

## The End of Financial Marginalization Is in Sight: Here's the Roadmap

We now have the tools and knowledge to radically reshape financial infrastructure to be ultra-inclusive, to spur the proliferation of diverse financial products that help the poor weather financial shocks and seize opportunities, to enable governments to operate more transparently and efficiently, and to foster new models of service delivery that can scale sustainably. Realizing this vision, however, will take deliberate, coordinated action by policymakers and regulators, and far more collaboration between the financial services industry and government than exists today. Above all, it will mean recognizing that ending “economic untouchability,” to quote Indian Prime Minister Modi, is an imperative for societies committed to shared prosperity and accountable governance.

Today, some two billion people around the world manage their already precarious financial lives without the help of tools the world's banked population uses to make retail purchases, buy a home, access health care, educate their children, and save for emergencies and retirement. Not surprisingly, most of this unbanked population live in developing economies, are disproportionately poorer than their countrymen, and more likely than not are women. Furthermore, despite recent World Bank data indicating that account ownership globally has increased over recent years, the types of financial products available often do not meet the urgent needs of the poor to even out highly variable incomes and reach longer-term goals.<sup>1</sup> Thus, the oft-cited figure of two billion unbanked worldwide undoubtedly masks a far greater number of underbanked—the individuals and institutions poorly served by the financial products that are available to them.

Until it becomes profitable to bank the poor, financial inclusion will remain illusory. Creating a market for commercially viable financial services relevant and affordable to the poor requires investing in shared infrastructure and aligning economic incentives so that serving the poor isn't just possible but profitable. To make this happen, governments and their partners in the development community must redefine which

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elements of financial infrastructure should be considered public goods and thus deserving of public funds, and use policy and regulatory tools to close the yawning gap between financial service providers and the poor.

We believe that the financial services landscape of tomorrow will be markedly different from that of today, and that we must begin now by investing in underlying infrastructure that will allow the fundamental reconfiguration of the way financial services are delivered, consumed, and regulated. Established banks and government bodies will join hands with the disruptive non-bank players that are using digital channels and data to enable scale and understand their customers. While not a silver bullet, developing widespread digital payment systems built on modern, open architecture is the surest way to enable both banks and non-banks to cooperate and compete in serving even the very poor with a variety of financial services.

Payment systems, however, mean different things to different people and have wildly different implications for expanding the reach and utility of financial services to the world's poor. In the developed world, fintech (financial technology, for the non-cognoscenti) has given rise to slick services like ApplePay and Venmo, but these services depend on a customer's existing bank account and/or credit card, and thus make basic retail transactions marginally easier only for smartphone-wielding consumers. Borderless cryptocurrencies, such as BitCoin, offer a glimpse into a future in which money is subject to far less intermediation by banks and transacting thus becomes significantly more affordable. Yet even today to purchase them requires a conventional bank account—or significant computing power to create them.

The real action in payment innovations is in fact happening far from Silicon Valley. Entrepreneurs in pockets of the developing world are leveraging the remarkable growth of mobile telephone infrastructure to reinvent banking services for the mass market without relying on the traditional retail banking paradigm. In doing so, they are redefining personal (and retail) finance, often stripping the costly conventional banking model down to bare-boned transaction accounts, and leveraging data—big and small—to design affordable, relevant products and drive the uptake of electronic payments and related financial services.

This banking renaissance in the developing world has profound implications for policymakers struggling to eliminate extreme poverty and promote inclusive economic growth. Connected distributed payment systems that facilitate secure, immediate transactions between individuals, businesses, and governments are proving to be the foundational element of the financial infrastructure of the future and are offering unexpected benefits of entrepreneurial dynamism.

For the purposes of this essay, “payment infrastructure” refers to the back-end technology supporting the functions for switching, clearing, processing, and regulatory compliance of money transfer. “Payment systems” refers to the broader view that the regulatory environment, governance structure, design features, and architecture of the infrastructure can influence the extent to which it supports a multitude of models for money transfer via mobile phones, card networks, local agents, and other channels. It

is our view that transformational change will require the fundamental reconfiguration of the underlying payment infrastructure as well as the broader system that determines governance and, ultimately, usage and affordability.<sup>2</sup>

## DIGITAL PAYMENT SYSTEMS AS THE FOUNDATION

With the underlying digital payment infrastructure in place, the most basic financial service becomes available to the majority of people—the transaction service that allows people to pay and be paid without the burden of having to use physical cash but with the comfort of knowing that, when needed, digital value can be claimed in cash. This seemingly mundane capability brings important benefits to the unbanked, for it is not just low incomes that trap individuals in poverty but the extreme income variability that makes it so difficult for those working in the informal economy to escape poverty permanently. Having the ability to store money safely and transact securely and efficiently can have a powerful effect on household resiliency by giving the poor a basic tool to smooth income and protect consumption. Consider Kenya, home to the now-iconic M-PESA mobile money service, where researchers found that poor households with access to a basic transaction account were fully insured against consumption loss in the face of economic shocks, whereas neighbors without mobile wallets (and hence the ability to quickly solicit financial help from friends and family) endured an average 7 percent drop in basic consumption during the same period.<sup>3</sup>

Perhaps more importantly, digital payment systems provide a foundation for drastically lowering the costs companies face when delivering a broader suite of loans, savings, and insurance products to the poor. The costs of delivering financial services fall into three broad categories: (1) operating expenses related to customer acquisition, loan processing and servicing, and information technology (IT), which serve as the major cost driver when offering “doorstep banking” to the poor; (2) default costs, which are directly correlated with the ability to assess the economic risk factors of prospective clients; and (3) cost of capital, which depends not only on the provider’s track record of offering performing loans but also on its ability to access a deposit base or outside capital markets.

By dramatically cutting these costs, the prospects of reaching the poor become far more attractive to financial services companies. For example, by reducing reliance on loan officers and brick-and-mortar operations to disburse and collect funds, the operating costs of providing financial services can be cut by more than half. Furthermore, digital payments reduce the likelihood of default by ensuring that credit decisions are based on more precise information about a prospective client’s economic history. Enabling companies to review a client’s digital “footprint” allows providers to rethink the terms and features of critical financial management tools and to make them far more affordable and relevant to the global poor. Finally, it is plausible that retail financial service providers that rely on digital payment solutions for delivery can, in time, access capital at lower rates than those still operating in analog.

The emergence of low-cost electronic payment systems also has created unexpected benefits related to business growth and delivery innovations. Until now, many businesses avoided serving base-of-the-pyramid consumers, not for a lack of demand or even willingness to pay for critical services but because of the poor's limited ability to pay for services in ways that map to their purchasing power. Low-cost distributed payment systems enable incremental asset financing, such as pay-go solar energy, which opens up vast new markets for life-enhancing services that have been unable to scale without the novel financing terms made possible by affordable digital payments.

For governments, digitizing transactions such as disbursing salaries and pensions and collecting revenue transparently and efficiently can close critical gaps in their ability to mitigate day-to-day corruption and increase much-needed revenue to the state while driving financial innovation where it is most needed. Digitizing public spending also offers a key opportunity for governments to show outside investors that they are serious about rooting out corruption, fostering the inclusion of traditionally marginalized demographic groups such as poor women, and enabling a strong environment for entrepreneurs.

#### THE MANDATE FOR PUBLIC INVESTMENT

Despite increasingly compelling evidence of the broad benefits of digitizing economies, progress is in fact painfully slow. Basic digital payment services such as mobile money have proliferated in recent years, but although the community's understanding of the challenges of getting payments to scale has deepened, market failure remains the norm. This is not surprising, given that electronic payments are at best a low-margin business that requires scale to deliver return on investment. Lowering the threshold for success in a vibrant, competitive sector must become the North Star that aligns policymakers, regulators, and investors, and this objective should inform how future financial infrastructure is organized. In short, governments and their partners must be more intentional about designing the rules and financial incentives related to the provision of financial services to ensure maximum reach and affordability.

Embracing the foundational role of robust ultra-inclusive and ultra-low-cost digital payments is the critical point of departure. Although rhetorical commitments to "financial inclusion" are increasingly part of the global development dialogue, few countries have prioritized the growth of inclusive electronic payment systems and taken aggressive measures to align the requisite resources and policy. Moreover, the institutional partners that typically provide technical assistance and support to financial sectors in developing countries, including bilateral donors and development finance banks, have been slow to coalesce around a vision and a pathway that lay out the responsibility of the public sector, beyond ensuring a level playing field for payments providers. We believe that success will require forging a new consensus among policymakers that recognizes digital financial systems as a basic, critical element of the financial infrastructure that can enable better governance and broad-based economic growth in virtually all developing countries.

To move the conversation forward, we offer the outlines of a seven step roadmap for accelerating the growth of inclusive electronic payment systems. Critical to this discussion is understanding the unique role government is able to play in setting the conditions for commercial success. By aligning policy, regulation, and investment in shared infrastructure, government will be able to create a catalytic playing field that invites aggressive innovation by service providers incentivized to serve the greatest number of people possible with relevant, safe, and affordable financial services. Equally important is the development community's ability to understand the implications that design choices have on a national payment architecture's ability to foster truly inclusive finance.

- **Step One: Adopt a Shared National Vision.** Recent data released by the World Bank suggest that countries whose governments have adopted national financial inclusion strategies are expanding access twice as quickly as those that lack an explicit commitment to broadening the reach and relevance of the financial system. Formulating a shared vision for a foundational digital payment system with universal reach through a consultative process that includes relevant stakeholders across the government and industry is the first step toward creating a dynamic, inclusive financial system. This process can set expectations and drive accountability by establishing national targets and timelines, and by creating the space for critical discussions on policy, regulation, and shared investment.
- **Step Two: Pursue a Platform Approach.** Emerging digital payment technologies have the potential to reduce the cost of financial transactions by as much as 90 percent; this lower cost can translate directly into greater access and scale.<sup>4</sup> Creating a single back-end platform shared by industry participants is critical to driving down costs because it aggregates essential functions that are too costly for individual payment providers to undertake alone—including switching, clearing, compliance with anti-money laundering and terrorist finance standards, ID mapping, bulk payment processing, and, potentially, agent network management. Designing a digital finance sector around this shared platform model will spur innovation, enhance competition, and generate substantial value for providers, individuals, and the economies of developing markets.
- **Step Three: Design the System to Maximize Cost Savings and Usage.** System design choices have real implications for the transaction costs that in turn drive pricing and profitability, and thus the ability of systems to be truly inclusive. Although international payment system standards explicitly crafted to promote universal financial access do not yet exist, a set of design “best practices” is emerging. While these features can be found individually in various existing and emerging payment systems, when brought together the principles will maximize cost savings while safeguarding the safety and soundness of the broader financial system and fostering trust in digital payment services by protecting consumers. These design

principles include immediate fund transfers so that money is available to the payee in near real time; “push” payments (versus “pull” payments) to reduce risk of fraud; interoperable, open architecture to increase participation; and adherence to international messaging standards and open APIs to lower cost and foster product innovation. Furthermore, the governance structure of the underlying infrastructure can have important implications for usage. We posit that shared governance structures in which no one owner has a majority voice is critical to ensuring that the back-end infrastructure serves the needs of a variety of competing payment and banking services equally.

- **Step Four: Put the Consumer at the Center.** To make electronic payment systems truly inclusive, they should be designed with the underserved consumer as the end user that matters most. This means understanding these consumers’ preferences and designing inclusive systems that make electronic payments more attractive than using cash. Critical to this is building consumer trust in the system, which can mean, in addition to price, focusing on core drivers of consumer confidence such as speed, convenience, certainty, and privacy. For electronic payments to be more attractive than cash, they must make it possible for consumers to correct mistakes and protect themselves from fraudulent transactions.
- **Step Five: Understand the Business Cases for Inclusive Payments.** Payments are a volume business. While the domestic remittance market has been key to the growth of mobile payments in East Africa and parts of Asia, public-sector spending on salaries, pensions, social protection payments, and subsidies will be important early drivers in many small, underdeveloped economies. In some countries, incoming international remittance flows and even direct philanthropy models are potentially powerful for fostering significant adoption of digital accounts. Understanding the business cases (and the associated unit economics) best positioned to drive institutions’ and consumers’ widespread adoption of electronic payments is critical to informing the appropriate level of public-sector investment, as well as aligning policy and regulation. Furthermore, deep market segmentation will reveal the true money management needs of all economic actors, including the poor, eventually spurring the development of next-generation products that are optimized to fit the needs and circumstances of all.
- **Step Six: Foster Frequent Usage.** Based on the analysis of the business case, driving transactions through the system and participating providers is essential to creating the volume required for sustainability. Just as the U.S. Treasury Department’s decision in the 1980s to route social security payments through the new ACH system created the momentum for banks and consumers to adopt the system, government payments and collections are proving to be critical early users of digital payments. Governments also can use policy and regulatory tools to create incentives for fostering the frequent use of digital payments, including low-value pay-

ments. Such tools can include tax incentives for consumers or merchants and other innovative approaches. A key benefit to governments of incentivizing greater use of digital payments is the ability for such transactions to draw previously informal businesses into the formal economy, thereby increasing the state's revenue base. Broadening the tax base enables governments to create meaningful and impactful incentives while simultaneously increasing revenue.

- **Step Seven: Invest in the Enablers—Connectivity, IDs, and Supporting Regulation.** Inclusive digital payments depend on all citizens having the ability to transact digitally and to authenticate themselves as the payer/recipient of funds. It is inherent in this vision that citizens have access to digital tools and some means of personal identification. While the path toward universal broadband access (3G) may be a long one, governments can take interim steps to ensure that mobile connectivity (2G) is more fully utilized by women and men of all income and literacy levels. Investing in building digital skills, supporting gender-disaggregated studies on access and usage, and making policy shifts that drive down the cost of access are all critical steps. Another step is biometric identification, which is now recognized as the most efficient and secure means for building a civil registry. National IDs create efficiency in all means of service delivery, from banking to health care. While biometric systems can take years to put in place, governments can take creative interim steps to rethink the identity requirements and, for example, to facilitate the means by which the identified identify the unidentified. Just as important is establishing an enabling regulatory environment, which often means taking a tiered and risk-based approach to identity requirements and also taking steps to make the playing field more open and competitive.

## THE COST OF INACTION

The framework described above calls for governments and their development partners to make proactive, thoughtful investments to foster accessible and affordable payment systems. Should there be any doubt of the returns on such an investment of time, talent, and treasure, we end with the need to evaluate the costs to governments and to the people associated with not having functioning, low-cost digital payment solutions in place. As policymakers and their partners in the development community prioritize efforts to eliminate poverty and foster more stable, prosperous societies, government decisions to build digital payment infrastructure need to include not only the benefits of having such infrastructure in place but also the costs of not having it.

The recent outbreak of ebola in West Africa offers a sobering illustration of these opportunity costs in practice. When faced with the urgent need to rapidly expand the number of health workers and ebola responders across Liberia, Sierra Leone, and Guinea, existing systems that relied on the countries' limited banking infrastructure for delivery simply could not scale in a timely manner, much less transparently. The governments' inability to pay salaries and risk premiums to this cadre arguably un-

dermined care for ebola victims and delayed implementation of measures required to staunch the spread of the disease. As the focus shifts from response to economic recovery, policymakers find themselves struggling similarly to deliver assistance to households and communities ravaged by the disease. Were digital payment rails in place in these countries, social protection payments could be deployed rapidly to mitigate the deprivation wrought by the disease.

While the most fragile and least developed countries offer the most radical examples of how costly it can be for a nation to function without a way to pay its civil servants and security forces, collect taxes and fees, and deliver critical services to its people efficiently and transparently, virtually every other state suffers in similar albeit more subtle ways. In India for instance, McKinsey estimates that the government loses approximately \$22 billion a year as a result of using inefficient financial services. Much of that is likely lost through graft, as money or in-kind benefits make their way from the government to beneficiaries. Recognizing the scale of this problem (and its associated political cost), the government of India is now heeding the call of Prime Minister Modi to end “economic untouchability” by digitizing benefits programs and sending payments directly to consumer bank accounts, cutting out middlemen and seeding expansion of the financial infrastructure that delivers value to previously excluded Indians and the economy as a whole. The government’s investment in building the payment infrastructure to make this happen is sure to be dwarfed by the benefits many poor Indians experience, not to mention efficiencies experienced by the government.

The Peruvian government’s similar aspiration to reach all vulnerable citizens with social protection payments created sufficient policy, regulatory, and investment momentum for the financial services industry to unite around a single digital payments platform and shared agents, so that banks and alternative providers now can compete on service and products rather than focusing scarce resources on proprietary infrastructure and closed agent networks. With interoperability at its core, this system allows providers to take advantage of economies of scale while deepening the accessibility and utility of digital payments and related financial services. Built-in interoperability also means the new service will be fully integrated into Peru’s existing financial infrastructure and will encourage broad national use, rather than establishing a separate system for the poor. While efforts to end financial marginalization in both India and Peru are certain to hit bumps along the road, we should all be humbled by their commitment and the aggressive action they have taken toward digital financial inclusion. Other governments should model exactly this type of proactive engagement in order to build a commercially viable, competitive market that will ensure that even the most vulnerable can participate. The cost-benefit analysis both governments conducted clearly favors establishing digital payments as critical market infrastructure that in time will serve all people, no matter their income level or proximity to a bank. Governments across the globe should be conducting their own evaluation not only of what they gain from having this infrastructure in place but of what they are losing by not having it now.



1. Demirguc-Kunt, Asli, Leora Klapper, Dorothe Singer, and Peter Van Oudheusden, "The Global Findex Database 2014: Measuring Financial Inclusion around the World," World Bank policy research working paper 7255, Washington, DC, 2015.
2. Throughout this essay we refer to the role of the state in supporting an overhaul of the financial system as we know it. While we believe change must be enabled and even endorsed by the state through regulatory reform, aspirational but pragmatic policy making, and adherence to system design principles that will foster inclusion, we are not prescribing a specific role for the state in ownership of the infrastructure nor in providing payment or other financial services.
3. William Jack and Tavneet Suri, "Risk Sharing and Transactions Costs: Evidence from Kenya's Mobile Money Revolution," *American Economic Review* 104, no. 1 (2014), page 19. ([http://www.mit.edu/~tavneet/Jack\\_Suri.pdf](http://www.mit.edu/~tavneet/Jack_Suri.pdf))
4. Fighting Poverty Profitably <https://docs.gatesfoundation.org/Documents/Fighting%20Poverty%20Profitably%20Full%20Report.pdf>