



Microfinance Strategies

Mr David Piesse, Head of Insurance with Sun Microsystems explored the role of technology in the microfinance sector, as well as microinsurance and Shariah-compliant microfinance, in a white paper he authored and presented at the Asian Bancassurance conference, organised by *Asia Insurance Review* in Jakarta in April. We present an extract.

Microfinance essentially came out of burial groups where people grouped together as an affinity in order to provide money to bury their relatives with dignity. This was the basis of the Scottish Widows assurance company over 200 years ago and much of the United Nations microfinance program in Africa conducted in last 50 years. Although the UN and the World Bank still provide useful services in this area, things have moved into the commercial world from the charity arena by an emerging meso layer of microfinance institutions (MFI) acting as agents for banks and insurers. This meso layer sells financial products to the urban, semi urban and rural sectors whilst the banks remain as aggregators though securitisation.

The meso layer (see Figure 1) is responsible for technological innovation by increasing security, regulatory transparency and scalability. It must reduce repetitive tasks and remove costly processes and move the function to point of sale which is the first lesson in lowering cost of microfinance. Following outreach success, it must provide data warehousing capabilities to achieve sustainability and subsequent profitability. So we are looking at capacity building, credit rating and access to wholesale finance arising from this layer. We will look at how the meso layer can be technologically advanced and how in the long term, this layer will get absorbed into the very institutions that now securitise the loans.

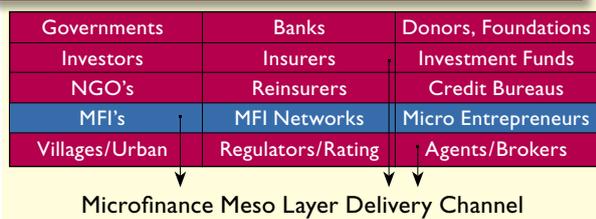
sustainability scale. This will enable benefits to be bought in bulk and cross selling to occur inexpensively with ease of distribution. Introducing alternate microfinance such as Shariah-compliant products is a requirement for many communities and must be provided.

Innovative technology handles these distribution issues inexpensively from one (not silo) source to provide low cost payments for premium collection, claims settling, remittances and lowering costs in general. Low cost of entry and transaction cost is the key objective.

Product Management

Efficiency and take up is achieved by proper product design and the ability to price these products effectively. Without effective pricing and data mining, profitability will not be achieved. Thus, product managers in the microfinance area take bits of covers from their insurance experience and tailor them specifically for the needs of the microfinance market eliminating complex riders and clauses. This gives different product offerings combined with a toned down marketing approach that requires a degree of e-learning about financial services. The sections in the policies are designed to facilitate easy claims handling and it is imperative to design products towards the affinity and schemes group category which means ease of cross sell and automated underwriting. In order to achieve the level of compensation required to sell by channels, the cost of transaction must be kept low to enable realistic incentive based schemes.

Figure 1: The Microfinance Market



Source: Sun Microsystems

Sustainability Strategies

In order to achieve sustainability a series of business and technical best practices and standards need to be applied. If the microfinance is based on a loan, then credit life insurance needs to be applied to protect the loan. However this insurance only benefits the lender so we need to look at insurance provided on the back of loans and insurance given without a loan being involved. The key to sustainability is also to encourage savings by pensions where savings can be pooled and fund managed.

Product management matching the needs of the customer is critical, as the use of traditional products is not sufficient. Designing products which focus on the bigger issues (e.g. healthcare), capping benefits to avoid reinsurance costs, targeting certain benefits and forming affinity groups to sell these products rank highly on the

Figure 2: Bank Microfinance Cluster Financing



Source: Sun Microsystems

As can be seen in figure 2, a variety of different product layers exist for microfinance and this requires an effective front end technology solution controlled by the business users that enables cross-sell of products, easy change of underwriting rules, change of rating parameters, online management of channels and compensation, and the ability to handle multiple channels from the same source, plus ring fence customer profiles and manage payment collections, claims and remittances.

Distribution Channels

The key here is the low cost channels. Furthermore, in order to achieve delivery there must be an on request service driven by an as-needs basis commonly called "pay as you

go". This must be a global financial service driven 24 by seven with Internet and any low cost pervasive device to be able to rapidly create, launch and manage microfinance products via any distribution channel in any currency and any language from anywhere in the world, while at the same time managing compliance changes and an-end-to-end process control with real time information.

Payments and Claims

There is no doubt that Personal Digital Assistants (PDA), smart Java cards and mobile phone banking are the most relevant and promising technologies for low cost microfinance. PDAs improve transactional efficiency, reduce data entry error and fraud prevention. Smart Java cards will reduce the operating costs in the rural areas and now they come with fingerprint readers. Mobile banking allows clients to transfer money, withdraw and deposit cash, make loan repayments and pay insurance premiums from their mobile phones.

MFI's need to manage their internal distribution network and have access to both billing and claims information. They need to respond to workflow requests in the automated areas of policy issue and enrollment at point of sale, premium collections, automated billing for group clients, on line claim submission and tracking, fast claim processing and payment by ATM or local banks and ability to handle remittances from one location to another.

Risk and Catastrophe Management

MFI's must be able to manage the relevant information and reporting facilities in real time in order to provide the proper operational risk management holistically across the enterprise. Similarly, they need to be able to aggregate exposures to cover areas of natural catastrophe, global warming issues and acts of terrorism. On the first issue there are new key performance indicators in microfinance that do not exist in traditional finance and this leads to new MIS (Management Information) issues.

On the second issue of catastrophe management it should be noted that there is no such thing as micro reinsurance and that transfer of risk is required on a global basis to protect the investment in the microfinance deal. Banks securitise the loan into securities but are unlikely to transfer and securitise the insurance premiums. Current thinking is that regulators should make compulsory a catastrophe premium in each loan as another insurance section. This would be at low cost but provide income to government which could be used for risk financing to further protect the investment in event of any shock event that may hit an exposed region. This could be in the form of any Special Purpose Vehicle asset to raise capital against a catastrophe.

This has addressed the issues of removing the reliance on post disaster funding where remittance rarely hits the target, the lack of liquidity after disaster inhibits recovery, years of unstable fiscal deficit inhibiting growth and the poorest segments involved in microfinance being the most vulnerable. These are key operational risk takeaways need to be addressed by technology for microfinance to be sustainable.

Shariah-Compliant Microfinance

Takaful and Shariah-compliant financial products will greatly aid MFI's that are trying to reach the low income market. Current Islamic products have concentrated on

the upper and middle class wealth sectors of the Muslim affinity group and therefore will have a large impact on the under banked and under financed in Muslim countries and populations including those in China. Also the low income market in Muslim communities is most likely to resist non-Shariah compliant products and non-Muslim communities are likely to purchase Islamic finance products because of their mutual approach and profit sharing.

There is however more work to be done in this area to fully bring an Islamic microfinance strategy to market although the Sun Finance On Request (FOR) will handle takaful transactions and compliance issues. The outstanding business issues are to make sure MFI's charge fees not commission, act as facilitators and not aggregators, train more trained personnel for outreach and satisfy compliance on links to cooperatives rather than links to traditional commercial organisations. This is a significant confluence in the sector.

Technology in Microfinance

As the financial institutions change their models, so IT companies have to relook their models as well for these affinity markets to ensure they charge enough by transaction for the commercial venture to be worthwhile, yet small enough for the process of technology-enabled microfinance to take place in rural areas. That means we need to have interaction with devices and a microfinance supported architecture based on the principles of Service Oriented Architecture(SOA).

The benefits of SOA technology in microfinance is the flexible architecture which gives a faster time to market, time to volume, time to profit plus the advantage of an end to end pre integrated architecture. The ability to change the workflow processes in the application means that FOR can meet the current and future market conditions at the lowest costs possible. Simplified business integration means seamless integration with MFI MIS, core banking and core insurance applications at the back end plus IT governance and compliance. This means we can align business and IT units and bring legacy products and channels through to point of sale to support the microfinance distribution channel and its specific product range.

The benefits of straight through processing or bringing legacy through to point of sale have already been mentioned but are a key benefit of SOA.

Reducing transaction costs is important for highly dispersed populations. Mobile deposit collections reduce costs of policyholders not willing to pay the cost of travel and this can increase policy value, Mobile banks and micro payment bundling can reduce the costs of transactions, providing high tech alternatives to manual processes. Some shift and redefinition of the IT model is required to meet the high volume, low cost model of microfinance.

Future and Conclusions

The microfinance sector has a huge growth potential. The under-financed are all potential clients for banks and insurers through microfinance. These financial organisations are not leaving these markets solely to NGOs and donors but taking a significant share of this market aided by regulation. In 10 years as a commercially viable model, microfinance will become standard for financial systems in emerging countries as affinity finance. Microfinance will enter the market as mainstream especially if combined with Islamic finance.▲