

TECHNOLOGY FOR MICROINSURANCE

In 2008, the Microinsurance Innovation Facility and Technology Working Group (from the Microinsurance Network) published the results of a scoping study on “Technology for Microinsurance”, with the objective to catalogue and illustrate existing technologies used or potentially useable in the area of microinsurance.

The study is part of an initiative to compile an inventory of information technologies that are or could be applicable in the extension of insurance services to low-income households.

The study attempts to address the following questions:

- Who are the users of technology for microinsurance?
- What technologies are available to support microinsurance business processes? and
- How does the cost of technology translate into overall benefits?

The component technologies for microinsurance divide naturally into three groups:

• **Customer Interface**

The customer interface is the distribution layer of the processing model. It consists of the human organizations involved in microinsurance distribution channels and the front end tools they use for providing and receiving information.

• **Transaction Processing**

Transaction processing is designed to maintain a computer system (typically, but not limited to, a database or some modern file systems) in a known, consistent state, by ensuring that any operations carried out on the system that are interdependent are either all completed successfully or all cancelled successfully.

• **Data Analysis & Processing**

Data Analysis and Processing refers to the Enterprise Data Management (EDM) function of an organization, to the ability to precisely define, easily integrate and effectively retrieve data for both internal applications and external communication, and it defines the business objectives.

Following activities were carried out:

- A market survey on technology for microinsurance, addressing user profiles, requirements & systems and field assessment of technology;

- An information processing model and a taxonomy of technology for microinsurance;
- A technology catalogue, examples and case studies, relevant literature and references organized according to the taxonomy;
- An assessment framework based on a model of technology cost and sustainability, allowing benchmarking, scalability and productivity comparisons of various solutions; and
- A website to report on the project results.

Main conclusions

The market survey indicated that the greatest demand in the field was for Transaction Processing Systems; the interviews confirmed that User Interface and Data Processing & Analysis were in fact supporting functions to the core business management function.

The general recommendation is that Transaction Processing Systems be installed and properly integrated with paper processes before attempting to automate the supporting functions.

The market survey also indicated a stronger demand for more integration between systems than for a disaggregated approach to technology. This does not mean that projects to investigate technology components (especially front-end technologies) should not be encouraged, but that much more emphasis is placed on reengineering internal business processes, systems integration and other approaches to reducing the administrative load in the back offices of both mutualities and agencies. The risk of not doing so is that investments of MIUs will be prioritised incorrectly, resulting in increased overhead costs.

The market survey indicated a strong demand for a common data repository, but the authors sensed that this was only part of the story. Having good data using a common format can only improve the quality and penetration of microinsurance products. One of the main challenges to cost effective use of information technology in microinsurance is managing the flow of data between organizations. The use of common data is just the first step. Any organization wishing to provide added value to its clients needs to be able to

handle the flow of data between members, health service suppliers, microinsurance units, insurers of record and reinsurers. The problem is particularly acute for international microinsurance networks that manage multiple workflows.

Based on the survey, a number of areas for technological R&D would be worth investigating more deeply than could be accomplished in this study.

These include technologies to support the following:

- Integrated user interface functions (authentication, data, micropayments) in smartcards and mobile devices;
- Training, knowledge capture and dissemination;
- Management accounting and business intelligence applications to microinsurance.

There is plenty of scope to increase the depth of the analysis started in this report and to address this question in more detail. In particular, it is necessary to detail the opportunities for technology at each level of the information-processing model.

The report provides an assessment framework for the cost of a system based on the number of clients it can support. The framework classifies microinsurance platforms into low-end, mid-range and high-end systems that support different scales of microinsurance business.

Technology for microinsurance	1
Microcare: Effective technology for poor populations	2
Selected information	4
Website	4
Publication	4
Newsletter	4
Microinsurance Network	5
Launch of website	5
Impact Working Group	5
Member profile	5
Focus	6



The assessment framework was used to analyze different systems to be compared at the level of cost per client. The conclusion from the analysis was clear. A low total development cost does not imply a low cost per client; in fact just the reverse seems to be the case.

The main conclusion to be drawn from the analysis is that reducing transaction costs is one of the major challenges facing microinsurance. Making progress on this front will reduce administrative overheads, with direct impact on customers' premiums.

Microinsurers need to streamline the routine production processes such as customer registration, claims management and implementing systems that support the efficient flow of information within and between organizations. If they don't, the automation of user interfaces, the addition of knowledge management, product design and business intelligence will simply add costs without improving services to customers.

Scoping study summary

The full report makes ten recommendations for the microinsurance community as a whole and to organizations planning the introduction of technology. The reason for these recommendations is not just efficiency for its own sake, but to encourage microinsurance organizations to focus their energies on developing business processes that really add value to the customer. Using technology to release resources from administrative activities and redirect them into product innovation and marketing will have a direct impact the growth of the industry.

There are several technical and non-technical challenges in bringing together innovation and local knowledge of grass roots microinsurance organizations with the demonstrated scalability and efficiency of global solutions providers. In particular, it will be necessary to achieve long-term sustainability of the cooperation and harmonization of the social and economic goals of these very different types of organizations.

The authors think that bottom-up innovation and experimentation should be encouraged, but at the same time, they see potential problems in the area of support. Although there is a willingness to share experiences and applications, it is difficult for MIUs that have developed solutions to provide support to others. These organizations are not properly structured to provide this kind of technical assistance; they are MIUs and not technology experts.

The recommendation is that local solutions be developed in a managed way to stimulate local ownership and innovation but at the same time encourage coordination between developers to avoid repeatedly reinventing the wheel.

Berende, Michiel and Eric Gerelle, 2008: Technology for Microinsurance – Scoping Study. IBEX, Microinsurance Innovation Facility and Microinsurance Network.

The full report can be downloaded from: www.microinsurancenet.org

More information: www.ibex.ch/TM/index.html

MICROCARE: EFFECTIVE TECHNOLOGY FOR POOR POPULATIONS

This article looks at Microcare's experience with effective technologies for microinsurance. Microcare started in 2001 providing health insurance as a not for profit organisation and scaled up its operations into a commercial health insurance company in 2005. Microcare is today a registered insurance company with health background. It provides a range of health insurance, microinsurance and health fund administration services. Microcare has securely managed health data, control fraud and deliver accountability to clients by integrating smartcards and biometric technologies, advanced database networking and online claims processing.

When you give peanuts you get monkeys

IT (Information technology) systems vary from simple book keeping to a robust Oracle database management system. IT system is not only restricted to the collection of data but also contributes to the control of fraud and system abuse, and enhances administrative efficiency when it comes to handling large volume of clients, and large volume of claims data, especially in health Insurance.

Considering the importance of a good IT system, it is worrying that the priority

given for a good IT system in terms of budgeting is most often very poor whereas significant amounts are spent on consultants, conferences and travel. It is a myth to believe that microinsurance is a low-cost business. An actual efficient system bears a high cost initially, but it will pay off over time, latest when the microinsurance programme reaches its critical mass volume of business.

Micro health insurance

Microcare pioneered health insurance in Uganda, when the other insurance industry was still hesitating. The tripod arrangement - "Insurance company, service providers and clients" - has to play their part in risk management. When Microcare developed its IT system, we kept in mind that there is going to be a large amount of claims that has to be entered in the system. We decided to go for a robust Oracle software package. Using a friendly Visual Basic front end and our powerful crystal report tools, we then introduced magnetic swipe cards for individuals or families for ID verification. Later we upgraded to a microchip smart card with T1 protocol for advanced security features, and also introduced fingerprint biometric, ID verification for standalone hospital service provision.

Microcare's IT system

Microcare developed a unique networked check-in desk health insurance control system to prevent system abuses and enables fast accurate settlement of claims. This system has contributed greatly towards the success of our company:

- The adapted system has been developed on an Oracle 9i database platform with dot net and ASP front end. This translates into a highly reliable and robust system that can handle millions of client profiles and thousands of health service providers.
- This programme is unique in that claims can be entered and processed from the point of treatment. So before the patient leaves the service point, the claims are processed thus ensuring "the Right person gets the Right treatment at the Right place for the Right cost". This also ensures that there is a minimal backlog in claims processing and removes dependence on expensive labour intensive paper based claims form processing.
- The system can handle various inclusion and exclusions in entitlements along with set ceiling limits set to control the usage of the members.




- There is an intelligent automated programme capability to check claims against predefined costs as pre-agreed with the service provider hospital or clinic.
- Service provider terminals can have a computer terminal or a client version of the computerized system as a point of sale device.
- To verify client identification the system can have a biometrics (finger print) check.
- The system links up from all terminals and point of sale devices to the main server using minimum communication connectivity like ISDN, SMS, and GPRS.
- There is photo ID verification with each member/member family holding a microchip smart ID Card which can carry their photo as well as the photo being held in the central database and available to terminals.
- The microchip holds the last 25 to 30 transaction records along with cumulative ceiling limit comparing with the usage given.

Claim processing technology


Microcare uses three different claims processing technologies for maximum benefit for the clients:



Claim processing using ordinary desktops and laptops: Claim processing may be offline or online limited to the technology availability. Period data transfer to the main database using SMS protocol or GPRS using GPRS Modem.



Online Claim Processing using web based application:
 Implementation is subjected to the availability of bandwidth. Online application provides latest claim details at the insurer end to budget the service provider payment.




Online and Offline Claim Processing using any windows based mobile devices:
 Data transfer to the main database on a daily or predefined periodic basis through GPRS protocol.

Other key features and benefits of Microcare's Insurance IT Management system are:

- Familiar, easy-to-navigate interface that is easily customized to present key functions and information people need.
- System help employees across the company make a positive impact on insurance management right from the start.
- Tasks are streamlined and functions are connected to help reduce busy work and redundancies.
- Automation and efficiencies introduced by Insurance Management solutions help to accelerate and simplify insurance management at many levels.
- Bring formerly disparate sources of information into a single view of events and help to ensure that the right people can take action.
- Reducing the time for monthly closes, shortening the accounts receivable wait, invoicing with greater accuracy, and increasing return on investments in technology, skills, and processes.
- Retrieve information in your spreadsheet programme.
- Provide reports and other business data in a business portal on the company intranet for financial managers who are collaborating across the company, and across the globe.

Benefits of digital dashboards

Digital dashboards allow managers to monitor the contribution of the various departments in their organization. To gauge exactly how well an organization is performing overall, digital dashboards allow you to capture and report specific data points from each department within the organisation, thus providing a «snapshot» of performance.



Benefits of using digital dashboards include:

- Visual presentation of performance measures;
- Ability to identify and correct negative trends;
- Measure efficiencies;
- Better managerial overseeing tool.

Heads	Amounts in Millions		
	2007	2008	2009
Medical Insurance Sales	440	670	370
UGANDA RAILWAYS CORPORATION	194	294.5	115.5
UGANDA MICROINSURANCE LTD	176	289	132
UGANDA INVESTMENT AUTHORITY	110	187.5	82.5
Outstanding Collections	50	20	290
Claims Processed	230	427	389
Outstanding Payments	0	70	389
Tax Invoices	3	32	2
Outstanding Collections	0	2.5	2
Purchase Credit Notes	15	60	14
Outstanding Payments	0	32	9

Article written by Francis Somerwell, Managing Director, Microcare, Uganda
 For more information visit: <http://www.microcare.co.ug>

SELECTED INFORMATION

Website

Highlight on www.micropensiones.org

The main objective of Micropensiones.org gateway is to share information and knowledge on micro pensions in Latin America, as well as to facilitate experience and knowledge exchange between the different institutional actors (for example, microfinance institutions, networks, donors and international cooperations, academic and research units, NGOs) interested in this topic. The website is in Spanish.

Micro pensions are credit products recently developed, which are mainly offered MFIs. Generally speaking, micro pensions schemes are microfinance products that include a savings component for retirement, that will be used specifically to support the economic needs of the retired clients of such institutions.

Unlike traditional financial pensions products, micro pensions have the particularity of being directed towards the informal sector generally excluded from the traditional schemes of obligatory pensions, because of their informal condition or poverty.

Visit: www.micropensiones.org

Micropensiones.org also offers a monthly bulletin as a way to disseminate information via email. It will give you an update about the micro pensions related topics (news, documents, events, multimedia information and other related information resources) as well as about their impact on the social and economic development of the region.

Subscribe to the newsletter: www.micropensiones.org/servicios/inscribirse-en-el-boletin

Also visit microseguros.info, which is another project from the Fundación GALILEO with the support of the Ford Foundation and Hivos. This website includes documents, news, events and videos about microinsurance in Latin America.

Visit: www.microseguros.info

To subscribe to the newsletter from [microseguros](http://microseguros.info), send an email to boletin@microseguros.info

Publication

Microinsurance in the Context of Social Protection

BWPI Working Paper 55, Thankom, Arun and Susan Steiner, October 2008

This Working paper aims to understand the role of microinsurance as an element of social protection based on two countries with very different socio-cultural backgrounds, namely Ghana and Sri Lanka.

Here are some of the main observations:

In both Ghana and Sri Lanka, there is an increasing tendency to provide formal microinsurance, with the number of providers being clearly higher in Sri Lanka. Public as well as private institutions engage in the field of microinsurance, though possibly for differing reasons. As clearly stated above, Ghanaian commercial insurers regard microinsurance to be a way to expand their market reach and secure future profits; this does not necessarily hold true in Sri Lanka, as the example of the first takaful microinsurance shows.

The public initiatives in both countries are, rather, attempts to extend the existing social security systems and include more people in social insurance programmes. However, as exemplified by Ghana's NHIS (National Health Insurance Scheme), the outreach of public schemes is likely to remain limited to a certain percentage of the population and, more importantly, biased towards more affluent groups. About 60 percent of the Ghanaian population does not have access to the NHIS, and more than 90 percent lacks access to the Social Security and National Insurance Trust.

In Sri Lanka, often cited for its high levels of social security provision, there are difficulties in extending coverage to the 40 percent of the population who are not in formal employment. Private – both commercial and non-profit – initiatives are therefore essential mechanisms 'to support communities, households and individuals, in their efforts to prevent, manage and overcome vulnerability' and hence to provide social protection to the people.

Download paper from www.bwpi.manchester.ac.uk/resources/Working-Papers/bwpi-wp-5508.pdf

Newsletter

Micro Insurance Matters

January 2009

The latest issue of Micro Insurance Matters includes, amongst others, news about details of the latest products; this edition features a new micro housing insurance which has just been launched in the Philippines; and the work of Microfinance Opportunities in relation to client education through the use of comic books is featured.

http://www.microinsuranceagency.com/newsletter_latest.pdf

MICROINSURANCE NETWORK

Launch of website

The Microinsurance Network website supports the objectives of providing a platform for information sharing and stakeholder coordination with the aim to promote the development and proliferation of insurance products for low-income persons.

The website has four main areas:

- Information about the Network, its members and Working Groups;
- Information about microinsurance in general;
- News related to microinsurance, the Network members and publications;
- The Network's publications and links.

Many different functions, like for example a member area with discussion forums and RSS feeds, are available as well.

Any feedback is welcome so to make this website a useful tool for everyone interested in the work of the Microinsurance Network and microinsurance in general.

Feedback Form is available: <http://microinsurancenetwerk.org/feedback.php>

Impact Working Group

As part of a systematic review of the impact of microinsurance, the Impact Working Group is about to finish collecting published research, which was conducted on impact so far. The review is conducted following the approach and standard of the Campbell Collaboration. This stock take is the first step towards the development of tools for impact assessment.

Everyone working on impact projects or knows about unpublished evidence on the impact of microinsurance, and would like to be included in this review, should get in touch with Ralf Radermacher at ralf@mia.org.in

Member profile

ICMIF (International Cooperative and Mutual Insurance Federation)

Each newsletter will introduce to the reader a different Microinsurance Network member. This series starts with ICMIF, represented by Sabbir Patel, member of the Executive Committee of the Microinsurance Network.

Initially established in 1922 as the Insurance Committee of the International Cooperative Alliance (ICA) with a view to strengthening collaboration amongst cooperative and mutual insurers, ICMIF has grown over the years, significantly changing direction in 1972.

By 2008 this number has risen to 206 members with approximately one-third of the membership in Europe, a further third in the Americas and the remainder representing Asia and Oceania, Africa and the Middle East.

This individual membership in turn represents over 600 distinct insurance organizations and a further 1,500 mutual insurers are indirect members of ICMIF through their national mutual trade associations

Source: www.icmif.org

- Members Making a Difference, the ICMIF Development case studies report

Cooperative and mutual organizations have been providing insurance to the underserved population for centuries in developing and developed countries. They have played a critical role in addressing a need traditionally ignored by the commercial-based insurance sector. This first publication brings together several short case studies on how members of ICMIF are successfully extending the outreach of insurance to the low-income population.

Available at www.icmif.org/images/stories/development/ICMIF-Case-Studies-Full.pdf

- Prosper

Is the development activities supplement from ICMIF. Published to complement and support Federation and members' development activities, Prosper includes articles relating to the area of development, including microinsurance and takaful. Contributing authors include ICMIF member organizations, as well as industry specialists.

Available at http://www.icmif.org/index.php?option=com_content&view=article&id=62&Itemid=117&lang=en#prosper

Focus

Insurance Education Working Group

Insufficient market education is a major obstacle to the expansion of microinsurance. People who do not know what insurance is, how it works and why it might be good for them are less likely to spend money on insurance.

Quality educational materials on microinsurance- particularly when coordinated in an effort to avoid duplication and encourages sharing of “best practice” - holds great potential to many stakeholders in the microinsurance sector.

The Insurance Education Working Group seeks to promote microinsurance through taking stock of educational materials already developed, identifying and documenting best practice, encouraging the sharing of resources across the microinsurance community, and designing new materials to further promote awareness and intake of microinsurance to resource-poor populations.

Planned activities for 2009 are:

- Engage in a “stock taking” exercise of available materials;
- Identify gaps in current offer of microinsurance education, and devise strategies to fill these;
- Prepare the ground for a “lessons learnt” or case study series. The objective of this exercise is to make the “business case” for investing in insurance education;
- Endeavour to create a forum or market place (of sorts) to address questions on micro insurance education, including securing the technological and human resources needed to effectively manage such a microinsurance education portal.

For more information contact Iddo Dror at iddo@mia.org.in

To join the Insurance Education Mailing list: <http://lists.microfinance.lu/mailman/listinfo/insuranceeducationwg>

Visit the Insurance Working Group Page on MicroinsurancenetWORK.org: http://www.microinsurancenetWORK.org/network2_overview.php?num_wg=18

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micro
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network

This newsletter of the Microinsurance Network is published three times per year. The Microinsurance Network, formerly known as CGAP Working Group on Microinsurance, is a member-based network of insurance and social protection providers, policymakers, donors, NGOs and academics.

The mission of the Microinsurance Network is to promote the development and proliferation of good-value insurance products for low-income persons by providing a platform for information sharing and stakeholder coordination with the aim of creating public goods.

The Microinsurance Network includes several Working Groups. To receive more information on their activities, visit the Working Group pages at www.microinsurancenetWORK.org/workinggroups.php

The Microinsurance Network launched a listserv called Microinsurance Focus with the objective to encourage the exchange of information and stimulate discussions. The listserv can be used for news items, announcements and discussions related to microinsurance.

To subscribe to Microinsurance Focus: lists.microfinance.lu/mailman/listinfo/microinsurancefocus

To access the archives: lists.microfinance.lu/pipermail/microinsurancefocus

To subscribe to this publication in English, French or Spanish, send an email to info@microinsurancenetWORK.org

To view all the back issues and other Microinsurance Network publications, visit its website at www.microinsurancenetWORK.org

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