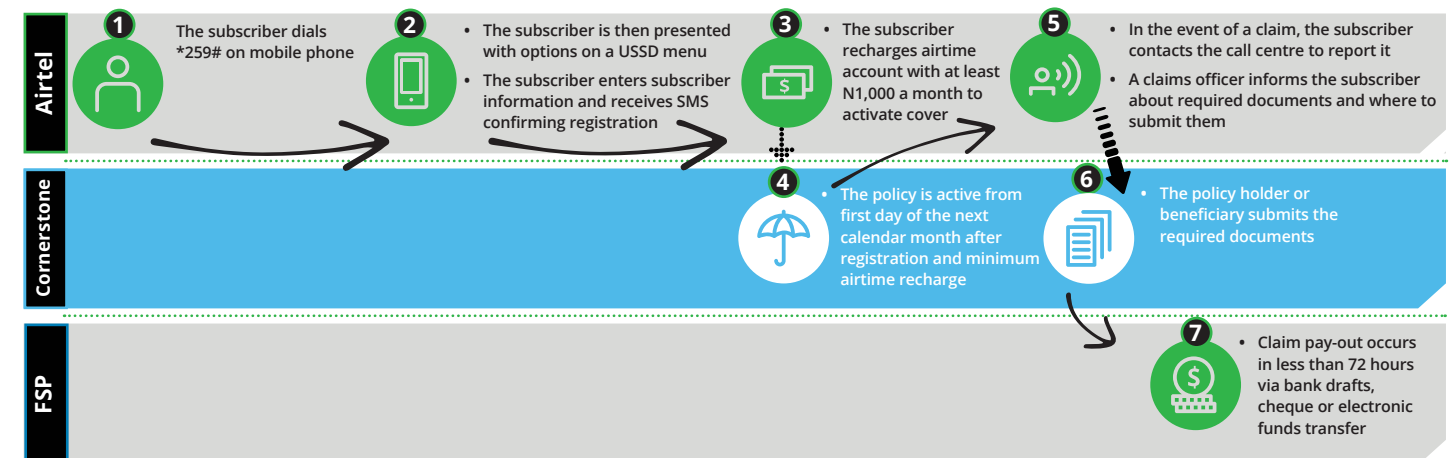
- Subscribers can register via an easy-to-use USSD interface without submitting any supporting documents and regardless of the type of phone used
- Registration and amount of monthly cover are confirmed via text message once a month
- Cover is based on airtime spend or usage and accommodates changing 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.





# Life insurance by MobiLife<sup>12</sup>

MobiLife has simplified the purchasing and managing of life insurance in South Africa through mobile digital solutions designed for the BoP consumer.

MobiLife is a 100% mobile life insurance company established in 2015. The firm's founders saw a gap for insurance products servicing the low-income market, a market segment that has been regarded as nonviable and thus was underserved by traditional insurance providers.

The adoption of mobile technology drastically reduces overheads allowing the firm to offer insurance cover at a lower cost. MobiLife's premiums are based on the policy holder's age. Being 100% mobile makes cumbersome paperwork redundant and increases

efficiencies. In order to sign up to MobiLife customers only need to provide limited information including name, ID number, cell phone number and bank account details.

Traditional life insurance companies usually terminate insurance policies due to lapsed payments. MobiLife's unique never-lapse rule prevents policy holders from losing their cover because of non-payment. This is based on the high cost related to customer acquisition and reacquisition following termination of policies due to failure of policy holders to pay the

premiums. Instead of terminating policies, MobiLife reduces the pay-out amount in case of a policy holder's nonpayment.

In contrast to life insurance policies and funeral covers, MobiLife does not pay out a lump sum in cash in the event of death but provides beneficiaries with weekly grocery vouchers for a set period. The beneficiaries of the policy receive weekly text messages with a code that enables them to purchase groceries at a range of leading supermarket chains in South Africa.

Ability to sign-up customers in just

**3 minutes**

**Successful** uptake in policies since inception in 2015

Life insurance product underwritten by a **established** life insurance provider in South Africa



## Key success factors

### No-lapse policy

By not lapsing the policies MobiLife accommodates its customers' infrequent cash flow and reduces costs of reacquisition

### Fast, paperless self-service

100% mobile allows for a quick and paperless selfservice of purchasing and managing the policy

### Customer needs

Grocery vouchers address a real need of low-income households in case of the passing of the breadwinner

### Flexibility

Its start-up mentality provides MobiLife with the opportunity to test ideas faster compared to traditional insurance companies

## Company and product/ service description

Traditional life insurance products tend to be unsuitable for BoP customers due to their complexity, high cost and inflexibility. MobiLife provides an innovative, fully mobile solution designed to overcome these challenges.

Key to MobiLife's business model is the adoption of mobile technology and the ability of customers to sign up online. Customers are able to buy and manage their policies using internet enabled devices including smartphones, tablets or computers. The use of mobile technology for customer acquisition reduces the company's overheads and allows it to offer more affordable rates for its insurance product compared to traditional insurance providers.

While most life insurance products targeted at BoP consumers in South Africa tend to be funeral covers that pay out a lump sum in case of death, MobiLife's FoodSurance™ provides beneficiaries with weekly grocery vouchers that are sent to the beneficiary's mobile phone and can be redeemed at leading retailers across the country. The amount and the duration of the

pay-out is based on the plan selected and the frequency of premium payments.

MobiLife's insurance product provides the necessary flexibility to accommodate the low and unstable cash flow of low-income households. Its Never Lapse™ model ensures that even in the case of a policy holder being unable to pay premiums the cover does not lapse nor is it terminated; instead non-payment of premiums will reduce the cover. The ability of changing the policy without being penalised adds an additional layer of flexibility to the product that enables policy holders to adjust their cover to changing cash flows.

## Digital solutions

### Mobile

- With close to 52% internet penetration at the end of 2016, South Africa has the 5<sup>th</sup> highest penetration in Africa making the use of an online-based insurance product viable
- By answering a few questions via MobiLife's online interface customers are signed up making the use of physical documentation redundant
- Customers use smartphones when signing up and managing their policies with smartphone technology allowing for better communication of the terms and conditions and improved ability to produce visually-appealing marketing material
- MobiLife uses social media platforms to market its products to consumers
- Weekly grocery vouchers are sent via text message and can be redeemed at leading supermarkets

### Data analytics

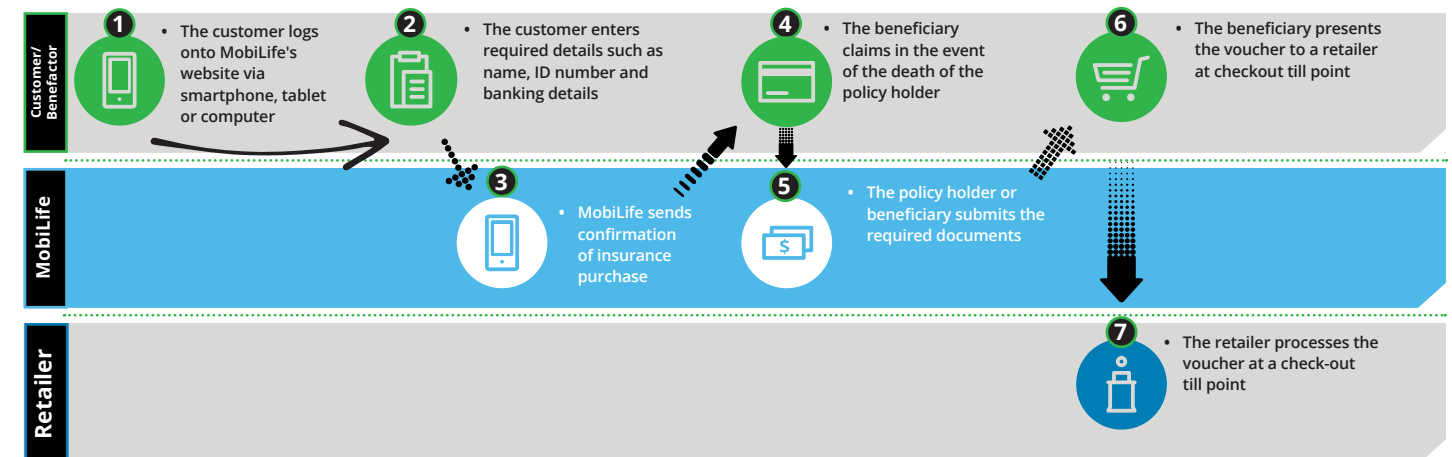
- By analysing the payment frequency of premiums, MobiLife is able to adjust claim pay-out amounts following potential non-payment

### Cloud computing

- The use of cloud-based systems ensures that the model can be replicated in other markets across the African continent

## MobiLife: How it works

Mobile technology is used to sign-up and manage policies and to redeem grocery vouchers making cumbersome paperwork redundant





# Replanting Guarantee by ACRE Africa<sup>13</sup>

The deployment of weather index insurance models and mobile technology substantially lowers the cost of customer acquisition and claim assessment.

Smallholder farmers face risks they cannot control due to their exposure to rainfall patterns and adverse weather conditions. The Insurance Development Forum estimates that more than 90% of economic losses from natural hazards in low-income countries remain uninsured.

Kilimo Salama (Safe Agriculture) was developed to mitigate weather-related risks for smallholder farmers in East Africa.

Traditional insurance products and loss assessment procedures are typically unaffordable for smallholder farmers. Initially Kilimo Salama was launched as a partnership between UAP Insurance and the Syngenta Foundation for Sustainable Agriculture in Kenya.

In June 2014, Kilimo Salama was spun off into a social for-profit enterprise called Agriculture and Climate Risk Enterprise (ACRE Africa).

In order to reduce the cost of assessing losses due to crop failure, index insurance measures are used and these eliminate the need for site visits by adjusters. Index insurance uses weather data and matches this to the conditions required by crops. A diversion from a set range will trigger claim payments to insurance holders. Claims are paid out through mobile wallets, or as discounts on the next fertiliser or seed purchase. This ensures that farmers can replant their crops and avoid a total loss of income.

In contrast to most insurance products, Replanting Guarantee (a product offered by ACRE) insures the seed and fertiliser input costs and not the lost harvest revenue. Farmers activate their insurance cover by sending a text message with a pin enclosed in bags of certified seeds or fertiliser. The input company bears the cost of insurance as a marketing cost. The linking of insurance cover to the certified inputs incentivises farmers to buy drought-resistant and high-yield seeds improving the productivity and food security of insured farmers.

Strong partnerships with MNOs, input manufacturers and local agricultural input vendors, ensure scalability of the product and wide reach of coverage at a low cost of service. The easy-to-use sign-up process via text message and the immediate pay-out into mobile wallets that requires no action from the farmer, make it a suitable product for individuals with limited levels of financial literacy.

By 2016 over **1 million** farmers in 3 countries had insured **US\$56m** in inputs across multiple products by ACRE Africa

Replanting Guarantee reached **200,000 individual farmers** and **427,000 registrations** since 2013

Kenya Agricultural & Livestock Research Organisation (KALRO) signed MoU with ACRE to provide insured crops and livestock<sup>15</sup>



## Key success factors

### Proximity to customers

Given that agrovets<sup>14</sup> are close to the farmers they are well positioned to engage and educate potential customers

### Ability to aggregate customers

By leveraging partnerships with input companies ACRE is able to aggregate customers and increase its reach

### Strong partnerships

Partnerships with MNOs and input companies ensure support of insurance product and increase trust

### Scalability through satellite data

Low cost to service by reducing the need for in-person farm visits

## Company and product/ service description

Traditional agricultural insurance products that are linked to site visits by insurance company representatives tend to be unaffordable for most smallholder farmers leaving them exposed to the risk of crop failure due to adverse rainfall patterns.

Kilimo Salama was developed as an insurance product utilising weather index models that rely on weather data gathered from automated weather stations and satellite images. Initially the product was piloted in 2009 under the Agricultural Index Insurance Initiative by UAP Insurance and Syngenta Foundation for Sustainable Agriculture (SFSA).

Since its inception, the product design and delivery has undergone multiple changes. At a first stage the product was sold directly to farmers. However, as the product did not gain the desired uptake, the product was

sold through agrovets which form part of the local farming community. At this stage the insurance premium was subsidised by input companies. Customers were signed up through QR codes scanned by agrovets with mobile phones.

Currently, the premium is paid by the input companies, e.g. a seed company, and activated through text messages by farmers. This effectively makes the input producer the customer and the farmer the beneficiary.

The distribution of policies through seed and fertiliser sales enables ACRE to aggregate policy holders efficiently and makes it easier to scale its reach.

The company uses radio adverts and farm visits to create awareness about the product and its benefits.

## Digital solutions

### Mobile

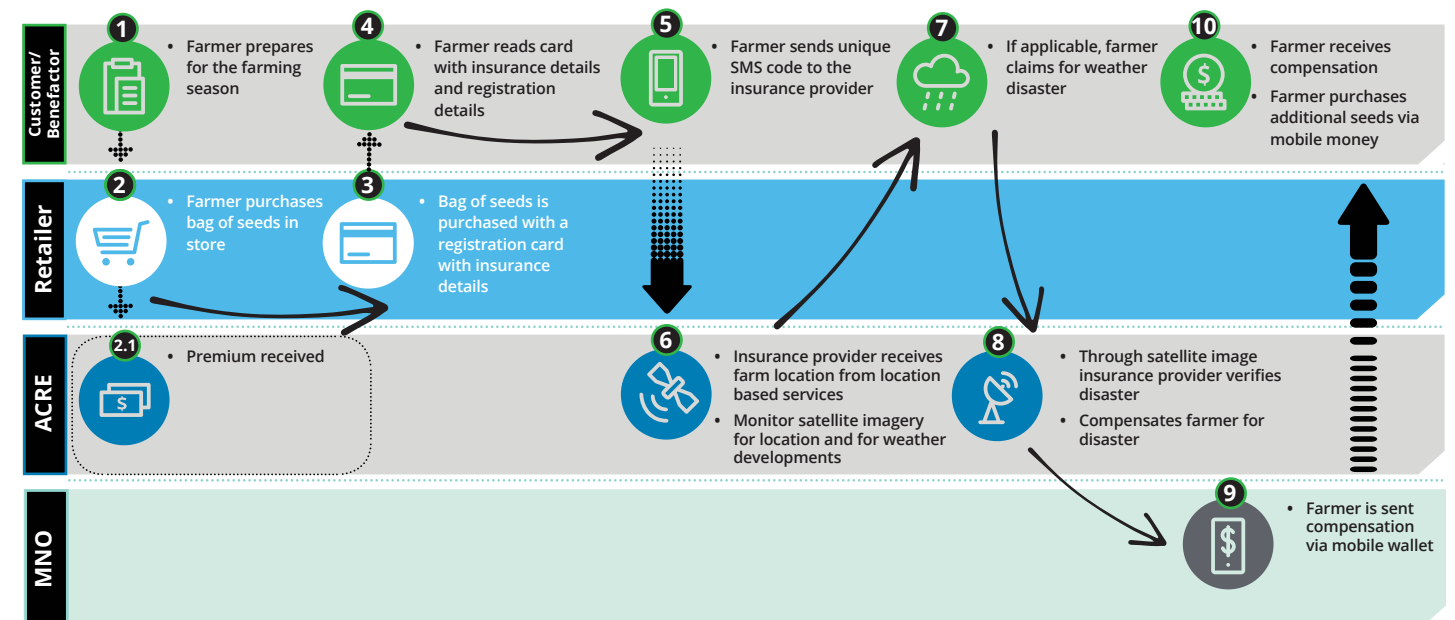
- Mobile penetration is high in ACRE's targeted markets and many agricultural customers have access to mobile devices
- ACRE provides its customers with a simple mobile-based interface utilising USSD technology which can be accessed across all mobile devices
- A farmer's location is determined by triangulation of their mobile phone signal while activating insurance cover via text message
- Claim pay-out occurs into the mobile wallet or as a discount on the next seed or fertiliser purchase without any actions required by the farmer
- The use of mobile technology provides ACRE with the opportunity to offer agricultural extension services to policy holders via text messages

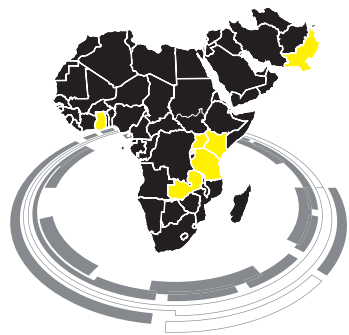
### Data analytics

- Historic and current weather data is analysed to establish rainfall patterns and overlaid with agronomical data of crop development to develop risk profiles for specific areas
- Satellite data allows ACRE to geographically locate farms without physical farm visits

## Replanting Guarantee by ACRE Africa: How it works

The placement of registration cards in newly purchased seed bags that enable farmers to activate cover using USSD is a key mechanism to purchase the Replanting Guarantee insurance product.





# Low-cost financial services platform by JUMO<sup>16</sup>

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

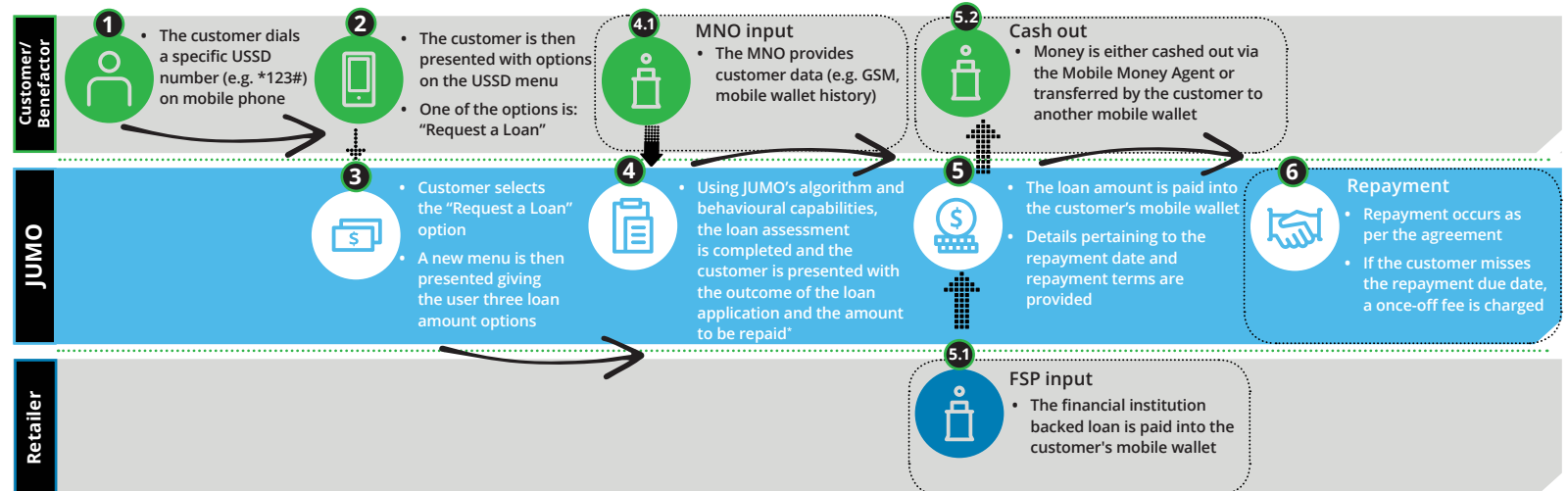
- The use of digital technology gives JUMO the ability to analyse behavioural data such as GSM data (voice and SMS) and mobile wallet transaction history to better understand their customers
- The company has access to a wide range of data points (e.g. location and calling patterns) some of which are 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.

# Achieving customer centricity through innovation

As illustrated in *Leveraging digital to unlock the base of the pyramid market in Africa*, servicing the BoP and tapping into new markets requires a business model that is customer-centric and focuses on affordability, access, reach and trust.

Traditional 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.

Insurance providers are exposed to information asymmetries as customers tend to have more information about themselves than the financial services provider. Data analytics combined with first principle thinking allows 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.



By developing partnerships with companies, such as mobile network operators (MNOs) and banks, insurtech companies can tap into the partners' existing customer base and quickly and efficiently increase their reach. Partnerships with MNOs also allow 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 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 without being dependent on traditional banking infrastructure or accounts.

# Digital – a combination of technology and a supporting business DNA

Digital is enabling business transformation and is leading to the emergence of exponential organisations.

We illustrated in *Leveraging digital to unlock the base of the pyramid market in Africa* that digital disruption in the financial services industry is inevitable as technology-driven companies have entered the sector.

The cost structures of most incumbent insurance providers make it difficult for them to service the BoP effectively or tap into new markets. Incumbents strongly rely on costly physical infrastructure, traditional payment channels and broker networks to acquire and service their customers. This bricks-and-mortar approach is a hindrance to offering affordable insurance products and to gaining the required economies of scale.

Companies that leverage digital innovation are better positioned to rapidly scale their operations by taking advantage of the relatively low incremental costs related to customer acquisition, product distribution and service.

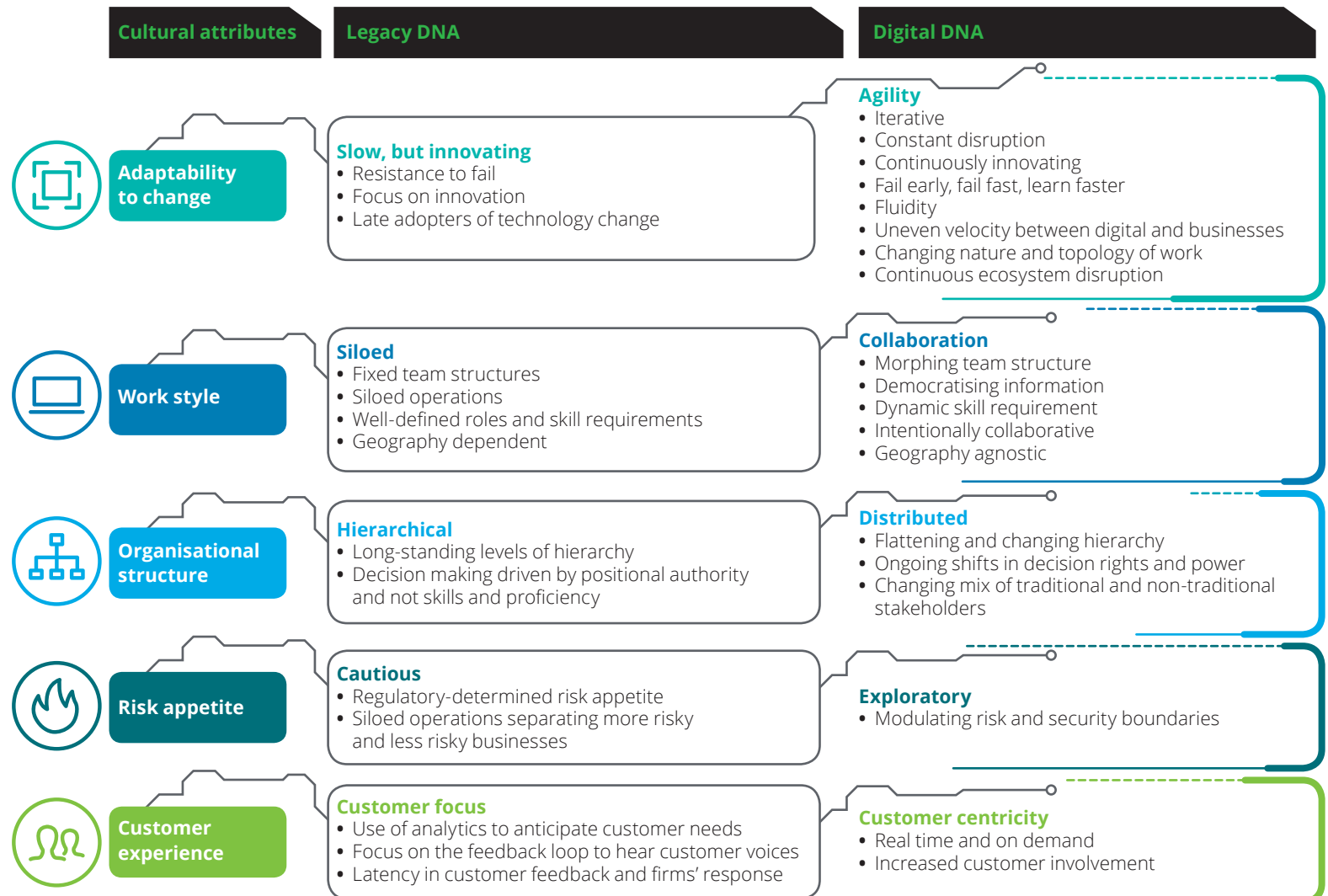
Digital innovation is often associated with technologies such as:

- cloud computing
- mobile applications
- internet of things
- telematics
- blockchain
- artificial intelligence
- advanced data analytics.

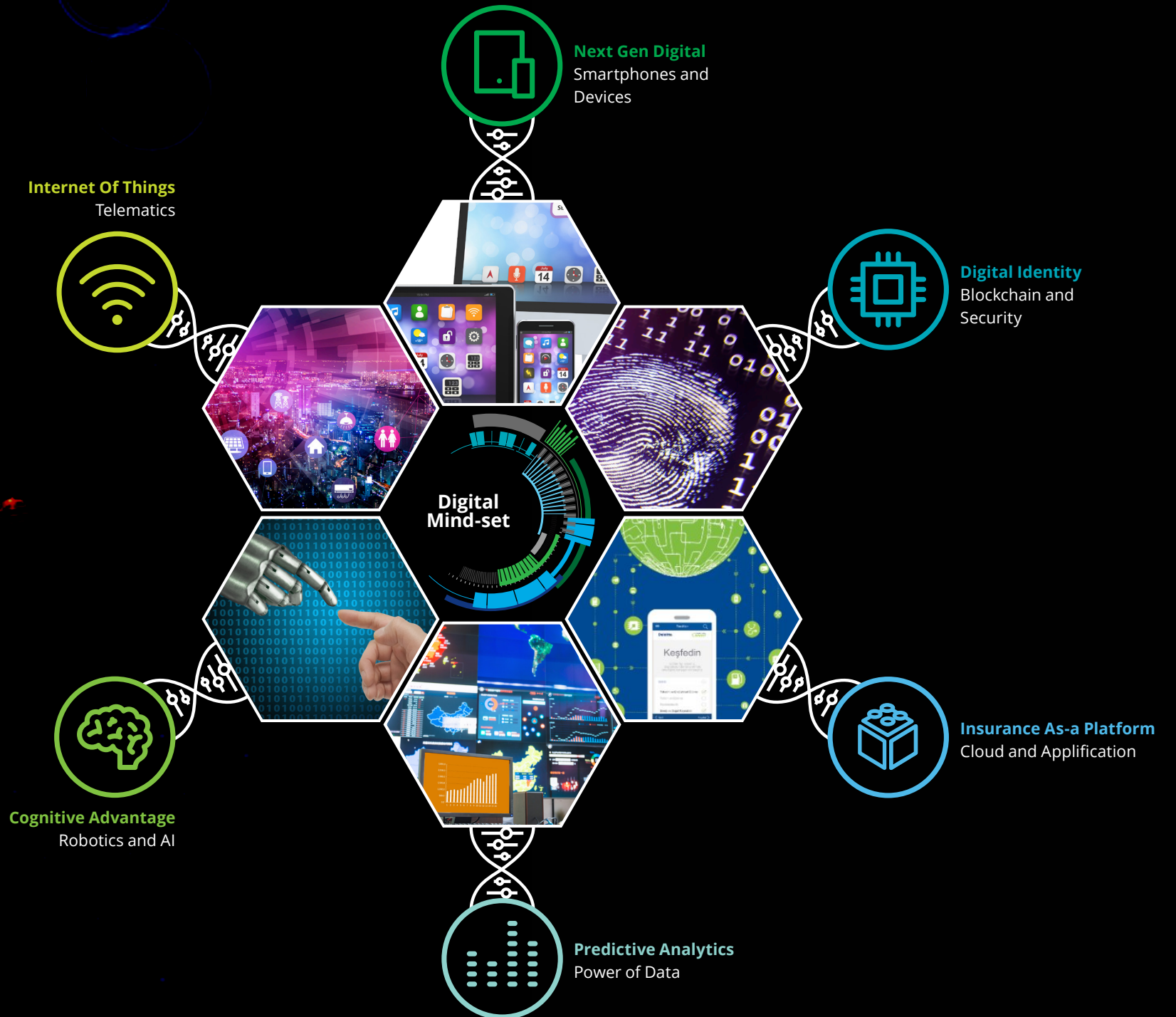
These technologies can be leveraged to offer new features and benefits of insurance products, to streamline distribution, improve customer interaction and to make internal processes more efficient. While the adoption of technology plays an important role in a digital world, technology needs to be embedded into and supported by a digital DNA of an organisation (see Figure 7).

Having a digital DNA entails certain cultural attributes such as agility, emphasis on collaboration, flat and changing hierarchies, a bold risk appetite and a focus on customer centricity. A digital DNA enables companies to do business digitally. The combination of technology and the right digital DNA can transform companies into exponential organisations that are able to achieve rapid growth and drive disruption.<sup>17</sup>

**Figure 7**  
Attributes of companies with legacy DNA and digital DNA



# Digital is not one technology, but many interconnected technologies embedded into a digital mind-set



## Sample only

Many more technologies are influencing the way insurance can operate, a few are shown here for illustration

## Concluding remarks

While insurtech companies are yet to challenge the dominance of incumbent insurance providers, the emergence of these new competitors highlights the disruptive potential digital technology combined with the right mind-set hold.

Digital plays an important role in product design, product distribution and service delivery in the insurance industry. It can speed up the time to market for new products, reduce the cost of the service and unlock markets which were previously perceived to be unviable.

It is time for organisations to look at how to shape business culture to fully leverage digital technologies and to unlock new opportunities.



# Endnotes

- <sup>1</sup> The International Finance Corporation (IFC) defines the BoP as the population living on less than \$3 000 in purchasing power parity per year.
- <sup>2</sup> Centre for Financial Regulation and Inclusion (2017) <http://cenfri.org/>
- <sup>3</sup> Swiss Re Foundation (2017) [www.swissrefoundation.org](http://www.swissrefoundation.org)
- <sup>4</sup> Munich Re Foundation (2017) [www.munichre-foundation.org](http://www.munichre-foundation.org)
- <sup>5</sup> United Nations Office for Disaster Risk Reduction (2017) <https://www.unisdr.org/>
- <sup>6</sup> Penetration is concentrated among the affluent segment in the country, penetration among low-income earners is lower
- <sup>7</sup> Information is based on interview with company representatives.
- <sup>8</sup> Based on BIMA's policies in Ghana and exchange rates in mid-March 2017.
- <sup>9</sup> BIMA website (2017) [www.bimamobile.com](http://www.bimamobile.com)
- <sup>10</sup> Information is based on interview with company representatives.
- <sup>11</sup> Airtel website (2017) [www.africa.airtel.com/nigeria](http://www.africa.airtel.com/nigeria)
- <sup>12</sup> Information is based on interview with company representatives.
- <sup>13</sup> Information is based on interview with company representatives.
- <sup>14</sup> Agrovets are small retail outlets that sell agricultural inputs such as seeds, fertilisers and pesticides.
- <sup>15</sup> Partnership will assist in catalysing the dissemination of climate smart technologies developed by KARLO.
- <sup>16</sup> Information is based on interview with company representatives.
- <sup>17</sup> For more detail on digital DNA vs legacy DNA refer to *Deloitte 2016, Digital transformation in financial services - The need to rewire organizational DNA*. [https://dupress.deloitte.com/content/dam/dup-us-en/articles/2993\\_Digital-transformation-in-financial-services/DUP\\_Digital-transformation-in-financial-services.pdf](https://dupress.deloitte.com/content/dam/dup-us-en/articles/2993_Digital-transformation-in-financial-services/DUP_Digital-transformation-in-financial-services.pdf)

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