Mobile phones and microinsurance

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Making use of mobile phones can drive the expansion of insurance coverage in low-income markets. It should increase the efficiency of transactions across the entire value chain, improving processes such as enrolment, premium collection, and claims settlement. At first glance, the incentives that drive revenues for mobile network operators (MNOs) and insurers do not seem naturally aligned. MNOs have more customers and more products than insurers and they have fewer difficulties in serving the low-income market. But it is precisely these distinctions that make MNOs such attractive partners for insurers wanting to reach scale and to access the low-income market. MNOs can provide insurers with access to a large, dispersed client base and an established network of distribution points to interact with these clients. It can enable exceptional scale and it can, although not always, improve client value. On the other hand insurance can help MNOs to raise revenues and create adjacent benefits such as reducing churn and increasing average revenue per user (ARPU).

Keywords: microinsurance, technology, mobile phones, distribution, value chain

MICROINSURANCE IS A RAPIDLY EVOLVING FIELD with great potential to help low-income households reduce their vulnerability to risks. Insurers, however, face a number of challenges when delivering microinsurance products, such as high transaction costs, poor infrastructure, and lack of awareness and demand from clients. The cost of underwriting, selling, and administering claims does not decrease in proportion to the value of the policy. Insurers find it challenging to provide viable products for the low-income market using traditional channels and processes. The mobile phone provides a way of addressing these challenges.

This paper provides an overview of how insurers are making use of mobile phones to reach scale and increase efficiency. The paper is based on a review of literature and a selection of eight schemes that are using mobile phones (see Table 1). The findings reveal good practices and ways of enabling scale, increasing efficiency, and enhancing the client experience through better communication and data

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Table 1 Reviewed schemes

Name	*Country*	*Insurance cover*	*Mobile phones used for*
YuCover	Kenya	Life, accident	Enrolment, premium collection, policy admin, claims processing, value added services, data analysis and management
Tigo Family Care & Extra-Life	Ghana	Life	Enrolment, premium collection, claims processing, value added services
Kilimo Salama	Kenya	Weather index	Enrolment, premium collection, claims processing, value added services
MTN Mi-Life	Ghana	Life and accidental death	Premium collection, claims processing, value added services, data analysis and management
Ecolife	Zimbabwe	Life	Enrolment, premium collection, claims payment
Zong Insurance	Pakistan	Life and accidental death	Enrolment, policy admin, value added services, data analysis and management
Tata AIG cattle	India	Livestock	Enrolment, policy admin, claims processing, value added services
WRMS' CARM product	India	Weather index	Enrolment, value added services

management. The paper also presents several challenges that insurers and mobile network operators are likely to face as they venture into this space.

The paper is organized into the following sections: the next section details how mobile phones are being used to increase the efficiency of transactions across the entire insurance value chain. There follows a discussion on how insurers can partner with mobile network operators (MNOs) to reach the significant proportion of clients that have mobile phones but no insurance. Then we look at how the use of mobile phones is improving client value to help stimulate and sustain a demand for microinsurance and to promote market development. This section uses the ILO Microinsurance Innovation Facility's PACE Framework to compare the schemes across the dimensions of Product, Access, Cost, and Experience. The last section concludes with thoughts on the next wave of innovation in mobile insurance.

Increasing efficiency across the microinsurance value chain

The lack of distribution infrastructure, such as roads and payment platforms, has been a major barrier to the spread of microinsurance, with a significant amount of time, effort, and money required to collect and transfer information and administer products manually. These processes can now be done with mobile phones, making it possible for insurers to increase overall efficiency and profitability. This section discusses how mobile phones can increase efficiency across the value chain.

Enrolment

Insurers face many challenges when enrolling clients, such as a lack of physical infrastructure, low education levels, and no identification mechanisms in rural areas. As stated above, mobile phones can help them overcome these challenges to a large extent. Insurance schemes that involve an MNO partner can use the pre-existing client information which is collected under the 'know your client' rules (such as name, address, and, in the case of mobile money clients, next of kin) to meet identification requirements and thereby reduce data collection costs.

Tellez and Zetterli (2014) found that 71 per cent of mobile insurance schemes used mobile phones to help with the enrolment process, but only half allowed customers to fully register via the mobile, without any paper documentation. The rest of the schemes still required customers to complete paperwork or visit a branch to complete enrolment. This could be because in many markets, completely replacing paper documentation with digital data violates insurance regulations that require insurers to provide proof of coverage to policyholders in paper format or physically sign the policy document (the so-called 'wet signature'). Nevertheless, regulatory regimes should be able to accommodate digital transactions while ensuring that clients are still protected. Allowing digital signatures on mobile phones and electronic receipts as confirmations could help accommodate digital data and ensure that clients are informed about the product.

In most schemes reviewed, agents of the insurer or distribution channel assist clients during the enrolment process. Agents capture the client details using customized software loaded onto their mobile phones. They then transmit the details to the back office for the enrolment to be completed. For example, agents of Tata AIG General Insurance use mobile phones to register clients in real time for its livestock insurance product. By replacing the manual, paper-based process with mobile-enabled enrolment, Tata AIG has been able to reduce enrolment time from 15 days to 30 minutes.

Besides a reduction in time, Comprehensive Agriculture Risk Management (CARM), the weather-based crop insurance scheme run by Weather Risk Management Services (WRMS) in India, has also seen reductions in the cost of enrolment because of the use of mobile phones. Using mobile-based enrolment, WRMS reduced the enrolment cost to 10 per cent of the premium.

Some schemes are testing agent-less models for sales, marketing, and enrolment. The experiences of two such schemes, Zong Insurance in Pakistan and YuCover in Kenya, are explored in this section.

The cost of agents can comprise a large percentage of overall distribution costs and removing them can translate into savings for the partners in the scheme. YuMobile, the MNO behind YuCover, estimated that removing the agent from the sales process reduced the cost of enrolment from US$1.35 per policy to $0.45 per policy, and allowed YuMobile to break even in 5 months. The model helped reduce enrolment costs by 66 per cent and overall operation costs by 10 per cent.

Agent-less models do face challenges. Not having an agent to describe a product and assist during the enrolment process may result in poorer customer understanding or provide an additional barrier to customer enrolment which can lead to

lower persistency and higher queries. When using such a model it is important that providers monitor customers' knowledge about the product and benefits and address any gaps in understanding. In the case of YuCover, customers did not understand the disability benefit that was provided as part of the life insurance policy, leading to many rejected claims and much dissatisfaction. To address these issues, YuMobile is considering a modification to its product design to eliminate the confusing disability cover. It is also looking to provide a voice education option accessible through the USSD menu, as well as automated and manual welcome calls to new registrants. In addition, it is considering introducing SMS tests to check clients' understanding of the product. Clients would have to respond to the SMS questions. YuMobile would then analyse the responses, and make calls to customers who showed a lower understanding of the product. Making calls only to the relevant subscribers helps to make the best use of the call centre agents' time (Gross, 2012).

Premium collection

Developing a mechanism for collecting small premiums from widely spread customers in remote locations is a challenge for insurers. The spread of mobile money and increased acceptance of it by customers provides a mechanism to overcome this obstacle and design premium payment plans wherein small amounts can be collected regularly, even daily, at lower cost. While we recognize the potential of mobile money to drive premium collection, many mobile money providers are still suffering from low activity rates which can significantly impede take up. We expect this will be improved in time. The cost of operating a payment infrastructure through an agent with a mobile phone is about 2 per cent of that of operating via a bank branch (Tarazi, 2012). With self-payments (that is, payments not requiring an agent) costs can fall still further.

For schemes that include an MNO partner, premiums are typically paid through clients' airtime or through their mobile money accounts, or 'mobile wallets'. Mobile money accounts are accounts that can be accessed through a mobile phone, using MNO's services that allow clients to transact without paying cash. They may or may not be linked to a bank account. Almost 86 per cent of the paid-for schemes reviewed in Tellez and Zetterli (2014) collect premiums via a mobile payment mechanism: of these almost 60 per cent used mobile money accounts, while 35 per cent used airtime deduction and the rest used mobile-initiated card payments. At the least, every single paid-for product reviewed used mobile phones to send automatic reminders to customers when a premium payment was due (Tellez and Zetterli, 2014).

Premiums paid by airtime or mobile money accounts can be collected in small amounts to accommodate customers' often small and uneven cash flows. With the Tigo Family Care product in Ghana, customers can double their insurance cover by paying 1.50 Ghanaian cedis (GHS) ($0.75) per month. Tigo collects daily instalments of GHS0.05 ($0.025) from their mobile phone account. The premium is deducted over the course of the month until the full fee has been collected.

For schemes that do not include an MNO partner, agents typically collect cash from clients and deposit it using their own mobile money accounts or in person at a branch. In a growing number of cases, the customer pays the premium to a trusted distributor, such as a retailer or farm-input provider. The distributor can then use its mobile money account to transfer the premium to the insurer. This approach has been adopted with the Kilimo Salama product in Kenya, where insurance is sold through agro-dealers shops that sell fertilizers and seeds (Smith et al., 2010). Kilimo Salama uses a fully automated, paperless process with mobile phones as registration devices and a central server that communicates with the points of sale using GPRS and with insured farmers using SMS. By automating the process, Kilimo Salama has reduced the cost of registering an insurance policy to the cost of one SMS – 1 Kenyan shilling (KES) ($0.012). In addition, it provides comprehensive real-time information about insurance policies, premium cash flow management, and contract monitoring. UAP, the insurer for the Kilimo Salama product, usually assumes a loading of 18–20 per cent of the gross premium for administration costs for traditional policies in Kenya. However, for Kilimo Salama, the cost structures are much lower (below 10 per cent) because of the process automation. It should be noted that Kilimo Salama has experienced some challenges with the index insurance model itself, which is somewhat inherent to index insurance and is not related to the use of mobile phones (BFA, 2013).

Claims processing

Mobile phones can facilitate speedy claims settlement. In a typical process enabled through the mobile phone, clients initiate the claim by sending an SMS message with their contact details to the insurance company. The insurer or designated intermediary follows up with the client to tell them what documents are required and to inform them of the next steps to continue processing the claim. In some schemes, such as Tigo Family Care and MTN Mi-Life, the claims payments can be credited directly to the mobile money account of the customer.

A technical service provider, MFS Africa developed a USSD-enabled menu (USSD stands for unstructured supplementary service data and facilitates the communication between GSM cellular telephones and the service provider's computers) for MTN (a mobile network operator) which allowed policyholders to initiate claims over the mobile phone. The call centre (operated by an intermediary, MicroEnsure) calls the client and tells them what documents are needed and where to go (MTN outlet). Then MTN submits the documents to the insurer, UT Life, and UT Life pays claims via MTN mobile money to the client's mobile wallet within six days.

In the case of index insurance products, claims payouts can happen automatically. For Kilimo Salama, the claims payment is linked to an indexed parameter. At the time of purchasing the insurance product, farmers decide on the automated weather station that is closest to their land and their policy is based on the parameters recorded at that weather station. Farmers' phone numbers are collected at the time of the policy purchase. When that parameter is triggered (based on weather station data), all farmers' phone numbers that are linked to that weather station receive a

payout directly via M-Pesa. The farmers receive a confirmation of their payment via SMS. If the farmer does not have a mobile phone, then the dealer through whom the insurance was purchased receives the payout and passes it on to the farmer. The dealer provides a physical receipt to the insurer to document the payout to the farmer.

Tata AIG uses a mobile phone application to approve and settle claims for its cattle insurance product. Through an application developed especially for claims, the agent sends photographs of the dead animal to the central server. The central server sends an email to the claims team with the on-the-spot survey report for the client immediately. Previously, it used to take up to 20 days for the documentation and survey report to reach the claims team. Claims assessors compare the photographs with those taken at the time of enrolment. Specific features like the distance between the horns, or coloured patches on the skin are compared to verify the identity of the animal. Once the claim is approved, confirmation is sent to the client by SMS. This process has reduced the claims turnaround time to six days from about 30 days earlier. However, the biggest challenge currently is ensuring that the assessors are comfortable with the process. There is a need to have the software in the local language, so that there is better understanding in the implementation phase.

Fewer schemes use mobile phones for claims processing compared with enrolment and premium collection. In the survey conducted by Tellez and Zetterli (2014), only a third of schemes reviewed enabled customers to register claims over a mobile device and less than half used a claims process that relied solely on mobile phones. Claims processing is perhaps the most important process from the client's perspective as this is when the value of insurance becomes tangible. The hope is that as schemes mature and competition increases, more schemes will use the mobile phone as an instrument for reporting, registering, and settling the claims of the client in the aim of improving the claims experience – as long as the process is designed in a user-friendly way that encourages usage.

Renewals

The database of customers created through the mobile phone can be used to approach customers at the time of renewals. WRMS, for example, developed a mobile application to record insured customers' details collected at the time of enrolment. It uses this repository of data to approach clients who are due for renewals.

Many mobile-phone-based insurance schemes involve automatic renewals as long as a client meets certain criteria. Policies can be automatically renewed based on having paid the required premium, or for loyalty models having a minimum balance available in the customer's account, or airtime consumption in a particular time period, amount of recharge in a specified time or number of transactions done in the mobile money account. Such automatic renewals reduce costs and effort for the both the customer and the provider. However, insurers need to ensure that clients are informed of their renewals. This can be done by periodically sending SMS messages to customers reminding them of how much money they need to keep in

their account or how many more transactions they need to conduct to maintain their insurance cover.

Value-added services

Insurance is an abstract concept about an intangible promise to pay, which makes it difficult to convince clients of its value. To address this issue, some providers are bundling value-added services with risk protection to make products tangible and to provide more frequent 'benefits'. These services are particularly effective if they are designed to improve the risk management practices of clients and hence decrease the risk for the provider. For example, WRMS uses mobile phones to provide its clients with weather predictions and updates, so that they receive a frequent and tangible benefit.

A further example is provided by Kilimo Salama, which collects information on the whereabouts of the farmers as well as their contact details through the registration of the farmers. This enables Kilimo Salama to send farmers SMS messages throughout the season tailored to their crop. This will enable farmers to improve their farming practices and make the best of the rains in years when these are sufficient to grow a crop.

Enabling scale: partnering with mobile network operators

MNOs are covering, or will rapidly cover, the majority of the population with their transmission and distribution networks. These widespread networks provide a unique distribution opportunity for insurers as they can reach a large number of potential customers who have a mobile account but lack insurance services.

Partnerships between insurers and MNOs are starting to pay dividends. For example, the African microinsurance market grew by more than 200 per cent during 2010 and 2012. Eight out of nine markets with more than 1 million insured (not counting South Africa) have reached those customers through mobile-phone-based insurance (McCord et al., 2012). In Ghana, Senegal, Namibia, and Zimbabwe, insurance offered through MNOs doubled the insured population in the country within one year, compared with 40 years for a typical insurance market with many active players (Gross, 2013).

MNOs can provide insurers with access to a large, dispersed client base and an established network of distribution points to interact with these clients. In many developing countries, MNOs are highly visible and accessible to people of all income levels, with branded shops, corner stores selling prepaid airtime, and umbrella-cart service stops. This ubiquitous presence enables insurers to talk to customers through a 'mouthpiece' that people see everywhere and use throughout the day, every day. A survey in Ghana – considered a pioneer in mobile-phone-based insurance – showed that 70 per cent of people would rather buy insurance from a telecom company than an insurance company (survey completed for Hollard-MTN by MicroEnsure). Insurers can leverage this trust to build confidence and lay the foundation for a culture of insurance.

As with any successful partnership, the association between MNOs and insurers needs to benefit both parties. From an MNO's perspective, insurance offers a value-added service that has the potential to help MNOs differentiate themselves from competitors and attract and retain clients, reduce churn, as well as increase average revenue per user by encouraging clients to spend more on airtime, or make more transactions on mobile money in order to retain their insurance cover.

Insurance can be offered as a free product, a paid-for product or a combination of the two. Products are likely to evolve as the market matures, as depicted in Figure 1. In a nascent market with little understanding of insurance, a 'market maker' such as loyalty-based schemes that include a free insurance product embedded in the MNO's core service may be the most suitable. As markets mature and customers gain a better understanding of the benefits of insurance, the second stage can include the extension of the loyalty model to include a 'freemium' option where clients are offered the opportunity to buy extra cover. In fact, it may make sense to offer the freemium model from the start, so that consumers understand that insurance is something for which a premium has to be paid. The third stage allows for the sale of a stand-alone, voluntary product that can cover various risks and is paid for by the client. This stage is most likely to succeed once there is some understanding of the benefits of insurance.

Insurers and MNOs need to identify the stage of maturity of their insurance market, assess customers' perceptions and understanding of insurance, and adapt their offerings accordingly. They should base their product strategy on their overall business strategy, organizational capacity, risk appetite of the partners, and an understanding of the culture of insurance.

A successful example of a freemium product, which started as a pure loyalty product, is Tigo Family Care in Ghana. Tigo customers in Ghana receive free life insurance for themselves and one family member. The sum assured ranges from $104 to $520, depending on how much airtime they use each month. To be eligible for the cover subscribers must spend at least $2.60 for the lowest benefit level and

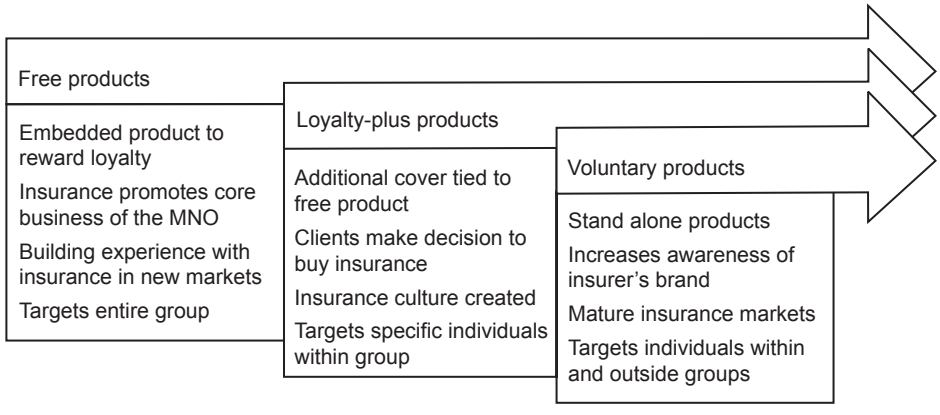

Figure 1 Product evolution
Source: Leach, 2012

$20.80 for the highest. The customer has to register for the insurance by filling in a form and can stay on this free plan indefinitely, provided the monthly airtime requirement is met. The policy period lasts for 1 month so the customer has to stay with Tigo in order to continue enjoying the free insurance benefit. Through this model, Tigo and Vanguard (the insurer) have 550,000 insurance policies in force, covering over 1 million lives, 93 per cent of whom never had insurance before (Zetterli, 2013a).

Tigo Family Care found that although average revenue per user was higher and churn lower for insurance subscribers, the overall profit margins were not as high as expected (Zetterli, 2013a). On the contrary, YuMobile, which offers a loyalty-based life insurance cover in Kenya, experienced an increase of 10 to 15 per cent in average spending per customer from its insurance subscribers, translating to an additional $5 in revenue per subscriber in one year. In addition, churn decreased by 20 per cent (Gross, 2013). The difference in results suggests that offering added benefits to increase loyalty might be more important in more competitive and mature mobile markets like Kenya.

Tigo then introduced Xtra-Life to extend the product to a freemium model, offering clients the option to double their free insurance cover by paying a fee of GHS1.50 ($0.75) per month, giving them a sum assured of up to $1,040. More than 55 per cent of Tigo clients have selected the paid-for cover. In a single year, the number of insured has increased from zero to 270,000 paying customers in a market segment where only 7 per cent previously had insurance. Tigo Ghana is convinced that the product evolution has been the main driver behind this achievement: the initial, free, loyalty-based insurance created a market where none existed (Zetterli, 2013b).

In new markets, embedded (free to the client) products are a good starting point for MNOs to build insurance expertise, drive adjacent benefits, and for insurers to gain knowledge of the low-income market. Insurers and MNOs can subsequently introduce voluntary stand-alone products to cover other risks faced by clients and build a sustainable (direct income generating) insurance business. For voluntary products to achieve the take-up necessary to achieve viability, insurers need to build trust in insurance. Hence, it is especially important that free and loyalty-plus products have an efficient and fair claims process.

Ecolife experienced the potential of offering an embedded product, while neglecting some requisites of successful MNO-tied insurance products. In 2010, it launched an embedded life insurance product, which was provided to subscribers of the MNO Econet on an opt-in basis. In less than year, the product covered 1.6 million people (Leach, 2013a). Yet, the clients of Ecolife had a poor understanding of the product, partly because they were provided with insufficient documentation. Ecolife also made an excessive use of SMS communication and implemented unclear claims processes.

It is too early to tell if markets will follow this development process as most markets with MNO-tied insurance products are still in the free or loyalty-plus stage. The evolution of market stages might happen once enough players enter the market and when better products are needed for them to remain competitive. Insurers, however, need to push markets and MNOs forward to provide a broad range of

products that meet clients' multiple risk management needs once the market is ready. Until an insurance culture is built, offering simple risk products may be the best approach.

Client value

Both insurers and MNOs need to consider the value to clients of their product in order to allay regulatory concerns, for long-term viability, and to ensure that even mandatory mobile-phone-based insurance builds the foundation for an insurance market.

This section uses the PACE client value assessment tool, developed by the ILO's Microinsurance Innovation Facility, to analyse the value for clients of the schemes reviewed in this study. The PACE tool examines client value in four dimensions – Product, Access, Cost, and Experience. The tool can be used to assess the client value of an insurance product by comparing it with other products and with other means of protection from similar risks (Matul et al., 2011). Before designing a new mobile insurance product, insurers should understand the 'pain points' or challenges that clients experience at each step of the insurance process and be clear on how a mobile intervention can address them.

This section analyses how some of the reviewed schemes have improved value in each of the dimensions (see Table 2). Although the discussion does not pay attention to challenges, we acknowledge that the reviewed schemes have faced challenges. MTN Mi-Life, for example, experienced high claims, since its product did not include waiting periods.

Product

The use of mobile phones in insurance has helped to extend product benefits. Most of the MNO-related schemes have no waiting periods and low eligibility thresholds, especially for loyalty-based schemes. For example, YuCover set a significantly low eligibility threshold that enabled more than 700,000 YuMobile subscribers to qualify for the cover (Gross, 2012). Some schemes allow clients to 'top up' benefits, either to cover more risks or obtain more benefits. For example, for a small fee Tigo Xtra-Life doubles the life cover for the policyholder. Schemes have also improved the value proposition by providing value-added services to increase the tangibility of the product and improve the client's risk management and risk coping abilities. WRMS provides farmers with tailored crop or weather-related information over the mobile phone via SMS or recorded messages.

In addition, the mobile phone is enabling more complex types of cover to be offered that were not previously possible. For example, Kilimo Salama offers insurance against crop loss due to adverse weather conditions and Tata AIG offers cattle insurance.

For the next steps, products can be further improved and customized by making use of client data. Insurers and MNOs can analyse client behaviour and mobile money transactions or airtime transfers to segment the market and offer customized

Table 2 Benefits of the schemes reviewed, from the client's perspective

Scheme	*Product*	*Access*	*Experience*
YuCover	No waiting period Low eligibility threshold	Enrolment through USSD menu on mobile phone Easy to enrol based on airtime usage	Claims initiated through USSD menu Hotline number to assist with claims Claims processed in 1 week
Tigo Family Care & Xtra-Life	No waiting period	High level of product understanding Easy to enrol based on airtime usage	Hotline to assist with claims Claims paid within 72 hours Low documentation requirement
Kilimo Salama	Bundled product Value-added services (customized crop-related messages)	Availability of product agro-dealers Easy enrolment process	Automated claims payout directly to M-Pesa accounts
MTN Mi-Life	No waiting period	Enrolment possible at MTN outlets	SMS reminders Recurring debits through mobile money Claims initiated through USSD menu and paid to mobile money accounts
Ecolife	All Ecolife clients eligible Key risks covered including HIV (at the request of the regulator)	Sign up via sending a text to designated number Terms and conditions disclosed via media (radio and press) Policy document (Ecolife book) available at all Econet and FML branches	Econet regularly communicated with clients via text message. Clients could communicate or enquire through Ecolife call centre, FML, and Econet offices
Zong Insurance	Expanded life cover, including accident and funeral expenses No waiting period	Automatic daily airtime deduction	Daily premium Sum assured >50,000 × premium
Tata AIG cattle	Cattle insurance (cover not available before)	Enrolment time reduced from 15 days to 30 minutes	Claims settlement reduced from 21 days to 7 days
WRMS' CARM product	Weather-index crop insurance (cover not available before) Value-added services (weather alerts and prices)		SMS weather data enable clients to calculate claims payouts

insurance solutions. For example, clients with a high number of mobile money transfers to relatives might be interested in remittance-linked insurance.

Access

All the schemes have been able to increase the efficiency of the enrolment process by using mobile phones. In most of the cases reviewed in this study, the mobile phone makes enrolment more convenient for clients by enabling them to enrol over an agent's mobile phone (or sometimes via their own handset) or at locations that are close to their homes. For example, farmers can enrol in the Kilimo Salama scheme at their agro-dealer while purchasing their agricultural inputs, and Tata AIG agents visit clients at home and enrol them in 30 minutes, using the mobile phone. The ability to use existing client data captured by the MNOs to meet identification requirements saves time and eases the enrolment process.

However, for clients to benefit from improved convenience there is a need to educate them on the benefits of the product. One approach is to support enrolment with an agent at an MNO outlet, who can explain the product. The Tigo Family Care product was offered over the mobile phone with the assistance of an agent at a Tigo outlet. Around 93 per cent of Tigo Family Care policyholders were first-time users and reported high levels of product understanding. Education was essential when Tigo Xtra-Life was introduced. The 'top-up' product achieved considerable success by targeting existing clients via call centres and SMS marketing and managed a conversion rate of 55 per cent. YuCover, on the other hand, introduced an accident component to its life cover without agents and initially used a USSD menu to educate clients.

Looking ahead, providers should be aware of the need to manage both the digital and the physical world where some face-to-face interaction and education may be needed for first-time users to realize the value of insurance. This is increasingly important for products that introduce additional components or top-ups. However, over time as the client base is educated providers can look to more cost-effective methods such as call centres or SMS marketing. Providers need to determine better ways to use mobile phones for client education and marketing.

Cost

The cost dimension relates to affordability and value for money for the customer. Loyalty-based products perform well on the affordability dimension as their mandatory nature allows providers to offer them at low cost to the aggregator although there are typically low levels of cover. They also perform well on transaction costs, at least in terms of the cost of removing the bulk of the transport costs, as most of the products are accessed at convenient locations that are close to clients. Further, insurers are using mobile phones to collect premiums in instalments, making the products more affordable. However, while airtime and mobile money can be used for collecting premiums, a decision in favour of one of these options needs to be

made carefully. So far, the cost of using airtime has typically been a lot higher than that of using mobile money.

While there is a need to provide improved value, immediately translating reduced costs to improved benefits may not translate into higher demand straight away. Zong Insurance operates completely over the mobile device, deducting premiums daily from airtime. In addition, it offers cover for accidental death and funeral expenses. However, its product has experienced limited take-up, due to the limitations of a pure digital sales model in a market where only 2 per cent of the population have insurance (FinScope, 2009).

In future, providers need to find ways to improve the value for money for clients. Many products have lower operational costs due to greater efficiency of processes (for example, Kilimo Salama, YuCover, Tata AIG cattle). Reduced operational costs should translate into lower premiums and more affordable products in the long term. Although we have not seen a reduction in prices as yet, it is likely to happen as markets become more competitive.

Experience

The reviewed schemes have improved the experience of insured clients by: 1) improving communication; 2) allowing clients to manage policy details; and 3) improving the claims experience. All the schemes use the mobile phone for communication, either through SMS reminders for premium payments or USSD menus for basic information. The mobile phone has proved to be a cost-efficient communication channel for the transfer of basic information and reminders. Further, the two agricultural schemes (CARM and Kilimo Salama) provide value-added services to farmers via SMS to improve the tangibility of the product and help farmers deal with risk.

Intermediaries play an important role in facilitating the claims process in a number of schemes, so even though they might add to the cost, they help improve the experience of clients.

Most of the insurance products offered in partnership with an MNO provide a hotline number to assist with claims, while others allow clients to initiate the claims process through the USSD menu on the phone (YuCover, MTN Mi-Life). Some of the schemes have also significantly improved the claims experience for clients by paying claims directly into mobile wallets or bank accounts and by significantly reducing the claims settlement time. For example, Tata AIG reduced its claims turnaround time from 21 days to seven.

Looking to the future, providers need to determine better ways to use mobile phones for client education, especially if more schemes adopt the agent-less distribution model. Moving to a low-touch model, where most client communication takes place through call centres or SMS messages, might make products more financially viable, but requires additional effort to ensure that clients' experience with products does not deteriorate.

Conclusion

Mobile phones present a tremendous opportunity for insurers targeting the low-income population, with the potential to enhance scale and increase efficiency. A few MNOs have partnered with insurers to distribute insurance schemes that have reached scale quickly. Some insurers have also used the mobile phone to make enrolment and claims processes more efficient, provide better customer care and communicate better with customers.

While embedded products have had the most success so far, as insurers and MNOs gain experience and as markets become mature and more competitive, it is expected that voluntary products will become more viable and successful. As time goes on, more MNOs might see insurance as a stand-alone business opportunity rather than just a value-added service to support their core mobile business; we are already seeing the signs with MNO Vodacom establishing a life and general insurance business in South Africa.

Insurers need to work with regulators to ensure that they are able to seize the opportunities offered by mobile phones across the insurance value chain, such as digitization of client data and more efficient electronic payment systems. Regulation needs to support these opportunities while ensuring that consumers are protected and have access to appropriate insurance products that they understand and use (Leach, 2013b).

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