



2010 Africa-Middle East Regional Microcredit Summit

Session transcript

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

Day 1, 4:00 PM - 5:30 PM, Tsavo B

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

Panelists:

- Mr. Eamon Scullin, CEO, Fern Software, UK
- Mr. George Conard, Executive Director, Technology for Microfinance, Grameen Foundation, USA
- Mr. Murray Gardiner, Manager, Microfinance & Community Banking, Temenos, UK
- Mr. Mohammad, consultant, IBM South Africa

Mr. Budhabhatti: ...guest, especially from the information technology section and they're going to share their views on what works and what does not work. Let's make this section an interactive session. Obviously, after the presentations, if you have any questions, ask them freely -- as many questions as you want. Obviously we have some time limits but we'll try and accommodate as much as possible. I would like to introduce myself, my name is Kamal Budhabhatti, and I'm the chief executive of Craft Silicon. Craft Silicon is a software company which provides software solutions for microfinances and more typically, finance verticals. I have a couple of panelists here; they are also from the software industry.

We don't normally sit like this. I would never sit with him or him because we're always fighting for common customers. But here, we'll try to be as decent as possible, and we will not fight. I assure you that.

I want to introduce the panelists here one by one.

First panelist is Mr. George Conard. Mr George is the executive director of Technology for Microfinance at Grameen Foundation in the United States. I've known George for a couple of years now, and he's the backbone behind the MIFOS. MIFOS is an open-source microfinance software. And at times we have argued why there should be an open-source microfinance software, at a couple of meetings like this. I was not convinced, but he was able to convince me why microfinance needs an open source software. So, Mr George, we welcome him.

The second panelist on the list is Mr. Gardner. He is the manager for microfinance and community banking for Temenos UK. Obviously, he will introduce himself, but Temenos is one of the major players in the banking and microfinance sector.

My third panelist is Mr. Eamon Scullin. He is the CEO for Fern Software. Fern Software was established in 1979 and they have close to 300 microfinance institutions using their product. That is a very large number, and I congratulate him for having so many microfinance institutions using their products.

Our fourth panelist, Mr. Mohammad, is a consultant at IBM in South Africa. More and more, IBM is also playing a key role from the hardware and infrastructure as well as the consulting point of view in the microfinance sector.

I'm sure all the panelists will be introducing themselves and giving a short presentation of what they do and what they are good at. Including myself, I'll also do a short presentation after all the panelists have done their presentations. The presentations will be about 8-10 minute presentations, and once they are done with the presentation, we'll open the floor for questions and answers, where we will be taking the questions for each and every panelist.

So, with that I would like to welcome Mr. Eamon to do his short presentation for all of us. Welcome Mr. Eamon.

[3:47-5:02 / Short interruption due to technical problems.]

Mr Eamon Scullin: Good afternoon ladies and gentlemen, I would like to thank you for coming along to this workshop. My name is Eamon Scullin, and I'm the CEO of Fern Software. In this quick presentation, we're going to hear a little bit about Fern, a little bit about the challenges and lessons learned in m-commerce, and perhaps a little introduction to what the next step should be.

Fern itself was founded 1979. We have 300 customers in 40 countries and we work with quite a wide range of NGOs and other organizations. This gives you some idea of the geographical spread of our customers. I'm going to specialize in my talk on mobilizing 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, there are my friends and my right hand side and myself, trying to provide some sort of sensible platform on which all of this will operate efficiently and cost-effectively for the MFIs. This covers m-banking, where you might want to check your balance, transaction history, and m-payments for wallet management from prepaid phones directly and so on, and m-remittances. The challenges that are faced in the arena and some lessons that have been learned.

Which solutions are suitable for your market? What I think is necessary as in so many things to do with microfinance, I think we should try to agree on a shared vision and service scope for your company on the market, and this includes all the providers, 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, I think it's necessary for us to step back and try to agree on some standards.

This gives you some idea of the ritues and interferences [unclear] which may be available on your mobile phone, allowing you to do input, check balances, and use your mobile phone in a user-friendly way.

Which standards, functionalities, and payments must we support? 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 virtue-based payment scratch card for P2P 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.

Again, prepaid payments for top-up of a prepaid account with a virtue-based payment from the sender to the phone to the shop to the sender phone registered on the bank card top-up virtue of the same. So this card can be used in any point-of-sale payment scenario or to cash out money at an ATM. For example enter your mobile number, enter your PIN, enter the transaction code and enter the withdrawal amount, thereby making ATM transactions possible via mobile platform.

The next steps I think we're here today to try and discuss what some of the options in the future might be. For example new models of commerce such as iTunes, new technologies, travel cards, smart posters, contact list payments and loyalty peer-to-peers, all via mobile phone.

Thank you very much, that's our contact details. I look forward to having this discussion with you when we resume the questions and answer session at the end. Thanks very much."

Mr Budhabatti: Thank you Mr Eamon for this wonderful presentation. Next we could have Mr Gardner from Temenos, UK. I think the next room is quite loud. We should also be a bit louder.

Mr Gardiner: Well, I won't try and talk over the next room. I see they just turned up their volume as well. Thanks for the opportunity to meet you. I appreciate all of the people who've come and shown interest in this topic today. And thanks to Eamon for this very useful discussion of payment channels which is very topical and very important in microfinance these days.

I represent a company called Temenos which is a listed company in Geneva. I work out of the United Kingdom office. We have 58 offices around the world and we have clients in 125 countries. We have

1000 commercial banks and 140 microfinance banks in our client base. We offer a core banking system to drive all of the banking systems for large and complex systems as well as fairly modest implementations. We have about 3000 employees and 60 nationalities, so we're quite a global company and quite a rapidly moving company.

What I wanted to talk about is a couple of things. Why are we involved in microfinance, why microfinance for Temenos? Well, first of all we see financial services as important in terms of a general good. We believe that access to finance is important and financial inclusion now is perceived as a public good. And I want to come back to that a little later in my short presentation. But also mass-market retail banking (microfinance the same) is expanding the frontier of formal finance and all financial institutions that participate in the expansion of formal finance to more people around the world. There are some important commercial issues that we're cognizant of and we think that are important in the market. And what's happening in the market is consolidation and commercialization of microfinance, being driven by transaction costs and efficiencies with technology and scale. We also see the market focusing very much on the customer. We're seeing a definite shift in the business towards the customer's wants and a big shift in terms of consumer lending. 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. 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, within the movement. I think it's an important discussion that we're having. And particularly I like to highlight a discussion that we need to be having and that we can use technology to facilitate as in terms of transparency, transparency of pricing, the ethics of our business. And an organization that I'd like to mention is Microfinance Transparency; the URL is on this site. Look them up. It's to promote the discussion about fairness in pricing, pricing transparency and Temenos is an organization that supports the efforts of Microfinance Transparency.

Technology issues: Core banking, we believe, is going to grow in importance because of consolidation and scale. There have been a lot of innovations in channel delivery. Eamon was just talking about mobile cell phone technology that's channeling of innovation. There are all sorts of new ways of dealing with electronic payments and M-PESA is a big example in the world here in Kenya.

What I'm going to talk about a little bit is cloud technology. I don't know if you have heard of this idea of cloud. People talk about cloud all the time. It's just the internet. It's taking a big application and putting it up in the internet and allowing access through a browser to business functionality of enterprise software. And it can be for various things. And 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. There's a big process to building any public cloud. I think that's far off into the future. 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 on to the internet, will be able to buy just one piece of a product, they'll use radio button clicks to follow through a process to define a product and they'll have their portfolio managed or they can have an entire management of an enterprise. The technology exists but building that out into a public environment has major commercial issues, it has major legislative issues, some issues that we're participating in the discussion of. But that's a big process and it's a service industry, it's not driven by software vendors, it's driven by service companies.

What is more common now is: large banks are using enterprise level technology like our technology which is what we call "multi-tenant software". So you're going to have one large holding company, one large retail bank with its whole branch delivery system, but have within it another set of businesses where you can compartmentalize, run off the same server, run off the same hardware, the same infrastructure but offer access to separate databases with common functionality and be able to run and manage a separate PNL and balance sheet for smaller entities. And larger banks were able to use multi-tenant software to offer outsourcing capability to smaller MFIs through a business model of agency banking so that a bank can effectively make an MFI an agent of the bank. Offer services, offer access to the switch, run their business, provide all their information and then have a global

perspective of the broader network of organizations working with, which will drive consolidation in the market. And I think that that's going to happen. We're already seeing it happen. We already have five major private cloud projects underway in the world. Three of which are alive and quite active. So I think that that's going to come before any public cloud. But it will come.

Future trends: I think that technology is going to be a major driver in the expansion of multi-tenant, multi-company technology driving agency banking, driving further consolidation and co-opting smaller organizations which is not necessarily a bad thing because it can take away the 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 and can only be driven with large scale enterprise software. But it will also create some crises.

We need to have a discussion as this happens. 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 Walmart in Mexico is a microfinance organization, financing consumer goods from Walmart stores. Is it a good thing? That's a debate that we need to have, and 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. 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.

Thank you very much.

Mr Budhabatti: Thanks, Mr Gardiner. We have now Mr George going next for his small presentation on Grameen foundation and what they do.

Mr Conard: Small being the operative words, I brought my stop watch up here, so I don't pull a Fidel Castro on everyone.

Mr Budhabatti: A few days back he sent me an email saying that my presentation is long and I'm going to make it short, so I'm just trying to put pressure on him to make it short.

Mr Conard: Excellent.

Mr Budhabatti: I'm just kidding, George.

Mr Conard: No, no worries. So, Grameen Foundation's MIFOS initiative works to transform technology from a barrier into an accelerator for microfinance. And really it's interesting sitting here with his panel. We are kind of the little brother in the room, the smaller organization, trying to take a different approach to how to solve technology problems for microfinance. And our goal really, as a part of Grameen Foundation is to create a world without poverty. And so 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. And we work to integrate changes in business process and improvement in business process into the technology work that we do with MFIs that enables them to scale up faster and to have more impact.

Scale, I think, is an interesting place to start the conversation and I really have just a few messages around technology but most of them are focused around how we enable microfinance to scale. And scaling means for me two different things. One, it's 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.

MIFOS today is working with about a dozen MFIs around the world. Here in Kenya, in Tunisia, in Lebanon, India, the Philippines, and elsewhere. And one of the things that we've learned from these institutions that we're working with is that their innovation is really centered around their business.

It's not centered around technology. And the technology that they use has to do a few things for them. It needs to increase the leverage that they get from the information that their MIS system is providing them. So, it's not enough simply to capture transactions and simple reports. They want to be able to make decisions based on the information that's going on there and use their systems to enable them to have more business agility. So we want to increase the leverage that the systems get through the use of technology, remove friction from rolling out new products and services or, as some of the other panelists have mentioned, rolling out new technologies front-end technology, mobile, whatever it is that will enable MFIs to serve their clients more effectively. And finally, I think it is critical for technology to stay extraordinarily flexible. And the systems that MFIs are using... One of the things that has been interesting for me over the last week and a half or so, I've been travelling around, I was in Tunis last week, and in India, visiting some of our customers. And they are starting to things today, even in the next three months, that they had not even thought were possible or thought that they were going to do three, four, five, six months ago. They're rolling out new types of products, 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 very rapidly, even though they didn't know what they were going to do. And having technology that isn't kind of locked into "Here are the fifteen different things that you can do, even if you only doing twelve of them today" but that can grow with the MFIs is a critical piece of enabling them to get to scale.

The topic for today is innovations that work for microfinance institutions and their clients. And as I think about technology and innovation... I mean my background is in the technology business. I'm an ex-Microsoft guy and now kind of paying for those sins a little bit later in life. But the thing that gets very interesting for me is that the devices that we use and all the kind of cool gadgets that are coming out is not the important innovation for microfinance. Business innovation that is centered around their clients and what is best for their clients is really what is going to drive the industry forward. So, we've worked with a number of our customers from the customer consortium to really help them teach us where their business is going. And as we've done that, we've learned that the starting point of working with any MFI on technology is not the technology itself, it's looking at their business processes and helping them to understand how they can optimize their business processes to be more effective. Flowing that into how they enable their people out in the field and the headquarters to have more impact with their clients and then sorting out "What technology do they need? How does the technology get implemented and deployed?". And that then feeds back around, once they've implemented and deployed technology back into their business processes in another look as they look at what the next set of innovations are that they to deliver to their client. It's something that pushes us as their technology provider. Grameen Koota, who's one of our customers in India I've met with last week, and 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 system. Which is great because it turns out that for them, those 59 things are all things that somebody else wants as well. And so one of the other things that we're starting to see in a this customer consortium around MIFOS is that as Grameen Koota in India pushes the platform forward, and as Enda in Tunisia pushes the platform forward, by taking this kind of 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, 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. And as Grameen Koota moves with us to implement some new functionality, others benefit from that. So Enda benefits from that. As Enda asks us to do something new, Grameen Koota or Keef here in Kenya or someone else benefits from that. And there is a nice kind of virtuous circle that comes out of that.

Second key message that I've got after thinking about business process and technology integration is: Around this concept of a platform, I think that a lot of companies, not just microfinance institutions, but anywhere in the world, people think of software as an application. I want to buy Microsoft Word or I want to buy a game or something like that. And certainly, the application... [24:24-24:31/ NO RECORDING] ... with everybody and see who has the longer feature list, we're thinking about how we can build a platform that is so flexible that anything six months from now, six years from now that a microfinance institution wants to be able to do, they will be able to do. The other benefit of having an open platform for a microfinance institution is that they have a choice in who they work with. So

Grameen Koota in India, who's a great example of this works with us and asks us to do a lot of work for them and provide support, do some software development for them. But they also work with a company called Sunguard which is a very large-scale financial services and technology company, works worldwide and have, you know, five to ten thousand people. They're able to work with Sunguard as well to take some of the best practices that they've learned out of the banking industry and integrate them into the work they're doing as well.

Finally, I think one of the things that we miss a lot as an industry, as on the vendor side and in MFIs, and in all the other stakeholders that are out there, is measuring the impact in a very very tangible way of what we do with technology. It's superimportant 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 are you 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. It's not only an expense that goes away every month and every year but it's something that is generating more revenue for them in somehow lowering their cost. In parallel with that, we want to be able to demonstrate that there is a social return on investment as well. For Grameen Foundation that means bringing the progress out of poverty index into the MIFOS platform and enabling an MFI to ultimately measure the social impact of what their products are and make decisions based on those as well.

So really, the three key things that I think about are:

- 1) Integrating business process and technology and making sure that that cycle is very tight in how an MFI and their use in technology evolves.
- 2) Thinking of technology as a platform not just as a stand-alone application.
- 3) Making sure that we really effectively and quantitatively measure the impact of how technology is helping MFIs work.

That's what we're doing at MIFOS and I appreciate the time that we had today. Thank you.

Mr Budhabatti: Thank you, George. Our final panelist, Mr Mohammad, he's a consultant in IBM South Africa. Welcome Mohammad.

Mr Mohammad: Thank you. Good afternoon ladies and gentlemen, just trying to get this presentation open.

Ok, I'm from IBM South Africa. IBM two years ago or three years ago started featuring in microfinance space. A huge amount of research was conducted by IBM, particularly from the New York office, and what they found was that most of the MFIs found it difficult in upscaling from one level to the other. So if they had two thousand clients, they found it difficult to get to five thousand and ten thousand and that type of thing. So what IBM, after doing some of the research, dived deeper into it and started looking at: What are the cost factors and the cost differences between a bank and a MFI?

What we found was that the major cost difference was an operational cost from an MFI perspective. From a MFI perspective it costs about seven times more to grant a loan per dollar than from a banking perspective. Further analysis, we found that this operating cost is actually made up of three key components. One is a processing environment which in most cases is Excel or Spreadsheet or manual or off the shelf products, distribution and the risk management side. From the IBM side, what we then summarized from this was that in an established bank space, they found it difficult to move into the rural or unbanked space, 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, which would cost huge amounts of money to change.

What the microfinances have been very successful in doing is to get to the unbanked space, although their backend has been one of the areas that needs to be focused on. So one of the areas that the MFIs have major challenges with is in terms of the processing environment, operating environment and

those large MFIs that have other functionalities within that environment charge huge amounts in terms of cost to the client. So IBM has developed a processing hub which is a M2M technology solution for the long-income retail bank. This would enhance productivity as well as it would enhance the business opportunities for the microfinance. So there are three components to this processing hub: One is the application itself which is the accounting, the customer management, payroll collection, that type of thing. The other one is infrastructure management which is a security data storage environment. And then the third part is an interface which allows interfacing either through ATMs, mobile networks, payment systems, that type of thing.

What the processing hub also allows other stakeholders that are part of the MFIs to be able to integrate into creating an ecosystem. It creates a vibrant financial ecosystem and this would be established banks. So established banks that are providing loans to MFIs would be able to get reporting requirements or MI that would meet their requirements. As well as for donors, telcos to be able to link in mobile payments, credit bureaus to be able to provide to credit bureaus and from credit bureaus information, regulators meeting all the regulatory requirements as well as international payment networks.

The key thing with the processing hub is around the issue of cost. MFIs often spend a huge amount of money setting up off-the-shelf products, half of the features they don't use within their environment. So for example, an MFI who's got ten thousand clients currently and wants to aggressively move to four hundred thousand clients got two choices: Either they buy a system that's going to take them to their four hundred thousand client capability of processing that volume or be more conservative and say: Let's buy a system that's going to allow us to have a hundred thousand clients in the book and then review the situation. So if you have a situation where the MFI exceeds the hundred thousand target, now they've got the challenge again of the technology, that processing cannot handle that type of thing. If they choose the system where it's got four hundred thousand clients and it only achieves two hundred thousand, they've made a huge investment in IT infrastructure and not achieving the benefits of that. So with this processing hub, it allows them to balance their cost structure together with the revenue structure. So the way this thing is done, it's done on a software services level. So, what you do is basically: For the transactions that you've got on this processing hub is what you pay for and not any capital investment into the hub itself. The research that's been done with various sizes of MFIs, we found that the very small MFIs they that the cost per client is very small; more or cost per client is very small because they operate of manual systems, spreadsheets and that type of thing. Whereas as they move up the ladder and you've got the very large MFIs, their cost increases substantially because you've got all this functionalities that they need to keep the client with the MFIs. Because the risk 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 these MFIs, providing these, suddenly the costs start increasing.

So from a processing hub perspective, what IBM has been trying to do is trying to reduce this cost and minimize it lower than what the normal retail bank would be charging. And obviously the more clients that we've had on board on the processing hub, the lower the cost would be in terms of the pricing side of it.

In terms of the variety of products and services that could be offered, currently there's the microcredit that's been offered in that space as well as microsavings, and this includes individual loans, group loans, village banks and the likes, housing loans, education and region specific, so specifically to South Africa context or to the South American context could have specific products that could be linked to this thing.

We're busy developing the micropayment side and the transfer side, as well as microinsurance side. In the future, obviously, the focus will be on providing other, non-financial type 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. So, currently in Mexico we've got 3.5 million accounts that are on this hub, in India we're working with FINO where we're doing the processing in that environment. In South Africa we're currently negotiating with one of the largest banks there to do their mass-market

deployment onto this hub and there are other parts of the world, East Europe, China, Southeast Asia and Latin America that we're working on.

Thank you very much.

Mr Budhabatti: Thanks Mr Mohammad. So finally I'm here as a panelist and not as the chair of the panel. We're running short of time so I'm going to reduce my presentation as quick as possible. I mean people have been talking about the microfinances. I don't want to do a presentation because I don't have so much time. People talk about microfinances and they talk about the loans, and they talk about the hardware and they talk about so many things. Now I want to just say about two or three major points.

One is obviously the cloud computing. It's catching up a lot, where you have shared services and you are not investing into the capital hardware and you are using the software on a cloud on the internet somewhere and you are paying per transaction.

The other major factor that we had was the branchless banking. Can the banking that we do with the microfinance client, can it be taken outside the branch? And obviously the answer is yes, it can be. Obviously there are a couple of regulatory requirements that need to be done.

I just want to show you a small video, about two minute video, that would actually see how branchless banking, how microfinance can use a technology to extend its outreach. While that is loading, let's see, where is it?

[video starts]

This is a rural place in Kenya. It's Kajialo. I'm also going to forward a bit because we are running out of time. This guy that you see here is a credit officer of a microfinance that goes outside and does transactions in the field. Poor guy, the bicycle keeps going up and down. Let's forward a bit.

What happens is that he would have so many people waiting for him in an agreed location where the transactions are going to happen. He now reaches at a place, which is a secured place, where he can perform transactions. And these transactions are performed online using a small device that you see mounted on his bicycle.

The authentications are done on a fingerprint. The transactions are done online, using a GPRS network. The receipt is also given to the customers because some of the microfinance customers, unless and until they see a printed receipt, it's very difficult for them to understand that the transactions have gone through.

[39:47-39:50 / NO RECORDING]

...he serves about 200-250 customers. And obviously, at the end of the day he is back at his office.

And the last one, obviously not many people have thought of it. At Craft Silicon, we always keep thinking that we are one of the most innovative companies in this space. Let me give an example. How many of you are on Facebook? Many, right? An indication says that about 450 million active users are on Facebook. Now, there are about 120 million active users in the emerging markets, which includes all this third world countries, Africa, Latin America and Asia. Let's think about Africa.

In Africa we have about 45 million active users on Facebook. These are figures that we have received from Facebook. In Kenya, there are three million active mobile phone subscribers. And most of them use Facebook through their mobiles. And these are the young people who actually are so addicted to the Facebook. And in Kenya we have about 1.6 million active Facebook users. We did a pilot with one of the microfinance [institutions]. What we did is every time somebody opens an account in that particular microfinance [institution], we link it to a social networking website, saying: 'This guy has opened an account, it goes to his ten friends.' Now when it goes to his ten friends, they also have a link there: 'Click here to also open an account in this microfinance [institution].' That way... Some of the figures were actually very crazy. This pilot we were running for about ten days. In ten days, these particular microfinance [institutions] were able to open forty to 45,000 new customers into these microfinance [institutions]. And in Kenya for example, there are so many Facebook users, all of them using Facebook on their mobile. And these are young people, they are active people, they are not

someone who is old. And anytime you bring an active young user into a microfinance [institution], then obviously he's going to be there as he continues growing old and old and old. So these are some of the innovations that we should also look into. Not just, yes loans and savings and those things are fine, but how do you increase the scale and reach of a microfinance [institution]. We must use some of this thing so that we can actually reach to the people with easy marketing.

Thank you very much.

So I'm back at my other position. And I want to thank all the panelists for giving their views on this particular topic. I would now open the floor to the audience. Please ask the question so we can answer. Before asking the questions, some requests: Please use the microphone because this particular event is being recorded and also introduce yourself.

Q1: My name is Aminul Alam, I'm executive director of BRAC International. I was...I think the last speaker... I saw the video and I saw the collection of the money in the field. How get back the money to the office?

Mr Budhabatti: What is happening, sir, is... This money is collected in the field and he goes to the nearest branch bank where this particular money is deposited. Also mind well that this particular person is from the same region, and that is why the chances of theft are much reduced.

Q1: Because, you see, the microfinance is generally working in the area where the bank is not available. So when he goes to the village, the bank is not nearby. He is coming from 10 kilometre or 30 kilometre. Risk is still there. The only thing that we saw from the video is that collection and receipt the people received because generally we are doing them manually. Because in Bangladesh, we are doing the seven million borrowers we have. And we have 3000 branches. But how could we bring the money the ten kilometre to the branch? In between, there is no bank. How we can solve the problem? This is an issue of BRAC all the time.

Mr Budhabatti: "One approach that the [MFI] has taken in this particular case is: In the morning, they do a savings collection. So in the morning, all the people are depositing the money. So in the morning the credit officer keeps on receiving the money, while in the afternoon session, he keeps disbursing the loans. So when he comes in the evening, he either remains with little money so that that money is quite safe. So cycle is like that. And they also encourage people to do savings in the morning so that... When you do a savings deposit in the morning, the charges are less, when you do it in the afternoon, the charges are a bit higher. So it encourages people to do savings in the morning, while in the afternoon, there is the loan disbursement. I mean these are just... Obviously, one technology cannot fit all the countries. There are different ways we can look at it. This is just an example of what Africa is doing. Something that can be done in other regions obviously could be different; something different has to be done."

Q2: Hello. I am Natan from Indian Swadar [45:26]. I have a question for Mr. Conard and Mr. Gardner, both of them spoke of cloud computing. You're talking about it, coming in the microfinance sector. You really think that you will be able to provide that kind of service to a small microfinance? Because even banks today have not been able to do that where shared computing can be available to different customers.

Mr Gardiner: It's being done and the way it's being done is: Banks are making small organizations, pre-existing organizations with their staff, their own infrastructure agents of the bank. So the bank will run the books for the agent. The agent will sell the bank's products, may it be insurance products, cards, usually transaction products and some specialized lending products that are beyond the capability of the MFI. And the MFI will collect deposits. So the agency that the MFI becomes co-opted by the bank infrastructure becomes an agent, it co-brands with the bank and then concentrates its efforts on its mission in terms of extending outreach and working with clients. So it's really from a technology point of view, it's not difficult to do. As long as there's an electronic connection, there needs to be an electronic connection to the branch point. It can all be run with enterprise software in a, what

we call multi-company multi-book environment. And it's cheaper. So all the client MFI needs is a browser.

Mr Conard: Just briefly, the simple answer is yes. I mean, for our product, MIFOS is running in the cloud today. We have one MFI in the Philippines who is being served out of the cloud. We're starting to roll it elsewhere. You know, it's a very different model than what Murray just described in that it is specifically directed toward the microfinance institution. It's microfinance specific software rather than kind of making them a part of a bank or something like that. We are running in the cloud, so it is absolutely possible and I think there is a lot of potential for it going forward.

Mr Gardiner: I think we have to be careful in the use of the term "cloud". Because it's a kind of a catchy phrase for something that we can't really articulate very well. 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. Facebook, we're talking about, is in the cloud and it is global access. 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 and use only the components and pay per click. And with that will come all sorts of other services because what is being built as a channel. One of the most complicating things in terms of public cloud is the administration of payments, settlements, how do you pay per click?, how 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. It's not something that can be done light if it's going to be large and public. And it'll take years to tease that out. The banks have so far recoiled from it. There are all sorts of regional problems in terms of where the data resides. So we are a long way off from a public cloud solution, I believe for the mass-market. But in specific regional markets, say within a specific country, you can use a facility to give access to software. But what I was reporting is that banks are using that as a mechanism of consolidation and outreach by drilling down into the microfinance market."

Mr Budhabatti: I think more discussion on the same question can also be done offline.

Q3: Hello, my is Chera Foribs [49:54]. I have a question a little bit following the former question I think. I understand that IBM, MIFOS and also Temenos applications all run via cloud computing via the internet applications. Now I also know that internet availability in, especially Africa, is less far advanced. What's the view of the experts on how the MFIs in the environment here can make use of these products in practice and how it also can be used for really improving rural banking. Because the branchless banking is the real challenge in Africa. Thank you.

Mr Budhabatti: Let me take that question. In terms of the internet connectivity in Africa, people keep thinking that it's not that reliable. However it is improving day by day. The mobile service providers now are moving aggressively into the data space. And if you look at Kenya for example, we have very good connectivity in Kenya over the mobile network service provider. The same is being followed in most of the parts of the African countries. So with time, I think, that issue of connectivity will definitely reduce. Anybody who wants to add something?

Mr Mohammad: I can talk mainly from a South African context. If you look at a mobile phone, most of the banks are joining with mobile partners because of the reach into the very remote and rural spaces. If you drive into very remote villages, the signs that you will see are either MTN or WorldCom, which are the mobile providers. So clearly, there is opportunity in that space.

Mr Gardiner: Yeah, just reinforcing. GSM networks, we're talking about small bits of data, it's quite ubiquitous. From a commercial point of view, if you don't have an electronic connection, you don't serve it; you put the guy on a bicycle.

Q4: Hi, I'm Casey, I'm studying currently in Spain. I have a practical question and a theoretical one. First, you went through really fast with your presentation, I wanted to know if there is a place you guys are going to upload them online that we could maybe see them later?

Mr Budhabatti: All the presentations will be available online. And they will be giving it to you. The Microcredit Summit people will be sending you the links to download the presentations.

Q4: So we can take a further look at them later?

Mr Budhabatti: Yes.

Q4: Ok, wonderful. The next thing is that when you're working with the ultra-poor, the poor that are not used to using these kinds of technologies, or don't feel comfortable using them, is there a lot of marketing that you guys need to do to be able to make them understand the process or how it works? Is it expensive? I mean, what do you do to be able to confront that challenge?

Mr Budhabatti: Ma'am, ma'am, ma'am. Can I answer this, please? You know, let me give an example. The other day, I brought a brand new 52-inch TV in my home. I got the remote. I wanted to do picture in picture because somebody wanted to do something else and I wanted to do something... I wanted to do a picture in picture into that TV. I went to the manual, the manual says it's there. Without reading the manual, I started pressing the button here and there and I was not able to do. I consider myself as a bright technical person. I was not able to do that. My maid who was just watching what I was doing, she picked up the remote and very soon, she was able to do that. So if you guys think that the poor are not able to handle the technology, I think we should not go there. Because poor, the kind of phones that they use, the kind of use that they do on a phone is much better than you and me possibly do it. This is something practically what we are doing now.

Q4: It's like more the idea of, like you said- They need a receipt to see that it's gone through. Like the idea of abstract. The idea that you give somebody money, it goes in a pocket and then it appears on an account somewhere.

Mr Budhabatti: Obviously, there has to be some education to be done to the customers of the microfinances. But I don't think it's that difficult. Again, this is our experience from dealing with many African countries. Possibly outside, there might be something different. This is our experience, I don't know what others' experience is.

Mr Conard/Gardiner [unclear]: You've got a point that I'd just like to just elaborate. You gave the example of a receipt... [54:20-54:30 / NO RECORDING] ... are not going to market off the grid. They're not going to try because there is no money that can be made in that transaction. That's the role of social microfinance. Always at the end, the periphery of where it can be done commercially, social microfinance has and will continue to have a role in terms of outreach and innovation. And we were there 25 years ago, it was all methodologies and there was nothing, no banks were involved. Now, mass-market retail is penetrating right down, is very far in using all kinds of last-mile technology. But there will always be a role, I think, for development and investment in the human processes of engaging that economy. I think it also invites the discussion about the wisdom, sometimes, of converting your cattle to cash.

Q4: Thank you very much.

Mr Budhabatti: Since time is running out, we'll take three more questions. Is it OK? How much time we have? Ok, we have about 25 minutes, so apologies for that.

Q5: Hi, my Name is Miles Burn. Just a quick question directed towards Craft Silicon. It's my understanding that you guys have offices in Kenya, Nairobi and the US. What are your plans for expansion in Asia, especially, and what's your long-term growth plan for Asia?

Mr Budhabatti: Craft Silicon have offices in India, in Bangalore, we have a couple of installations in Asia. And as we speak there is an aggressive growth happening in the Indian

subcontinent from the infrastructure point of view that will be able to help the clients in all over Asia as well as Far East.

Q5: Does Craft Silicon think about investing in China, Mongolia, Southeast Asia and what obstacles does Craft Silicon face in those markets?

Mr Budhabatti: We have some installations in Mongolia. We are discussing with some clients in China though we have not really succeeded. However, from the strategy point of view, Craft Silicon is definitely there and I don't want to make it too much of a sales stop, but I think we will take this offline. I want to be very biased to all of the panelists, but we will take this offline.

Q5: Ok. Thank you.

Mr Budhabatti: I am sorry about that, but I hope you understand.

Q6: Hello, my name is Howard Brady. I'm a consultant and one of the things that I try to do as a consultant is to help organizations implement those things that I tell them that they should implement. In other words, I try to help them manage change. And I was curious if one or all of you had instances of where you have been able to manage change because you are essentially either taking a spreadsheet system and turning it into something different, or you are taking different processes and you're telling people: 'Wait a minute, maybe if you do process C before B, that might make some more sense.' So I'm curious, perhaps George and Eamon, if you could just take a minute and mention something. And others, too.

Mr Conard: Absolutely, thanks. And Howard, I owe you an email, I know. I'm just way behind.

Mr Conard: We have found over the last four or five years of working on MIFOS that what you just described is exactly right. And in fact, when we go in to a MFI that's moving on to MIFOS now, we start with business process analysis, finding out whether or not they have an IT strategy in place, if they don't, helping them to build an IT strategy that matches what their business goals are, and then bringing the technology in. And that has been extraordinarily successful in the MFIs that we've worked with because rather than kind of taking the technology and going: 'Let's slap it on to the existing processes and hope that it works.' 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, helps the MFI to move forward much more quickly and take much greater advantage of the technology once it's put in place and in fact a lot of the MFIs that we're working with now have pointed to that action that we take and this kind of holistic approach that we take as much as the technology are some of the reasons that they've started working with us. So it's totally in line with what you're saying. I think that's absolutely right.

Mr Scullin: Hi Howard. I've seen your name in many emails, I've never actually met you. So, nice to meet you. Well, Fern has been around for such a long time, we've been through several technological revolutions from DOS to the first Windows [59:10 / unclear] and now through to the next big thing on the cloud. My own experience is that the first three questions we get asked are: How much does it cost? And then: How much does it cost? And then: How much does it cost? So, it's really driven by very practical considerations by the end user. And we've also found that, you know, we introduced a package which has taken us some years to finally mature and get 99.9% of the bugs out of it. And they get so wedded to it, that even if we have existing customers and we go along and we show them the latest technology and 'It'll do this, it'll do that.' I have to say that I empathize with them because when some new version of Word or Powerpoint or something comes out, I'm not necessarily the first guy to use it either. So there's a natural human inertia against change. I think that in most things there are pioneers who go out there and are willing adopt a new technology and new things. But again a lot of people looking at the microfinance market assume some sort of homogeneity, that there is this microfinance customer out there and they all think the same thing. There's probably ten thousand different types of microfinance institutions. They don't

all move at the same pace, they don't all have the same requirements. However, what we try to do is to provide some sort of standardization across 40 different countries with an off-the-shelf package that's going to suit them. And they don't all jump to it. Sometimes I think that we should build some bugs into our older versions so that they will stop using that bloody thing and we can move them on to some new platform. I wish there was another Y2K because we were able to dump our, well, that's the wrong word maybe, but we were able to retire an old system which had been going since 1986. Fourteen years later they still wanted to use it. And I have to tell you that I lied and I said that it wouldn't work past Y2K because all the guys that had worked on it were in their retirement homes eating [61:19 / unclear] and being looked after by nurses. So, there is a time when they should move and it's usually when there are a number of drivers. The biggest one I find is the regulatory authorities. So they bring in new regulations and that's a big driver. There's a lot of international pressure on money laundering regimes, identifications and so on. So there are pressures which are coming from outside on the MFIs to make changes. I have to say that there are not very many pioneers within the microfinance fraternity that necessarily want to lumber themselves with another new system. So sometimes the changes come from outside.

Q7: We would like to ask about the potentials of this technology in terms of capturing information related to the social impact of microfinance and specifically related to gender indicators. The experience that you had on this, if you could expand on that please.

Mr Conard: Great question. As I said in the presentation, I think that capturing social performance indicators as a part of overall portfolio management, so that you can assess both what are the financial results that are coming, what's your [62:49 / unclear] and things like that, as well as the social impact of the products and services that are being offered, is absolutely critical. Our experience with that, with MIFOS has been frankly somewhat mixed. We essentially started building the Progress out of Poverty Index, which is one of Grameen Foundation's tools for measuring social performance, into MIFOS at the beginning. And we found that we actually didn't build it quite right to be able to be used in exactly the right way. So we've learned from that and are working this year to integrate it further so that it can be used in exactly the same way as the financial reporting tools. And the thing the MFIs that we work with and have seen want to do, is you want to be able to take for example, two loan products and ask: 'Which one of these has a greater social impact? Can I actually compare this loan product and this loan product and find out which one has a greater social impact?' So the first [63:41 / unclear] is being able to capture social performance indicators as well as client information like gender and things like that in the system and then have the appropriate business intelligence and reporting tools to be able to look at the different results that you're getting, slice and dice it in different ways so that you can then start to make some of those decisions as we have seen.

Mr Scullin: Yeah, I spoke last year at the Social Performance Task Force meeting in Madrid and one of the things that surprised me was that all the different NGOs and so on that are looking for social performance information seem to be hell-bent on torturing the poor MFI with ten different Excel spreadsheets and ten different formats and ten different forms to be filled in. And I did suggest to them that maybe, they could do everybody a favor and standardize on the information that they were looking for. Now I know that Mix has done some work in that regard, but I honestly think that the people that are looking for that social performance information should please do the MFIs a big favor, standardize it in a format, you give to each of the panelists here, we'll build it into our software, we'll collect the information instantly at the time of signing them up and you'll get your reports. But there's a lack of standards coming from the NGOs which in my mind is not helping the MFIs who are already burdened with running their business and then they have to fill in those social performance statistics. So if we can get the people who are seeking the information to standardize somehow on the information that they are looking for, I pretty much guarantee that each of us here would build it into our systems and you would get the information very quickly, very accurately and on time.

Q8: My name is Rashid, I don't have any questions. Just to add something because I have heard a question according to the connectivity. I will not make it in terms of "says" because I think our lady was asking about connectivity, the phones that you have seen in the movie slide. So these phones by you and what you are bringing to the microfinance in the remote area who are providing a common SIM. A common SIM that you can put in the phones and it will be connected to every available network in the country. So when you go to any remote area, if for example ZANE is not available, automatically it will smart-switch into Safaricom and this way you are bringing connectivity to this remote area and everywhere you are with just one common SIM. And we sign a global agreement worldwide with all the technical operators. Thank you very much"

Q9: Hello, this is Ariful Islam, head of BRAC Uganda. I am referring to the issue of capturing social performance indicators and information. BRAC Uganda has started capturing those informations and we have almost covered 85,000 borrowers up until last month. We have started covering and capturing data of every borrower. So there will be a presentation, I think, from my research department maybe tomorrow or the day after tomorrow. So you are welcome to attend that session how we have been capturing, using software inhouse that we have developed in BRAC. My question to panelists and everybody, anybody can answer that: My fear, I'm afraid of the way they're using technology, say using internet or using telephone or any other technology is excluding poor people from accessing to microfinance services. Is there any study report or any result or any information that can claim that using technology is reaching out to more poor people, not more people but more poor people or even ultra-poor people? So that would be appreciated. Thank you.

Mr Conard: I don't know whether any of the other panelists can chime in on this. I don't know of any formal study that has done that. And I think it's a very good question in keeping the focus on the poor and the poorest. To make sure that microfinance is in fact reaching them is absolutely critical as we all think about how we help the mission of microfinance to be successful. Anecdotally, I think what we've seen is that in a lot of cases, the phone in particular may be able to actually increase outreach to the poor and the poorest. Because in a lot of cases microfinance institutions are constrained in terms of how far they go out into the field, how far they are able to get out into rural areas because of the need to get back at night or some of the things that Kamal has talked about and come up in the conversation around moving money back to branches and things like that. So anecdotally, we are starting to see MFIs who believe that they can move farther into rural areas as a result of using that technology. But I think it's a great question and I'm not aware of any kind of formal study around that.

Mr Gardiner: I'm not sure if I really understood the question and stop me if I am off-track. But it's two ways that from my observation in dealing in the world of microfinance and dealing with people that are using our technology. There's two ways of thinking. One is 'It's a business.' And the other is 'It's social intervention.' And if a microfinance institution is operating with interest rates of 50 or 60 or 70 % per annum and they have operating costs which are high because of inefficiencies and manual system, maybe there operating margin is 30 %. If they use technology and they can crush those operating costs and jack up their transaction volumes and squeeze their cost down to ten or eleven percent but they are still maintaining those high interest rates, then they're doing that because they're making a profit. And this is a microfinance organization that's in the business of making a profit. And their investors are expecting a return on equity. It's business. And that's how it's viewed by the investors. Even some of our social investors have taken deposits from private banks with funds for socially positive lending. They still want a competitive return on investment. And it's risky because it's an emerging markets funds. And you've got to cover for foreign exchange risk. So the expected return on equity is high. And if you are operating a business that is funded by money that's looking for a high ROE, you are not going to serve those people if they are not profitable. If you're a microfinance organization that's in the business of serving the poor and as you are articulating, using technology to serve the poorest of the poor, because your objective is to empower poor people to try and create wealth and opportunity in their community, that's a different kind of ethos in microfinance. And right

now we're at a bit of a crossroads. We have technology that's driving mass consolidation and we're seeing a lot of money flowing in from advanced financial markets into emerging markets into microfinance to capitalize the acquisition of technology and management and capacity and branch infrastructure to consolidate the market and pick up millions and millions of transactions. And those transactions are valuable. That's the business. Now, is this helping the poor? It all comes into the discussion. What is the purpose? What is the mission? What is the quality of the loan? What is essentially the business? We've got the technology, that's not a technology problem. So, I think the debate really is if you are going to use this kind of technology to extend to the last mile. The debate is within the microfinance community. What is the quality of the interaction and transaction you're having with the poor? That's the discussion. We have the technology, that's not a problem. GSM? Everywhere. It's not a technology discussion.

Q9: Hi, my name's Mammadi, I'm here from Lummon Creative Labs. So my question is for George regarding MIFOS. So you said you had MIFOS running in the cloud. So can we be a bit more specific about that? Are we talking about one that gets Amazon web services or [72:34 / unclear] and also is there integration with things like Amazon debt pay or PayPal XAPIs?

Mr Conard: Great question. And it gets back to Murray's comments about what's in the cloud and what's not in the cloud. There are a lot of different definitions about what 'being in the cloud' means and I tend to agree with kind of how Murray categorized it which is: It is not simply that it's running on the internet someplace. So what we mean by MIFOS being in the cloud today is that it is in fact running in Amazon EC2, their cloud computing service, using Amazon web services for a lot of those pieces of things. We have not yet componentized it in the way that Murray described it, being able to pull out specific different pieces at a kind of individual product level. You are able to take kind of a core product, add on a reporting server if you want to do that. So there is some level of that coming together. We're honestly just getting started with it. So it's up and running in the cloud, we have one customer that is running on it and we're essentially slowly starting to explore: What the hell does it mean to be running in the cloud and what does it mean for microfinance institutions? What is the value that they need to get out of that? So, does that help a little bit?"

Q9: Yeah, okay.

Q10: Thank you, my name is David from Triplejump. Just to say, very great presentation and I guess as Mr. Kamal said, we'll get them so that we can continue interacting with your very good presentations. But probably my question is a general one. Whenever in my exposure, I always, always find MFIs having problems with their technology, especially their loan tracking technology, and that's the same for almost every MFI. And my query probably is: I do appreciate that your businesses could be thriving, but might it be that you gather technology and get the MFIs to adopt because the disquietness in the MFIs I think is not the same as in the banks. Most MFIs are always trying to change to another software. Why is it that you guys develop it and then the MFIs follow it? It's just general category.

Mr Budhabatti: Before the other panelists answer, just slightly on the lighter side. If all the software would be working nicely with all the MFIs, then we would all be out of the business. So we would not like to do that. But let the panelists answer.

Mr Mohammad: This is not just a problem with the MFIs, it's with general financial services. If you go to the banks, they've got exactly the same things. You'd find they spend millions of Rands in new technology, bringing on, although they have a legacy system, but adding on to these things. And because of the financial services environment, it's a very dynamic environment, you'll always find these changes taking place.

Mr Gardiner: It's painful. 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. 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 very difficult and requires a lot of planning. If you miss any piece, if the project management is weak or 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, maybe, is 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.

Mr Budhabatti: We have about five to seven minutes, so let's make it quick. You and the panelists will answer them shortly.

Q11: So, my name is Peter, a consultant in a cooperative bank. My question is on the technology. Well, we didn't appreciate the math technology is doing and we can't do away with debt. Perhaps it would also be important that we get from our panelists what the technology, especially in the developed countries, is able to do. Perhaps with regard to savings. Because we know in the lesser developed and especially the African economies, a good number of people are net borrowers and because the money is at our arms length, we are likely to be distorting the savings model. Would this maybe also have to do with monetary policy? Because MFIs, like any other financial institutions, they either impact positively or in a negative manner on our economies to some extent. Certain regimes would want perhaps to apply certain monetary policies. Perhaps it would also be kind enough for you to just explain to us: What are the experiences that you have come across, especially in the developed economies, so that as an African and especially as a Kenyan, we can borrow such a leaf? Thank you.

Mr Scullins: Well, if I understand your question correctly, you're asking about the impact of savings. And, I mean, Fern started out with credit unions, of which savings are an integral part of that. So we've always lived with that as part of our remit to provide to MFIs. And more recently, a lot of MFIs have been asking us for savings products. I think that this question is really a metaphor. The regulatory authorities who are... because if you are taking deposits, you require typically a deposit taking license, and that is something that the government bodies are very keen to regulate.

Mr Conard: Two very brief comments. I'm going to skip the monetary policy one, that's totally not my area. On savings: Grameen Foundation has a number of products that we are doing with a couple of large MFIs around the world. Two things that we're looking at around technology and savings and how they interact are: One, ensuring that the technology can handle irregular transaction cycles versus kind of the traditional microfinance once a week, once a month, something along those lines. Second, looking at how technology, and particularly mobile technology and things like that, can reduce the opportunity cost of savings and make it easier for people to do deposits without taking a day-long trip to a village someplace.

Q12: Hi, my name is Philoma, I have a question that's a little more theoretical. So, looking at minimizing operational cost, it makes sense of course to minimize the wages of loan officers because that's a major input cost. But at the same time, there's a sense in the classic story of microfinance that that replaces the need for collateral as a threat in terms of repayment rates. So, has there been any worry over this sense that mechanizing the transition between the loan officer interaction, the face-to-face kind of story to the technological input and the monitoring and screening and reinforcement is going to impact repayment rates in the future?

Mr Budhabatti: Our experience, working with some of the large microfinances: Yes, there is an impact when face-to-face interactions are not happening. I don't know what others...

Mr Mohammad: I mean, generally, if there is no face-to-face, there is definitely an impact. So, ideally where you have a client who has got a history already, it would be easier to deal

with him through the technology. But when you are onboarding new clients, I don't think that you can completely eliminate the face-to-face interactions.

Mr Conard: And just to reinforce that: Yes, 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 fall. 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. And you use technology in the back end to minimize your risk. 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.

Q12: Thank you.

Mr Budhabatti: The time is really running out. So do you suggest I take or I close? One question? We take one question and please, we are very sorry for people who are standing. People who have questions, you can ask after the sessions are done. This is what I am getting from them. Please, ma'am, we'll keep it short and you will also keep it short.

Q13: Yeah, I'll try. Good evening, I'm Marro. I'd like to know if you, according to your experience, if you think that really small and rural microfinance institutions can support alone all the costs of buying a license, buying all the equipment, renewal after some years, all the packages, and paying all the costs which are connected with this important process but which is really really costly, without subventions according to your experience. Thank you.

Mr Gardiner: Our experience is that they are often challenged to do it, they don't want to do it and that once we walk through the process of what they're getting out of the technology and actually start putting numbers against that. You know, 'By using that technology, you are reducing your cost by X amount and you are able to increase your revenues by Y amount and that's ten times of what your investment is in the technology.' Then, yes, it absolutely makes sense. If it's treated strictly as an expense item, it's a totally different story and you're not actually getting the true picture of what the MFI is either spending or getting back out of the technology.

Mr Scullin: That's a very good question and one of the ways that we address that is that we have a number of different products. We have an entry-level product which is extremely cost-effective. Then, if you are slightly larger, we have a slightly larger piece of software. So, by recognizing that the smaller volumes and so on may not be able to afford the high-end technology, we have brought out a number of entry-level, medium-level and high-end level. And I've left some brochures at the back of the hall if you want to pick up some more information on the different levels that we have. Thanks.

Mr Budhabatti: So, with this, let's try to close this session. I think it was a very important discussion.