

Payments and financial inclusion: An interview with Rodger Voorhies of the Bill and Melinda Gates Foundation

Bill & Melinda Gates Foundation's Financial Services for the Poor initiative seeks to extend financial services access to those who lack it, particularly in rural and poor regions of the developing world. Behind this goal is the belief that access plays a crucial role in helping people move out of poverty. Rodger Voorhies, director of the initiative, has spent nearly two decades living and working in emerging markets. His experiences wrestling with challenges in microfinance and financial access in Africa and Eastern Europe eventually led him to the Gates Foundation, where he believed he could address these issues on a larger scale.

McKinsey on Payments sat down with Mr. Voorhies in our Seattle office to discuss the aims and the approach of the FSP initiative, the specific challenges and opportunities they face, and the role of innovation in their mission.



McKinsey: Tell us about the Bill & Melinda Gates Foundation, the Financial Services for the Poor (FSP) initiative, and your approach to driving change in the world?

Voorhies: The Gates Foundation is trying to tackle big inequalities in the world. Internationally, we have a focus on global health and development, including agriculture, water and sanitation, and financial services for the poor. Broadly speaking, we aim to harness advances in science and technology to save lives in developing countries. We focus on problems that have a major impact but get too little attention and funding. Where proven tools exist, we support ways to improve their delivery. Where they don't, we invest in research and development of new interventions like vaccines, toilets or flood-resistant seeds. Finally, we want to ensure that our investments achieve the highest possible impact, for the greatest number of people, over the longest period of time.

In considering why the Gates Foundation should be focused on financial services, we had three initial questions: Why do financial services matter? Why do the tools that low-income people have now not work for them? And, what would have to change to actually provide access to the over 2 billion people who are left out right now? That is a huge inequality, and yet poor people are really active consumers of informal financial services. What would actually have to change to get them access to formal financial services? Why would that have a social welfare effect?

McKinsey: How do you define the FSP's goals for broadening the financial system? Where is your focus right now?

Voorhies: There are 2.6 billion people on the world who live on less than \$2 per day; 77 percent do not have a bank account of any kind; and the vast majority lack any kind of credit or insurance. The challenge is that poverty is not static; rather, over a period of years, hundreds of millions of people rise out of poverty by taking advantage of opportunities, but almost an equal number fall back down because of shocks. Those shocks can be health shocks; they can even be positive shocks like weddings, or they can be the birth of a child. These things consume resources and can push people deeper into poverty. Our FSP strategy aims to capitalize on advances in mobile communications and digital payments systems to connect poor households to affordable and reliable financial tools.

I would just challenge people to imagine living without access to any of the financial services that many of us take for granted. No bank account to save for the cost of schooling or put away money for a rainy day. No way to get a car loan or a mortgage. No way to get a credit card or anything to get through a difficult month. No insurance when your health fails or your house burns down.

McKinsey: FSP is active in a number of countries. How did you determine what countries to focus on, and how do you manage the differences across markets?

Voorhies: Even though we are the world's largest foundation, we do not have the ability to be everywhere. We would like to change the lives of the poor in every country of the world. However, we have to be strategic in our investments. Our goal is to both drive inclusion directly, as well as create examples of success for others to learn from and build upon in their own countries. As a result, we are focusing our efforts on opportunities we see that have major impact. For example, India is a very important country for FSP, and we are increasingly active in Nigeria. We started in countries that we thought had a "readiness factor." We looked at places where there were big populations with a huge degree of financial exclusion, and where we thought we had partners aligned with capabilities that would allow us to create great demonstration cases in those markets.

As far as differences in markets go, there are a lot of unique cultural, historic retail structures that affect market and customer behavior. But we also think these differences have most impact at the boundaries, at the periphery. The core operating systems both on the payments front and on the payments back end are, we think, transferable market to market.

McKinsey: Prior to joining the Gates Foundation, you were the CEO of two banks – one in Malawi and one in Serbia. What led you to the Gates Foundation?

Voorhies: I started my career at Bank of America and out of graduate school went on to work in the developing world. I worked in post-Communist Europe in 1991. The challenge I saw was that the lack of access to financial services really left low-income people in a vulnerable position. I then started working in a number of microfinance institutions, and with a group that started a bank in Malawi called the Opportunity Bank of Malawi, with the express purpose of

going beyond credit into savings and insurance for low-income folks. The bank grew rapidly and became, in terms of customer base, one of the larger banks in the country. Yet I still struggled with huge issues around transaction costs, access and actually reaching the customers we cared about, because I couldn't change the economics. That is what really led to me to the Gates Foundation, where we thought we could deal with these issues in a bigger way. So, I've spent much of my career in Africa, and then in Eastern Europe, really wrestling with these issues, especially low-income consumers, access to rural families and smallholder farmers.

McKinsey: What are the major barriers preventing low-income consumers around the world from gaining access to reliable, affordable and sustainable financial services?

Voorhies: We think that there are several factors preventing the private sector, in particular, from extending and developing the sustainable

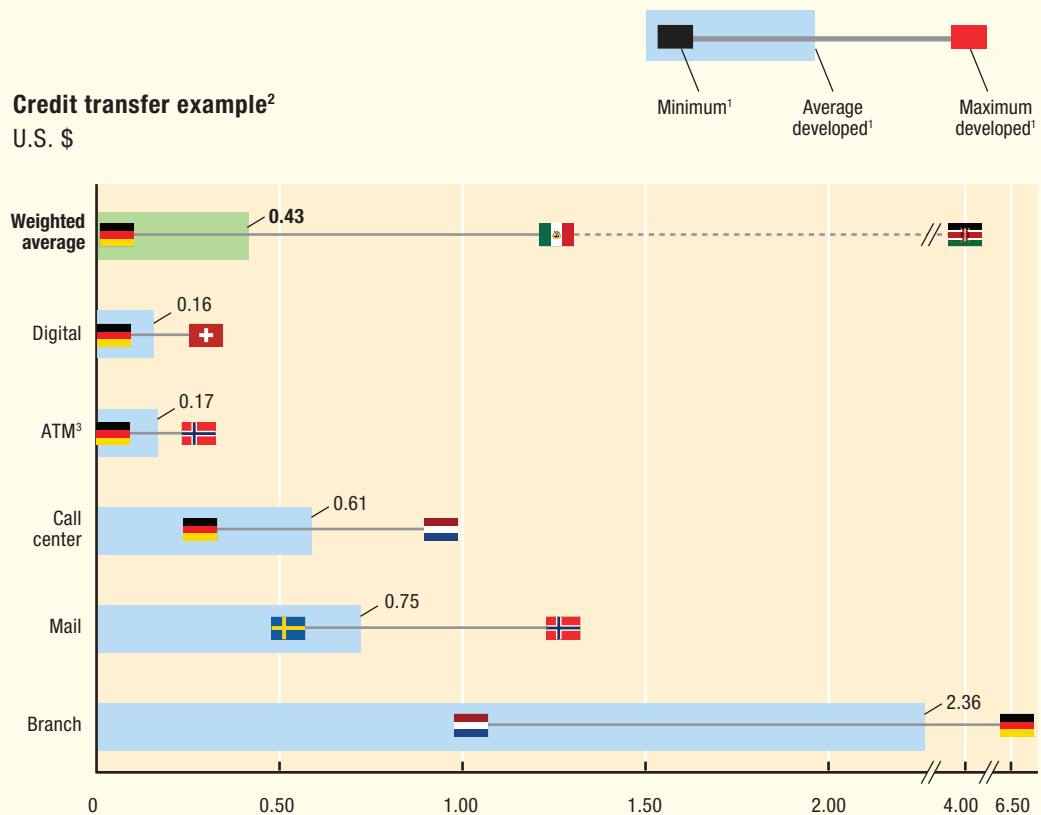
solutions for low income consumers at a price they can afford. If we can solve these, we unlock tremendous positive change. The first is the cost of transactions, which is one of the reasons why we focus on payments. Until we get transactions to a cost level that poor people can afford we are never going to be able to make a dent in this problem. The Gates Foundation has conducted extensive research around the world which leads us to believe that if we can move transactions from cash to digital, we overcome a big piece of that cost-bearing and can eliminate up to 90 percent of the cost from transactions (Exhibit 1).

The second barrier is asymmetries of information. Poor people are caught in this problem that we almost know nothing about. We know a lot about agronomy in the field of development; we know a lot about health services, but we almost know nothing about the financial behavior of poor people.

Exhibit 1

Digital channels have lowest transaction costs and lowest cross-country variance

Credit transfer example²
U.S. \$



¹ Based on cost estimates in U.S. and Europe.
² Digital payments are initiated through the internet, and can include file/batch payments for corporate users. Mail is initiated via mail-in form to payer's bank.
³ ATM transactions are similar to digital (the ATM playing the role of the payer's computer) with additional small cost allocation from time ATM is used for credit transfers. However, only more efficient payment systems offer credit transfers via ATM, so the maximum cost across sample countries is smaller than for digital.

Source: McKinsey Global Payments Map; The Bill & Melinda Gates Foundation, Financial Services for the Poor – Fighting Poverty, Profitably (2013)

The third barrier is access. Consider that in Nigeria, which has 163 million people, there are only approximately 16,000 financial access points of all kinds – bank branches, ATMs, mobile money agents, etc. Almost all of them occur in urban areas, leaving rural areas thinly served (Exhibit 2). The data tells us that the closer you are to a financial access point, the more likely you are to use it. But if you are 15, 20 or 30 kilometers away, you just do not even have access to it physically.

McKinsey: The Gates Foundation is a major grant-making institution and deploys billions of dollars annually across all of its programs. How does FSP determine the best opportunities for deploying capital?

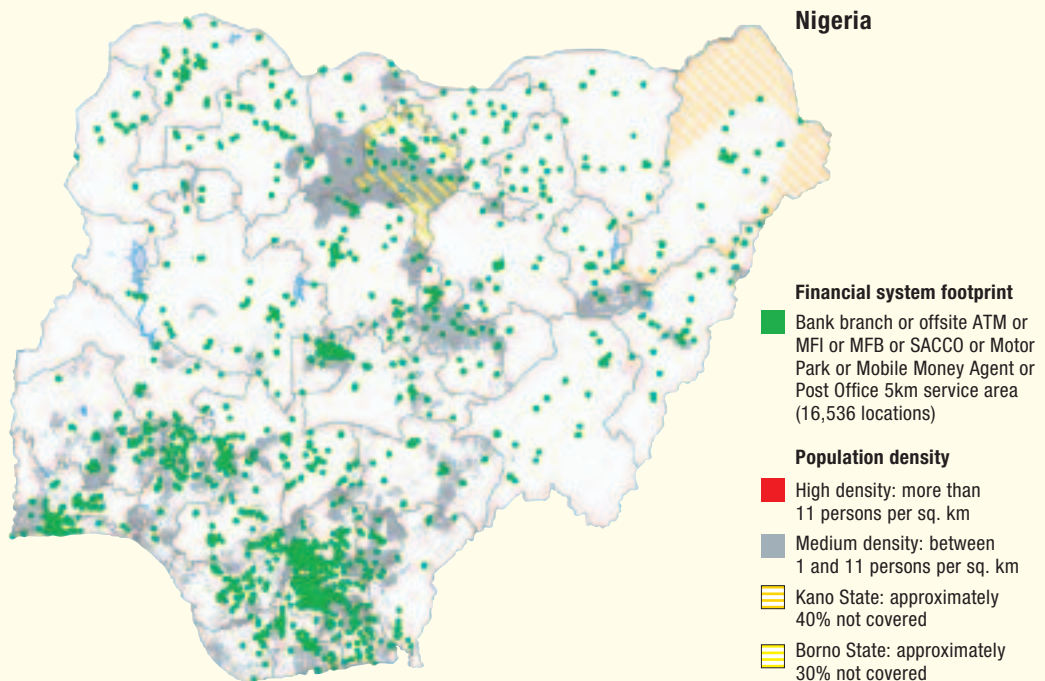
Voorhies: First, we try to create public goods that actually help the whole industry to be successful. Our work in geospatial mapping is one example of this. Next, we try to create demonstration cases, to “crowd in” other players, who can see what is working. The third approach is to fund real innovation. I think we’re not going to get there unless we have real technological innovation and real business model innovation.

McKinsey: Can you share some examples of work the Gates Foundation and others are doing in financial access that have potential to positively impact low-income consumers?

Voorhies: When I was in Malawi, we worked to have harvest proceeds from small farmers go directly to deposit into commitment

Exhibit 2

In Nigeria, financial access points are highly concentrated in urban centers



Population within 5, 10 and 15 km of financial services areas				
	Number of access points	Relative percent of population (5km)	Relative percent of population (10km)	Relative percent of population (15km)
Rural	4,490	24.1	43.9	60.1
Urban	12,046	95.5	98.2	98.8
Total	16,536	47.3	61.6	72.7

Source: The Bill & Melinda Gates Foundation, Financial Services for the Poor; Brand Fusion; AfriPop; Global Rural-Urban Mapping Project; Center for International Earth Science Information Network; International Center for Tropical Agriculture; Second Administrative Level Boundaries

savings accounts designed to help farmers save for fertilizer. Based on a study done later, 21 percent of the farmers used the option, but the really cool thing was that it led to a 22 percent increase in revenues because there was more money for seed and fertilizer. That in turn resulted in a 17 percent increase in household consumption after harvest. That is the difference between having a tin roof and a thatch roof, or between kids going to school and not going to school. Another example involves one of the partners we work closely with in Bangladesh – bKash. This is a platform that serves a number of mobile network operators, and offers a person-to-person (P2P) payment system that serves over 5 million clients. Their business model allows P2P transactions to flow for a price of just 2.5 cents to the customer. We think that organizations like bKash have real potential in all kinds of new areas.

We're also particularly excited about work we're doing with garment factory workers in Bangladesh. We are trying to get payrolls paid electronically rather than in cash. The social impact of doing that is not just the cost savings of moving from having to stuff envelopes with cash, but in allowing the women, who make up most of the workers in garment factories, to save in ways that were really difficult before.

McKinsey: Where do you hope to make real changes over the coming years?

Voorhies: We have a comprehensive framework for focusing our efforts and grant-making. Let me share a couple of examples. One is around what it actually takes to open an account. In some of the countries we work in, it can take a month or two to open an account. We are working with a number of players around the world to see if we can get that down to 30 seconds. We're also looking at new systems of distribution. Brick and mortar channels are not going to get us there. It takes approximately \$2 or more per transaction if you're going to run a brick-and-mortar operation. ATMs can get that down to perhaps 10 to 20 cents a transaction. But a mobile phone can potentially be lower than 5 cents a transaction if they are done efficiently.

McKinsey on Payments: Payments systems are complex value chains with multiple stakeholders. How does FSP approach working with the different parties in the ecosystem to influence change?

Voorhies: One of the big challenges is that some countries seem to be bank-led, meaning banks will go downscale to reach to low-income people. And others appear to be telco-led, where they're going to allow a non-bank payment system to reach them. At the Foundation, we shy away from this dichotomy, and think more about what processes have to be in place. We have to think of where the costs are in the system and what platforms can be leveraged to help poor people. Then, we think about adjacent revenue streams that could provide the revenue to institutions to provide those services. After that, we need to figure out how the regulatory environment can best allow these changes to happen.

A recent study we are putting out entitled "Fighting Poverty, Profitably" looks at some of these questions with payments systems and how they might reach poor people. We focused on a wide variety of countries, and the conclusions argue for both policy changes and for business models that are a lot more innovative and require real partnership between different kinds of actors than we have right now.

At the moment, you have models where people are making the money off of float in the account, or they are making money off of lending to the customer through intermediation, and yet losing money on the payment stream. Poor people are probably not going to keep enough in their balances to support the float-based system, and it is probably a moral hazard to assume we are going to make enough money off of lending. So, the model that most banks are using as a profitability construction does not work. We believe it is possible to find new business models that shift the economics. A critical component in our eyes is tapping into adjacent revenues that can be linked to broader financial services, such as cross-selling insurance, or non-financial services, such as reducing customer churn for a mobile operator.

McKinsey: It seems like there is more innovation happening in payments now than in many, many years. How does FSP look to harness innovation to solve problems?

Voorhies: I think that's really true. From being a banker in the last 25 years, I think there is more innovation taking place in the last five years than I've seen in my entire career.

At FSP, we looked at over 300 companies that are doing real innovation in this space, thinking about how what they are doing can help tackle the challenges we see: How can we instantly onboard people?

Can we create commitment savings accounts? Can we create direct access and self-signup so that opening an account looks more like opening your email account than it does opening up your current bank account? (Exhibit 3) There is some great innovation taking place that can be transferred to help solve problems in the developing world. We are working with a couple of partners that are doing this now in some developing countries, and we hope in the next few months to announce some initiatives.

McKinsey: What advice would you offer traditional financial services providers hoping to offer services to low-income segments?

Voorhies: I'm not sure that anyone, including the Gates Foundation, would come to the conclusion that there's one right path. Solving these issues will require new kinds of partnerships and different kinds of open platforms, and will require brand new actors that we have not even thought of before. We think this requires an understanding of economics end-to-end, ensuring delivery effectiveness, such as scale and operating efficiency, and new partnership and creative alliances to capture the value of adjacent revenues.

Exhibit 3

Financial Services for the Poor's Digital Money Innovation Framework

FSP's Digital Money Innovation Framework outlines seven components that must be in place for digital money systems to thrive and scale. The following are examples of technology and business-model innovation that could overcome hurdles in these seven key areas.



Source: The Bill & Melinda Gates Foundation, Financial Services for the Poor