



Innovations in Information Technology that Work for the Clients and for MFIs

In the morning of Tuesday, April 7, **Kamal Budhabhatti**, CEO of Craft Silicon in Kenya, chaired the workshop on “Innovations in Information Technology that Work for the Clients and for MFIs.” This incredibly rich discussion touched on many of the innovative technology solutions that have been developed to support the growth and scalability of the microfinance sector, but also touched on key sectoral issues from a technology perspective, including mission drift, commercialization and pricing. The panelists included **George Conard**, Executive Director of Technology for Microfinance at Grameen Foundation in the USA; **Murray Gardiner**, Manager of Microfinance and Community Banking for Temenos in the UK; **Mohamed Rashid Kola**, Consultant for IBM in South Africa; and **Eamon Scullin**, CEO of Fern Software in the UK. Each of these expert practitioners provided their unique perspectives on the latest technologies their organizations are employing in response to the expanding needs of microfinance clients and MFIs. They also provided comments on lessons learned, the challenges they face and the future direction of technology in the microfinance sector.

The first panelist was **Eamon Scullin**, CEO of Fern Software in the UK, who provided great insights on mobile banking and commerce (“m-banking” and “m-commerce”). “There are four main players in the m-commerce arena: the consumer, the merchant, mobile operators, the banks and card networks. In the middle of that ... we [Fern] are trying to provide some sort of sensible platform on which all of this will operate efficiently and cost-effectively for MFIs. This covers m-banking, where you might want to check your balance [or] transaction history; m-payments, for wallet management from prepaid phones directly; ... and m-remittances.”

“Which solutions are suitable for your market?” Mr. Scullin asked. “What I think is necessary, as in so many things to do with microfinance ... [is to] try to agree on a shared vision and service scope for your company in the market and this includes ... all the technology providers and all the other players in the arena. What is the right usability and mobile channel mix? We should optimize the usability along services and mobile channels. There is such a wide variety of options [that] I think it’s necessary for us to step back and try to agree on some standards.”

“Which standards, functionalities, and payments must we support?” he continued. “Again, we should agree on setting up a future-proof platform open for financial networks. In the emerging markets, we should try to minimize activation barriers with virtue-based payments. For example, unbanked customers buy a payment scratch card for P2P [(Person-to-Person)] transfers and bill payments; from the sender to the sender’s phone, a 16-digit code is sent to the receiver, and it’s loaded in the receiver’s mobile account or bank account.”

The second panelist was **Murray Gardiner**, Manager of Microfinance and Community Banking for Temenos in the UK, which operates 1,000 commercial banks and 140 microfinance banks around the world. “We offer a core banking

Tuesday, April 7, 2010

4:00 PM – 5:30 PM

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Panel:

*Chair: Mr. Kamal
Budhabhatti, CEO,
Craft Silicon, Kenya*

*Mr. George Conard,
Executive Director,
Technology for
Microfinance,
Grameen Foundation,
USA*

*Mr. Murray Gardiner,
Manager,
Microfinance and
Community Banking,
Temenos, UK*

*Mr. Mohamed Rashid
Kola, Consultant, IBM,
South Africa*

*Mr. Eamon Scullin, CEO,
Fern Software, UK*

system to drive all of the banking systems for large and complex systems,” he began. “We believe that access to financial services is important and financial inclusion is perceived as a public good. Mass-market retail banking and microfinance are expanding the frontier of formal finance, and all financial institutions are participating in the expansion of finance to more people around the world. ... Consolidation and commercialization of microfinance are being driven by transaction costs and efficiencies with technology and scale. ... We’re seeing a definite shift in the business towards [focusing on what] the customer wants And I believe that over time we’ll see consumer lending as a greater and growing proportion of the portfolio of microfinance, which has traditionally been social lending or lending for provident and productive purposes,” Mr. Gardiner observed.

“But there is a mass movement of expansion of finance going on right now in the world. And I think that’s going to cause some issues in terms of mission drift and cause some crises within the sector I think it’s an important discussion that we’re having. And I would particularly like to highlight a discussion that we need to be having—that we can use technology to facilitate transparency, transparency of pricing and the ethics of our business,” he recommended, citing Microfinance Transparency for promoting a discussion about pricing transparency and fairness in pricing.

“What I’m going to talk about a little bit is cloud technology,” he continued. “It’s taking a big application and putting it up in the internet and allowing access through a browser to the business functionality of enterprise software. ... You see a lot of cloud technology now, but not in banking. I don’t think public cloud platforms are going to be coming any time soon. ... But there will be a time when a small MFI, a loan book, someone who’s got a couple of hundred clients or is managing a few deposits associated with a retail shop will be able to go on the internet, [and] be able to buy just one piece of a product ... and they’ll have their portfolio managed, or they can manage an entire enterprise. The technology exists, but building that out into a public environment has major commercial and legislative issues, and we’re participating in the discussion around some of these issues.”

“[In terms of] future trends,” he added, “I think that technology is going to be a major driver in the expansion of multi-tenant [and] multi-company technology, driving agency banking, driving further consolidation and co-opting smaller organizations, which is not necessarily a bad thing. It can take away the [burden of] administration from a small organization, and allow a smaller organization to work on its social mission while at the same time providing financial services at low transaction costs with access to payments, which is important. So an organization could co-brand with a bank, have a card pin-and-chip-access to the payment system and all of the other services that are available to large-scale financial institutions that can only be driven with large-scale enterprise software.”

“We already have five major private cloud projects underway in the world, three of which are ‘live’ and quite active. So I think that that’s going to come before any public cloud. But it will come,” Mr. Gardiner asserted.

Mr. Gardiner warned, however, of potential for crises. “As we commercialize microfinance, do we just assume that access to finance in itself is enough? Is that doing our job in microfinance? Is that achieving the mission? Banco Wal-Mart in

Mexico is a microfinance organization, financing consumer goods from Wal-Mart stores. Is that a good thing? I think we have to have a discussion about that because the consumer market that we're creating globally with mass-market retail banking and microfinance is creating a market that can be commoditized and traded. And we're seeing billions of investment dollars available, chasing too few good ideas right now," Mr. Gardiner pointed out. "So we'll see larger consolidations, larger banks using large technology platforms and networks to drive consolidation. And it brings us back to the question about social mission. What are we all about? How are we going to achieve access to affordable finance for the poor?"

The following panelist was **George Conard**, Executive Director of Technology for Microfinance at Grameen Foundation in the USA, who described Grameen Foundation's approach to increasing the outreach and scale of the microfinance sector through technology solutions. "We look at ways to use technology to enable microfinance institutions to reach hundreds of millions more poor people around the world, and we do that through the back-end technology platform called MIFOS, which is an open-source platform for microfinance institutions. We work to integrate changes ... and improvements in business process[es] into the technology work that we do with MFIs to enable them to scale up faster and have more impact," he explained.

"Scale, I think, is an interesting place to start the conversation," Mr. Conard continued, "and I really have just a few messages around technology, but most of them are focused around how we enable microfinance to scale. Scaling means for me two different things: One is reaching more clients, certainly, and scaling up to reach literally hundreds of millions more people around the world. But it also means scaling out and enabling MFIs to deliver a broader range of products and services."

"One of the things that we've learned from the institutions that we're working with is that their innovation is really centered on their businesses [and their clients] – it's not centered on technology. And the technology that they use has to do a few things for them. ... It's not enough simply to capture transactions and [produce] simple reports. They want to be able to make decisions based on the information that's going in there and use their systems to enable them to have more business agility. ... And finally, I think it is critical for technology to stay extraordinarily flexible."

"I've been travelling around, I was in Tunis last week, and in India," Mr. Conard recounted, "visiting some of our customers, and they are starting to do things today that they had not even thought were possible or thought that they were going to do three, four, five, or six months ago. They're rolling out new types of products and new services to their clients. And the technology that they're using from us is enabling them to keep up and innovate in their business very rapidly. ... And having technology ... that can grow with the MFIs is a critical piece of enabling them to get to scale."

"Grameen Koota is one of our customers in India They've crossed the 400,000 client threshold and they have a long list – 59 things – that they want to be able to do with the [MIFOS] system, which is great because it turns out that those 59 things are all things that somebody else wants as well. So one of the other things that we're starting to see in this customer consortium around MIFOS is that as Grameen Koota in India pushes the platform forward, and as enda [inter-arabe] in Tunisia pushes the

platform forward by taking a client-centered innovation approach, they are able to start sharing their innovations and talking to each other about what they're doing in their business. [They are able to talk about] what types of products they're rolling out, and how they need their technology platform to move forward and evolve in order to support what they are trying to do. As Grameen Koota moves with us to implement some new functionality, others will benefit from that [and so on] And there is a nice kind of virtuous circle that comes out of that," he remarked.

"Finally," Mr. Conard concluded, "I think one of the things that we miss a lot as an industry ... is measuring the impact of what we do with technology in a very tangible way. It's super important to remember that measuring return on investment includes both the financial side and the social impact side of things. And so, you want to look at, on the financial side, not only [whether] you are reducing cost, but, are you enabling an MFI to increase their revenue? And in doing so, can you paint a picture for an MFI that shows them why investing anywhere from a few thousand dollars to a few hundred thousand dollars is actually an investment?"

The final panelist was **Mohamed Rashid Kola**, Consultant for IBM in South Africa, who provided an inside look at the analytical approach employed by IBM to develop a new technology platform that can support the scalability of the microfinance sector on a global basis. "Two or three years ago ... a huge amount of research was conducted by IBM ... [and what we learned] was that most MFIs found it difficult to upscale from one level to the [next].... If they had 2,000 clients, they found it difficult to get to 5,000 or 10,000 clients. After doing some of the research, [IBM] dived deeper into it and started looking at [the question]: What are the cost factors and the cost differences between a bank and an MFI?"

"What we found was that the major cost difference was operational From an MFI perspective, it costs about seven times more to grant a loan per dollar than from a banking perspective. [Through] further analysis, we found that this operating cost is actually made up of three key components: the processing environment (which in most cases is Excel or a spreadsheet or off-the-shelf products), distribution and risk management. What we summarized from this was that in an established bank space, they found it difficult [and expensive] to move into the rural or unbanked space. [This was] clearly because of the cost of establishing the footprint, the very rigid credit system that banks have in place and the legacy systems that banks have What the MFIs have been very successful in doing is to get to that unbanked space, although their back-end is one of the areas that need to be focused on," Mr. Kola explained. (The back-end is one of the reasons for high costs being passed on to MFI customers.)

So IBM developed a processing hub that creates a vibrant financial ecosystem which integrates with the MFI's stakeholders, such as established banks that are providing loans to MFIs. This would enable the MFI to meet reporting requirements for its bank, as well as donor requirements; to link to telephone companies for mobile payments; to provide information to and from credit bureaus; to connect with regulators to meet regulatory requirements and link to international payment networks.

"For example," Mr. Kola examined, "an MFI who's got 10,000 clients currently and wants to aggressively move to 400,000 clients [has] got two choices: Either they buy

a system that's going to [provide them with the] capability of processing that volume, or [they can] be more conservative and say: 'Let's buy a system that's going to allow us to have 100,000 clients in the book and then review the situation.' So if you have a situation where the MFI exceeds the 100,000 target, they've got the challenge again of technology that ... cannot handle [more volume] If they choose the system [that can handle] ... 400,000 clients and ... [the MFI only secures 200,000 clients] they've made a huge investment in IT infrastructure, and are not achieving the benefits of that [investment]."

"[What is so significant about] this processing hub," he added, "[is that] it allows the MFI to balance their cost structure with their revenue structure. ... The transactions that you've got on this processing hub are what you pay for and not any capital investment into the hub itself. [Through] the research that's been done with MFIs of various sizes, we found that the per-client cost for very small MFIs is [also] very small ... because they operate on manual systems, spreadsheets and that type of thing. As they move up the ladder ... [to] very large MFIs, their costs increase substantially because they've got [more complex] functionality that they need to keep their client[s] The risk [that] MFIs face is that as clients graduate, they come to a level where they could now require the same type of functionalities that banks offer, and [for] the MFIs, providing these [services], suddenly the costs start increasing. So from a processing hub perspective, what IBM has been trying to do is reduce this cost and minimize it, [so that] it is lower than what a formal retail bank would be charging. And obviously the more clients that we have on board on the processing hub, the lower the costs will be in terms of the pricing side of it."

"In terms of the variety of products and services that could be offered, currently there are ... microsavings and microcredit and this includes individual loans, group loans, village banks ... housing loans, education [loans] and region specific. ... [We are] developing micropayment and transfer [components] as well as micro-insurance [products]. In the future, obviously, the focus will be on providing other, non-financial types of services on the same hub. In addition, IBM has also established a mobile payments ecosystem that could be linked into this hub and integrated for the MFIs."

Following are a few key comments from the Q&A session:

Comment from Mr. Gardiner on "cloud computing": "There's a difference between using the internet to deploy your network and cloud computing. Cloud computing is like iTunes; it's where there is something off there in the ether—you don't know where it is—and you can go and buy a component of it. Cloud technology for microfinance will one day be public and will one day be a service provided where an MFI can purchase components of software, use only the components [it wants] and pay per click. And with that will come all sorts of other services because it is being built as a channel. One of the most complicating things in terms of a public cloud is the administration of payments [and] settlements: How do you pay per click? How do you get a fraction of a cent shared amongst the value chain? How do you administer that? How do you do it efficiently? It takes big infrastructure ..., and it will take years to tease that out."

Comment from Mr. Conard on helping MFIs embrace new technology: "Rather than taking the [new] technology and saying, 'Let's slap it onto the existing

processes and hope that it works,' [we are] stepping back to look at what the business goals are, look at the business processes, get them aligned and then get the technology aligned with them. [Customizing an IT strategy with the MFI in this way helps them] move forward more quickly and take much greater advantage of the technology once it's put in place. In fact, a lot of the MFIs that we're working with now have pointed to that action we have taken, and this holistic approach that we take – as much as the technology – as some of the reasons that they've started working with us."



Comment from Mr. Conard on client interactions via loan officer vs. technology: "You lose whatever the social glue is, whether it is a cooperative, a community or some other local entity, to give people an identity with or loyalty to the institution. If you replace that with technology, people don't understand that and the relationship becomes cold. The sense of loyalty and obligation to an amorphous electronic system will fail, and then you have to rely on a different mentality. You have to rely on an expectation of future access, and you will then have to use technology very efficiently to mine that data to understand the client. ... But you have made a fundamental shift in the relationship between yourself and the client as you go through that, and if you slip on that one, your loan performance will crash."



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Comment from Mr. Gardiner on growing pains: "Implementing a core banking system is probably the most painful thing that a financial institution will ever go through. It changes everything: It changes the power relationships within the organization; it changes all sorts of dynamics; it opens doors that were kept closed before [and] it does all sorts of things to destabilize an otherwise stable, but maybe muted, organization that's not realizing its potential but is comfortable where it is. So, changing a core banking system is painful, and implementing it is very difficult and requires a lot of planning. If you miss any piece, if the project management is weak, if your business process definition is wrong, or you have the wrong technology decision for the wrong reason, you get into all sorts of problems. And also people that sell technology—software salesmen—are often selling what they believe may be the right solution, but there's so much behind it and it's so complex. There's a joke in the industry: 'What's the difference between a software salesman and a used car salesman?' And the answer is that the used car salesman knows when he's lying. And there's a bitter truth to that. They try, but it's complex, and we don't always know when it's the right fit."

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