Mobile Money
for the Unbanked

Emerging Practices in Mobile Microinsurance

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Contents

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Introduction

Microinsurance is insurance for people with low incomes, giving poor people the ability to manage risks in their lives.[1] It is not, however, widely available. Why is insurance easily accessible to those in the developed world, but not the poor—whose demand for insurance, given how close they live to the economic brink, is arguably greater? The answer is simple: transaction costs. The cost of selling and underwriting insurance and of administering a claim does not decrease in proportion to the value of the policy. Using traditional channels and processes, insurance companies simply cannot write policies with values below a certain floor without pricing them unrealistically. Moreover, microinsurance is a low-cost, high-volume business; therefore, scale is crucial.

The mobile platform, including mobile money, can be used as a tool to reduce the costs of microinsurance and to help it to scale. The objective of this paper is to outline the opportunities for leveraging the mobile channel, including mobile money, to deliver microinsurance, and to share examples of attempts to do so from around the world.[2] We hope that readers from both the mobile industry and the insurance industry will find in these pages new ideas for collaboration that will make risk-management tools available to those who most need them.

What is Microinsurance?

Microinsurance aims to cover lives and protect the assets of low-income individuals and families from natural disasters, illness, death, accidents and crop failure amongst others. By doing so, it enables low-income individuals to manage their risks better by providing them with a safety net that can stop them from falling back into poverty. It often refers to the subset of insurance products that are characterised by low premiums and low coverage limits, on the assumption that these suit the needs of low-income people.

Mobile microinsurance has been defined as "any type of microinsurance product which leverages the mobile channel, regardless of the existence of a mobile money platform to improve a part of the insurance value chain which can include: product design, pricing, marketing and sales, policy administration and claims payment."[3]

At the time of writing, figures released by Lloyds and the Microinsurance Centre estimate that there are over 135 million people worldwide who are covered by microinsurance. The total market size is vastly larger, amounting to 1.5 to 3 billion policies.[4]

The role of intermediaries

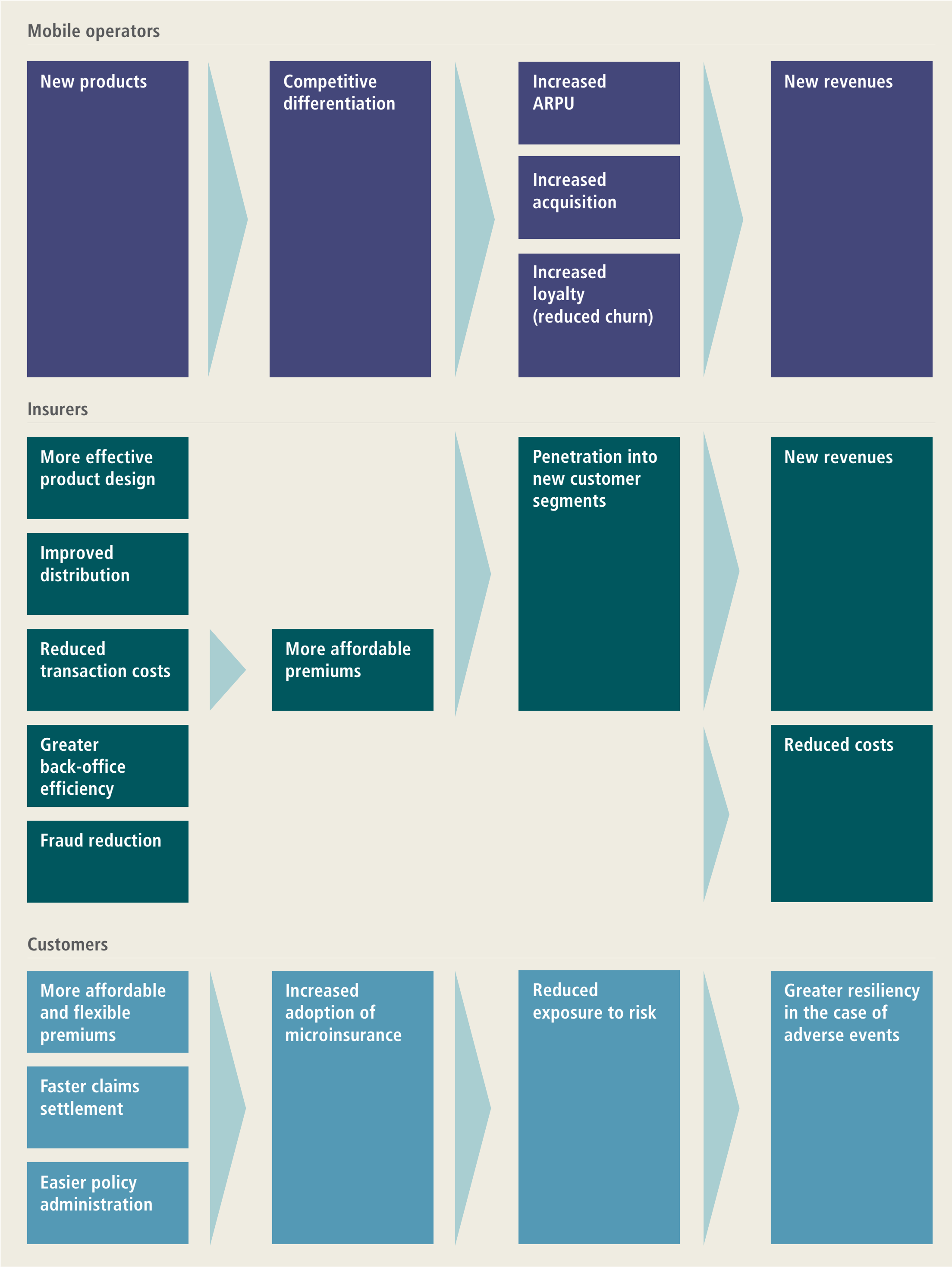
Besides MNOs and insurance companies themselves, there are a number of niche players emerging as specialists in bridging the gap between insurance companies and mobile network operators. Companies like MicroEnsure, Trustco, and Bima have been instrumental in building some of the innovative propositions described in this note.

1. Protecting the Poor: A Microinsurance Compendium, edited by Craig Churchill (available at http://www.microinsurancecompendium.org/)
2. The mobile channel can equally be used to reduce the cost of delivering traditional (i.e., not micro-) insurance, but we will not discuss these uses here.
3. "M-Insurance: The Next Wave of Mobile Financial Services?" by Jeremy Leach (available at http://www.microensure.com/news.asp?id=47&start=5)
4. Insurance in Developing Countries: Exploring Opportunities in Microinsurance, Lloyd's 360° Risk Insight (available at http://www.lloyds.com/~/media/Lloyds/Reports/360%20Other/InsuranceInDevelopingCountries.pdf)

The Promise of Mobile Microinsurance

Depending on the implementation, leveraging the mobile infrastructure for microinsurance can benefit operators, insurers, and customers in a variety of beneficial ways.

Figure 1



ARPU: Average revenue per user

What are MNO Assets that can be Leveraged to Provide Microinsurance?

Assets controlled by MNOs can help insurers reach customers in low-premium environments. MNOs have large physical and virtual networks with the potential to reach significant numbers of clients, including the unbanked, at low cost.

Figure 2, below, summarises the ways that insurers can leverage the MNOs' communication channels, retail distribution networks, and payment mechanisms; in this section, we discuss each of these assets in turn.

Figure 2

The microinsurance value chain

Relevant mobile infrastructure	Product design and pricing	Marketing	Sales	Client enrollment	Policy administration	Claim processing	Claim payment
Communication channels ▪ Voice ▪ Regular and premium SMS ▪ USSD		Insurers can promote their services using mobile communication		Customers can self-enrol over the air	Insurers can handle routine customer inquiries over the air	Customers can submit claims over the air	
Retail sales and distribution ▪ Airtime dealers ▪ Mobile money agents			Airtime dealers and mobile money agents can educate customers about microinsurance	Airtime dealers and mobile money agents can distribute and accept enrolment forms			
Payment mechanisms ▪ Pre- and post-paid airtime accounts ▪ Stored-value mobile money accounts ▪ Over-the-counter mobile money payment points				Customers can pay premiums with airtime, mobile money, or over the counter			Insurers can disburse payouts into mobile money accounts or over the counter
Transactional data ▪ Airtime ▪ Mobile money	Insurers can use transactional data to model risk and price policies						
Brand		Co-branding can build confidence in microinsurance among the low-income segment					

Communication channels

MNOs control a range of communication channels that can support the promotion and sales of and enrolment in insurance policies. They can also allow insurers to handle routine customer enquiries and account management. Finally, they can be used to streamline claims handling, which is one of the most important parts of the value chain to client.[5]

Voice is the most obvious of these channels, and it is widely used by insurers today to communicate with clients. SMS is more complex to implement—typically requiring integration with an SMS aggregator—but it can be an extremely cost-effective channel for, for example, reminding customers when premium payments are due, because sending such reminders can be entirely automated. The USSD (Unstructured Supplementary Service Data) protocol allows for secure, interactive sessions that can be suitable for policy enrolment and administration, and it is accessible on even very low-end handsets. However, insurers must typically negotiate directly with mobile operators in order to gain access to this channel.

In 2011, MTN Ghana, Hollard Insurance, MicroEnsure, and MFS Africa launched an microinsurance product called "mi-Life," which is available on MTN's MobileMoney platform. As the name suggests, "mi-Life" provides users with the opportunity to buy life insurance via their mobile phones via the USSD channel. The same interface used to purchase the insurance can then be used to change its attributes, tailoring the insurance package to suit the consumer's needs. Through their handsets, users are able to initiate claims, queries and make premium payments. Premium payments are deducted from their m-wallets on a monthly basis, and customers are notified via SMS. Once the premium is paid, the insurance cover lasts one month, until the next monthly premium is deducted.

The partnership between MTN and other parties reduces the costs of insurance by lowering transaction costs and by leveraging their extensive distribution network; a larger number of customers are reached. mi-Life policies in Ghana are underwritten by Golden Life Assurance Company with support from Hollard International.

Retail sales and distribution

Insurance providers can leverage the existing distribution network of airtime dealers and/or mobile money agents as a low-cost sales channel. These agents can help explain a product to customers who might not be familiar with insurance, in addition to serving as a channel for notifications, claims handling and even disbursement.

Using existing airtime retailers and/or mobile money agents network may build trust in insurance, since customers are often familiar with these retailers already.[6] However, caution is required. In order for customers to understand exactly what they are buying, the sales channel needs to be appropriately trained. MNOs have learned the hard way that the agent training for the provision of a mobile money service can be a challenge. Finding the right incentives is also complex. If agents are overcompensated for selling policies, they may resort to unsavoury tactics to do so; if their compensation is insufficient, on the other hand, they probably won't bother investing the time it takes to educate customers about the product.

In some countries, there are rules which specify who is allowed to sell insurance. This can restrict the ability of insurers and MNOs to exploit third-party retailers as a sales channel.

Payment mechanisms

Collecting premiums is a major challenge for the microinsurance industry. Customers in the target market often have irregular and unpredictable cash flows and poor access to traditional payment mechanisms. Exploiting new channels for premium collection can result in higher renewal rates, particularly when used to extend flexibility for poor customers with irregular incomes.

The mobile infrastructure offers four ways to collect premiums from customers—and, in some cases, to disburse payouts, too.

Stored-value mobile money accounts

In dozens of low-income countries, mobile operators have launched mobile payment services for their customers.[7] Customers can use these accounts to make payments for their insurance policies, just as higher-income customers would use a bank account. Disbursements can be made into these accounts, too. Of course, it is only an option in countries with live mobile money platforms.

5. Insurance and Technology to Better Serve Emerging Customers: Learning to Improve Access and Service, Zurich Financial Services Group (available at http://www.zurich.com/internet/main/SiteCollectionDocuments/insight/Insurance_and_Technology.pdf)
6. "Driving Customer Usage of Mobile Money for the Unbanked" by Neil Davidson and M. Yasmina McCarty (available at http://mmublog.org/wp-content/files_mf/drivingcustomerusagefinallowres.pdf)
7. GSMA Mobile Money Deployment Tracker (available at http://www.wirelessintelligence.com/mobile-money/unbanked/)

Kilimo Salama ("Safe Agriculture") is a weather-index microinsurance product designed to protect farmers from the risk of drought and of excess rain. It was launched in partnership between UAP Insurance, the Syngenta Foundation for Sustainable Agriculture (SFSA), and Safaricom. Kilimo Salama policies are sold by independent stockists of agricultural inputs across Kenya.[8] These stockists use a scanner attached to a smartphone that allows instant, paperless registration. Stockists collect premiums and transfer these through M-PESA to the insurance company. Automated weather stations then monitor rainfall: if the weather stations' measurement shows that there is a payout due, these are sent automatically to farmers via M-PESA.

This type of insurance is also being adapted for natural disasters, such as typhoons affecting coastal communities using a wind speed index, where an insured's location is recorded via GPS and pay-out is triggered depending on the recorded wind speed and distance from the storm.

Over-the-counter agent payments

Just as insurers can leverage airtime dealers and mobile money agents as a sales channel, they can also be tasked with collecting premium payments from customers.

Pre- and post-paid mobile accounts

In a number of countries, MNOs and insurers have made it possible for customers to pay for their policies using their existing pre- or post-paid mobile account. The advantage of this payment mechanism is that it is available to every customer with a mobile phone.

In the context of the base of the pyramid, this payment mechanism may still need to be combined with a physical sales channel, since customers with no previous experience with insurance will most likely benefit from more personalised sales attention.

No fee (i.e., loyalty based)

Finally, insurers may opt not to collect premiums from customers at all, turning instead to MNOs to cover the cost of insurance on behalf of their customers.

Loyalty programmes are structured marketing efforts that reward, and therefore encourage, buying behaviour—behaviour that is valuable enough to the MNO to justify subsidising the cover.[9] In countries where customers tend to have more than one SIM card, loyalty programmes can be designed to reduce churn. Alternatively, when qualifying for insurance is tied to certain levels of expenditure (e.g. top ups), these schemes can actually cause customers to spend more, having a positive effect in ARPU.

These types of models tend to renew every calendar month, as long as the customer fulfils the aforementioned requirements. When they don't, the insurance benefit is forgone. A key success factor for such programmes is that customers become aware of the potential benefits of the insurance cover they are receiving.

Tigo Ghana provides a loyalty-based life insurance cover for prepaid subscribers and any one member of their families. This insurance is underwritten by Vanguard Life with support from Bima and MicroEnsure. Registered subscribers who spend GHS5 (US$3) in a calendar month receive an insurance cover for themselves and for a registered family member in the event of a natural death. The more the customer spends, the higher the insurance cover they receive—up to GHS 1,000 (US$562). Once a subscriber registers to be insured, Tigo sends the customer an SMS at the beginning of each month so they know the level of insurance they have acquired. In the event of a natural death, the subscriber's family member registered on the insurance plan is required to report it along with the deceased's death certificate to redeem the policy. The insurance cover for a particular month cannot be rolled over if not claimed in that month.

A key advantage of loyalty-based insurance products is that they can extend the benefits of insurance cover to customers who would otherwise be unwilling to pay for it. By demonstrating the value of insurance to customers without requiring an upfront financial contribution from them first, loyalty-based insurance policies can build awareness and understanding of insurance as a concept—increasing the likelihood that customers will purchase policies themselves in the future.

Globe in the Philippines has piloted the Hospital Benefit Plan, a loyalty-based hospital insurance scheme specially designed for all qualified recipients of GCASH remittances. For every remittance made, regardless of the amount remitted to the beneficiary in the Philippines, the beneficiary is entitled to a thirty-day cover for free. All sickness and hospitalisation charges are covered, except for those related to cancer, pregnancy, injuries caused while driving under the influence, and certain other exclusions. The insurance coverage remains valid for thirty days thereafter and is cumulative: as such, the more frequently remittances are sent, the more coverage the person receives.

Transactional data

One of the major challenges faced by insurance practitioners when designing and pricing new products is the lack of historical data. The real time rendering of insurance and mobile-transaction information (airtime or mobile money usage patterns, geo-tagging, etc.) can dramatically improve this process and give insurers access to reliable data to find patterns necessary for better understanding their customers, ultimately allowing them to design more appropriate products for them.

Collecting and analysing mobile-transaction histories is also relevant for the marketing of insurance, given its potential to help identify customers who have low risk profiles or a need for a particular insurance product. Record keeping can be improved, thereby eliminating redundant processes and reducing fraud. And for claims settlement, the readily available data reduces the amount of documentation necessary, making the process more efficient.

Brand

Brand recognition and trust are important in any industry. Trust in the insurance provider is particularly essential because a prospective customer will not purchase a policy unless he is sure that, in the case of a legitimate claim, a payout will be made. (This is one of the reasons that microinsurance has diffused more slowly among low-income consumers than microcredit.) Under the right conditions, MNOs can lend their substantial brand power to give credibility to the claims of an insurance provider. For example, in a recent survey in Ghana, 70% of respondents said they would rather purchase insurance from an MNO than from an insurer—presumably because of the low visibility of insurance providers among the low-income segment.[11]

8. "Fact sheet: Kilimo Salama ("Safe Agriculture"): Microinsurance for Farmers in Kenya," Syngenta Foundation (available at http://www.syngentafoundation.org/__temp/Kilimo_Salama_Fact_sheet_FINAL.pdf)

9. "Loyalty Programs and Their Impact on Repeat-Purchase Loyalty Patterns: A Replication and Extension" by Byron Sharp and Anne Sharp (available at http://byronsharp.com/resources/6076.PDF)

11. "Mobile life insurance launches in Ghana—Interview with MFS Africa & Hollard Insurance," Developing Telecoms (available at http://www.developingtelecoms.com/mobile-life-insurance-launches-in-ghana-interview-with-mfs-africa-a-hollard-insurance.html)

The Global Landscape of Microinsurance Products

This sample of microinsurance schemes is not exhaustive, but it provides a picture of the range of approaches that are being tested around the world. As a general note, many of these products are still in pilot stage, and, at present, they tend to focus on the simplest kinds of insurance, such as life and accident.

Country	MNO	Insurer	Partners	Name	Product description	Mobile use
Bangladesh	Banglalink	Jiban Bima			Life insurance product	Premium collection via mobile
Ghana	MTN	Golden Life	MFS Africa, Hollard Insurance, MicroEnsure	mi-Life	Life insurance product available to MTN MobileMoney subscribers	Initiation of claims, queries, and premium payments through MTN MobileMoney platform
Ghana	Tigo	Vanguard Life	Bima, MicroEnsure	Family care insurance	Life insurance product for Tigo prepaid customers having a minimum usage, covering themselves and a registered family member	Registration via SMS and airtime-based premium payment
Honduras	Tigo	Seguros Ficohsa		Seguro Medico via Celular	Accident insurance covering for medical expenses	Registration via SMS and airtime-based premium payment
India	Airtel	Reliance Life Insurance Company Ltd	mChek	Free Group Term Life Cover	Life cover valid for a period of 6 months from the date of subscription	Cover based on the usage over the past 6 months. Registration via SMS
India	IDEA Cellular	Birla Sun Life Insurance		Group term insurance cover	Life insurance product offering one-year coverage to 18 to 35 year old people	Registration via mobile phone after downloading a particular dialer tone and providing personal details (age, etc.) over SMS
India	BNSL	MS General Insurance Company Ltd		BNSL Personal Accidental Insurance Scheme	Loyalty-based accidental insurance worth Rs 50,000 (US$944)	Free insurance for all subscribers of postpaid mobile services. SMS Registration
India	Bharti Airtel	Bharti Axa Life (Bharti stakes sold to Reliance in June 2011)		BEAM	General and life insurance	Premium collection and payments via mobile
Indonesia	Telkomsel	Takaful Safari Insurance, Jiwasraya Staco Insurance			Accident insurance worth up to Rp 100m (US$11.200) available during the Idul Fitri holiday season	Policies can be bought through T-Cash
Indonesia	Telkomsel	Commonwealth Life		Advanced Comm Care	Accident insurance available to T-Cash customers	Registration via SMS and T-Cash

Country	MNO	Insurer	Partners	Name	Product description	Mobile use
Kenya	Safaricom	UAP Insurance	Syngenta Foundation for Sustainable Agriculture	Kilimo Salama	Weather index insurance product designed to insure maize and wheat farmers against drought and excess rain	Premium collection and disbursement through M-PESA. Mobile scans for product
Kenya	Safaricom	Britak			Personal accident insurance product	Enrolment and premium payment through M-KESHO
Kenya	All MNOs offering mobile money services in Kenya	CIC Insurance Group		CIC M-Bima	12-year endowment product providing a savings element with a life and disability cover. The client is encouraged to save money; he receives savings interest and an immediate life insurance cover	Premium collection through mobile money platforms (M-PESA, Airtel Money, Yu-Cash...) and weekly SMS reminders for premium collection
Kenya	Safaricom		MicroEnsure, FrontlineSMS: Credit ChildFund	Akiba Sure	Combined life insurance and savings product to benefit children in the event that a guardian passes away. The two-year term product is based on savings contribution levels ranging from 10-60 KES/day (US$0.10-0.60), with a savings payout at the end of the life of the policy in the event a claim has not been made	Uses FrontlineSMS: Credit's PaymentView software to monitor incoming M-PESA payments via SMS, track customer progress towards savings requirements and prompt targeted SMS messages and reminders
Kenya	Safaricom	GA Insurance Ltd	Chamgamka, Microhealth Ltd	Changamka	Flexible savings and health m-insurance product designed to support families save towards the cost of childbirth	Top-up smart cards via M-PESA
Kenya		Kenya Oriental Insurance Ltd		Safari Bima	Personal accident cover	Subscription with a scratch card via SMS
Namibia (also Zimbabwe)	Econet	First Mutual Life	Trustco	Ecolife	Life insurance for prepaid customers of Econet having a minimum usage	Registration via SMS
Pakistan	ZONG	Adamjee Life		ZONG Insurance	Accidental death or disability insurance caused by an accident or terrorism	Subscription to one of three different plans via SMS. Daily deductions of Rs 2-5 (US$0.02-$0.05) for annual cover of US$1130-$3390

Country	MNO	Insurer	Partners	Name	Product description	Mobile use
Philippines	Globe	Oriental Insurance		Hospital Benefit Plan	Accident and Hospital insurance to the recipients of remittances through GCASH	Based on the number of remittances received via GCASH mobile money platform
Philippines	SMART	Philamlife		Aksitext	Life insurance product offering accidental death benefits to SMART customers. Pay US$0.24 and get 15 days accident/death cover of US$240	Registration via SMS and airtime-based premium payment
South Africa	Clickatell	Metropolitan Insurance		Cover2go	Accidental death and funeral cover	Registration via SMS and airtime-based premium payment
South Africa	Various	Hollard Insurance	Take it Eezi (Sharedphone)	My Funeral Card	Funeral insurance product	Payment through the Take it Eezi payment system (a special SIM card inserted into a cell phone interface). SMS reminders for premium collection
Tanzania	Airtel	Real Insurance			Life Insurance available to Airtel Money customers	Facilitates payment of Real Insurance premiums over mobile money platform available to Airtel Money customers
Tanzania	Tigo	Golden Crescent	Bima, MicroEnsure	Tigo Bima	Life insurance product for Tigo prepaid customers having a minimum usage, covering themselves and a registered family member	Registration via SMS and airtime-based premium payment
Tanzania	Vodacom		Comprehensive Community Based Rehabilitation in Tanzania (CCBRT), UNFPA		Non-traditional insurance. Charitable pay-outs to women suffering from obstetric fistula to facilitate travel to hospital	Pay-outs via M-PESA
Thailand	DTAC	Muang Thai Life Insurance		DTAC Lifecare	Postpaid life insurance product	Registration via SMS and airtime-based premium payment
Thailand	True			TrueMove	Life insurance product covering accidental death and medical expenses. Covers no more than 10 days of the trip	Available to postpaid customers travelling abroad and roaming. Subscription by calling *9399 ext 5 within 7 days prior to departure
Thailand	AIS	CIGNA Insurance			3-month personal accident coverage with accidental medical reimbursement of up to Bt 5,000 (US$162)	Available to GSM Advance customers nationwide. Subscription via mobile by calling *101. No charge of premiums

Further Reading

Protecting the Poor: A Microinsurance Compendium, edited by Craig Churchill
Available at: http://www.microinsurancecompendium.org/

The Role of Cell Captive Insurance in the Development of the South African Microinsurance Sector, by Derek Pead and Lynn Witten
Available at: http://www.cenfri.org/documents/microinsurance/Alchemy_Cell%20captives_final%20draft30072010.pdf

Insurance and Technology to Better Serve Emerging Customers: Learning to Improve Access and Service, Zurich Financial Services Group
Available at: http://www.zurich.com/internet/main/SiteCollectionDocuments/insight/Insurance_and_Technology.pdf

Insurance in Developing Countries: Exploring Opportunities in Microinsurance, Lloyd's 360° Risk Insight
Available at: http://www.lloyds.com/~/media/Lloyds/Reports/360%20Other/InsuranceInDevelopingCountries.pdf

Insurance in Emerging Markets: Sound Developments; Greenfield for Agricultural Insurance, Swiss Reinsurance Company
Available at: http://media.swissre.com/documents/sigma1_2007_en.pdf

"M-Insurance: The Next Wave of Mobile Financial Services?" by Jeremy Leach
Available at: http://www.microensure.com/news.asp?id=47&start=5

The Landscape of Microinsurance in the World's 100 Poorest Countries by Jim Roth, Michael J. McCord, and Dominic Liber
Available at: http://www.microfinancegateway.org/gm/document-1.9.29195/40285_file_15.pdf

The Demand for Microinsurance in Pakistan by Elizabeth McGuinness and Volodymyr Tounytsky
Available at: http://www.microfinanceopportunities.org/docs/Demand_for_Microinsurance_in_Pakistan.pdf

"Weather Index Insurance: The Case for South Africa" by Shadreck Mapfumo
Available at: http://www.microfinancegateway.org/gm/document-1.9.29543/43854_file_Weatherinsurance_SA.pdf

"The Landscape of Microinsurance In Africa" by Michal Matul, Michael J. McCord, Caroline Phily, and Job Harms
Available at: http://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_124365.pdf

"Micro-Insurance: Extending Health Insurance to the Excluded" by David Dror and Christian Jacquier
Available at: http://www.microinsurancenetwork.org/file/extendinghealthinsurance_to_the_excluded.pdf

"Access to Insurance and Financial Sector Regulation," by Arup Chatterjee (forthcoming)

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