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Organization of the Journal

Each issue of *Innovations* consists of four sections:

1. **Lead essay.** An authoritative figure addresses an issue relating to innovation, emphasizing interactions between technology and governance in a global context.
2. **Case narratives.** Case narratives of innovations are authored either by, or in collaboration with, the innovators themselves. Each includes discussion of motivations, challenges, strategies, outcomes, and unintended consequences. Following each case narrative, we present commentary by an academic discussant. The discussant highlights the aspects of the innovation that are analytically most interesting, have the most significant implications for policy, and/or best illustrate reciprocal relationships between technology and governance.
3. **Analysis.** Accessible, policy-relevant research articles emphasize links between practice and policy—alternately, micro and macro scales of analysis. The development of meaningful indicators of the impact of innovations is an area of editorial emphasis.
4. **Perspectives on policy.** Analyses of innovations by large-scale public actors—national governments and transnational organizations—address both success and failure of policy, informed by both empirical evidence and the experience of policy innovators. The development of improved modes of governance to facilitate and support innovations is an area of editorial focus.

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Jan Chipchase and Panthea Lee
with an Introduction by Bill Maurer

Mobile Money: Afghanistan

INTRODUCTION
by Bill Maurer

Money and banking services are taken for granted in western countries. The trust and confidence we have in our currency, as well as in our savings and checking accounts, goes largely unquestioned. And yet, in much of the world, that kind of security is unknown. Over half the world's population lives without reliable banking institutions. They live in a world rife with theft, graft, and bribery. "Cash stuffed under the mattress" is a real phenomenon, and in many places, it's a more reliable way to guard and access one's life savings. Money is transferred as it has been for centuries—through informal couriers or *hawala* brokers who operate on an honor system. There is an opportunity and a need for a new way of sending money to others, and a new way of banking.

The near-universal presence of the mobile phone is offering just that opportunity, while also providing possibilities for bettering the lives of millions. "Mobile money"—applications for transferring small amounts of money, or offering basic savings accounts and other services—is generating excitement among development practitioners, the donor community, technologists, microfinance experts, user-interface designers, academics, and many others.

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Bill Maurer is director of The Institute for Money, Technology, and Financial Inclusion at the University of California, Irvine.

The idea of mobile money became concrete in 2007. In that year, after a pilot program supported by the United Kingdom's development aid organization and Vodafone, the Kenyan mobile network Safaricom launched its M-PESA service. M-PESA permits person-to-person money transfers via mobile phone using an extensive network of M-PESA agents throughout the country. The sender initiates a transfer via text message and the recipient of the message goes to an agent to collect the cash. As of late 2010, M-PESA had over 12 million subscribers and had become an integral part of Kenyans' everyday lives.

There is an opportunity and a need for a new way of sending money to others, and a new way of banking. The near-universal presence of the mobile phone is offering just that opportunity, while also providing possibilities for bettering the lives of millions.

Many other countries around the world are trying to replicate M-PESA's success. In one such effort in 2008, Vodafone and the telecommunications company Roshan created "M-Paisa," a money transfer service initially used to facilitate payroll for the Afghan national police force. The service is now taking hold with the general public, but questions around its long-term impact remain. Will Afghanistan's M-Paisa achieve the same kind of scale, level of consumer confi-

dence, and degree of economic significance as Kenya's M-PESA? And if it were to do so, what would this mean for Afghanistan, a country that for millennia has been the crossroads connecting the world and as a consequence, a battleground for political and economic dominance?

In the words and photographs in this book, frog design's executive creative Director for Global insights Jan Chipchase and researcher Panthea Lee report on research they did in the summer of 2010 on the nascent mobile-phone-based financial services currently available in Afghanistan. The field study provided some valuable insights into the service, but to understand how M-Paisa is used, Jan and Panthea had to understand the culture of Afghanistan and the people's day-to-day lives. That's why this book is also partly about afghans' everyday economics and the daily struggles they have with life and work.

To fully appreciate and understand the mobile money phenomenon, reflect for a moment on the fact that so many service providers use variations of the word "pesa" in their names: M-PESA in Kenya, Iko Pesa offered by Safaricom's competitor Orange, EasyPaisa in Pakistan, and Zpesa in Tanzania. Obviously, there's an attempt to capitalize on the recognition consumers have with the M-PESA brand, but there's also significance in the word itself. "Pesa" in Swahili; "paisa" in Dari, Hindi, and Pashto; "peso" in Spanish and other Romance languages: the words

derive from the same root, *pensare*, which is Latin for “weight.” The names of these mobile money services are a continuation of an ancient practice for determining value: the use of scales and weights to measure precious materials like gold. It’s a reference to a world in which value had to be tangibly ascertained and verified, where you could see what something would be worth regardless of what language you spoke because you could feel the heft of the thing in your hands.

In the travelogue of his adventures through Afghanistan in the mid 1830s, Godfrey Thomas Vigne relates that the moneylenders would come to a debtor’s house in Kabul with a set of scales, and “compel payment of the money, by residing in the poor man’s house, as his guests, till the cash be forthcoming, as the laws of hospitality will not permit him to turn them out.”

From Vigne’s time to the soviet occupation to the Taliban regime and the US-led invasion of the late 20th and early 21st centuries, Afghans feel the weight of history. They also feel the tenuousness of institutions, since banks and governments have been seen again and again to fail. Hence the role of kinship, tribe, and elders in a land where life expectancy today is only 43 years.

Afghanistan’s long history may hinder mobile money. The obstacles may be insurmountable. There are electricity failures and irregular bank hours. The Taliban insist that some towers be turned off at night. People withdraw their cash as soon as it registers in an account. People trust gold, and they trust the *hawala* networks that have endured at least since the time of Vigne to transfer their money. By contrast, most distrust the commission structure of the mobile money service; it looks like a bribe, and it’s hard for people to know why they should trust an agent, or, likewise, for an agent to know why he should trust the service itself.

And yet, many of the ingredients for a successful mobile money service are there. There is latent demand. There is an existing means of domestic money transfers through *hawala*. One might imagine the *hawaldars* themselves becoming mobile money agents, offering the service alongside their own. There is sufficient mobile phone penetration, with only a few dominant carriers; there is also regulatory flexibility since the initial launch of M-Paisa happened through government payroll, harnessing an existing government-to-person payment system.

Also, there is love. One of the most interesting findings of our researchers is the role of mobiles in courting and love marriages. Sending airtime to sweethearts as an alternative currency provides a model for how one might envision mobile money unfolding as a space of play, freedom, and hope.

In *The Sound of Language*, Amulya Malladi’s novel about afghan refugee life in Denmark, the protagonist, Raihana, marvels that the money she will receive from her betrothed will, in this new land, be her money, not her father’s, not her brother’s, not anyone else’s—hers. Despite the dangers, the risk of thieves, the continuing threat of violence, there is something to be said for the hopefulness found in the simple act of calling up your beloved with the airtime he sent you as a gift. Mobile money might just work in mobilizing the gifts of ancient provenance in Afghanistan—gifts of language, of love, and of the durability of social relations in a land seeking balance.

MOBILE MONEY: AFGHANISTAN

by Jan Chipchase & Panthea Lee

Notes From the Field

In late summer 2010, we landed in Kabul, Afghanistan, to conduct a field study exploring practices around money, with a particular focus on the M-Paisa mobile banking service recently launched by local operator Roshan. Most readers know Afghanistan from the constant stream of headlines about war, corruption, and poverty. These realities were part of the frame for the study, but our research focused more on day-to-day life in Afghanistan in order to better understand the “kitchen table” struggles individuals and families have with handling money, paying bills, and saving for the future.

As research topics go, it’s unusual to find a subject simultaneously so ubiquitous and taboo as money. How honestly would you answer if anyone, much less a stranger calling him or herself a “researcher,” asked you about your income? Would you feel comfortable revealing how much you save or where you hide your money around the home? In Afghanistan, even acknowledging the existence of money presents a problem. Because of the high levels of poverty and a history of institutional and governmental instability, visibly displaying or discussing one’s wealth is asking for trouble.

And yet, *we can’t not talk about money* because money represents so many things. It can be a means of exchange, a unit of account, a store of wealth, a medium of choice, or a medium of control. Money represents access, stability, liberation, and power. But having money, while almost always useful, is hardly enough. People also need the ability to use money—or other forms of stored value—in practical and productive ways.

Basic banking services, however, are out of the reach of most of the world’s poor, and certainly of most Afghans. Official figures indicate there are 83 bank accounts for every 1,000 people, but the penetration figures are inaccurate. The few Afghans that are able to get bank accounts often have more than one. Most of the population doesn’t have access to savings accounts, let alone insurance, payment services, or formal lines of credit. If you’ve always had access to such services, it’s hard to imagine how critical they are to leading secure, happy lives. Savings allow us to decrease our risk in handling and storing cash, and insurance allows us to protect against economic shocks. Payment services help us save time that can be spent in more productive ways, and basic credit allows us to use current assets to seize upon future opportunities.

Those without are often forced to seek out comparable alternatives through informal, unregulated markets, often at greater burden, risk, and cost to themselves. There is always the underpaid government official with palms extended or the day-long line at the utility company. Lack of access to primary financial instruments contributes to the marginalization of those already most vulnerable, and exacerbates the cycle of poverty.



Street scene, Mazar-i-Sharif



Roshan sign, Jalalabad



Barbershop, Jalalabad



Trader, Dehdadi

Many people associate mobile banking with cities like London or New York, but its potential impact is far greater in countries where there is limited access to fixed banking infrastructure. In London, the addition of person-to-person mobile money transfers is incremental to multiple bank accounts, online banking, PayPal and its derivatives, and multiple ATMs on every high street. How would a mobile money transfer system aid the current practices of (limited) banking, Western Union, or even delivering money in person in developing countries?

Access to basic money transfer services will help poor families save time and money that can be spent in more productive ways. Basic credit will allow them to use current assets to capitalize on future opportunities. Appropriate insurance schemes will allow them to protect against economic shocks. The ability to save, and to do so securely, will allow them to decrease their risk in handling cash. Taken in sum, access to basic financial instruments will allow families to pursue economic opportunities, generate greater income, and accumulate amounts of net worth. As a result, they will be more able to meet their life and emergency expenses.

Every service provider appreciates the many elements that go into a successful service offering: from how the brand is positioned in the marketplace, to pricing, to understanding the full range of consumer touchpoints. What do we know about consumers in Afghanistan today? We were not just interested in their current attitudes and practices around money and mobile phones, but also their hopes, dreams, aspirations—these can all drive or impede the adoption of mobile banking services.

Afghanistan was chosen as the destination for this research because of the rise in mobile subscriptions, the stubbornly low level of fixed banking infrastructure, and the widespread distrust in formal banking institutions. Building on research such as *Portfolios of the Poor*, which highlighted the strategies the poorest members of societies use to manage their limited resources, as well as the sector-galvanizing discussions led by the World Bank's consultative Group for the poor and the GSMA's Mobile Money for the Unbanked initiative, our goal was to explore traditional money and emergent mobile money practices in Afghanistan, and to contribute to the knowledge base of the mobile money community. It is our hope that these findings are useful for those who wish to develop second-generation banking models and services that respect the diverse needs of poor users, and that our approach encourages others to take the time and effort, wherever possible, to understand those they are working for.

The Method

For most foreigners in Afghanistan, there are three models of working: the military model, the NGO model, and the journalist model. Those associated with the military stay on a fortified base. They are tooled up and primed for things to go wrong when they step off-base. non-governmental organizations (NGOs) and their employees have their sights set on the long-term, and they operate within strict security protocols that often limit staff interaction with the locals by stubbornly keeping them from the streets. Journalists use a model that allows nimble move-

ment and a high degree of interaction. They hire a good local “fixer,” keep their movements unpredictable, and maintain good situational awareness. For this study, we adopted the journalist model, with the added bonus of using motorbikes to beat Kabul’s legendary traffic jams, and to ensure quick in-and-out access to dirt-road edge cities. Our accommodations were in comfortable, local, low-key guesthouses.

One of the benefits of working in Afghanistan is that there is already a relatively large pool of fixers who support the international media, the various development organizations, and the military forces. Fixers know the physical, social, and political lay of the land and can turn on the charm and hustle as needed. We hired three male and two female local fixers of a range of ethnic backgrounds—Pashtun, Hazara, Uzbek, Tajik—who were fluent in the main local languages—Dari, Pashto, and Uzbek.

The field study centered on three cities—Kabul, Jalalabad, and Mazar-i-Sharif—and the small town of Dehdadi, chosen because M-Paisa was in use in these locations, and because they were relatively accessible and secure. The research was anchored by eight in-depth home interviews and 25 intercept interviews conducted in everyday contexts—on the street and at the bazaar—and included people in a range of professions, from small entrepreneurs, farmers, and schoolteachers, to police officers and players active in the M-Paisa ecosystem. We also carried out a number of pleasantly chaotic large group interviews, using guerilla ethnographic techniques familiar to researchers worldwide but, for obvious reasons, less practiced on the streets and back alleys of Afghanistan. Oral data consent was obtained prior to in-depth interviews, and in-home contexts, participants were encouraged to review and delete photos from their session prior to the team taking ownership of the data. Interview notes were written up at the end of every day, and cleaned up on return to home base. Time in the field included group synthesis sessions.

Going to a country with both a tradition and a present revival of *Purdah* (the seclusion and veiling of women), we anticipated a gender bias in our results. Within these boundaries, our methods and our mixed-gender team still gained access to female respondents. We visited women’s collectives, women’s public call offices, and several homes. Nevertheless, conservative gender dictates restricting women’s movements and behavior limited our interactions. Despite our efforts, only one-fifth of our respondents were female.

Findings and Profiles

Using insights from our interviews, the following pages sketch the profiles of three potential mobile customers and one M-Paisa agent. Salid (page XX) is a successful store owner and businessman who doesn’t see the need to stop using the banks and the *hawala* agents he’s been using effectively for years. Ahmed (page 23) is a day laborer who is unable to make enough money to pay his electricity bills, his father’s healthcare costs, and the fees for his two younger brothers’ schooling. Nevertheless, he is trying to save up for a mobile phone because it will help him on the dating



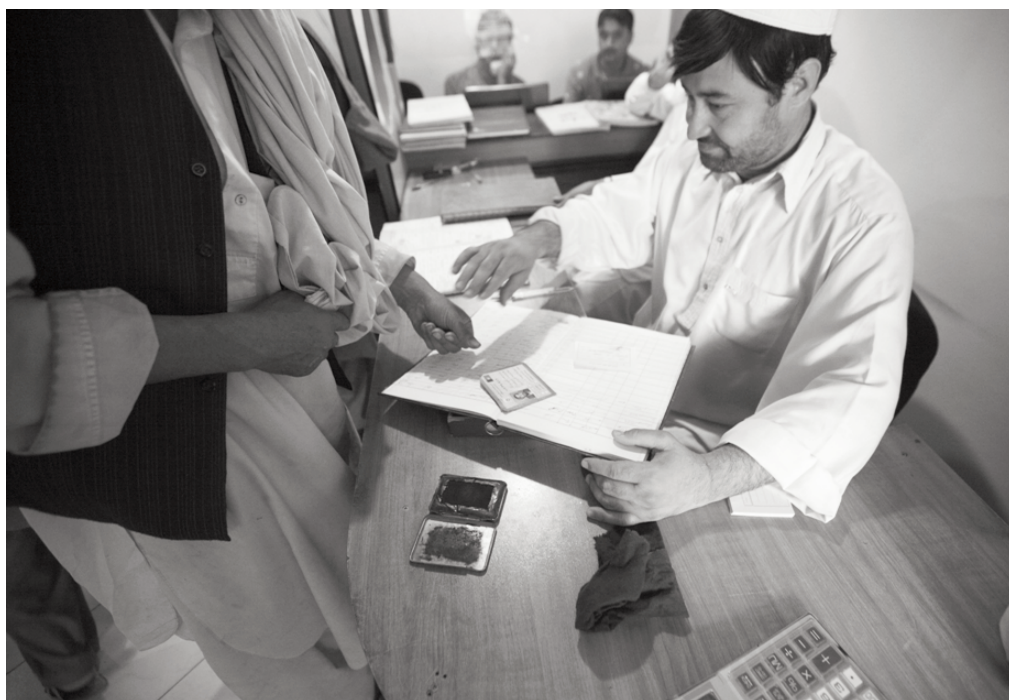
Storekeeper, Kabul



Street scene, Kabul



Entry to offices of *Hawala* agent, Mazar-i-Sharif



Hawala Agent, Mazar-i-Shari

scene, which will hopefully one day lead to marriage. Miriam (page 27) is a school-teacher who has tried M-Paisa but is skeptical of how convenient and trustworthy it really is. And finally, Farooq (page 31) is an M-Paisa agent who has seen first-hand the challenges Roshan has both with their own agents and with their customers.

The design of any mobile service has to be linked to the people and their everyday needs. It's our hope that these individuals and their circumstances can help describe current mobile phone use and mobile money practices on the ground in Afghanistan, and, in turn, help inform opportunities in the mobile space that might give these people's lives more security, better access, and greater support.

To protect the privacy of the individuals, all names related to the study have been changed, and the photography does not directly match interview profiles and quotes.

Salid

Salid, 46, has run a convenience store in a suburb of Kabul for the past six years. This, however, is not his first store. That one was burned down at the start of the civil war, after which he was forced to migrate to Pakistan for his family's safety. He describes in vivid detail the journey down to the border, his family carrying all their possessions, and how they hid their money in the folds of his wife's clothes, safe from the prying hands of the Muslim checkpoint guards. Life in Pakistan was difficult, and he returned to Kabul as soon as it was safe to do so.

Salid has experienced radical change enough times to know the importance of spreading around his investments—over the years he has put his money into livestock, gold, and most recently, property. A peek inside his wallet reveals a bank card and a wad of Afghani (AFN), the local currency, and US dollars.

Behind the counter of his shop, he keeps a stack of candles and a big box of matches. power cuts are frequent, and at night the best he can hope for is four hours of uninterrupted electricity. Because of this, he now contributes AFN 250 (USD 5.50) per month to a generator provided by a local entrepreneur in the community; it's not cheap, but it's worth the business he would otherwise lose. Sometimes Salid charges his mobile phone at one of the many street-side charging stations for a nominal fee (these stations use car batteries to charge phones).

Like any successful local trader, he carries three mobile phones, one from each of the main mobile networks, as inter-network calls are expensive.

As the head of an extended family, and a trader to boot, he's acted as the guarantor on a couple of loans. He has also turned down several. After all, not everyone—even if they are family—can or should be trusted with money. Salid knows, like many, that cash can taint relationships.

"Has life become better or worse?" he often muses to himself. On the one hand, he now runs a thriving business. On the other, the store makes him a clear target for thieves—he's been robbed four times in the past three years, including once

where the robber feigned a heart attack. Airtime scratch cards make for a particularly easy target as they are easily convertible into cash.

Salid often has people trying to buy goods on credit, but he only extends it to loyal customers or those personally introduced and vouched for by the same. Some pay back the loans quickly, a few take their sweet time, and some don't pay them back at all. This, he concedes, is the will of Allah. According to him, not all personal loans are equal. He sells a small number of pharmaceuticals, and it's difficult to deny credit to someone in need of medicine, particularly during the holy month of Ramadan. As is common, he keeps a small jar of change on his counter from which he tips the vagrant beggars.

Salid has heard of M-Paisa, but has trouble describing what it is ("it's something about mobiles phones and money," he says). In terms of money transfer, he is already using—and loyal to—*Hawala*, the widely popular system operated by extensive networks of unofficial brokers. "I trust *hawala* because my family has been using it for over 40 years, long before private banks were available to us," he says. "In the most difficult times, when we needed money from abroad, they were our lifeline."

Ahmed

Ahmed, 24, is a day laborer—or at least he would be if there were enough jobs. He currently works one out of every three days—hardly sufficient for putting food on the table, paying the rent, attending to his father's medical bills, and putting his two young brothers through school.

The last time he had a good run of consecutive days work, Ahmed paid for a few private classes for his younger brothers in the hopes they would help them achieve a better life (one took English, the other, basic computing). "Maybe they can be translators for a foreign NGO," he says. "That's where the money is—with the foreigners."

Though Ahmed had been learning to read and write, he stopped attending school after the age of 13 in order to work. After years of manual labor, he has forgotten what he learned. Right now, he is months behind on the rent and the debts are piling up. "Every month, the local electricity company rep comes to collect payment, but as he's from the neighborhood and knows our family is poor, he doesn't say anything and allows us to not pay," Ahmed says. "But if we go too long without payment, someone from the main office will come to chase us—that person is not so forgiving."

As of six months ago, there was one less mouth to feed in the family. Ahmed's father had accumulated an AFN 140,000 (USD 3,100) debt to the neighborhood shopkeeper, a man in his sixties, "and so we had sacrifice my sister to pay off the debt," he says. "For my father, the choice was difficult but straightforward: sell my sister, or go to Iran to find work. As he was in ill health, he chose the former."

Ahmed often has trouble getting paid for his work, and it's always a gamble. If his employers are dishonest or unscrupulous, he has little recourse. "If employers



M-Paisa agent, Mazar-i-Sharif



Jalalabad



In-store ATM, Kabul



Jalalabad

don't pay, there is nothing we can do but force them to pay through the threat of physical violence," he says. Taking his grievances to the authorities may result in more money lost than gained. "We have to pay government officials before they'll even look at our case. It's just not worth it."

He carries his most valued possessions—a few Afghani notes, his old SIM card, and an identity card, in a vest sewn into his undershirt pocket or rolled into his clothing.

Ahmed used to own a mobile phone but he sold it when things got tough. He sometimes borrows his friend Hamid's phone to receive text messages and calls; sometimes this can lead to paid work. For Ahmed, saving is a luxury he simply doesn't have. "To save money, you first need to have money," he says. "Any money I make, I use for food." he has not heard of M-Paisa and he doesn't have a bank account.

Ahmed had been saving for almost eight years in anticipation of marriage but because of the lack of work and his father's healthcare bills, the money quickly evaporated. As soon as he can put aside money again, the first thing he'll save for is a mobile phone, but not because it will help him find work; it'll help him find a wife.

"The mobile phone makes love marriages possible," he says. "Young people can now communicate directly with each other, without their families or friends knowing. This wasn't possible five years ago."

Common dating etiquette, as he explains it, has the male suitor sending airtime credit to the woman he likes, and if necessary, purchasing a basic phone for her. Through mobile, they can advance their relationship. if they're lucky, they can defy the blind arrangements their families would otherwise have made for them. Ahmed tells us with a sigh that if he were to get engaged, he would subscribe to one of the airtime packages for the newly betrothed that allows them to speak as much as their hearts desired—for a flat fee, of course. But with no savings and no way to accumulate savings, the prospect of marriage for Ahmed seems like a distant hope.

Mariam

Mariam, 26, is an elementary school teacher. She is unmarried and lives with her parents in a house in the suburbs of Mazar-i-Sharif.

She has a *bakht* account with Kabul Bank, which is a special lottery-style account through which she is entered into regular draws for prizes that can include anything from cash and computers to cars and even apartments. The principles of Sharia law forbids the payment of interest on bank accounts, but local banks get around this by paying *mafad* (benefit), and they incentivise savings through a variety of means including *bakht* (luck) or *qismat* (fortune) accounts.

Every month, Mariam's employer, the Ministry of Education, deposits her salary of AFN 5,000 (USD 110) into her Kabul Bank account. every payday, she heads to the bank to withdraw her full salary because she worries that the banking system will fail (a relatively common occurrence; the day we left Afghanistan, there was a run on Kabul Bank), or she worries that when she urgently needs cash, the

lines at the bank will be prohibitively long and she won't be able to access her funds. She doesn't trust the banks and she has never used an ATM or ever bothered to learn how to—there are only a few of them around town, but many don't work.

Mariam owns a mobile phone. Recently, a mobile agent convinced her to register for M-Paisa, claiming it was a low-cost, secure, and convenient way to send money. She thus used it to send some money down to a friend in Kabul (the shops are better in the capital, and her friend had promised to do some gold shopping for her). While the transfer was indeed inexpensive (AFN 25, USD 0.55) and seemed secure, Mariam became ashamed when her friend told her how inconvenient it had been to pick up the money.

This friend had spent two hours trying to cash out the transfer before she was successful. Over an hour was spent combing the streets of Kabul trying to find an M-Paisa agent, who upon hearing her cash-out request, said he didn't have enough money on hand, and asked her to return the next day. This person was located on the fourth floor of a nondescript office building in downtown Kabul, with nary a sign on the street or on the building to indicate the presence of an M-Paisa agent within. Another hour was then spent looking for other M-Paisa agents. When she asked others where she might find these people, most didn't know. At one point, she spent 40 minutes chasing one lead: "M-Paisa? I think I've seen one of those. Walk to the roundabout, turn right at the sign of the butcher, and it's the third alley on your left. Maybe the fourth..."

Mariam's friend did eventually get the transferred cash and bought a gold ring with the money, but after this experience, Mariam considered reverting to a regular bank as her default money transfer system. "People know where and how to get money if it's through Kabul Bank," she says. "If you go to any person in a city and ask them where the nearest bank is, they will be able to tell you immediately."

As for why Mariam was so intent on buying a gold ring, she tells us that she did it because gold jewelry is a practical investment. Unlike currency, jewelry retains its worth and can be cashed in or used as collateral. It also has the added benefit that it can be worn at weddings. Mariam's most prized possession is a gold necklace that cost her AFN 32,000 (USD 700), or roughly six and a half months of salary.

Farooq

Farooq, 30, has been a Roshan M-Paisa agent for the past three years. He speaks highly of the company now, but his experience hasn't always been good.

At first, he was an enthusiastic M-Paisa evangelist, believing that he could collect commission on all new activations, regardless of whether his M-Paisa recruits later used (or even knew) what it was they had signed up for. It seemed like easy money. "But of the 100 or so activations I gave them, Roshan only paid me for four or five," he says. "For all the others, they came back with excuses: there was a missing iD card, something was not filled in properly. There was always an excuse." (This gulf of understanding is, in part, the result of commissions being paid on users, not activations, highlighting the need for expectations setting.)

Farooq maintains that it's not his responsibility to ensure the IDs provided by



Mother with child, Kabul



M-Paisa top-up cards with mobile phone, Kabul



M-Paisa screenshot, Mazar-i-Sharif



Laborers, Kabul

customers are valid. “How would I know if an ID card is real? Anyone can get one on the street for AFN 500 (USD 11), or by knowing the right person; it’s not my problem if someone uses a fake one. How can i tell? Maybe M-Paisa should just accept thumbprints like the *hawala* agents. Then people that can’t read can use it, too.”

Another complaint he has is that no matter what the customers’ transfer amount—and thus, how much they may deplete his reserves—Farooq makes the same flat fee. “Why would I let someone cash out a big transfer if I make the same money as I would on a small one?” he asks. “Why would I inconvenience myself if there aren’t added rewards?” according to him, Roshan has been promising to change the commission model for some time, but to date, nothing has been done.

He also notes that some customers accuse him of asking for “bribes” for completing a transaction when they are, in fact, the standard M-Paisa fee. He knows that many people slip the electricity company AFN 50 to 100 (USD 1.10 to 2.20) to skip the hours-long lines when paying their power bills, but for him, there is no service for which he could even ask for a bribe. This is another challenge for mobile money in Afghanistan. For new consumers in a country where graft is commonplace, where is the line between a legitimate commission and a bribe, whether real or perceived?

In fact, Farooq has seen plenty of skeptical customers who are used to sending money by *hawala*. “People are suspicious of these newfangled schemes,” he explains. “And can you blame them? We’ve endured three decades of war. Instability in our environment makes us seek out stability in our day-to-day, even if it’s just the same *hawala* agent that our father used, or our grandfather used. Instability saps the motivation to learn new systems promoted by this power or that. Come another war, how do we know these new companies won’t just disappear? Afghans don’t have a decades-long relationship with Roshan, so we don’t know that they won’t run away with our money when times get tough.”

Farooq quietly admitted that he, too, has reservations about storing cash in his mobile account. When he receives money via M-Paisa, he transfers it straight into his bank account.

Farooq’s final grievance with M-Paisa is that the system charges him fees to maintain his float when he takes cash from Azizi Bank (also an M-Paisa partner).essentially, he reckoned, he is being punished for trying to meet M-Paisa’s liquidity requirements. “Azizi Bank is an M-Paisa agent, but so are we,” he says. “Why should I have to pay money to them?” he reasons that all transactions between M-Paisa agents, no matter their place in the ecosystem, should be free since they are all performed in service of the system.

Despite his grouching, Farooq recently attended a new training with M-Paisa, and is now more positive about future prospects. Roshan has promised to increase efforts in market education, which would bolster the M-Paisa business and his revenue. He also knows that Roshan has begun partnering with retailers and service providers to allow users to make purchases or pay bills via M-Paisa. He agrees that such a service is good in theory, but he sees a challenge. “People want physical

things—physical money and physical evidence of transactions,” he says. “The concept of mobile payment is tough for most to accept.” The key question for Farooq and for those at Roshan is whether these attitudes will change once the bill paying services are launched, and the removal of friction from the system becomes apparent.

CONCLUSION

As with many countries where there is limited access to formal banking infrastructure, in Afghanistan, we found many formal and informal stores of value ranging from banknotes to airtime and goats to gold. Similarly for those on the breadline, credit was delicately drawn from any source where there was sufficient give, and borrowers balanced sometimes extreme financial and social burden in deciding where or from whom to borrow.

Facilitating the personal, convenient, and safe movement of money between people is the ultimate goal, and Roshan deserves credit for introducing M-Paisa into a challenging market. But M-Paisa is caught in the tricky position that faces all services requiring network dynamics—to succeed, they must educate and nurture both consumers and agents, neither of which has much incentive to jump in first without the other being around. M-Paisa also has the challenge of delivering services in a landscape with low levels of trust in formal institutions to consumers with highly variable degrees of textual, financial, and technological literacy.

On the bright side, mobile penetration is growing, and along with it, brand recognition and trust in Roshan and other mobile service providers. In the same way that mobile telephony has evolved to the point that we can’t imagine life without it, we believe that M-Paisa and similar services have a very real opportunity to transform Afghan society. Just as mobile telephony isn’t as much about the phone as it is about the conversation, mobile banking is not about the money—it’s about what the money can enable.

Appendix 1: Researching During Ramadan

Every study comes with its own set of unique challenges. Compounding ours in Afghanistan was the precarious security situation and the intense summer heat that regularly got up to 104 degrees Fahrenheit (40 degrees Celsius). How one prepares for those situations is relatively predictable. Preparing to do research in a Muslim country during the spiritual holiday of Ramadan, on the other hand, was a unique learning experience.

During the month-long observation, Muslims fast between dawn and dusk. As non-Muslim researchers, we had to be much more aware of the social and physical impact of the holiday in order to understand how to function appropriately, and come away with a successful field study.

For starters, a wide variety of social situations in the field can be lubricated through the act of eating and drinking. During ad-hoc street interviews, for example, accepting the offer of a glass of sweet tea moves the relationship from passing strangers to giver-receiver, and suggests to all parties that it’s okay to be there for

at least enough time to brew and drink the tea. Food and drink helps us overcome those little moments of awkwardness that can stifle the rest of the conversation. A lack of food or drink can feel like there's a void to be filled and makes it more difficult to break down social barriers.

Another consideration is team dynamics. In countries where the summer heat is blisteringly oppressive, local Muslim participants or team members won't exert much energy during the day. Many will have been up since before dawn for morning prayers and breakfast, the single meal that will carry them through the daylight hours.

The heat and lower than normal blood sugar levels can mean that tempers will be shorter during Ramadan. Drinking water in front of team members who are abstaining is not great for morale. Also, try to avoid scheduling interviews that overlap with prayer times. Lastly, be aware that both participants and team members will want to spend *iftar*—the evening breaking of the fast—with their families.

Given all this, it's worth asking the question, "is it worth shifting the study dates to avoid Ramadan?" on the one hand, Ramadan does make it tougher to conduct research. On the other hand, the inquisitive researcher that truly wants to understand the culture and context of their study participants will be missing an important piece of the puzzle by skipping such important events. In the field, every challenge presents a unique opportunity.

Appendix 2: Field Gear

The workhorse gear for this study included a Canon 5D Mark II camera with a variety of high-end lenses, a Panasonic Lumix, a MacBook pro, a tough Netbook, a Canon mobile printer, a FlipHD video camera, and a simple Olympus WS 400 recorder. Our civilian iPhones were supplemented by Afghanistan-grade Nokia 1110s with local SIM cards—virtually indestructible, with a stand-by battery life of close to a month. They were our lifeline should every other power source die. They can also be fixed by the ever ubiquitous street vendors should anything go wrong.

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