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MOBILE PHONES AND MICROINSURANCE

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EXECUTIVE SUMMARY

Insurers are using mobile phones to address two main challenges facing the microinsurance sector: increasing efficiency and reaching scale. This brief is based on a review of literature and 13 insurance schemes that are using mobile phones to overcome either of these challenges. The review reveals good practices and lessons for insurers to consider when implementing mobile phone based microinsurance schemes.

Increasing efficiency across the microinsurance value chain

By leveraging mobile phone infrastructure insurers have made processes more efficient across the insurance value chain. They have reduced turnaround times for enrollment, premium collection, claims processing; lowered costs; and bridged geographical distances. Mobile phone infrastructure is more than just the mobile phone. It consists of different components that are used to deliver mobile services. Many of these components can be leveraged when delivering insurance. For instance, the client's mobile phone transaction history can be used by insurers in product design and to target clients based on usage. Further, the extensive network of mobile phone retail agents can be used to enrol clients and collect premiums.

Enabling scale: Partnering with mobile network operators

Mobile network operators (MNOs) provide a distribution channel with immense potential to provide insurance to the vast pool of mobile phone subscribers, the majority of whom do not have insurance. In Africa alone, the 44.4 million lives and properties covered by insurance pale in comparison to the more than 600 million mobile phone subscribers.

In addition to offering access to a large client base, MNOs also offer 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.

From an MNO's perspective, adding insurance to an MNO's product portfolio serves multiple purposes. First, insurance has the potential to provide another revenue stream, received either as commission (in a typical distribution partnership) or through profit-sharing. While this added revenue is attractive, perhaps a greater incentive to offer insurance as a value-added service is its potential to help MNOs differentiate themselves from competitors and attract and retain clients, as well as increase the average revenue per user by encouraging clients to spend more by using more airtime in order to retain their insurance.

Lessons for insurers

Understand why and how you want to leverage the mobile phone. The mobile phone is a powerful tool to access both current and potential clients; however, it should not be seen as the "silver bullet" for microinsurance. Mobile phones can be used for multiple purposes, including for enrolment, policy administration, premium payment and claims.

Some providers also offer value-added services through mobile phones to make products tangible and to provide more frequent benefits. For example, Weather Risk Management Services Ltd. (WRMS) in India provides various value-added services such as weather forecasts and alerts, and crop market prices to clients via mobile phones as part of its insurance package.

Match products to the maturity of the market. Insurance can be offered as a free product, a paid-for product or a combination of the two. Insurers and MNOs need to gauge the maturity of their insurance market, assess customers' perceptions and understanding of insurance and adapt products accordingly.

It makes sense to start in markets with limited insurance experience with loyalty-based schemes that include a free insurance product embedded in the MNO's core service. As markets mature and customers gain experience with insurance, a "freemium" product that is still loyalty-based, but offers clients the opportunity to buy additional coverage can be considered. Stand-alone, voluntary products that cover various risks and are paid for by the client are most appropriate in mature insurance markets with a more developed insurance culture.

Segment client data. MNOs' data on client mobile phone use, demographics, etc. provide an opportunity for insurers to design customized products that target specific populations. Improvements in processes to share data seamlessly between MNOs and insurers are needed.

Agent-less enrolment models cost less, but face challenges. The cost of agents comprises a large percentage of overall distribution costs; an agent-less model can translate into significant savings. However, having an agent to describe a product and assist during the enrolment process may result in enhanced customer understanding and reduce barriers to enrolment. When using an agent-less model it is important that insurers monitor customers' knowledge about the product and benefits and address any gaps in understanding.

Weigh benefits of airtime vs. mobile money for premium payments. For schemes that include an MNO partner, premiums are typically paid through clients' airtime or through their mobile money accounts, often called "mobile wallets". There are advantages and disadvantages to both payment mechanisms. Mobile money transactions, like bank transactions, are usually not taxed, and therefore cheaper than payment through airtime deductions. However, not all customers have mobile money accounts whereas airtime, being the core offering of the MNO, is available to and used by all customers.

Weigh benefits of automatic premium deductions. In many MNO-tied schemes, the premium is automatically deducted from the customer's airtime or mobile money balance. While this promotes persistency, the downside of automatic payments is that since clients do not need to actively decide to pay the premium, they may not be aware that they are enrolled (or that the premium payment was deducted from their account). Another drawback of scheduled, recurring payments is that people dislike the feeling that their balance is being "eaten" when they're not looking – they may load their account to make a call and see part of top-up immediately deducted. In comparison, by requiring clients to make an active decision to pay premiums, insurers can reinforce the idea of insurance in the client's mind, but risk greater lapses as clients might forget to pay on time. The value of both options needs to be better understood, and the benefits of greater efficiency and lower lapses (resulting from automatic payments) need to be weighed against higher customer loyalty and value (resulting from greater understanding and active purchase decision).

Build brand recognition. Customers naturally associate insurance products offered through MNOs with the MNO and not the insurer. While selling insurance under an MNO's brand allows insurers to build trust in the product, insurers do not interact directly with the client via sales, enrolment/registration, premium collection or client servicing. Leveraging the MNO's brand in the initial phase of market development makes sense from a distribution standpoint. However, the insurer needs to find ways to build brand recognition and be visible in the mind of the client to enable development of other distribution channels and products in the future.

Conclusion

Insurers are using mobile phones to make enrolment and claims processes more efficient, provide better customer care and communicate better with customers. Many insurers have also partnered with MNOs and provided insurance products that have reached scale quickly. While loyalty-based products have had the most success initially, as insurers and MNOs gain experience and as markets mature and become more competitive, products are expected to evolve to offer voluntary options, target specific client segments, and provide value-added services. Insurers need to carefully design products and processes and pursue new partnerships in order to grasp the tremendous opportunity offered by mobile phones to enhance scale and increase efficiency.

1 > INTRODUCTION

"Mobile has already had a huge impact on society, so much so that Jeffrey Sachs, Director of the Earth Institute at Columbia University, has described the mobile phone as the 'single most transformative tool for development'. In part, this is because a mobile phone does not have the same barriers to access as other forms of technology and is simple, inexpensive and convenient to use. Access to mobile networks is now widely available, even in remote areas. Soon it will be possible for everyone and – just as importantly – everything to be connected."

Vittorio Colao, Vodafone Group Chief Executive Officer

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 (premium received and sum assured). 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. Insurers partner with mobile network operators (MNOs) to use their technology platforms and agent networks to provide insurance to the vast pool of mobile phone subscribers, the majority of whom do not have insurance. In Africa alone, the 44.4 million lives and properties covered by insurance pale in comparison to the more than 600 million mobile phone subscribers. In Ghana, with a population of just under 25 million, there are six mobile network operators with over 26 million mobile phone connections, compared to an insurance market of just over 1 million lives (McCord et al., 2012).

The spread of mobile money shows that people can perform financial transactions using their mobile phones even without prior experience of financial products. McKay and Pickens (2010) found that 37 per cent of customers across eight branchless banking implementations were previously unbanked. Currently, there are 208 mobile money deployments, which have helped reach unbanked clients, with 117 more planned (GSMA, 2013). As the number of deployments grows and competition for both mobile phone customers and mobile money subscribers increases, MNOs need to find innovative ways to drive customer usage and loyalty, and offering value-added financial services, like insurance, can help attract and retain customers.

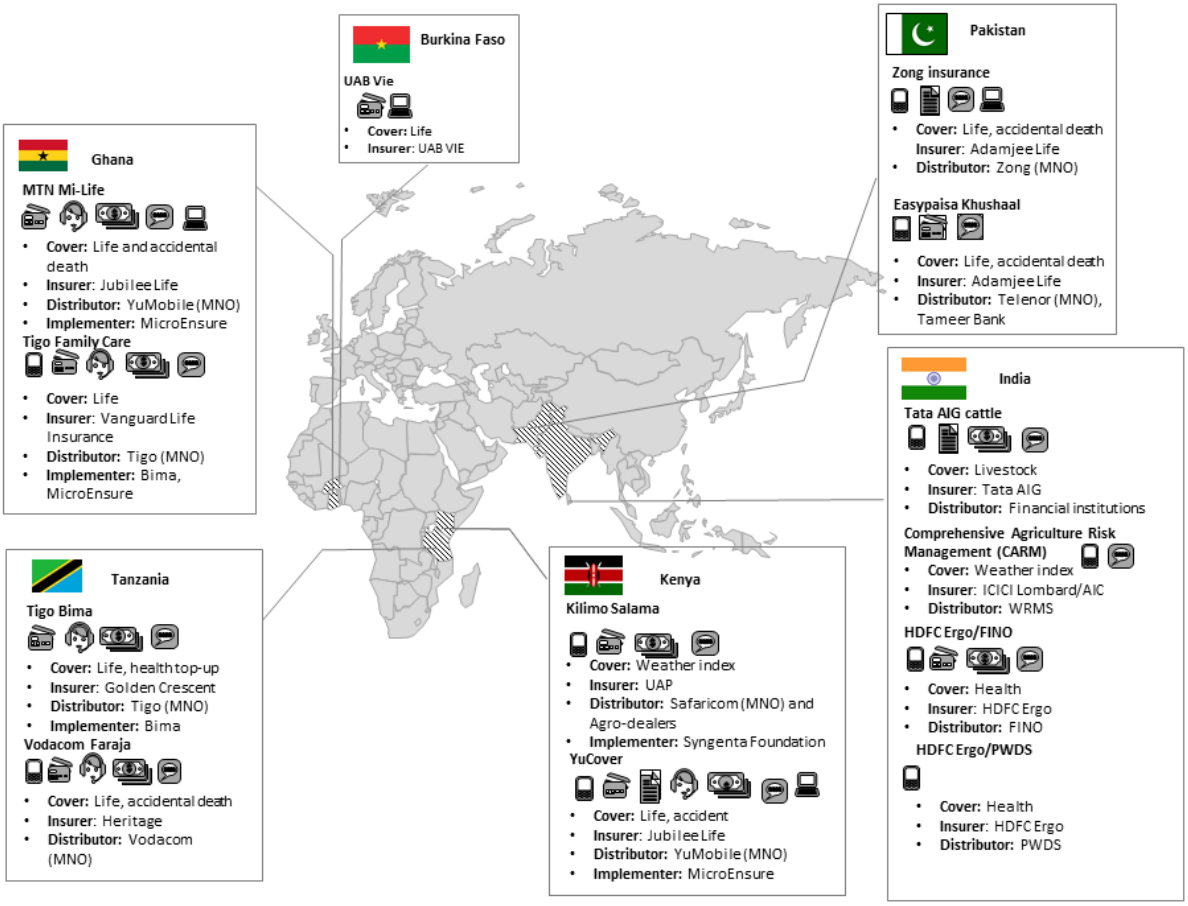
This paper provides an overview of how insurers are making use of mobile phones and forming partnerships with MNOs to reach scale and increase efficiency. The paper is based on a review of literature and a selection of 13 schemes that are using mobile phones. The findings reveal good practices and ways of enabling scale, increasing efficiency, and enhancing the client experience through better communication and data 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. Examples are primarily taken from a review of the cases presented in Figure 1. Section 2 details how mobile phones are being used to increase the efficiency of transactions across the entire insurance value chain. By using applications on mobile phones, insurers have digitized data collection and replaced manual, paper-based enrolment and claims processes. Mobiles are being used to enrol clients, collect premiums, communicate with clients and staff, capture data, and reduce turnaround times and costs.

Section 3 discusses how insurers can partner with MNOs to reach the hundreds of thousands of clients with mobile phones but no insurance. MNO-related schemes are trying to build an insurance culture in markets with low insurance penetration. Many of these schemes operate in environments where lack of a distribution infrastructure makes it difficult for insurers to distribute products directly or through distribution channels such as financial institutions. Hence, in these schemes the mobile technology infrastructure and network of agents provided by MNOs are being used to reach scale.

Section 4 looks 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 13 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.

Figure 1. Schemes reviewed in the paper



2 > 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. Many insurers are now using mobile phone infrastructure to make processes across the insurance value chain more efficient and to reduce turnaround times, lower costs, and bridge geographical distances. Enrolment and claims processes previously required forms to be filled in and documents and photographs to be collected and sent to the insurer's office for processing. These processes can now be done with mobile phones, which can reduce turnaround times drastically. By lowering operational costs and reducing inefficiencies, mobile-phone-based processes make it possible for insurers to do low-value, high-volume transactions in a financial viable way. The supply-side efficiency gains make it viable to serve new, low-income customers. Further, insurers can apply these improvements to their traditional product lines to increase overall efficiency and profitability.

Mobile phone infrastructure is more than just the mobile phone. It consists of different components that are used to deliver mobile services. Many of these components can be leveraged when delivering insurance, as depicted in Figure 2. For instance, the client's mobile transaction history can be used by insurers for product design and to segment the client database to target the most active or high-value clients. The extensive network of retail and sales agents can be used to enrol clients and collect premiums. These touchpoints are discussed in detail in this section, along with the use of the mobile phone in enrolment, premium collection, policy administration, claims settlement and renewals.

Figure 2. Leveraging the mobile phone infrastructure

	Product design	Sales	Enrolment	Premium collection	Policy admin	Claims processing	Value added services	Data analysis and management
Client's transactional data Airtime, mobile money	✓	✓	✓					✓
Retail sales and distribution Airtime dealers, mobile money agents		✓	✓			✓		
Communication channels Voice, SMS, USSD		✓	✓		✓	✓	✓	✓
Payment mechanisms Pre-and post-paid airtime, mobile money				✓		✓		
Brand		✓						

Source: Adapted from Tellez, 2012.

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 (such as name, address, billing information) to meet identification requirements and thereby reduce data collection costs.
Tellez and Zetterli (forthcoming) 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 sign the policy document. 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.

Agent-assisted enrolment

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. The agent captures the client and animal details, including photographs of the animal, with the mobile phone and transmits them to the central office for policy issuance (see Box 1).

Box 1. Enrolling cattle in real time

Tata AIG agents follow these steps during the enrolment process for the livestock insurance product. The company invested US$ 20,000 to develop a customized application for enrolment and claims.

- Cattle owner details, such as name and address, and cattle details, such as breed, age, horn shape, tail description and colour, are captured on a mobile application.
- The application provides the premium rates applicable to the location and the subsidy details (if applicable). These data are preloaded onto the agent's phone.
- Value of the cattle (sum assured) is decided in conjunction with the farmer and local veterinary surgeon and entered into the mobile phone. The premium payable by the farmer is automatically calculated by the mobile application.
- Five cattle photographs are taken using the device camera. The agent is guided by the mobile application on the details to be captured in each photograph.
- Payment instrument (cheque/cash) details are captured, providing an auditable trail that can help during reconciliation.
- Once all the cattle of a farmer are enrolled, data are relayed to a central server.

The enrolment process has been reduced to 30 minutes and the turnaround time for claims from 21 days to 7 days. This has improved trust and led to better understanding of insurance among cattle owners.

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. Before the introduction of a mobile application to capture enrolment information, the enrolment process cost 20 per cent of the premium and often required staff to interact at least three times with the customer. Using mobile-based enrolment, WRMS reduced the enrolment cost to 10 per cent of the premium.

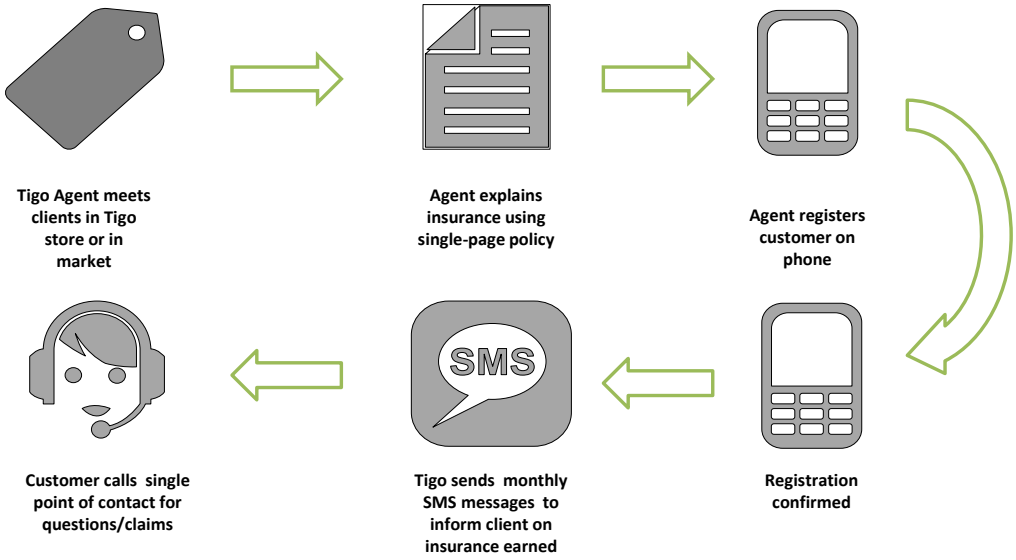
Also in India, HDFC ERGO General Insurance in collaboration with Palmyarah Workers Development Society (PWDS) uses a mobile application for a health insurance scheme, to enrol clients and create an auditable trail for reconciliation

of premium payments. The enrolment cards are provided to clients in 4 days instead of the 15 days that it took before the mobile-phone-supported process was implemented.

For the Mi-Life product offered in Ghana, the MNO MTN uses its mobile money agents for sales and enrolment. MFS Africa, the implementing partner for Mi-Life, believes that agents are critical to ensure that clients understand the product, noting that "there is an educational aspect: we want customers to understand exactly what they are buying" (CEO, MFS Africa). MTN agents are already trained to explain the benefits of mobile money, so they understand the importance of registering clients correctly. The agents are further trained to explain the insurance cover and disclose product details. They earn a base salary plus commission.

In the case of Tigo Family Care, Tigo Ghana (MNO), Bima (implementer) MicroEnsure (intermediary) and Vanguard Life Insurance (insurer) came together to offer a life insurance product. Tigo agents were responsible for enrolling clients (see process in Figure 3). Bima trained the agents to communicate product information and to process enrolments.

Figure 3. Enrolment process of Tigo Family Care



Source: Gross, P. 2012b

Training agents

Turnover among agents is high and insurers and MNOs need a way to train staff without incurring high costs. The quality of the sales agents determines not just whether people enrol, but also whether they ultimately understand the product and receive value from it, especially given the lack of knowledge about insurance in developing countries. This means that agents need to be trained to ensure that new clients not only enrol, but also understand benefits, know how to claim, and renew. Properly trained and motivated sales staff can ensure that clients have a positive experience with the sales process and a better understanding of how insurance works (Guarnaschelli et al., 2012). Effective agent management includes staying in touch regularly with the agents, giving them appropriate incentives and updating them on changes in products and processes. The mobile phone can facilitate communication with agents at a relatively low cost.

MNOs provide a large network of agents who can educate, sell to and service insurance clients. MNO agents have experience of selling and in most cases will have received training, but still need be trained on the insurance product so they can communicate the policy to the client. The experience of Tigo Family Care in Ghana demonstrates the usefulness of agents to educate a mass client base that had no previous exposure to insurance. Even though 93 per cent of Tigo

Family Care clients had never had private insurance before, 94 per cent of them can now explain the product benefits correctly (Zetterli, 2013a).

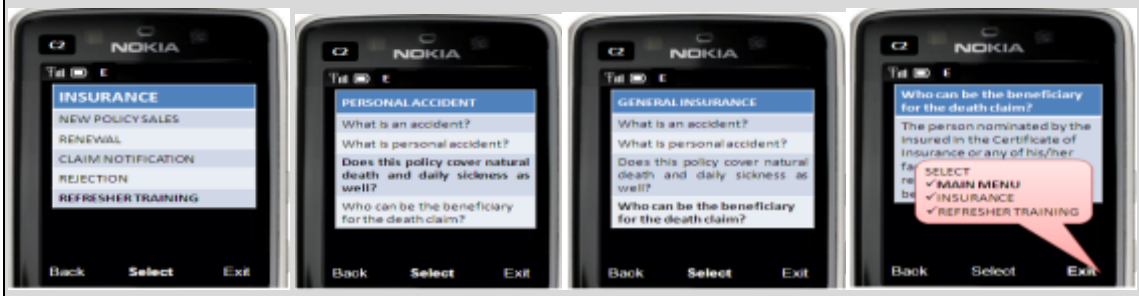
Communicating with agents

Mobile phones can be used to improve communication with agents as well as training. FINO, a technology provider and distributor of financial services in India, communicates regularly with agents using phone reminders and refresher training. For a project with the insurer HDFC ERGO, FINO uses village-based banking agents, called "bandhus". The bandhus provide a bundled product consisting of a hospital cash insurance product, developed by HDFC ERGO, combined with telemedicine service provided by mHealth Ventures. FINO has introduced an innovative and cost-effective mobile-phone-based training programme to educate the banking agents and keep their knowledge up to date (see Box 2).

Box 2. FINO's mobile-enabled training programme

FINO sales agents, called "bandhus", are first trained in a classroom training session. Bandhus learn about the hospital cash product and the enrolment, premium collection and claims processes. They are tested on their understanding of the product through role-play activities.

After the first round of classroom training, all updates to the product or processes are communicated over the mobile phone. Bandhus can use the application on the phone to go through a refresher training session every 14 days. They can choose the product they want to learn about through a training menu on the phone. The application guides them through a list of questions, which can be repeated until a full understanding is achieved. The bandhu's understanding is periodically tested by questions delivered through the mobile phone. Bandhus who show a lack of understanding are either removed or asked to work with other bandhus for a period of time.



Using mobiles for training has reduced costs and improved the understanding of the sales agents. Since only one classroom training session is required, subsequent costs of about US$ 700 per classroom training session are saved. The development cost of the application (US$ 20,000) can be recovered by training approximately 300 agents over the mobile phone.

Agent-less enrolment

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 US$ 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. It should be noted that removing agents could be associated with an increase in costs in other areas, such as a higher volume of inquiries to call centres about issues that were previously being handled by the agents.

YuCover customers are informed about the policy through an SMS message and can learn more via the USSD-enabled education menu downloaded on their phone including: (i) What is it – the more you top up, the more the insurance you earn (are eligible for), (ii) What is covered, (iii) Policy terms, and (iv) How to claim. Customers who want to enrol can do so by sending a short code[1] to the enrolment number identified in the SMS. They then receive an SMS that requires a response to confirm the enrolment. The insurer (or an intermediary) issues the policy and sends the policy number and contact details for questions and claims in an SMS. Clients learn about the product through SMS marketing primarily, but awareness creation is also done through radio, posters and in-store brochures and stand-ups and cut-outs about the product. The product uses an automated voice recording to disclose policy information and requires customers to press a number key on their handset to confirm that they understand the terms.

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. 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. YuMobile's approach to this issue is described in Box 3.

Box 3. Testing clients' understanding of the YuCover product

YuMobile contacts customers regularly to test their understanding of its insurance product, YuCover. The YuMobile call centre calls customers who may have left a registration process incomplete or whose registration failed.

YuMobile found that 46 per cent failed in the registration process through poor understanding, while 35 per cent failed because of technical difficulties. Almost 87 per cent did not fully understand the product, especially the extent of the disability benefits. Clients wanted to claim for small injuries and short-term disabilities, though the product only covered permanent disability. This misunderstanding led to dissatisfaction as customers were not sure about the extent of the coverage and felt claims were being unfairly rejected.

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.

In cases like this, insurance company staff can support MNO staff and maintain awareness and understanding of the product. The selling skills of the MNO agents can be complemented by the knowledge of the insurer staff to ensure that complete information is provided to customers.

[1] Short codes (also known as short numbers) are special telephone numbers, significantly shorter than full telephone numbers, that can be used to address SMS and MMS messages from mobile phones or fixed phones. There are two types of short codes: dialing and messaging (Wikipedia definition).

The other challenge has been the reliability of the MNO's network. Without agents a network outage can have a huge impact on clients. YuMobile experienced a significant network outage in January 2013 which caused problems for the YuCover insurance product.

Source: Gross, 2012a

Without agent feedback from face-to-face interaction with clients, it is important that client behaviour is analysed in other ways. For the Zong Insurance product, Zong Mobile (the MNO) and Adamjee Life (the insurer) conducted an analysis of the data on the longevity or retention of the subscribers on the Zong network. The premium for the product is paid daily and understanding who has missed premium payments is critical. Adamjee found that clients might not pay for a few days, go over the lapse period, and then start paying premiums again, requiring them to be reinstated. It was costly for Adamjee to reinstate customers and hence it needed to find a way to keep them active. It decided to make non-paying customers inactive but keep them registered and enrolled for the insurance, and only remove them when they unsubscribed from the mobile phone service. This made it easier for Adamjee to activate the customers if and when they started paying their premiums again. This is possible where there is close alignment of the insurer's processes with the MNO's and the payment data are shared.

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 at shorter intervals, at lower cost. The cost of operating a payment infrastructure through an agent with a mobile phone is about two 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, often called "mobile wallets". Mobile money accounts are accounts held on a mobile phone tied to an MNO 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 (forthcoming) 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, forthcoming).

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) (US$ 0.75) per month. Tigo collects daily instalments of GHS 0.05 (US$ 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. 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) (US$ 0.012). In addition, it provides comprehensive real-time information about insurance policies, premium cash flow management and contract monitoring

(see Box 4). 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.

Box 4. Using mobile phones to increase efficiency and reduce costs

The Kilimo Salama project in Kenya is a partnership between the insurer UAP and the Syngenta Foundation. The scheme has enlisted local agro-dealers to distribute the product. Farmers visit an agro-dealer who offers insurance under the Kilimo Salama project, and purchase their farming inputs. The agro-dealer then offers the farmer insurance protection for their inputs. The cost of the insurance is related to the cost of inputs purchased. If the farmer decides to buy the agricultural insurance, the dealer scans the bar code on the bag of seeds or fertilizer using a mobile phone application. The application informs the dealer of the premium and the farmer pays the dealer in cash for the goods as well as for the premium.

The dealer in turn captures the farmer's details, including name, mobile number and sum insured, on his or her mobile phone and transmits this information via the phone to the insurer through a central communications server. The farmer then receives a text message with the policy number and cover details. The premium amount is transferred through the dealer's mobile money account to the insurer. Payments are made through the widely used Safaricom M-Pesa mobile money service.

The Kilimo Salama process drives efficiency by omitting all paperwork.

Source: Smith et al., 2010

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.

MTN developed a USSD-enabled menu for policyholders to initiate claims over the mobile phone. The service 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 6 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 6 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, as compared to enrolment and premium collection. In the survey conducted by Tellez and Zetterli (forthcoming), 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.

Policy administration and communication

Trust is a major determinant of demand for microinsurance. Insurers can increase trust in their products by communicating frequently with clients to ensure that they understand policy terms and are kept updated about any claims decision. Regular communication is also a good way of encouraging renewals. Communicating with clients regularly can be expensive though, particularly because of the remote locations of many clients.

Mobile phones help insurers build trust in insurance in a cost-effective way. Insurers and distribution partners are using mobile channels such as SMS, USSD, short codes, applications and mobile internet to promote products to potential clients, educate existing clients about benefits, processes and value-added services, and solicit client feedback. Further, customers can use mobile channels to access policy data, check payment status and submit changes to policy coverage if required. YuCover customers in Kenya can use the USSD-enabled menu on their phone to check policy details and register claims when required. Customers can use a special short code to check how much airtime has been deducted in any month.

SMS communication

SMS messaging can be used to keep existing clients better informed. Insurers are using SMS messages to track payment and policy status, facilitate claims processes, remind clients of their cover, and inform them of new products.

SMSs can be effective in encouraging clients to act. Practitioners in financial services have successfully used SMS messages to prompt a desired action from clients. For example, research on the use of reminders for savings in Bolivia, Peru and the Philippines has shown that SMS reminders were successful in increasing savings balances by 6 per cent, and messages that focused on a specific saving goal (for example, saving for school fees) were particularly effective (Karlan et al., 2010). Similarly, CIC insurance group in Kenya found that about 10 per cent of clients who received an SMS prompting them to pay premiums responded. While the percentage might be small, it is a cost-effective strategy that costs less than 0.5 per cent of a weekly premium. Box 5 outlines the various messages that form part of CIC's promotion strategy.

Box 5. CIC's SMS strategy

SMS is an integral part of CIC's M-Bima (technology platform) offering and although it is not meant for education and skill-building, it is one of the most important ways for CIC to stay in touch with clients, help them build regular savings, and retain, even win back, policyholders. Major messages, and their sequencing, include:

- welcoming customers to CIC Jijenge Savings and requesting a payment through M-Pesa Pay Bill,
- confirming the first payment and the amount received,
- establishing credentials for the self-service internet portal (profile, username and password),
- providing a monthly statement of total savings and a requesting premium payments,
- reminding those who are late with their premium payments on a weekly basis,
- notifying customers when a policy has lapsed and telling them how to reinstate it,
- providing customers with another opportunity to reinstate a policy without paying an amount in arrears and enabling them to change daily contributions,
- alerting customers when a policy has been reinstated and reporting/informing on total savings,
- providing customers with another opportunity to reactivate the account with a minimum payment and giving them a reminder of the savings balance.

Source: Lee and Solana, 2013

Insurers must have a concrete strategy that determines the frequency of messages to be sent to clients, in order to avoid information overload and to maintain a balance between too much and too little information. Providers do not want to send so many messages that clients start ignoring the important ones or, worse, that clients start unsubscribing or blocking messages. For example, WRMS in India learnt that farmers preferred receiving weather alerts, as opposed to a daily weather forecast. Farmers responded to the weather alerts by adapting their irrigation techniques to save their crops. WRMS realized that it needed to be selective and send only the most important messages to prompt action from its clients.

Providers can monitor the effectiveness of messages by analysing client behaviour and usage patterns and soliciting client and staff feedback. For example, MTN in Ghana calls people to learn more from active customers and customers who have defaulted. In addition, all partners receive feedback from agents. MTN plans to vary the time messages are sent to see if this improves their effectiveness.

One of the many challenges facing microinsurance providers is illiteracy. How can providers communicate via text if clients cannot read? WRMS tried to overcome this problem by disseminating recorded messages to farmers. These messages, received as calls by the farmers, gave weather updates, forecasts and some advice on farming practices. WRMS also offers a query-resolution service, whereby clients can call a number and leave their queries about the insurance product. A call centre representative from the insurer calls them back. Currently, WRMS receives calls mostly seeking information related to crop diseases and prices, and market intelligence. This ability to connect with a "real" person over the phone and discuss their problems has had a beneficial effect by building clients' trust in insurance.

Illiterate clients are a challenge for implementing any microinsurance strategy, not just those that include the mobile phone. Possible lessons can be drawn from schemes that are not based on mobile phones. For example, the International Livestock Research Institute (ILRI) piloted an agricultural insurance product in northern rural Kenya – an area with high illiteracy rates – based on indexed vegetation parameters used as triggers for payouts. To communicate to participants in the scheme where parameters had been triggered, IRLI used colour codes as everyone understands that "green is good".

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 based on a particular client activity. Policies can be automatically renewed based on the balance available in the customer's account, amount of airtime consumption in a particular time period, amount of recharge in a specified time or the number of transactions done in the mobile money account in a particular time period. 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.

Schemes with automatic renewals may also have automatic removals if clients' activity does not reach the threshold for renewal. However, it is expensive for insurers to reinstate customers and confusing for customers to have cover one month and lose it the next. Insurers need to carefully think about how to structure provisions for lapse and grace periods. As mentioned earlier, in some cases, it might be more cost-effective to let non-paying customers remain on the books, as done by Adamjee Life (see section 2.1.2).

Data management and analysis

Mobile phones allow insurers to capture client and premium information in a digital format, reducing the need for manual data entry and the errors it can cause. In the case of UAB Vie, an insurance company in Burkina Faso, mobile phones are used to track field collections and create an auditable trail of payments that facilitated reconciliation. Premium collectors (agents) collect daily premiums and enter the amount collected from each customer into their mobile phones for transmission to the central server. When the agent reaches the centre with the day's collections, the amounts and the details of the individuals from whom collections have been made are already available at the collection centre, so that the agent can quickly hand over the cash and carry on with other tasks. This makes for more efficient use of the time of both the agent and the person at the collection office. In addition, the reconciliation can also help reduce fraud or unauthorized use of money by the agent (UAB, 2013).

Further, when the scheme involves a partnership with MNOs, insurers can access the client data already captured by MNOs. Insurers can use data such as the location of calls, the number and frequency of money transfers, and the amount of airtime purchases to better understand client habits and risk profiles. For example, the location and timing of calls could be used to determine the occupations of clients (farmers are likely to be in fields during the day). This information can then be used to analyse client's risk profiles and segment the population to design products to target specific market segments.

In addition, the database of customers created through the initial insurance sales can also be used to sell top-up components and promote renewals. For example, in Ghana, Tigo Family Care subscribers were targeted via SMS and call centres for the Tigo Xtra-Life product.

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, through the registration of the farmers, Kilimo Salama collects information on the whereabouts of the farmers as well as their contact details. 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.

WRMS in India is providing various value-added services as part of its CARM insurance package. The services are designed to improve the client's ability to cope with adverse weather. Box presents details of the different types of information and services provided by WRMS.

Box 6. Value-added services provided through mobile phones

Weather Risk Management Services Ltd (WRMS) is a climate risk management company that works with farmers and organizations to protect them against agricultural risks. WRMS is testing a weather index insurance package called Comprehensive Agriculture Risk Management (CARM) in two remote districts in India. The insurance package consists of a weather index product along with value-added services delivered through the mobile phone. In most cases these services are available free with the insurance. In some areas, farmers have to buy them for US$ 1 per month. WRMS covers 10,000 paying subscribers and 25,000 farmers who receive the services for free. The services include:

- Weather forecasts and alerts: Weather forecasts are sent to clients every 2 days via SMS. If extreme weather is predicted, clients are sent weather alerts so that they can take pre-emptive measures to minimize losses. The messages are in the vernacular language to ensure that the farmer understands. Clients pay greater attention to the weather alerts than they do to the forecasts. To address the problem of illiteracy, automated calls are made to farmers' mobile phones giving them daily weather updates in the local language.
- Crop market prices: The purchase prices of different crops prevailing in the market are sent to farmers to enable them to choose the best place and time to sell their produce.
- Updates on claims-related data: WRMS informs farmers about weather-related data and their relevance to claims. Communicating how claims are calculated has increased the level of trust in the product. The farmers can use the information to calculate claims payouts themselves, increasing the transparency in the system.

3 ENABLING SCALE: PARTNERING WITH MOBILE NETWORK OPERATORS

MNOs are covering, or will rapidly cover, entire populations 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 one 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 to 40 years for a typical insurance market with many active players (Gross, 2013a).

At first glance, the incentives that drive revenues for MNOs and insurers do not seem naturally aligned: insurers think in terms of hundreds or thousands of customers, MNOs, hundreds of thousands; insurers launch two or three new products per year, MNOs launch dozens; insurers see the low-income market as difficult to serve, while MNOs see the low-income market as under-served and often reach low-income markets (Gross, 2013a). 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, concentrated 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.

The limited presence of insurers and a sometimes shaky history of service have not enhanced their brand recognition and they are not widely trusted in developing countries. MNOs, on the other hand, enjoy strong brand equity and have the trust of the low-income population. A survey in Ghana by MTN-Hollard – 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. 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, adding insurance into its product portfolio serves multiple purposes. First, it has the potential to provide another revenue stream, received either as a commission (typical distribution partnership) or as part of a profit-sharing.

While this added revenue is attractive, perhaps a greater incentive is that offering insurance provides an opportunity for MNOs to retain clients in competitive markets. The telecom business is one of the most competitive industries, often characterized by "price wars". Keeping customers is challenging in developing countries, as clients often buy prepaid airtime in small blocks and switch operators and phone numbers depending on the best deal. Insurance offers a value-added service that has the potential to help MNOs differentiate themselves from competitors and attract and retain clients, as well as increase the average revenue per user by encouraging clients to spend more by using more airtime in order to retain their insurance cover. Table 1 summarizes the benefits of partnerships between MNOs and insurers for both parties.

Table 1. Benefits for insurers and MNOs

Insurer	MNO
Access to large concentration of clients Access to new client segments Access to large distribution network that enables enrolment, premium collection and claims settlement Use airtime and mobile money as premium payment Leverage trusted brand of MNOs High visibility of MNOs and easy accessibility of their outlets	Increased revenue from sale of insurance Competitive differentiation by offering insurance as value-added service Attract new customers Retain existing customers Higher spending by customers

Source: Tellez, 2012.

The increasing incentive for MNOs to be involved in insurance schemes has translated into a shift from most of the early schemes being driven by insurers to recent schemes being largely driven by MNOs. Many MNOs are now taking the lead almost as often as insurers, as noted in, with one-third of the products led by MNOs and insurers respectively and the remainder driven by banks, third parties, governments, donors or consortia: "*As MNOs assume the primary role in branding, marketing and shaping the design of these products, it is clear that MNOs are becoming far more than simply a channel*"(Tellez and Zetterli, forthcoming).

This section examines how partnerships with MNOs can help insurers reach scale. It presents the different types of products (section 3.1), and payment mechanisms (section 3.2) as well as the roles and responsibilities being assumed by MNOs and insurers (section 3.3). The schemes often include other players, for example, to manage the agent network or support claims administration. Technology integration is an important element of these partnerships, as discussed in section 3.4.

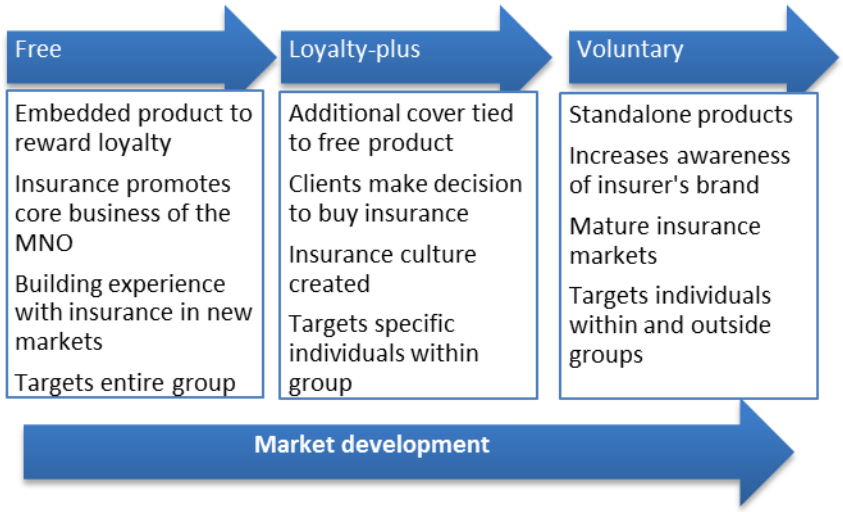
Finally, while partnerships with MNOs offer tremendous opportunities, they need to be planned carefully and insurers need to take certain steps to ensure their success. Due to the scale of these schemes, any failures can affect the insurance industry as a whole. Section 3.5 lists the most important points for insurers to consider.

Products

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 4. The first stage of market maturity is suitable for loyalty-based schemes that include a free insurance product embedded in the MNO's core service. It makes sense to start with this model in markets with limited insurance experience. As markets mature and customers gain a better understanding of insurance, the second stage can include the offer of a "freemium" product that is still loyalty-based, but offers clients the opportunity to buy extra cover. The third stage allows the sale of a stand-alone, voluntary product that can cover various risks and is paid for by the client. 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. In mature insurance markets with an insurance culture, it is possible for insurers and MNOs to offer voluntary insurance products without going through the first two stages.

The product strategy should be based on overall business strategy, organizational capacity, and risk appetite of the partners. Its needs to be combined with the overall business objectives and capacities of the MNOs, insurers and any intermediaries or services providers that may be needed.

Figure 4. Product evolution



Free product: loyalty-based

To increase their client retention[2] and usage,[3] MNOs can provide insurance to customers as an incentive to use the core service. In this case, the MNO and the insurer have a group policyholder agreement which enrols clients and pays the premium monthly. Insurance is embedded in the usage of the mobile phone and provided free to the customer, provided the customer uses the mobile phone service (this can be airtime, mobile money transactions or balance in the mobile account) to a minimum extent. The coverage clients receive is based on the amount of service they use (airtime/mobile money transactions/savings balance). The idea from the insurer's point of view is to allow clients to experience the free product for a period of time, in order to help to build a demand for insurance among first-time clients and create an insurance culture.

A successful example 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 $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).

Another example comes from Adamjee Life (insurer), Telenor (MNO), and Tameer Bank in Pakistan. The Easypaisa Khushaal product offers clients free life insurance based on the monthly balance in the customer's mobile money account at Tameer Bank (see Box 7).

[2] The churn rate (the percentage of subscribers who are inactive after typically three months) is an indicator for client retention.
[3] Average revenue per user (ARPU) is an indicator for client usage.

Box 7. Easypaisa Khushaal: Using insurance to encourage saving

Easypaisa, a mobile money service, was launched in 2009 by Telenor Pakistan, a unit of Norway's Telenor Group, in conjunction with Tameer Micro Finance Bank. As of 2013, there are approximately 4 million Easypaisa users with approximately 83 billion Pakistani rupees (PKR) (about US$ 843.5 million) worth of transactions being done through it. There are over 22,000 Easypaisa agents in 750 towns and cities in Pakistan, which offers a potential to the insurer not only to achieve scale but also to offer new products with additional benefits. In collaboration with Adamjee Life, Easypaisa Khushaal insurance was offered as a means to encourage savings.

By subscribing to Easypaisa Khushaal and maintaining an average monthly balance of PKR 2,000 (US$ 2) in their Easypaisa mobile wallet accounts, customers are covered for natural and accidental death. Coverage of up to PKR 500,000 (US$ 5,000) in case of natural death and PKR 1 million (US$ 10,000) if the cause of death is accidental is provided to all customers maintaining the required average balance, with an additional benefit of PKR 5,000 (US$ 50) per month in case of death due to any cause. The coverage is tied directly to the subscriber's mobile wallet account so the higher the balance in the account, the higher his/her insurance coverage.

In another example, YuMobile in Kenya offers YuCover, an "opt-in" life insurance product based on the agent-less model. As described in section 0, the agent-less model reduced the operating and administration cost, enabling YuCover to achieve viability in 5 months as opposed to a more common break-even point for free insurance offered by MNOs of 8–10 months (after marketing expenses) (Gross, 2013a). This can be attributed to both the agent-less approach and to the low eligibility threshold of KES 100 (US$ 1.10) of airtime per month, which allowed more than 700, 000 YuMobile subscribers to prequalify for the insurance and enabled the scheme to rapidly achieve scale.

Starting with a free, loyalty-based product can generate fast uptake and introduce customers to insurance through simple, easily understandable products like life and accidental death insurance. As the MNO pays the premium on behalf of the subscribers, it makes financial sense to the MNO to offer free insurance if the provision of insurance results in an increase in its core revenues. This type of scheme can only remain free if the MNO earns enough additional revenue through improved customer loyalty or usage to cover the costs associated with the product, including payment of the insurance premium to the insurer. The improvements in customer loyalty and usage should result in lower churn and higher spending per customer. 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). 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 US$ 5 in revenue per subscriber in one year. In addition, churn decreased by 20 per cent (Gross, 2013a). 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.

"Loyalty-plus" insurance: The "freemium" model

As customers' understanding of insurance grows, insurers and MNOs can offer paid-for insurance products that provide additional coverage or top-ups to the free product. Clients will only demand more insurance if they have experienced or witnessed the benefits. If the free products are to lay the foundation for other products, then the claims experience is critical, as this is when the promise of insurance becomes tangible.

Tigo Xtra-Life is an example of the freemium model, which is becoming popular in the financial services industry. Tigo Ghana adopted the freemium model, offering clients the option to double their free insurance cover by paying a fee of US$ 0.68 per month, giving them a sum assured of up to US$ 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 seven 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).

Products need to be adjusted to client needs, and success in one market does not guarantee success in another. When Tigo moved from Ghana to Tanzania, it initially planned to replicate the life product that had been successful in Ghana. However, market research indicated that the target population was much more interested in health insurance. In an attempt to introduce simple yet relevant products, Tigo in Tanzania introduced a hospital cash product that paid clients a fixed amount for each day of hospitalization, up to a maximum stay of 30 days. The premium for the policy is paid through airtime or mobile money deductions via Tigo Tanzania's mobile wallet, Tigo Pesa. The premium starts at TZS 750 (US$ 0.47) per month and the scheme requires face-to-face enrolment through dedicated agents. The policy lasts for 30 days and is renewed provided the client has purchased enough airtime during the previous month to be eligible. Clients' sum assured, based on their previous month's airtime usage, is communicated to them at the beginning of the month by SMS. Bima supports Tigo's delivery and management of this product and is responsible for sales, distribution, general administration, daily operations and the technical platform. The product is underwritten by Golden Crescent Assurance, and MicroEnsure, which developed the original hospital cash concept for Tigo, supports claims management.

Also in Tanzania, Vodacom has developed an insurance product called Faraja, which offers cover for death by accident in addition to a funeral benefit The product, underwritten by the Heritage Insurance company, is based on the number of transactions clients do through their mobile money account. Ten transactions per month makes a customer eligible for free funeral insurance worth TZS 200,000 (US$ 124.34). Customers can choose to pay for additional cover of up to US$ 11,000. Vodacom uses the lure of insurance to drive transactions, through text messages like this one: "You have completed six transactions, just complete four more and you get free life insurance cover." Faraja has 250,000 free insurance customers and 200,000 paying customers.

Voluntary products

In markets where customers have an understanding of insurance and an acceptance of paying for additional benefits, insurers and MNOs can introduce voluntary products. These products are offered as additional services that customers can pay for along with their mobile services. Customers do not have to meet minimum criteria to be eligible for these products. Voluntary products are more challenging for insurers and MNOs to administer because there is no guarantee of scale to make the scheme viable. Unlike loyalty-based schemes or free cover, which are paid for, at least in part, by the MNO, voluntary products are paid for by individual clients.

In Pakistan, Adamjee Life and Zong Mobile offer a personal accident insurance product to Zong subscribers. It is a voluntary, agent-less product. Customers pay a premium of PKR 2-5 (US$ 0.02-0.05) a day for a sum assured of PKR 100,000-300,000 (US$ 1,015-3,045) for accidental death or disability and an additional PKR 5,000 (US$ 50) for funeral expenses in the case of accidental death. Payments are made daily through airtime and aggregated over the month and then paid to the insurer as the premium. In the Zong Insurance scheme, all interactions occur over the phone. Clients can purchase the product over the phone, pay premiums through airtime and initiate claims via the mobile phone. SMS messages are sent out for disclosure, but not for payment as the premium is prepaid. The product was piloted to 300,000 Zong subscribers and within two-and-a-half months, 175,000 subscribers had opted in. However, the number of subscribers who have remained active is much lower.

In new markets, embedded (free or "loyalty-plus") products are a good starting point for MNOs to build insurance expertise and insurers to gain knowledge of the low-income market. Insurers and MNOs can subsequently introduce voluntary products to cover other risks faced by clients. 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.

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. It is foreseeable that loyalty-based products and voluntary products are offered in the same market as they could be designed to cover different risks.

Payment mechanisms

Using the mobile phone to collect premiums is becoming increasingly popular. It is convenient and more accessible for potential clients, as well as more cost-effective and efficient for the parties administering the scheme (MNO, insurers and third-party administrators). In this section we discuss the trade-offs between the two most popular premium payment mechanisms – airtime and mobile money – for providers and clients.

Airtime

Airtime has become an increasingly popular payment mechanism in countries with a regulatory environment that allows it. Unlike mobile money, airtime can be used by anyone who has a mobile phone and thus removes the need to have a separate payment mechanism for insurance. Using airtime for payments can be complex, however, because airtime units need to be converted into a monetary currency (one unit of airtime does not equal one unit of premium). It requires either bringing in third-party technology providers to support the scheme (for example, Bima or MicroEnsure) or making upfront investment in information systems that support communication between MNOs and insurers to calculate premiums from airtime. Adamjee Life developed different "middleware" (software that connects different applications) for each MNO they were working with to convert airtime to monetary value. This middleware enabled insurance transactions between the systems of the MNO and the insurer to be recognized and recorded.

Airtime insurance payment mechanisms have been successfully launched in a number of countries, such as Ghana, Sri Lanka or Pakistan, where the regulatory environment has allowed the use of airtime to purchase other goods and services. However, this is a controversial topic and in many countries, including India, Nigeria and South Africa, the regulatory regimes do not allow it. The ability to pay using airtime is convenient for customers since they continue to do what they are used to doing, that is, buying airtime. However, people need to be educated about using airtime as a payment mechanism, as they are only used to using airtime for calls and related services like ringtones.

Insurers need to keep two cost factors in mind while deciding on airtime as a premium payment mechanism to be used while working with MNOs:

- Airtime purchase attracts VAT and often excise tax, while insurance premium payments do not. This makes airtime purchases more expensive.
- MNOs charge third parties (including insurance companies) to do payment collection through airtime. This is usually a percentage of what is paid through airtime.

When the MNO "owns" the insurance product, as in most of the current schemes, the first factor is likely to be the one in play. When the insurance company is using the MNO as a service provider for the insurer's own product, it is likely that the second factor is in play.

Mobile money

Mobile money has been growing at a rapid pace and there are currently 60 million registered mobile money customers. In many countries, regulation stipulates that these mobile money accounts be linked to bank accounts, but as McKay and Pickens (2010) reveals that 37 per cent did not have bank accounts. More and more countries are relaxing regulations to enable customers to use mobile money without having a bank account.

Despite significant penetration in mobile subscriptions, in many markets mobile money lags behind the mobile phone outreach. For example, in Ghana, Tigo has the largest number of mobile money users but this only represents 30 per cent of its 3.75 million customer base, while there are even fewer "active" mobile money users. However acceptance is increasing. For example, MTN in Ghana initially had 11 million mobile phone subscribers, two million mobile money subscribers and only 100,000 active mobile money users. Today, they have over 300,000 active users.

Mobile money is not without challenges for the customer. For clients who have had no previous experience with insurance or purchasing financial services over the mobile phone, using mobile money for insurance requires adopting two new behaviours. First, clients need to purchase a financial product (insurance) they have never used before, and second, they need to learn to pay premiums through a technology platform that they might not be familiar with. As was observed in the case of MTN Mi-Life, if the market is not ready to accept these behavioural changes, this may create a barrier to scale.

Cost of airtime vs. mobile money

The costs of airtime and mobile money can be separated into two separate components: (i) the cost of a mobile phone (which is the same for both payment mechanisms) and (ii) the cost of transacting (which if different). This study looks at these costs in more detail, but does not provide orders of magnitude for them.

The transaction costs for airtime include value-added tax and the commission paid to airtime distributors. Both costs are built into the airtime cost, thus the client does not really experience them. For example, a client pays for 100 units of airtime and gets 100 units of airtime on their mobile phone. The MNO might pay the value-added tax and commission behind the scenes (as in the case of Tigo Ghana), but the value of 100 units of airtime is still given to the client. The caveat here is that 100 units of airtime is not necessarily equivalent to 100 units of currency and in many cases distribution costs are priced into the cost of the airtime and the additional costs for administering the product might be translated into less value for the client (that is, a lower sum assured). In addition, there are other costs that clients do feel – such as travel to and from MNO agents.

In a similar way to airtime, the transaction costs on mobile money include the commission paid to mobile money distributors and the fee charged by the mobile money provider for transacting. Unlike with airtime, for schemes that use mobile money as a payment mechanism, the transaction costs (if any) are borne by the client when they pay the premium (whether automatically deducted or not).

From the insurer's perspective what is important – apart from the regulatory environment – is the objective for collecting premiums over the mobile phone. Tellez and Zetterli (forthcoming) find that mobile money is the more common payment mechanism, but the trade-offs indicate that airtime might be the best way to enable clients to access your products. Potential clients are already familiar with purchasing airtime and the client base for airtime payments is much larger than for mobile money. However, using airtime for premium payments is limited to MNO-tied insurance schemes and regulatory environments that allow airtime payments. Alternatively, mobile money can be used in microinsurance schemes where the regulatory environment allows it and provides a cost-effective alternative for premium payments, which may explain its popularity.

There are advantages and disadvantages to both payment mechanisms. Mobile money transactions, like bank transactions, are usually but not always untaxed, but airtime accounts have greater reach. Not all customers have mobile money accounts and those that do often do not keep standing balances in their wallet. While some of the more successful programmes, like Tigo Family Care, have chosen airtime rather than mobile money, this may change as mobile money adoption increases.

Automatic deductions: Pros and cons for clients

Both methods of payment (airtime or mobile money) can be used for regular, automatic transfer of premiums. In many MNO-tied schemes, the premium is automatically deducted from the customer's airtime or mobile money balance. The downside of automatic deduction is that clients do not need to make an active decision to pay the premium and hence may not be aware of the deduction. Another drawback that tends to come out strongly is that people hate the feeling that someone is "eating" their balance when they're not looking – they may load their wallet to make a call and see part of it immediately deducted. In comparison, by forcing clients to make an active decision to pay premiums, insurers can bring the idea of insurance to the front of the client's mind. The value of both options needs to be weighed up, as it might be more efficient to deduct the premium automatically and also might be better value for clients since this would reduce lapses. Also, deducting a small amount every day, rather than taking a lump sum deduction once in the month, helps clients manage their expenses meaningfully. If automatic payment deduction is selected, the MNO and insurer need to make sure that clients are aware of the deduction. A commonly adopted approach by insurers and MNOs is to send clients an SMS after each premium payment is deducted and in some cases before, to remind them to top up their mobile wallets so that their policies do not inadvertently lapse.

One challenge for using automatic deduction is that most mobile money accounts (and some airtime accounts) keep zero balances. This means that automatic deductions will often fail. Providers may have to try multiple times to collect payments when there is insufficient balance.

Roles and responsibilities

MNO-led insurance schemes often involve multi-stakeholder partnerships with specialist service providers for different functions, including capacity building, relationship management, agent management, sales and claims processing. The MTN Mi-Life product in Ghana, for example, involves five partners: Hollard Insurance and UT Life (insurers), MFS Africa (technical provider for mobile financial services), MTN (MNO) and MicroEnsure (facilitator and third-party administrator). The project started as part of Hollard's and MFS Africa's international partnership to develop mobile insurance products. Roles are as follows:

- MFS Africa provides the mobile money expertise and technology.
- Hollard deals with all insurance and reinsurance matters concerning product development, pricing and regulatory issues.
- MTN agents are responsible for sales and receive a commission based on the number of policies sold.
- MicroEnsure provides the system to process and validate the registration and payment data, is responsible for the call centre and helps clients submit claims.
- UT Life, as the local insurer, manages local regulation requirements, carries the risk and pays claims via MTN's mobile money platform to the client's mobile wallet.

Specialist players are needed because of the scale of the schemes and the need to handle large volumes of transactions. MicroEnsure, Bima and MFS are three such specialist players with knowledge of insurance and the low-income target market who are helping bridge the gap between insurers and MNOs.

The trade-off with involving additional players is the cost of acquiring their specialist functions compared to the effect it has on the viability of the scheme. Less common, but potentially more threatening is the greater potential for disputes. In the case of EcoLife in Zimbabwe, the scheme was abruptly discontinued because of a disagreement that did not include the insurer but instead was between the MNO and technology provider (see Box 8).

Box 8. A challenging partnership

In Zimbabwe, MNO Econet partnered with insurer First Mutual Life and third-party administrator Trustco to deliver the EcoLife product. Trustco, a Namibia-based technology provider, operated the mobile platform and supported policy acquisition and administration. The loyalty-based EcoLife product provided life insurance for registered Econet subscribers based on their airtime usage. Clients registered for free and were eligible for insurance with a minimum airtime purchase of US$ 3 a month. The product was offered as part of Econet's prepaid package offer and was presented as a value-added benefit for the customer.

The EcoLife product achieved over 1 million policies in less than a year and was seen as a success. However, the product was discontinued following a disagreement between Econet and Trustco over their revenue split, resulting in 1 million people (20 per cent of the adult population) losing cover overnight. The insurer, First Mutual Life, was not involved in the partnership dispute, but was nonetheless subject to its consequences.

Source: Leach et al., forthcoming

The case of EcoLife is an extreme case of the possible fallout for insurers in partnership with MNOs and highlights the limited control insurers have in these types of schemes. This is further evident in the case of Tigo Family Care in Ghana. The product involved four partners: Vanguard Life (insurer), Tigo (MNO), Bima (technology provider) and MicroEnsure (facilitator). As is typical in MNO-insurer partnerships, the MNO owned the product and had the relationship with the clients.

The primary function of the insurer is as the underwriter of the scheme. Often insurers are only brought in after the product has been designed. In the case of Tigo Family Care, Vanguard was not involved in the product design or the training of sales agents. Vanguard had little control over the selection of clients; Tigo determined who should be enrolled based on its own calculation of airtime usage. On the administration side, the flexibility of the product and the monthly policy period meant that the insurer might enrol 500,000 clients in one month, and a million in the next, which meant that the insurer had to plan for a variable number of customers each month and faced challenges in forecasting for claims and reserves. The product was designed to be flexible for the consumers, not for the insurer. Finally, all client data were housed with the MNO and the insurer had limited access to them, making risk pricing difficult. The insurer needs to be aware of and plan for these variances when working on MNO-led schemes.

Insurers can gain access to client data housed in MNO systems if there is a data-sharing agreement. One way to improve data sharing is for insurers to engage in a long-term, profit-sharing partnership with the MNO. Adamjee Life and Zong Mobile have formed a joint venture in Pakistan to administer their accident insurance product. Zong is responsible for promotion, processes and transactions and provides the infrastructure (mobile and agent outlet) for servicing. Adamjee provides insurance expertise for product design and pricing. Adamjee developed its own software to link the mobile phone platform with its traditional back-end information systems and technology. Due to the joint venture approach, both companies participate in the profits (or losses) of the scheme. The agreement between Zong and Adamjee seems to show that a joint venture offers (i) greater sharing of information and processes between parties and (ii) greater investment in the partnership. This is seen by the granularity with which the partners approach the relationship; even marketing and text messages to clients are discussed and agreed upon before dissemination.

When entering into partnerships with MNOs, insurers need to leverage the existing processes of MNOs, which deal with a large number of low-value transactions. When looking for partners, insurers do not need to solicit only the largest MNOs, as even the smaller operators offer a large customer base. For example, Yu-Mobile, with a customer base of 2.55 million clients, is not the largest MNO in Kenya. However, Jubilee Insurance still partnered with Yu-Mobile because it offered a significant client base in the low-income segment.

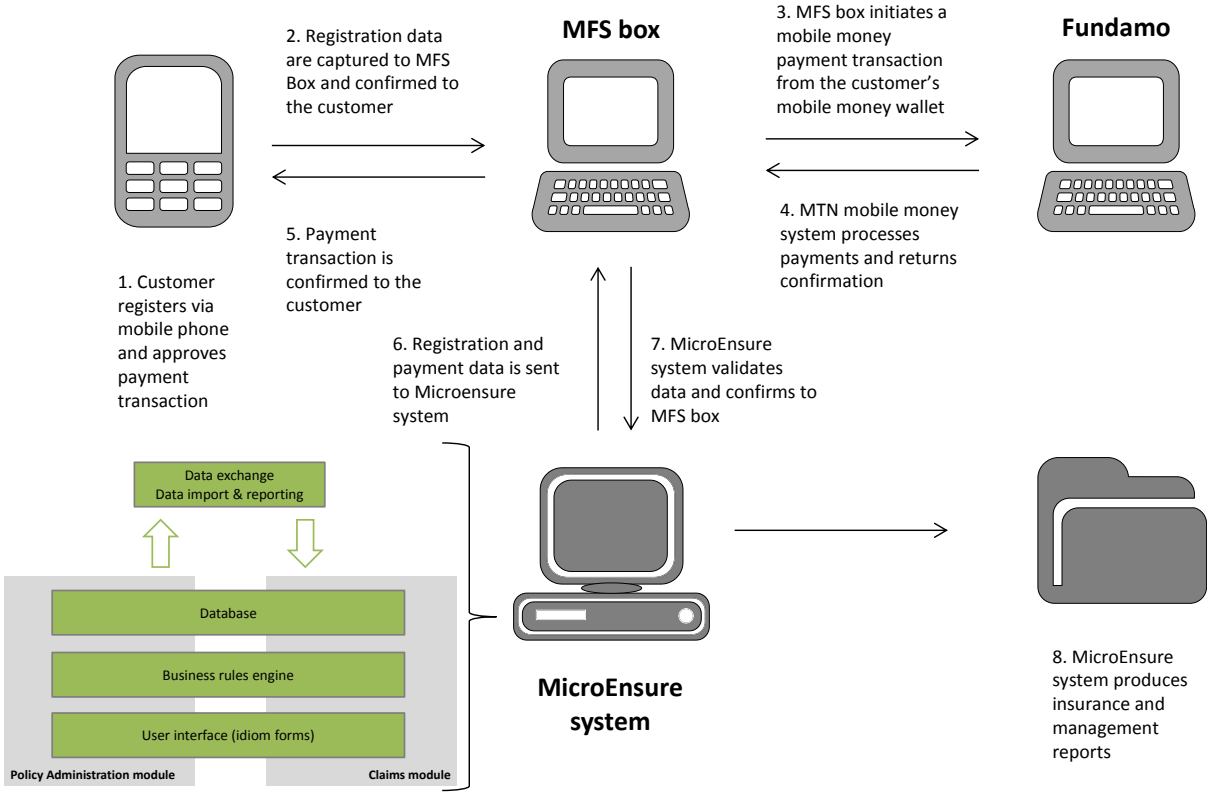
Technology and systems integration

A critical component of a mobile insurance scheme is a technology platform that enables the interaction of data between the MNO and the insurer. A back-end system is needed to automate processes and allow the use of the mobile phone to enrol clients, collect payments, communicate with service centres and pay claims. Insurers need to invest in system integration to ensure that the mobile-specific requirements are integrated into the core management information system (MIS).

Premiums collected with airtime need to be monetized. Insurers can develop in-house systems to achieve this, but they might need to do it for several distribution partners. Investments in mobile software can be expensive, especially when working with different distribution channels. Insurers need to invest in "bridge" software to link the mobile phones with the systems of the insurer and the distribution channels. Adamjee in Pakistan had to develop different types of middleware (one for each MNO partner) to convert the SMS to code and to convert airtime to monetary value. Alternatively, this function can be outsourced to an intermediary, as is typical in the African schemes.

In-house systems make sense with large volumes, for example, over 100,000 customers, so that the investment can be recovered quickly; otherwise paying a per-customer charge to an external agency may be better. Integrating the technology systems of five partners was essential to the successful implementation of MTN's Mi-Life product, which brought together the systems of MFS Africa (service provider), MTN (MNO) and MicroEnsure (service provider). The system integrates the MFS MIS system that collects registration information with the MTN mobile money system that processes payments and the MicroEnsure claims management system (see Figure 5).

Figure 5. MTN Mi-Life's technology system



Source: Gross, 2012b

The technology platform is essential to the MTN Mi-Life product and makes it easier to replicate in different countries with different partners.

Points for insurers to consider when working with mobile network operators

The cases reviewed highlight several lessons for insurers to consider when working with MNOs to implement insurance through mobile phones. As these schemes evolve, insurers have to keep evaluating the benefits, trade-offs and business viability from their perspective.

Insurers should have a clear objective and understand why and how they want to leverage the mobile phone. The mobile phone is a powerful tool for accessing both current and potential clients; however, it should not be seen as the "silver bullet" for microinsurance. As we have seen from the cases reviewed in this study, there are several different ways to use the mobile phone for enrolment, policy administration, premium payment and claims. What works in one market might not work in another. Insurers need to be aware that the implementation of a mobile-phone-based insurance programme, especially in partnership with an MNO, can take months of planning, more so if multiple partners are involved. Insurers need to be clear about their priorities from the beginning so that they remain committed during the potentially long planning process.

Insurers should find ways to build their brand recognition. In MNO-tied insurance schemes, customers identify the product with the MNO and not with the insurer as the products are launched using the MNO's brand. The insurer has little visibility in the low-income market. Insurers do not interact directly with the client via sales, enrolment/registration, premium collection or client servicing. Selling the products with the MNO's brand allows insurers to leverage their brand and gain trust in the new market.

In some countries, there is a legal requirement that the insurer is named on the policy so there is some "forced" brand building for the insurer; however, their brand remains weaker than that of the MNO.

Leveraging the MNO's brand in the initial phase of market development makes sense from a distribution standpoint. However, the insurer needs to find ways to build brand recognition and get to the "front of mind" of the client if it wants to develop other distribution channels in the future.

Insurers need to monitor that commitments to clients are met. MNOs usually control the partnership with insurers, because of their size and their hold over their client base. A particular challenge is that MNOs operate like the fast-moving consumer goods industry, focused on short-term results, while the financial services industry requires clients' long-term commitment and trust to succeed. Unilateral actions taken by MNOs can affect the long-term potential for the insurance industry, as seen in the case of EcoLife Zimbabwe. Insurers need to recognize this possibility before entering into a partnership and carefully evaluate the commitment level of the MNO partner. Contracts should include terms of termination that ensure that commitments to clients are adhered to. One option, suggested by Leach (2013), is to require a soft landing in the event of a termination. This could include an agreement by the insurer, MNO and regulator to:

- make an alternative voluntary (paid-for) insurance available if a free embedded insurance cover is cancelled;
- make arrangements to allow for appropriate payment mechanisms (for example, airtime, mobile money, cash, debit orders);
- require the MNO to continue to address queries and complaints following the ending of the policy;
- provide significant mechanisms for notice, and notice periods.

A loyalty-based insurance scheme can help build a culture of insurance. Loyalty-based schemes provide markets with an opportunity to learn about insurance without having to purchase it. These schemes can be made more valuable by

covering other risks and/or other people, to increase the chances that clients witness the benefits of insurance, thus helping start the process of creating an insurance culture. Insurers should take into account the stage of market development when deciding which product to offer.

Insurers should push for products that provide higher client value. Developing more complex products that offer greater customer value remains a challenge. Insurers need to move from only taking premiums and paying claims to designing innovative products that meet the needs and address the preferences of the market. This can help in building trust in insurance (and the insurer), which can lead to long-term relations with customers for covering their other risks too, through additional products. Providing life insurance is a good first step, but for the market to develop, insurers need to provide products to cover other risks. It is possible that insurers will need to interact more directly with clients, or make better use of the MNO's resources for market research to understand client needs. Data mining clients' transactions (phone and mobile money) can also provide more insight into financial patterns and risk management needs.

Insurers should pay claims on time. MNOs have experience in dealing with hundreds of thousands of customers and requiring limited documentation. Insurers can leverage this expertise to improve their own documentation and processes, especially for claims. Establishing a strong track record of paying claims quickly and fairly is critical to stimulate demand over time for voluntary, paid-for products. Most mobile phone customers in low-income households have never had insurance before, so for these customers to understand and trust insurance they need to appreciate its benefits.

Further, simpler ways of approving claims that are aligned with the MNO's processes allow the insurer to settle large volumes of claims more efficiently. In many cases, claims handling is outsourced to a third-party provider as the insurer does not have the capacity to handle the large volumes. Insurers need to ensure that the MNO or the intermediary representatives are properly trained and incentivized to settle claims quickly.

Insurers need to take an active interest in claims processing. While working with MNOs can build scale, insurers still face two challenges: low visibility to customers, since the enrolment is done by the MNO based on its enrolment criteria; and having little say in processes for checking the veracity of claims, due to the pressure of fast settlement for telecom subscribers. Thus insurers need to develop adequate checks and balances, while relying on the MNO and intermediaries for enrolment and settlement of claims.

Insurers can build on the MNO's interest in retaining customers. MNOs have an incentive to sell insurance over their networks beyond taking a slice of the profits. Keeping customers is tough in developing countries, as mobile phone users often buy prepaid airtime in small blocks and are willing to switch operators and phone numbers to use the best deal being offered at any time. By offering an insurance product as an incentive to customers, this churn can be reduced. For the partnership to work, all parties involved need to benefit from the product.

Insurers do not need to partner with the largest MNO. The MNO with the largest market share naturally seems like the best starting point for an insurer. However, insurers need not necessarily pursue the largest MNO as in most cases the even the smallest MNO within a market is likely to have a larger client base than the largest insurer (Gross, 2013b). Smaller MNOs may also be more likely to be interested in opportunities to maintain or increase their market share or revenue. Additionally, the largest MNOs might not be interested in what the insurer is offering, or in insurance itself as an offering, because they may have other value-added services that are reducing churn and increasing revenue per user.

Insurers should promote persistency of clients. Persistency can be a challenge for schemes that provide monthly enrolment that depends on transactions, which could result in constant churn in their risk pool. Many customers of the Tigo Family Care product do not consistently hit the minimum level of airtime use, meaning they often lose coverage and regain it later. If the customer is unaware of this, it can lead to dissatisfaction at the time of claims settlement. Insurers should remind customers of potential loss of coverage.

Insurers should build capacity to segment client data. Insurers can start targeting client segments with customized products. MNOs have data on customer usage and patterns – there is the opportunity for insurers to leverage these data for segmenting the population to provide more targeted products. Appropriate models need to emerge so that the processes of MNOs and insurers can be aligned to enable these data to flow seamlessly between the MNO and the insurer.

4 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 the some of the reviewed schemes have improved value in each of the dimensions (see Table 2).

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

	Product	Access	Cost	Efficiency
YuCover	No waiting period. Low eligibility threshold	Enrolment through USSD menu on mobile phone. Easy to enrol based on airtime usage	Sum assured > 100 x premium	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	Sum assured > 50 x premium. Small fee of US$ 0.68 to double insurance cover. Daily deductions	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	Sum assured > 20 x premium	Automated claims payout directly to M-Pesa accounts
MTN Mi-Life	No waiting period	Enrolment possible at MTN outlets	Sum assured > 1 000 x premium. Deduction from mobile money account	SMS reminders. Claims initiated through USSD menu and paid to mobile money accounts
Easypaisa Khushaal	No waiting period	Enrolment based on amount saved in mobile money account – no separate requirement	Sum assured > 2 500 x premium. Deduction from mobile money account	Claims filing over phone
Zong Insurance	Expanded life cover, including accident and funeral expenses.	Automatic daily airtime deduction	Daily premium. Sum assured > 5 000 x premium	Daily premium. Sum assured >50 000 x premium

	No waiting period			
Tata AIG cattle	Cattle insurance (cover not available before)	Enrolment time reduced from 15 days to 30 minutes	Premium 3% to 5% of sum assured (sum assured > 20 x premium)	Claims settlement reduced from 21 days to 7 days
WRMS' CARM	Weather-index crop insurance (cover not available before) Value-added services (weather alerts and prices)		Premium 7–12% of sum assured (sum assured > 8 x premium)	SMS weather data enable clients to calculate claims payouts

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, 2012a). 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 and Zong Insurance offers accident cover and funeral expenses. 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. For example, 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, which were not previously possible. For example, Kilimo Salama offers insurance against crop loss due to adverse weather conditions and Tata AIG offers cattle insurance.

Going forward, 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 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's 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 (see box 3).

Going forward, providers should to be aware of the need for face-to-face interaction and education, which is critical 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. Loyalty-based products perform well on the affordability dimension as their mandatory nature allows providers to offer them at low cost. They also perform well on transaction 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.

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 its distribution model.

Going forward, 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 (i) improving communication, (ii) allowing clients to manage policy details and (iii) improving the claims experience. All the schemes use the mobile phone for communication, either through SMS reminders for premium payments or short code 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 7 days (see box 1).

Going forward, 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.

5 CONCLUSION

The examples presented in this paper show how insurers are using mobile phones to make enrolment and claims processes more efficient, provide better customer care, and communicate better with customers. Many insurers have also partnered with MNOs and provided insurance products that have reached scale quickly. While loyalty-based products have had the most success initially, as insurers and MNOs gain experience and as markets mature and become more competitive, products are expected to evolve to offer voluntary options, target specific client segments, and provide value-added services. 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.

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.

Insurers need to carefully design products and processes and pursue new partnerships in order to grasp the tremendous opportunity offered by mobile phones to efficiently provide valuable risk management services to all.

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MICROINSURANCE INNOVATION FACILITY

Housed at the International Labour Organization's Social Finance Programme, the Microinsurance Innovation Facility seeks to increase the availability of quality insurance for the developing world's low income families to help them guard against risk and overcome poverty. The Facility was launched in 2008 with the support of a grant from the Bill & Melinda Gates Foundation.

See more at: www.ilo.org/microinsurance

International Labour Office

microinsurance innovation facility

The social dimension of finance

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