



PAVING THE WAY FOR THE DIGITAL MONEY REVOLUTION



The coming era of digital inclusion promises to transform the way in which money is stored, transferred, and governed in developing countries, ushering in what we describe as an era of “global money.” This revolution has three components.

A close-up photograph of an elderly man with a weathered face, wearing a blue patterned scarf and a light-colored jacket. He is holding a white Sassa card in his right hand. The card features the Sassa logo, a small photo of a person, and some text in a local language. The background is slightly blurred, showing other people in a public setting.

**700 MILLION PEOPLE
OBTAINED A BANK ACCOUNT FOR THE
FIRST TIME BETWEEN 2011 AND 2014.**

The first is financial inclusion, which involves bringing formal, basic financial services—savings, credit, insurance, and transfers—to people everywhere. Recent years have witnessed stunning progress on this front driven by a combination of government-mandated bank accounts, the emergence of mobile money, and broad-based development, resulting in 700 million people obtaining a bank account for the first time between 2011 and 2014. Nevertheless, 2 billion people remain unbanked (along with perhaps 500 million small enterprises), while another half a billion have an account that is dormant, highlighting the challenge of generating demand for financial services and spreading financial literacy among poor communities.

The second component is the shift away from physical cash toward predominantly digital money for both storage and transactions. Today's

trailblazers in this area are at both ends of the spectrum. They include countries where trust in digital money, and the institutions that guarantee its value, is especially strong, such as Denmark, along with countries where trust in cash is especially weak, such as Zimbabwe. Some countries have made concerted moves toward digital money, driven either by the government, as in India, or by the private sector working as a noncompetitive alliance, as in Peru.





Photo: © Logistimo



THESE CHANGES PROMISE WIDE-RANGING BENEFITS FOR THE DEVELOPING WORLD.

The third component is the introduction of new technologies that seek to further reduce frictions in the digital payments industry. The most prominent among these is the block chain technology behind cryptocurrencies that serves as a shared, traceable public ledger to record and secure transactions without relying on a governing institution to provide oversight.

These changes promise wide-ranging benefits for the developing world. Access to and use of financial services provide people with more ways to start and expand businesses, to invest in their children and education, and to manage risk and smooth consumption over time. Digital

technology enhances these benefits by making the handling of money more convenient, secure, faster, and less costly. The implications are especially profound for women, for whom convenience and confidentiality are critical to their use of financial services and broader economic engagement.

Businesses are benefiting from these changes in the digitalization of payments by reducing the cost of transactions with customers. This has spurred the creation of new business models, enabling businesses to reach geographically remote customers without an expansive physical presence, and to move quickly to scale at the national level or, on occasion, across borders. Rapidly expanding

digital inclusion creates a growing potential customer base, which has further fueled enterprise growth rates.

Governments are also increasingly harnessing digital payments in the delivery of public transfers and salaries. This can serve both to drive efficiency gains and to encourage citizens' entry into and use of digital networks. For example, Pakistan's Benazir Income Support Program (BISP), the country's largest social cash transfer program, has successfully incorporated a number of payment innovations. When it started in 2008, payments were delivered in person and in cash via the Pakistan Post Office. In 2010, BISP began experimenting with delivery via smart cards and mobile telephones. In 2012, BISP transitioned to a new payment mechanism using magnetic stripe debit cards that are accepted throughout the country's financial system, thus serving as an on ramp for digital inclusion. An experiment in India found that the transition from distributing social security payments in cash through a local government official to distributing them digitally resulted in a reduction in the incidence of bribes for payments by half (from 3.8 percent to 1.8 percent of attempts to obtain payment) as well as a fall in the incidence of ghost recipients.⁴

The ability to distribute money to poor people digitally, and thus at low cost and with accurate targeting, has the potential to change both the logic and practice of the aid industry. It offers an approach to charitable giving that demonstrates humility, by recognizing the difficulty outsiders face in correctly identifying poor people's specific needs, and that is empowering for recipients, by

**THE ABILITY TO
DISTRIBUTE MONEY
TO POOR PEOPLE
DIGITALLY...HAS
THE POTENTIAL
TO CHANGE BOTH
THE LOGIC AND
PRACTICE OF THE
AID INDUSTRY.**

4 Karthik Muralidharan, Paul Niehaus and Sandip Sukhtankar, "Building State Capacity: Evidence from Biometric Smartcards in India." [http://www.dartmouth.edu/~sandip/Muralidharan%20Niehaus%20Sukhtankar%20-%20Building%20State%20Capacity%20\(2%20July%202015\).pdf](http://www.dartmouth.edu/~sandip/Muralidharan%20Niehaus%20Sukhtankar%20-%20Building%20State%20Capacity%20(2%20July%202015).pdf)



giving them control over how charitable resources are ultimately used. It allows donors to act with unrivaled speed to help affected populations during or after natural disasters and other kinds of shocks. In addition, it can emerge as a benchmark against which other aid interventions are judged. This can encourage greater emphasis on evidence in aid programming. In addition, it can lead to a cleaner distinction between the provision of private goods to address poverty, where cash may serve as a viable substitute, and public goods, where other interventions are warranted, ultimately bringing more clarity to aid's purpose.

The prominent role of technology in bringing about an era of global money poses challenges for regulators. The wholesale application of rules intended for traditional banks and financial service products to new service providers can easily

quash innovation and opportunities for greater competition and inclusion. Anti-money laundering and counter financing of terrorism regulations are an exacerbating factor, as they appear to allow regulators less discretion in adapting regulatory principles to local circumstances. More broadly, they encourage excessive risk aversion from service providers, which are loath to fall foul of the rules and face potentially hefty fines.

Regulators need to move quickly to assess the opportunities and risks posed by new actors and financial service products. Cooperation between regulators can help in sharing assessments and regulatory approaches across countries. For instance, in Brazil, nonbank entities are eligible to offer payments and savings and to directly access the central bank's clearing and settlement system, paving the way for a number of new

THE PROMINENT ROLE OF TECHNOLOGY IN BRINGING ABOUT AN ERA OF GLOBAL MONEY POSES CHALLENGES FOR REGULATORS.



Photo: © MasterCard



Photo: © Logistimo

commercial partnerships. Mexico's approach of tiered, know-your-customer regulations is providing more flexibility for private-sector providers who participate in the distribution of government payments.⁵ International organizations from the Group of Twenty to the Financial Action Task Force have a role to play in ensuring that global financial rules do not mitigate risk at the cost of inclusion, although this is proving to be an uphill struggle, as the clampdown on remittances from the United States to Somalia shows.

Another area where the goals pursued by regulators may be at odds with each other is the interoperability of payment services, whereby users can transact with one another regardless of

differences in their choices of devices, software, or mobile applications. Regulators have tended to view interoperability as a desirable paradigm for all digital networks; yet in practice, full interoperability is anathema to the profitability and scalability of many digital business models. An exception is the payments industry, where interoperability is essential to achieving the desired network effects. A number of successful approaches have been developed that allow competing market players to cooperate.⁶

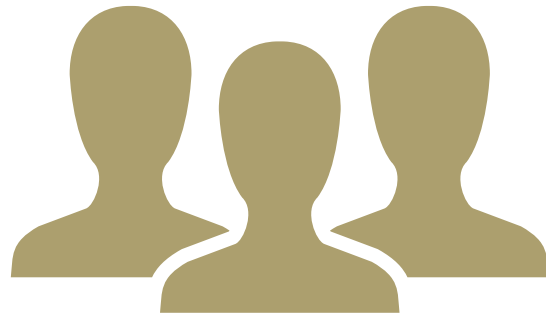
The global development community has a track record of interpreting exclusion from services as a supply constraint, only to later discover that extending the reach of services does not guarantee

5 World Bank, Development Research Group, the Better Than Cash Alliance, and the Bill & Melinda Gates Foundation, "The Opportunities of Digitizing Payments," G20 Global Partnership for Financial Inclusion, https://docs.gatesfoundation.org/documents/G20%20Report_Final.pdf.

6 Carol Coye Benson and Scott Loftesness, *Interoperability in Electronic Payments: Lessons and Opportunities* (Washington: Consultative Group to Assist the Poor, 2013), http://www.cgap.org/sites/default/files/Interoperability_in_Electronic_Payments.pdf.



Photo: © Premise



**CUSTOMERS ARE MORE LIKELY TO TRUST A DIGITAL
PAYMENT SYSTEM IF VENUES FOR OBTAINING CASH...
ARE WIDELY AVAILABLE AND IF THE EXPERIENCE FOR
OBTAINING CASH IS SECURE AND RELIABLE.**

uptake without complementary efforts to address the demand side. The roll out of technological innovations with a consumer-driven design can succeed in addressing supply and demand challenges simultaneously, but more common is for consumer education efforts to fall short because they are underfunded and poorly implemented. This is certainly true for financial services and the use of modern payment technologies. Efforts to draw people into formal financial services and digital payments, such as by disbursing welfare payments through digital accounts, have often failed to trigger broader usage.⁷

A key demand and design issue is the digital-analog interface. Customers are more likely to trust a digital payment system if venues for obtaining cash—so-called cash-out points—are widely available and if the experience for obtaining cash is secure and reliable. More broadly, less confident users of digital payments and products are likely to opt for traditional, human-centered ways of interacting with financial service providers to manage their digital money. That means working through mobile money agents or phoning call-centers, rather than relying on Web-based or text-messaging-based platforms. Investing in the digital-analog interface can foster greater trust in and ultimately encourage greater use of digital money.

⁷ Consultative Group to Assist the Poor, *Social Cash Transfers and Financial Inclusion: Evidence from Four Countries* (Washington: Consultative Group to Assist the Poor, 2012), <https://www.cgap.org/sites/default/files/Focus-Note-Social-Cash-Transfers-and-Financial-Inclusion-Evidence-from-Four-Countries-Feb-2012.pdf>.