The MasterCard Foundation Symposium on Financial Inclusion:

Clients at the Center

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This document presents transcripts from the plenary conversations and presentations during The MasterCard Foundation Symposium on Financial Inclusion: Clients at the Center 2013. The statements made and views expressed are solely those of the authors and do not necessarily reflect the views of The MasterCard Foundation, the Boulder Institute of Microfinance or the symposium participants. Some have undergone minor adjustments, but in general we preserved the tone of the panels and presentations to provide the reader with the content of the symposium.

Session 1: Innovation in the design of formal financial services for greater inclusion

How will innovation in the design and delivery of financial services for the poor drive financial inclusion? What are some examples of innovations we have achieved in this space, and where are more needed?

Speakers: Claudio González-Vega - Professor Emeritus, Environmental & Development Economics, The Ohio State University
Tilman Ehrbeck – CEO, Consultative Group to Assist the Poor (CGAP)

Claudio González-Vega

Thank you Bob, thank you The MasterCard Foundation and Boulder Institute of Microfinance for the opportunity to see so many old friends, to meet some new ones, and particularly for the realization that we're all interested in working for the same purpose. If you look at the title of my presentation, you already see the hints of what I will be talking about—financial inclusion, formal financial services, design, design, innovation, and the role of innovation. And I thought I would start the conversation by stating some five or six very general premises just in case I didn't have time to say the rest.

First premise. Financial inclusion matters, and it matters because financial services matter for everyone. This is the universal dimension of financial inclusion that we have become so used to. And what matters is inclusion in formal financial markets. There are useful roles for informal finance. But informal finance is not enough. What really matters is answers to institutional finance. And therefore, I will be talking about institutions.

The second premise is that not all of the instances of financial inclusion are equally valuable. They are not equally valuable for the parties engaged in the transaction; they do not have necessarily the same quality; they do not necessarily have the same cost; value will depend on what combinations of quality and cost we are able to achieve. They are not equally valuable for society at large. We're worried about young people, women, indigenous populations, and we put different weights on the value attached to these valuable populations. Value matters. There is a vector of terms and conditions that determines the value of each financial transaction. The price, the amount, the term to maturity. And if we are talking about financial exclusion, then this value goes to zero. And what we want to do is to find financial inclusion that creates value, and financial inclusion that creates wealth precisely because it creates value.

Third premise. The design of the financial transactions matters. The design of these terms and conditions would indicate, would determine how much value is created each time. This is the question of efficiency and what value is decided for whom. The question of equity that you were referring earlier. Without innovation, the dimensions of outreach will not change. So the central process through which financial inclusion takes place, the central process through which value is added is innovation. It took microfinance a technological revolution equivalent to the green revolution for us to achieve the substantial gains of outreach that go with financial inclusion today. But to go beyond this current outreach, we will need to engage in several new revolutions. I do not know the names of these revolutions because I do not know exactly what they will look like. The enigma with revolutions and with innovations is that they can evolve in unexpected ways. And that is very fine. This afternoon, we are probably embarking on a major and tricky journey of trying to forecast this uncertain future.

Another premise. Not all innovations are equal. Each innovation changes a different component of this vector of terms and conditions that determines the value of a transaction. Each innovation creates value in a different way and for different sectors of the population. In fact, I will say something that probably will look striking to you. Any innovation includes some and excludes some others. Innovations are not neutral. And then as we look at innovations that we're trying to pursue, we have to ask that question. Who are we including? Who are we excluding with this particular innovation? Innovation, of course, is necessary, but then the key questions are how will the innovation emerge; what is a propitious environment for this emergence; what spirit, what attitudes are needed for people to be innovative; what are the determinants of the process? And the central question: For whom does this innovation emerge? And in some sense, perhaps, what we are talking about this afternoon is a biased innovation. A pro-poor biased innovation that we will be looking for, because the kind of innovation that we will address and pursue will determine the map of inclusion—who gets included, who gets excluded.

I learned a very important lesson about innovation very early in my career. People were talking about their concern that there was no access to formal credit, and other preoccupations, and they were also attributing these shortcomings of financial markets to problems of willingness. Uh-huh, the bankers are too conservative. They are indifferent. They don't want to do this. They don't want to go into these rural areas. If only they had the willingness. And of course, back in the 1950s, people said, "Well, perhaps the state will have the goodwill to do this," and we went into all of these mixtures of financial repression, interest rate ceilings, and state-owned banks and so on, but it didn't work. The state-owned banking as a tool for financial inclusion was a failure. If we went around and asked several decades later what happened, we would see the diagnosis of the 1950s has not changed much. And then somehow, other people too, but I had to go through this process of learning myself—I discovered that it is really not a problem of willingness; it is a problem of difficulty. That it is hard, it is risky, it is costly to do it, and the central question is, what was the basic nature of the difficulty, the difficulty of what? And it became very clear that it was a production difficulty, that it is hard to produce a financial transaction for clienteles that have certain characteristics. And if it is a production difficulty, then it is a technological problem. And if it is a technological problem, then the solution has to be a technological solution. A new production function. A new way of doing things. A new way of producing. And clearly, new ways of doing things are innovations. That's why I typically like to define microfinance in a very narrow sense as a collection of innovations that allow us to do what a traditional banking technology would not do under certain characteristics of the clients, their transactions, the activities that the clients undertake.

Let me walk through very briefly through a contrast between two lending technologies—the traditional banking technology, and microfinance. There are problems, distance, information incentives that need to be resolved in a financial transaction. For the problem of distance, the banking technology says, "Here is my branch, come. I need information to decide about your credit worthiness. Bring me your tax returns, your financial statements, your investment plan. Ah, and if you don't repay me, I need you to pledge some asset. I need a mortgage in order to be sure that you will repay. And if you don't in the end, then I will take you to court only to discover that a lawyer's fee of $100 is about twice the amount of $50 that I want to collect in court. And for all of these reasons: people live very far, they are informal, they don't have written accounts, they don't have assets because they are poor and they can't pledge collateral. It was a problem of inappropriate technology, but it was still a technological problem. And microfinance comes into the picture, and the question of distance, instead of saying, "Come," microfinance says, "We go." Only a change of verb—come, go. And this already a tremendous innovation. This is an example of the multitude, the cluster of innovations that are around microfinance. It is not just one, but it is a cluster, multitude of innovations. I am going to look at your household farm as a unit. I am going to be there looking at you face to face. I am going to send someone who has knowledge about your circumstances, an experienced loan officer. And I am going to look, not at your financial statement, I am going to look at your honesty or your reputation or your creativity. I am going to look at the intangibles that define your character, that define you as an individual. And instead of threatening you with taking away some tangible assets if you don't repay, I am going to think that intangible assets are more important wealth for you, and that you will do anything you want to protect those intangible assets. And among these intangible assets, the most fundamental is the value of the client relationship. And in my own humble perspective, this is the most fundamental innovation of microfinance defined in this narrow sense that I have been describing, that microfinance has been about creating relationships, and relationships are valuable. And therefore, microfinance creates value because it creates relationships that are mutually valuable, and the value of this relationship is what determines the structure of incentives that makes people willing to repay. And we could go more into this, but I need to move forward.

So, we go back a little bit to an understanding of lending technologies and there are two types. One, which I will call the hard information technology is looking at financial statements, is requiring mortgages, or perhaps is a credit scoring system. This is hard information, and it is impersonal, and it is an evaluation of that particular transaction. In contrast with relationships, where the information is soft; the relationship is evolving over time; the connection is a person-to-person connection. And this, which seems not very important, is going to present the greatest challenge for us as we move into the future. And there are two or three reasons why this will be very challenging.

The first reason is that innovation is happening in all other fields of science and technology, as well information, communications, data management, automated platforms, electronic payments, mobiles, data mining, and so on and so forth. These are all mechanisms to make the hard information technologies less costly. But making hard information technologies less costly also means that in a sense we're making transactions more impersonal. Less face to face, less "I know you," less "I understand you as a client." And if that is the case, and if the structures of costs and the competitive advantages of different ways of approaching clients are going to be altered because hard information technologies are going to become more competitive, because of cost reductions, then we have a problem, and we have a dilemma that needs to be resolved as we go forward.

Do we follow the path to scale? Do we put emphasis on reductions of costs, looking for economies of scope, economies of scale? Or, do we follow the path to quality, the specialized services, the services tailored to the particular individual for specific market niches? And in both cases, there are very serious challenges. If I go to scale, I have a great threat that I will not be able to manage risk sufficiently. If I go to quality, my costs are going to be much higher, and I might not be competitive in a market dominated by scale institutions. And what we will have to ask, if we are interested in clients at the center, is what do clients want? Do they want quality, something that is adjusted to their own circumstances and demands? Do they want low costs? What combinations of quality and costs do particular types of clients prefer? And what is their distribution in the population? Because that is going to determine the structure of the market, what institutions survive, what institutions wither away and which ones will dominate in the future.

The problem is particularly difficult for me because I tremendously value heterogeneity. And I think that heterogeneity is the most basic characteristic of the poor in the rural/urban areas of our countries. They have different goals. They pursue different activities in order to achieve these goals. They look for all kinds of different financial products, and they look not just at the interest rate, but at the whole vector of attributes of that transaction, and finance is about matching. Where is the product that matches my own particular interests? And if heterogeneity is the law of the land, Amartya Sen had this wonderful sentence: “Human beings are fundamentally diverse,” and therefore if they are different, they have different demands; if they are different, the roles that finance will play in their lives will differ. The impacts that one would expect, that is why it is so hard to make impact analysis because there are thousands and millions of impacts. One different impact for each different individual. There is around-- and we need to learn about them, and we need to tailor services for them, and in a perfect world, standardization would not be the optimum, but standardization reduces costs and differentiation is costly. So how do we achieve a reasonable balance? By paying attention to heterogeneity, by creating quality, by tailoring services to individual clients, at the same time that we generate the economies needed to reduce costs.

This, which comes very much from my heart, comes also from economic theory. Financial theory hates pooling equilibrium. We do not like to see different risks treated as if they were the same risk. When we are looking at clients that are different, and we think they are the same, then adverse selection is quite likely and lenders engage in rationing, in exclusion. This is the problem I encounter. I remember the first time I arrived in La Paz, Bolivia. I was driving down from the airport, and down on the curb were sitting all these “cholitas.” They were wearing all exactly the same “cholita” shoes, with no heels, and the 16 petticoats and they wore the Borsalino hats. And I was going to talk about credit, and I said, “If I were a loan officer, how would I, looking at these cholitas that looked all identical, say, ‘This cholita, yes; this cholita, no; this one $50; another one $140; this one $35.” And that’s very much the same problem that we have. What we have not recognized is that microfinance itself is already a tremendous innovation and movement towards differentiation. Because before microfinance in the banking technology, the only criterion for evaluation of creditworthiness was what is the value of your home, what is the value of your land, what is the appraisal of your real estate? Only one criteria. And now, microfinance comes in and says, “I want to evaluate you on the basis of your cash flow, on the basis of your reputation, on the basis of your ability to organize a group.” So we are opening up, we are enlarging the range of criteria for creditworthiness, and that is a mechanism for creating diversity, for creating a separating result rather than a pooling result.

I have followed microfinance in Bolivia a lot, but I will describe is probably also true in quite a number of places. There are sequences of innovations that take us to different levels of outreach and different levels of providing the services that we want. The first one, the fundamental innovation was this technological innovation, the innovation in lending technology that generated knowledge about the credit process. How do I evaluate this creditworthiness? And what was particularly striking in Bolivia is that a number of NGO pilot projects developed at the same time, validated village banking, solidarity groups, individual loans. But that process of innovation did not stop there, and beyond the technological innovation came a second very important, as important innovation, which was the introduction of a microfinance business model. And perhaps, the first instance of this exercise was the creation of BancoSol itself. Here is someone who said, “We not only want to make loans to women, and we think that they will repay, and so on and so forth. We want to create an institutional structure that is going to do this. We want to define the functions of the different members of this organization. We want to establish a management system. We want to acquire the tools to assess risk and costs and think in terms of profitability, and eventually perhaps we even want to become, in the case of BancoSol of course, the first bank in the history of the world that is created as a typical commercial bank, private commercial bank devoted to microfinance.” So we have this juxtaposition, this amalgamation of a new lending technology, a new business model which itself is another innovation, access to funding that is possible by the transformation of the institution, and the talent and the local knowledge and the understanding of the clients, and the understanding of the local circumstances of local entrepreneurs, and all of this combined then gives rise to the -- until then unimaginable -- idea of commercial microfinance.

And then comes the third wave of innovation, which is the emergence of the large investors, or the funds that are making profitable investments in these institutions, the large banks that are acquiring NGOs, the NGOs that are transforming themselves into banks. And now with all of these additional shareholders, the objective function of the institution becomes even more complex, but at the same time it gives it access to bonds issues and IPOs and so on and so forth. And so we go from a technological innovation, how do I make loans to these cholitas, which was a step in the path to quality, because it was a step in the path to differentiation. And now with these ownership innovations, technological, and institutional innovation—that is a step in the path to size, to scale. And this is a sort of the big challenge. And the it comes of course the scope problem, the issue that Bob was highlighting, not only loans, but also payments and transfers and deposits and insurance, and how do we do all of that with this institutional infrastructure that has been created?

How did all of this happen? Was it dictated by the government? Can one promote innovation by decree? Do you need an environment where people are willing to take risks and experiments, and take losses, and create, and imitate, and learn? And clearly, this is why innovation is so central because it cannot be provided by the state itself. It has to come from the creative forces of hundreds of different people in different circumstances, willing to experiment, and there will be more innovation, the more the attempts to find solutions there are. Friedrich Hayek talked about the importance of looking in as many different possible ways for solutions, because the more different the possible ways in which we are looking, the more likely that we will find different solutions. So it is not saying, “this is the model, and this is what we’re going to do;” but saying, “here we are, in different ways, combining our efforts.” And what is interesting is that in this exercise in Bolivia, someone came with an innovation, and it was immediately copied by somebody else so that innovation was followed by imitation. But imitation was not necessarily just about copying what others were doing. It was the first step for the next innovation. And then somebody else is going to copy this, somebody else’s innovation, and so on. So that innovation is a collective process. It’s not a single event. It’s nothing that happens just now and then it is, we already have it. But it’s actually this very complex process.

It’s a process that requires learning. Microfinance possibly is one of the most learning by doing intensive activities there is in the world. You can come to the training course in Boulder Institute and learn a lot, then you go back to La Paz and how do you differentiate one cholita from the other? It isn’t going to be that easy. You have to be there to learn about them, to understand them. And I think particularly that we need to engage in a process of learning to learn. And learning to learn, learn first of all from our clients. I have heard in this symposium and around the symposium a lot the statement that we need to learn about clients. But, talking about learning about clients is thinking of them as the object of our observation. But what we really need to do is learn from clients.

They are our teachers. They are going to tell us what their expectations of value are. They are going to come with the ideas for the next innovations that didn’t occur to us. They are going to talk to us about the trends in the market; they are going to compare the products that are available. Of course, we need to learn from competitors, their successes, their failures, their products; from our own staff. The most valuable asset of an institution are the loan officers. The most valuable component in the true economic balance sheet of a microfinance institution is knowledge, and that knowledge resides in the loan officers. Of course, we can learn from the global industry, from the MIX, from CGAP, from the funding agencies, from the regulators, and we can learn particularly during crisis.

And my crisis is that my time is up. (Laughter) But crises are tremendous spurs of innovation, and perhaps what I should say is the best players in the field are the ones that have a comparative ability to create knowledge, innovate, learn, accumulate knowledge, imitate, and make sense of the market, understand clients, and learn from clients. And as we move on, and I end here, the message … you see? That's innovation too. (Laughter) The central message that I want for you to remember is all of this matters tremendously, but it is not innocuous as we innovate, we incorporate some people, and we leave some other people behind. As we innovate, we create additional inclusion for some segments of the population, and we exclude. If the innovation was a mortgage, only the people with real estate would be incorporated. If the innovation is gender-oriented women's banking, the males are left behind. If the innovation is consulting a credit bureau, those without credit histories will never get a loan. But our task is precisely to bring into the market those that do not have a formal history yet. (Applause)

Tilman Ehrbeck

So for those of you who don't know me, I'm Tilman Ehrbeck, and CGAP is a global partnership of 34 organizations who share the common mission to advance financial inclusion to help the poor improve their lives. And The MasterCard Foundation is an important member, and we are delighted, or I'm delighted to be here on behalf of the CGAP staff. Others of our members are here as well, and I see who will come later on the stage, UNCDF, the Citi Foundation, Omidyar, so it feels a bit like a family reunion.

Our role is very much to be a public good at the frontier of market development, and that we can, of course, only do frankly in supporting you all in this room. And many of you are partners of CGAP's and we are supporting you in your experimentation, and in your innovations. So thank you for letting us do all that. I'm a little intimidated to follow two such charismatic speakers. Absolutely fascinating to hear the journeys from Bangladesh, and to listen to Claudio's wisdom and wit in which he delivers that. So I'm a bit the contrast probably. I'm a German economist. How dull can it get? (Laughter) So I decided to make a virtue out of that vice, and start with a German brand that came to mind, to ask you all a question. So what do you think BMW drivers are most concerned about? Since we don't have microphones, I just pick on the front row. Lois, what do you think? And I'll repeat? What do you think BMW … quickly. Don't think too much. What do they care about?

(Female) Quality.

Quality, okay. Tim?

(Male) Profit.

Profit. BMW drivers. Customers. This is about clients at the center. Status? Comfort? Speed? Safety? Did I hear safety at high speed? Do you all remember their campaign, "The ultimate driving machine?" That's BMW. So the BMW Company I guess was dominated by engineers for a long, long time. I should do this, I guess. (Laughter) This was the ongoing perception—performance and safety at high speed. That's what I would have thought that as well. Then, the BMW folks decided, let's learn with our clients to use Claudio's language. So they did focus groups and just observed them, and what they realized is the real worry of BMW drivers was parking. They didn't want to scratch that precious limousine of theirs. So that insight led to a different type of innovation and design in the next round of BMWs. Rather than making them faster or safer, they made it easier to park, and they introduced distance sensors and dashboard designs, these types of things. So that is German engineering.

Now, here's another example that you all might remember. A client inside example. I hope I sort of pecked you right. You guys remember this, right? What is this? iMac? Yeah, that's it. First iMac. So what Apple did realize before anybody else, arguably, is that computers were becoming a fashion and style statement if you will. So they designed the iMac to be a piece of modern furniture that you actually liked to have in your living room. Remember, it only had one cable. Not all this other stuff that PCs had. That was purposeful, and it was meant to be an elegant piece of furniture, with no wires to trip over, and of course, ultimately as you know, Apple went on to sell its products in high end, dedicated retail shops. They totally reinvented something that did exist. The personal computer was not an innovation. Apple just understood far better where it was going, and in this case probably anticipated client needs and client uptake.

Now this type of insight can be very profitable as well, and helpful. So at one point in the early 90s, you might remember that as well, Apple was literally going out of business. And they had to be saved by a $100 million loan, including from Microsoft. And Microsoft probably was mostly interested from an antitrust perspective to keep that little thing alive. Now, as you can see, this is a little dated, this graph, but the Apple market capitalization as a share of all tech companies, is the lowest level where the little Apple is. And so from near extinction, Apple in October 2011, so it's a little dated, Apple represented 30 percent of the total market capitalization of all tech companies. And if I recall correctly, at one brief point in time, Apple was actually the most valuable company on earth.

So having consumer insights and being able to execute them does pay. But of course, what matters for us is something else in addition because we have another aspiration. We want to make sure that what we have to offer actually helps improve people's lives. If we don't do that, we have missed the bigger point. So against that, I want to convey four messages, and I realize based on the earlier sensor question that I'm running into a lot of open doors with you all.

The first one is, poor families have a broad range of financial needs. We do have an opportunity, and I'd argue an imperative, to better serve these needs. I will give you examples of innovations, product channels, business models, and then some summary lessons learned. And I'm drawing as much on my own private sector experience for 20 years prior to coming to CGAP. And I offer those summary lessons. So in terms of the first messages. Poor households typically live and work in the informal economy. Not by choice, but by necessity. And so in economic terms, they are producers and consumers at the same time, and as such, we should not be surprised that they do need the broad range of financial services to create livelihoods, build assets, smooth consumption in the face of irregular incomes, living off of $2 a day or $1.25 does not mean $2 every day. It might mean $20 one day, and then nine days nothing. And so they need to mitigate risks. Poor people by definition almost are far more vulnerable. So they need financial services more than we do. We get a paycheck on the first of the month, and we pay our mortgage or rent on the fifth of the month. We have nicely aligned cash flow spikes.

This is a picture of Alberto Vargas. He and his family are part of a CGAP supported graduation pilot near Cusco in Peru, and as part of this pilot, what the participating families do is they articulate their aspirations for the future. So you see behind his shoulders the "*situación actual*." Forgive me for my bad Spanish. On the right hand side is the "*proyecto de vida*." And here's what they want to do. They want to grow and protect livestock. They want to build a new stable. They want to expand housing. And as pretty much all parents in the world, they want to get the best education for their children. Now please note there's not a single product name here, like credit or savings or insurance. Kind of some of these needs do map against that, you could argue. But it's really important to first understand what their needs are, and what their aspirations are, and what their constraints are. Because I think too often we have jumped to product conclusions.

So take education as an example. In many developing countries, if you want the best education for your children, the public sector has failed you, and so you send your kids to private schools. And for private schools, you have to pay school fees. Now, school fees for poor people are a cash flow spike. That is true. But it's not an unanticipated cash flow spike. You know that in September you have to pay school fees. How can people borrow and pay interest on a loan to pay their school fees? Why can't they save up and earn interest? I think it's partly because credit was easier than commitment savings which is probably the right answer for this particular need. So this notion of understanding aspirations, constraints, behaviors before jumping to a supply side offering is truly, truly foundational to our conversation.

One way to start generating hypotheses on what poor families might need is to look at micro segments. And this is work my colleague Xavier Faz has done in Mexico. So he looked at livelihoods first and that generates a sense of cash flow patterns, which in turn inform about likely financial service needs. So for example, the microentrepreneur in his sample has clearly very high transaction density, but is pretty much cash flow positive. So they actually don't need credit. They need a transaction account in a safe place to save money. The seasonal work as farmers on the right hand side obviously need to manage money over a long -term time horizon.

To get to deeper insights, actionable for product innovation, we need to deploy different techniques, frankly, techniques that other industries have long developed for decades. And financial services in general, and maybe microfinance in particular has been behind the curve on that dimension. So one of them is, so learning from your clients. Right? One is human-centered design, for example. It starts with deep observations of people's actual behaviors. Live with the family, observe them. Don't just ask, observe, and then rapidly develop prototypes, retest them before you actually design in more depth. So we worked as CGAP with Bancomer in Mexico to help them better understand the savings behaviors of low-income households, and to extensively document that process. For us it's as important to document the process as the specific outcomes. So there's a 20-minute video on CGAP.org which you can watch. It's the most downloaded one, quite entertaining.

This is a picture of how Juanita saves, literally, in different cans for different purposes. And other interviews with other families confirm that. "I separate my money in different pockets. My mother keeps all money in bags, different bags for different things, like rent and food. We all do that." And so what Bancomer did, it came up with a product called "*Mi Proyecto*." that mimics that type of savings behavior, and this is a screen shot of the ATM. The quality is a bit fuzzy, but it shows the type of objectives the family has, and how it does in its savings efforts. There are a number of other product innovations from around the world. This is not at all exhaustive. And frankly, many of you are working on things that are more cutting edge, so I will not dwell on any of these. I think quite a few actually are going to be covered in some of the panels that we have.

I'll only comment on this one from Malawi. There, Opportunity Bank had noticed that even relatively well-off farmers had money management problems in off-season, and often were capital starved at the beginning of the planting season. So they came up with this combination product of post-harvest commitment savings, and consumption smoothing, and this is one product where a group of researchers actually embedded pretty hard-core evaluation, impact evaluation. So this is a randomized controlled evaluation, technology borrowed from direct trials, one who gets access to the innovation, and otherwise similar group does not. And what happened in this particular case, in light blue is the control group, the one that did not get access to this product. Dark blue is the group that did get it. And so at the next year, one year later, what happened was that the folks who benefited from this product innovation had a 27% higher input that they put in. They had higher sales and revenue, 22%, and that translated all the way to household expenditures at 17% higher. This is all at statistically significant levels. So understanding these types of dynamics, we can't do that for every product roll-out, but we as a community every now and then have to do it so that we actually know what works, and ultimately improve people's lives.

Now, for serving the poor, arguably, it's not just enough to know their needs, have learned with them, designed better products. We also need to deliver these services in a viable fashion. And you said in your clicker responses earlier that that is one of your biggest challenges. And so we are wrestling and learning together with this. I share a couple of examples. In India where I lived for five years, so I have a little bit of a knowledge bias here, population density like actually in Bangladesh I suspect, it allows actually for still experimentation with branch-based models. One of them is the KGFS. Five pilot sized, 300,000 customers. And their aspiration is to essentially help households maximize wealth in the long-term. So their model is characterized by these four things. Their front line people are actually called wealth managers, not loan officers. And they are incented to help a household understand its plans, aspirations and what they therefore need, offers the full range of products, local physical branch presence, very, very low cost technology enabled. And essentially KGFS has built a whole ecosystem, being in economic terms the principal for the credit delivery, but an agent for all other services. Dave Wallack is here from KGFS and is on one of the panels and will speak more about this model.

Another Indian example is Janalakshmi. That's an urban-based, an urban MFI based in Bangalore. They too want to be a full advisory in-service provider for the microentrepreneur segment that they call accelerators. The picture shows one of their pilot service centers. So the idea is to create a "branch" that actually feels like the living room of an aspiration, the Indian lower middle income family. We are working with them, CGAP is supporting this experiment. And we are working with them to basically reorganize the entire business system to deliver this value proposition in a viable fashion. And what we will do is we will blog on this experience and put out Facebook entries live as we go, so that you all and we all as a community can learn. So if you're not on Facebook yet, friend CGAP and stay tuned.

Now, in middle income countries, I think it's important to understand that the type of innovations, of course, are very much driven by the economic environment that you're in otherwise. And in middle income countries, you have other infrastructure that you can leverage successfully. So this is OXXO in Mexico. OXXO is a convenience store, much like 7/11 in the US, and OXXO has 10,000 stores with 7.5 million daily transactions, of course, not all financial. OXXO has more stores than the entire banking system of Mexico has branches. Forty percent of their customers are low-income. Bancomer, one of the large Mexican banks, decided to enter a banking correspondent arrangement with them, and overnight Bancomer's access points in the communities increased fivefold because they are leveraging. They are borrowing somebody else's asset. That is one way of actually lowering your cost as a financial services provider.

Now, of course, the iconic example of channel innovation in a low-density, low ticket-size setting, is of course M-Pesa. And M-Pesa had a bit, and we heard that, maybe to some degree from you as well, with bKash, but M-Pesa really had to put it in client terms, value proposition terms. What M-Pesa had was an early killer application, namely to safely transfer money from the city to the countryside. Kenya, like most countries, or many countries, is characterized by a lot of domestic migration, and it also has safety issues. So to send money on the bus, cash on the bus, is actually not so good an idea. So the money transfer was the early killer application. M-Pesa's rise has been well documented and we can discuss the lessons later. But what's important is that we see now electronic money popping up in other places as well in east Africa and obviously in South Asia, including in Pakistan, and obviously in Bangladesh.

What's exciting from a broader development perspective is the uptake of other services on the infrastructure of the virtually ubiquitous electronic retail payment system. So here you have mobile money, that's the base, and you have it in a number of countries. What mobile money does, this notion of reaching everybody electronically, it enables a new set of businesses that rely on being able to process a large number of possibly teeny, tiny payment transactions at very low cost. So we see a first round of innovation happening in the rest of the financial services space. I think it's very important to distinguish from the business model perspective payments. Let me step back.

In my book, here's the definition of finance. It's the slicing and dicing of cash flows, and distributing them across space. That's payment. Across time, investments, credit, and savings, and across probabilistic state. In some sense, the payments piece is the easiest. It's now in here sending from A to B. When you give out long-term credit, you better manage that risk. If you provide a pension plan, long-term pension plan, and you promise a return on that micro pension, you have to earn a return plus some in order to honor commitment. In insurance, you need to be able to aggregate risk, manage it, and lay it off. So financial services is way broader, and more complicated than payments only. But what mobile money does is it enables some of these other innovations in financial services, and we will talk I think from the agenda about a number of them in the course of the schedule.

But beyond financial services, and this is very important for the global development community, what electronic money also does is it enables other businesses that make it easier for people, poor people in the informal economy, to make money. It lowers transportation costs, it increases the productivity of agriculture. So Kilimo Salama in Kenya is an IFC-supported innovation in crop insurance. Essentially, it sells the insurance by bag, by bag of fertilizer or by bag of seed. That's breaking down insurance to a very small transaction cost size that traditional distribution channels would not be able to deliver viably.

And the other area where the ubiquitous access to a retail payment system allows is what I would call sort of almost community-based assets. Pay as you go financing of off-grid, off the electricity grid, solar power, or community based water stations—things that you could not afford if you had to pay them in one go as a poor family. But if you spend 50 shillings today in Kenya on buying kerosene to have light, there's an alternative to pay only 40 shillings to buy the MCOPA solar panel, including the device that links me through the mobile network to the ability to buy electricity on a daily basis. It's a pay as you go. This is very exciting because it proves to the broader world at large, and I personally believe this is very important, it proves that an inclusive financial system helps real people address real challenges, and it goes beyond financial services in and of themselves. It links it to productivity gains in agriculture for small farmers or to the climate change adaptation agenda.

Now, expect technology to rapidly change in the next ten years. I personally believe we have only seen the beginning of what might be possible in terms of innovation, in particular technology and data enabled. I think it's almost impossible for us to predict exactly what's going to happen. To your point, will there be a deterministic business plan for this? I doubt it.

This is a pretty remarkable screen shot. At least, I find that. It's a photo montage that made the rounds in the social media in February [2013]. On top 2005, it shows St. Peter's Square in Rome at the time of the transition to Pope Benedict from John Paul II. And in 2013, the picture below is from Benedict to Francis. You can spot the difference. What's the difference? All these little cell phone screens lit up as people take pictures. Now, this went viral on media that didn't even exist in 2005. You see the Twitter handle on the right-hand side. Twitter launched only in July 2006, and has more than 500 million users today. And the picture is Instagram. That was only launched in July 2010, and already has 100 million users. And I think your presentation from Bangladesh vividly demonstrated that this is not anymore a developed country phenomenon. This is global. And on CGAP.org, we know where people dial in from, and we know what device they use. That's all we know. The NSA knows more. (Laughter)

So we know that from Nigeria, we have a higher percentage of smartphone usage than from France. We live in a different world, and our generation cannot predict exactly how this is going to unfold. But it's going to unfold very, very quickly.

Let me end even a little bit ahead of time with some summary lessons learned. And if I had to write them after I saw the answers to the clicker questions, I would have put a bit more of an edge to it already. I thought I might have to do more of a convincing job, but I don't because you actually know what's going on. Supply side only is not enough. Right? Business model viability is a necessary, but not a sufficient condition for success. We need to learn from our clients and with our clients. I really like Claudio' formulation. We have a more technical language that we will edit, which is sourcing and leveraging consumer insights. Absolutely key. And a lot will come from needs-based, or behavioral segmentations, this way of understanding what's really going on. When it comes to product features pricing, you've got to understand, we need to understand what are the cash flows. Even, not just to understand the needs, but also the payment ability, repayment ability, etc. And what we have learned in many, many other industries, the customer experience – is this pleasant? Are we being welcomed, etc. – in and of itself, is part of the value proposition.

So what we also can learn from other industries is how to more rapidly and more iteratively, and therefore cheaply, pursue product development and product improvements. I realize that financial services is somewhat tougher because there's more of a regulatory environment. I think you made that very clear by comparing your two businesses. One was a bazaar, no regulation, and then the other, the regulator has very legitimate concerns. So financial services will always be a little slower than the technology business. But we can do better I believe.

And then the last word on technology and other channel innovations, they hold great promise, no doubt about that. But at the end of the day, technology is only a means to an end to do things better. So this is what I had prepared, and I'm looking forward to discuss any and all of this over the next day and a half. Thank you very much. (Applause)