

## Tameer Bank's Experiences with Mobile Banking

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Although Pakistan has several dynamic metropolitan centers, the majority of the population lives in rural areas, much of it far away from urban settlements. The rural population, predominantly poor, is widely unserved by the formal financial sector. This article explores how Tameer Bank aims to serve the rural poor by employing modern communication technologies: The mobile phone is the cornerstone of Tameer Bank's approach to outreach into the countryside.

### 1 Access to Finance: The Case of Pakistan

The population of Pakistan is about 175 million, making it the sixth most populous country in the world. The rural population is almost 64 percent of the total population.

However, historically, the rural sector has suffered from policy neglect and the weak implementation of delivery systems for financial services. The services provided have been inadequate, inconvenient, and unaffordable. In relative terms, most attention has been paid to the provision of agricultural credit and the mobilization of deposits from wealthy people in rural areas. The provision of insurance, credit for non-farm purposes and for the landless and small farmers, and the mobilization of savings of the poor and the poorest in rural areas have not received much attention from policymakers. The lack of appropriate saving products, the almost total absence of insurance, limited access to credit for the poor and rural, non-farm activities, and an inefficient payments system has deprived rural people of productive employment, as well as high and broadband growth. As a consequence, the rural economy is mired in a vicious circle of low growth, low productivity, low savings, weak employment generation, and rising poverty.<sup>2</sup>

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<sup>1</sup> Tameer Bank.

<sup>2</sup> State Bank of Pakistan. Excerpts from the report of the Committee on Rural Finance.

As depicted in Figure 1 and Figure 2, the average Pakistani household remains outside the formal financial system, saving at home and borrowing from family or friends. Fourteen percent of Pakistanis use a financial product or service of a formal financial institution (including savings, credit, insurance, payments, remittance services). When informal financial access is taken into account, 50.5 percent of Pakistanis have access to finance. Informal access can occur through the organized sector (through committees, shopkeepers, moneylenders, hawala/hundi money transfers, and so forth), or informally through friends and family. In comparison, 32 percent of the population has access to the formal financial system in Bangladesh; this figure is 48 percent in India and 59 percent in Sri Lanka.<sup>3</sup>

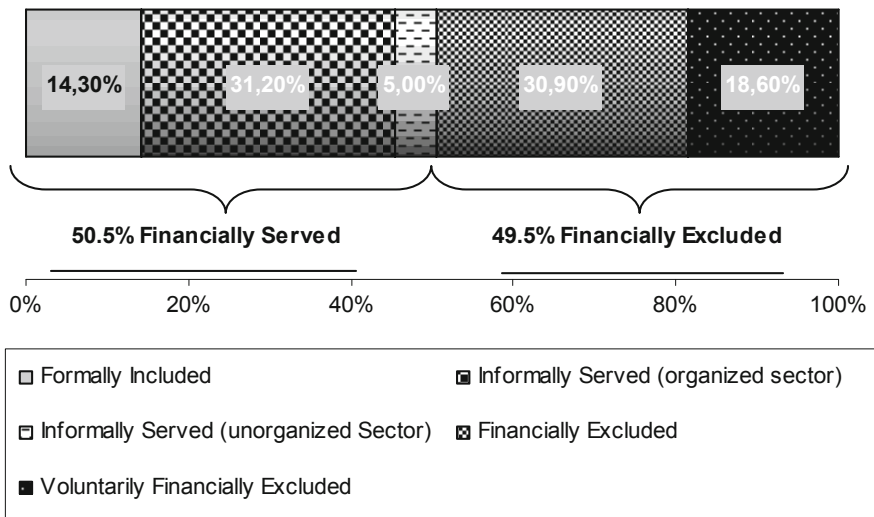
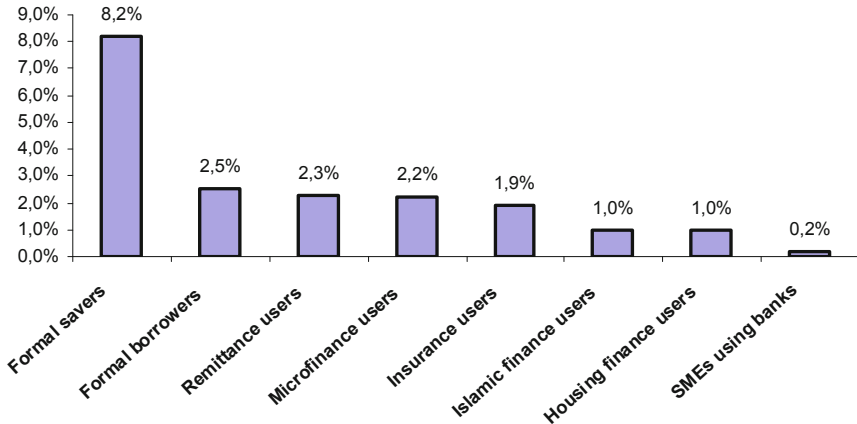


Fig. 1. Financial Inclusion Scene in Pakistan<sup>4</sup>

Financial access is low among the poorer, women, small and microenterprises, and in rural areas. Yet market studies suggest they are viable customers. Most formal financial products remain high-end, limited to urban, rich, educated males employed in the formal sector. The formal sector could learn a lot from and partner with informal providers; their services are perceived as being more geographically accessible, less complex, having fewer requirements, and being easier to understand.

<sup>3</sup> T. Nenova, C.T. Niang, and A. Ahmed, “Bringing Finance to Pakistan’s Poor: A Study on Access to Finance for the Underserved and Small Enterprises”, May 2009.

<sup>4</sup> Ibid.



- Over half of the population saves, but only 8 percent entrust their money to formal financial institutions.
- One-third of the population borrows, but only 3 percent use formal financial institutions to do so.
- Microfinance has grown at 40 percent per year since 1999 – **yet** microfinance access extends to only 1.7 million out of an adult population of about 80 million.
- International remittances have grown at 29 percent since 2001 – **yet** only 2.3 percent of Pakistanis send or receive remittances, while half of remittances, including domestic flows, are transmitted informally.
- Agricultural disbursement grew by 44 percent in 2003-07 – **yet** rural credit demand remains unmet – the financial system reaches only 15 percent of the farmers.
- Life insurance is the most used insurance product, and demand is high for drop insurance – **yet** only 1.9 percent are insured

Fig. 2. Financial Services – Demand and Supply<sup>5</sup>

## 2 Mobile Penetration: Anywhere and Everywhere

Pakistan is among the five most dynamic economies of developing Asia in terms of the penetration of mobile phones. While looking at regional mobile penetration, Pakistan is far ahead of many Asian countries. Because of consistent and unwavering growth patterns (Figure 3), Pakistan's mobile industry has reached the landmark of 100 million subscribers in July 2010. Mobile penetration in Pakistan has been increasing at a very high pace and it stands at 60.4 percent, showing a cumulative average growth of 5 percent in the last three years. The mobile operators have been aggressively working on increasing their networks, especially to unserved areas. During the fiscal year (FY) 2009–2010, cellular mobile subscriber showed a growth of 5.1 percent as compared to 2008–2009 when the total subscribers stood at 94.3 million and growth was over 7 percent. Even though the sector has been showing signs of slow down since 2010, growth has remained positive. The increasing

<sup>5</sup> Ibid.

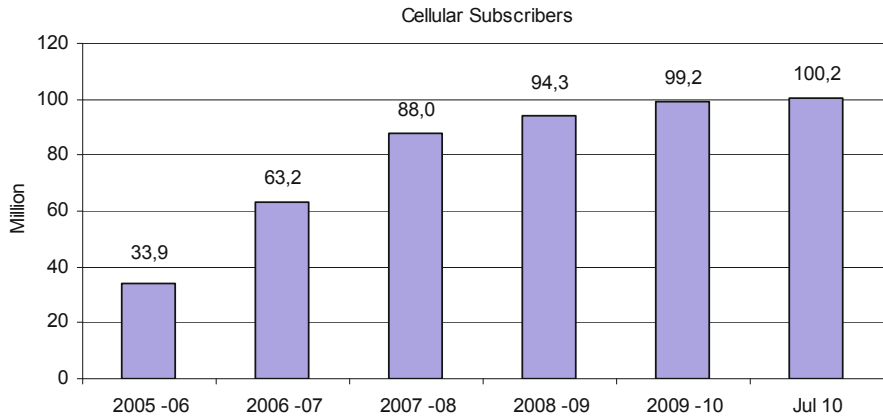


Fig. 3. Cellular Subscription in Pakistan<sup>6</sup>

coverage area serves as a key to expanding the subscriber base. At present, there are 30,126 cell phone towers erected by all operators combined across Pakistan.<sup>7</sup>

### 3 Mobile Banking: Differentiated and Low Cost

To serve poor and largely unbanked potential customers, a distribution strategy exclusively incorporating traditional brick-and-mortar model is time consuming for the clients, and at times, not financially viable for the bank as the costs attached to it can be prohibitive. The barriers facing branch-based models that can be overcome with branchless banking are shown in Figure 4.<sup>8</sup>

Technology can lower costs, enlarge geographical reach, increase product quality, help enhance credit information, and provide innovative applications for service delivery. There exist large segments of ‘unbanked’ people and those who are informally served by either organized or unorganized sector. At the same time, the mobile penetration and subscriptions and complementing Telco agent network servicing those customers have reached new heights. Given these occurrences, mobile banking turns out to be the solution and catalyst to promote financial inclusion in rural Pakistan.

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<sup>6</sup> Ibid.  
<sup>7</sup> Pakistan Telecommunication Authority, Annual Report 2009–2010.  
<sup>8</sup> Internal Tameer presentation.

	<b>Branch based models face the following barriers...</b>	<b>...Which can be overcome with branchless banking</b>
<b>Physical infrastructure</b>	<p><b>Cost is high to set up branch and ATM network and associated connectivity</b></p> <ul style="list-style-type: none"> <li>Not economical to expand outreach to low density areas, especially for non-credit products</li> </ul> <p><b>Response to market opportunities is low</b></p> <ul style="list-style-type: none"> <li>Speed of branch expansion is limited by need to find and train staff and obtain premises</li> </ul>	<p><b>Branchless banking is low cost as it leverages existing infrastructure</b></p> <p><b>Expansion is limited only by number of agents that can be signed up to act as channels for the bank and mobile network coverage</b></p>
<b>Image</b>	<p><b>Banks are seen as formal institutions meant only for "rich people"</b></p> <ul style="list-style-type: none"> <li>Bank staff is not trained to serve "poor" customers</li> </ul> <p><b>Cultural barriers restrict women from access</b></p> <ul style="list-style-type: none"> <li>Women visiting banks are frowned upon in conservative parts of the country</li> </ul>	<p><b>Low psychological barriers to access</b></p> <ul style="list-style-type: none"> <li>Customers typically already have existing interaction with agents (e.g., shopkeepers, post offices)</li> <li>Mobile banking enables women to transact with minimal physical interaction with society</li> </ul>
<b>Requirements and restrictions</b>	<p><b>Large amount of paperwork and requirements to be fulfilled to become a customer</b></p> <p><b>High fees and charges</b></p> <ul style="list-style-type: none"> <li>Banks need to impose service charges, minimum balance or minimum opening amounts to cover their high fixed costs</li> </ul>	<p><b>Reduced KYC requirements for branchless banking accounts</b></p> <p><b>Lower fees and charges</b></p> <ul style="list-style-type: none"> <li>Branchless banking model will be able to offer more competitive rates due to lower fixed costs</li> </ul>

Fig. 4. Branchless banking – benefits offered

#### 4 Tameer-Telenor Partnership

Tameer Bank was conceived and established in 2005 by a group of former executives from Citibank. The following market dynamics led to the idea of creating a new microfinance bank in the country:

- Largest untapped customer segment with multiple needs (cradle to coffin);
- Traditional microfinance was unable to achieve scale and no dominant player was present;
- Commercial banks had tried to move up the financial pyramid, i.e. concentrating on the upper and middle class, which worsened the access to finance for the vast majority;
- Enhancing financial inclusion and literacy could reap rich dividends in terms of economic improvement and resultant social impact.

Tameer envisions emerging as a global benchmark for innovative and commercially viable microfinance solutions for unbanked peoples' socio-economic empowerment. Tameer strives to set new standards of excellence in value-added microfinance and related services through innovative technology and a highly skilled/professional staff for customer convenience and satisfaction. Five years after its launch, Tameer provides services in three provinces of Pakistan and has over 100 outlets based on a spoke-hub distribution paradigm, comprising branches as hub and sales centers and community centers as spokes.

In 2008, with the bank on solid footing, it became apparent that the costs of rolling out a sufficient number of branches to serve the market would undercut their financial viability. To serve these relatively poor, unbanked potential customers, Tameer had to reach even further into the rural areas where these people lived. Even with a hub-and-spoke strategy incorporating low cost sales/service centers and lower cost community centers, the personnel costs were prohibitive.

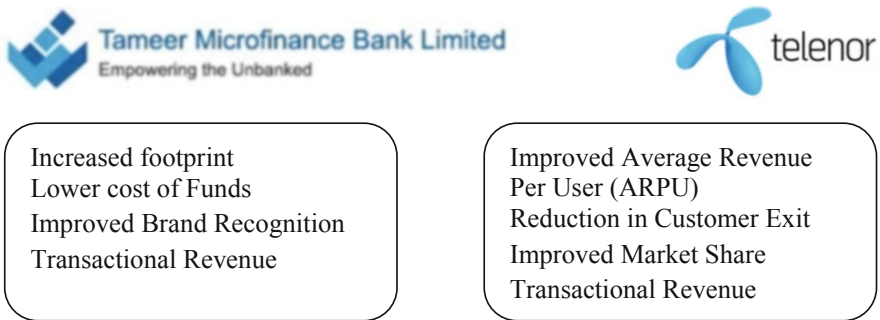
While ATMs and point-of-sale (POS) devices had already extended financial services beyond the walls of bank branches, Tameer's vision was much more expansive. Tameer saw beyond the debit card payment for purchases at retail store POS devices and the withdrawal of money from urban ATM machines to a network of authorized bank "agents" in small stores throughout the country equipped with mobile phones with which they could access the bank platform. These agents, who already had viable businesses, would be capable of opening bank accounts and providing a full range of financial services far beyond the reach of traditional banking facilities. The confluence of this technological alternative and Tameer's need for lower cost access to customers caused the bank to begin an exploration for partners who could provide both a technological solution and the necessary agent network.

As Tameer was beginning operations in 2005, the giant Norwegian telecommunications company, Telenor, was also establishing itself in Pakistan. Though Telenor was committed to investing fully in becoming a major competitor in the mobile phone market in Pakistan, Telenor recognized the steady erosion of telecom revenues throughout the world as the mobile phone business became increasingly competitive. Telenor Group management saw financial services as a growing opportunity to reach the huge numbers of potential customers in the unserved lower segments of the retail banking market, especially in developing countries. Grameenphone, another company in the Telenor Group, had already launched a branchless banking service in Bangladesh in 2007. To pursue the opportunities in financial services across its operations in 14 countries, Telenor Group established a separate organizational unit to drive strategies and support initiatives for each of the operation companies in the Telenor Group.

Telenor recognized that the State Bank of Pakistan (SBP) was determined to implement a "bank-led" model, restricting branchless banking services to regulated financial institutions. This meant that if Telenor was to enter the financial services business in a way that exploited its vast airtime sales agent network, it would need a bank as a partner. In November 2008, after five months of negotiations, Telenor purchased a 51 percent controlling interest in Tameer, and Easy-

Paisa was born. EasyPaisa is a branchless banking service offering convenient access to financial services. As the brand suggests, it promises to provide the customers with complete convenience and empowerment. This service is not just limited to Telenor subscribers but also to those who use other carriers or even do not use a mobile phone at all. It offers a hassle-free way of conducting financial transactions – be it utility bills payment, mobile account, domestic remittance, or even international remittance. The offering will be further enhanced by adding life and health insurance deals, saving products, loan disbursement and repayments (for Tameer Bank customers), and donations.

This win-win deal for both Telenor and Tameer is depicted in [Figure 5](#).



**Fig. 5.** Telenor and Tameer – Partnership Advantages

**EasyPaisa Team.** There were not two specific entities launching this service: It was one large team with distinct responsibilities assigned to each partner based on the partner best positioned to execute. Within the joint product team, there was everything you would expect: product management, operations, marketing, legal, technology, etc., with staff from both organizations.

From a legal perspective, Tameer has a relationship that entails an agency agreement whereby Telenor is acting as a distribution arm for branchless banking. Anything that relates to demand liabilities rests with the bank: the balance sheet used is the bank's, so all customer balances appear there. Beyond the legal architecture, there is also a logical assignment of responsibilities within the project to staff from Telenor and Tameer. The entire channel management and retail set-up work is done by Telenor, given its immense expertise in this core line of work. It also hosts the technology and operates a call centre that provides customer service and complaint handling. Concept development is done in partnership, but Telenor takes the lead on marketing, including working with creative agencies and purchasing media. Tameer is responsible for operating accounts, creating ledgers, reconciliation, fund settlement, fund settlement with external parties, risk and compliance, and fraud investigations. These are all core banking functions that Tameer is best positioned to deliver.

## 5 EasyPaisa: Story So Far and Way Ahead

Using the cell phones and agent network, EasyPaisa aims to bring efficient, instant, highly secure financial products like mobile accounts which offer, domestic remittances, utility bill payments, agent based cash deposit and withdrawal services and merchant development as value added service to complete the low end retail mobile commerce initiative.

Actual scope and sequence of products planned by the EasyPaisa team was a key difference between the various mobile money initiatives in other countries. M-PESA (introduced by the telecom provider Safaricom in Kenya) had been launched with the tag-line “Send Money Home,” focusing on money transfers. Another East African multi-national company, Zain, launched “Zap” in February 2009 and launched all of its multiple services together.

The EasyPaisa team decided initially to focus on four products, rolling them out one at a time in the following sequence:

1. Bill payments;
2. Money transfers;
3. Mobile account;
4. International remittances.

Establishing viable distribution through their agents was a primary concern. Bill payment was a known service and there where bottlenecks. However rural populations seemed to have less access to alternative bill payment facilities and stood in long lines outside banks for a large part of the day for this. Allowing payment at one’s local store was expected to greatly improve convenience for the target segment.

EasyPaisa was launched publicly on 15 October 2009 with a massive media campaign. Though the long-term strategic advantage of branchless banking was predicated on the use of mobile phones for financial transactions, the first service offered was traditional over-the-counter (OTC) utility bill payment at specially trained Telenor retailers. The intention was two-fold. First, EasyPaisa management wanted the retail agents to become accustomed to financial transactions before launching the mobile channel. And second, they wanted to begin with simple products/services that people needed and could easily understand. But EasyPaisa management also believed that for people already familiar with electronic top-up for phone service adopting financial services was only a small step. Telenor management was confident in their ability to train customers to use financial services just as they had trained them to use phones.

Transactions can be conducted at a variety of EasyPaisa outlets including Telenor sales and service centers, Telenor franchises, retail outlets, Tameer branches, and Tameer sales and service centers. It is intended to have a total of over 20,000 merchant agents by the end of 2011, outnumbering the total number of bank branches



and post offices in the country. Customers using these agent outlets are not required to be Telenor phone customers. The over-the-counter service at all locations is available for all people of Pakistan. It is only for signing up for mobile accounts and performing the service on the phone, the customer need to have a Telenor SIM.<sup>9</sup>

EasyPaisa has experienced rapid growth after successful early adoption of its OTC bill payment and domestic remittance products, indicating strong latent demand for e-payment services in Pakistan:

- The number of transactions grew from 49,000 in October 2009 to 1.6 million in January 2011, a cumulative average growth rate (CAGR) of 26.2 percent per month. Since May 2010, this growth has accelerated with transactions quintupling within eight months;
- The value of transactions has grown from PKR 61 million (\$0.7 million) in October 2009 to PKR 2.7 billion (\$32 million) in January 2011, a CAGR of 29 percent per month. This testifies to the rapidly growing ability of EasyPaisa merchants to handle cash in addition to increasing customer trust in EasyPaisa services. The value of transactions has quadrupled over the last eight months;
- In January 2011, more than 52,000 transactions per day were successfully carried out with average daily throughput of more than PKR 88 million (\$1 million). This amounted to approximately 1.62 million transactions a month with total throughput of more than PKR 2.7 billion (\$32 million);
- The EasyPaisa distribution network has grown from 2,200 merchants at the time of launch to 11,000 merchants today spread across 700 cities, towns, and villages of Pakistan. The growth in this distribution network has made EasyPaisa's reach larger than the combined reach of all banks in Pakistan. There are around 8,500 bank branches in the country;
- Approximately 33 percent of all transactions have a rural/semi-urban origin which highlights EasyPaisa's growing penetration in rural/semi-urban areas. This is particularly important as the rural/semi-urban penetration of formal financial services in Pakistan is very low;
- Among the products, utility bill payment and money transfer have shown significant growth through OTC channel during the first year of EasyPaisa operations. Utility bill payment has grown from 48,000 transactions/month to one million transactions/month, a compound annual growth rate (CAGR) of 22.6 percent;

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<sup>9</sup> A Subscriber Identity Module (SIM) is a chip card inserted into a mobile phone. It allows for the identification of the user in the network. With a SIM mobile phone, operators provide phone connections.

- Money transfer has been the most promising product of the EasyPaisa portfolio with transactions growing from 6,000 in November 2009 to 424,000 in January 2011, a CAGR of 34.8 percent;
- The results of a profiling study of money transfer reveal that 47 percent of the customers belong to the lowest socioeconomic classes. Furthermore, 40 percent of customers have not completed ten years of education. Most importantly, 42 percent of customers are blue-collar or skilled workers, while military personnel, farmers, and self-employed people are also represented. We should also note that many of EasyPaisa's earliest adopters were urban customers who needed to remit money and/or pay bills. As remittance receivers join the system and as the merchant network reaches into poorer and rural areas, we expect the percentage of EasyPaisa customers who are poor or very poor to increase over time.

The phenomenal success of EasyPaisa has shifted the paradigm and prompted competitors to follow suit. Being viable, scalable, and efficient, the model has the potential to bridge the gap between the haves and the have-nots.

Lack of formal financial services in rural domains, and exponential penetration of mobile phones and agent networks provide a opportunity for mobile banking to step in and bridge the gap. EasyPaisa envisions becoming the first choice for the unbanked and rural populations. The market potential is huge and still largely unserved. Given the diversity of financial needs, there will be products added to the suite that cover loan disbursals, loan repayments, health insurance, and small savings.

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