

easypaisa

Overview of the Operational
Model of Mobile Money
Service Provision

Easypaisa: Overview of the Operational Model of Mobile Money Service Provision

Authored by: Hussan-Bano Burki

Copyright © SAMN, 2013

SOUTH ASIA MICRO-ENTREPRENEURS NETWORK

117, Street 66, F-11/4, Islamabad, Pakistan

Telephone: (+92) 51 229 2270

Fax: (+92) 51 229 2230

www.samn.eu

Edited by: Ali Shahrukh Pracha and supported by Katherine Rousseau

Designed & produced by Headbumped Studio

Reproduction is authorized provided the source is acknowledged.

Printed in Pakistan.

Disclaimer: The content of this report does not reflect the official opinion of the South Asia Micro-entrepreneurs Network (SAMN). Responsibility for the information and views expressed in the report lies entirely with the author.

Easypaisa: Overview of the Operational Model of Mobile Money Service Provision

September 2013

Authored by:
Hussan-Bano Burki

Sponsored by:



This page has been intentionally left blank.

ACKNOWLEDGEMENTS

This study would not have been possible without the input and support of the senior management and staff at Tameer Microfinance Bank Ltd. and Telenor-Pakistan (Pvt.) Ltd. Their willingness to readily (and on occasion, repeatedly) provide generous access to information and data has been invaluable in piecing together the story of this unusual, yet remarkably successful cross-sectoral partnership; a partnership that has led to a quantum leap in the utilization of mobile service networks for the provision of financial services to the un-banked and under-banked. The author and the South Asia Micro-entrepreneurs Network (SAMN) would also like to acknowledge the invaluable information source on branchless banking maintained by the State Bank of Pakistan and the valuable input and guidance provided by the staff of Pakistan Microfinance Network, and Monet (Pvt.) Ltd. The sources and individuals consulted have undeniably added to the depth and texture of this publication.

SAMN wishes to acknowledge Grameen Foundation for generously supporting this research study and providing the necessary guidance. SAMN is also grateful to its donor, the Agency for Technical Co-operation and Development (ACTED) for its continued support.

This page has been intentionally left blank.

CONTENTS

1. Introduction	1
1.1. State of Mobile Banking in Pakistan	1
1.2. Regulatory Framework for Mobile Banking in Pakistan	3
1.3. Growth and challenges for the Mobile Services Sector in Pakistan	6
1.4. Access to Financial Services in Pakistan	7
2. Incentives for Launch, Successful Delivery and Expansion of Easypaisa	9
2.1. Recognizing the Strategic Value of Launching Mobile Money Services	9
2.2. Easypaisa Generates Additional Revenue and Customers Primarily through OTC Transactions	10
2.3. Incentive to Encourage Mobile Wallet-based Transactions	12
2.4. Interests Aligned by Equity Share in TMFB	12
3. Organization of Easypaisa	15
3.1. Legal Agreements Shaping Operational Roles and Responsibilities	15
3.2. Relative Competencies and Division of Roles and Responsibilities	16
4. Conclusion	20
4.1. Ability to Reach Scale	20
4.2. Partnership and Organizational Efficiency	21
5. References	23
Annexes	24
Annex 1: Branchless Banking Models in Pakistan	24
Annex 2: KYC Requirements for Approved Branchless Banking Activities	25

LIST OF FIGURES, TABLES AND BOXES



Figure 1: Summary of mobile money transactions in Pakistan (Oct–Dec 2012)	2
Figure 2: Comparison of MNO market shares between 2003–4 and Dec 2012	7
Figure 3: Pakistan’s cellular service sector’s average revenue per user per month	7
Figure 4: Division of roles in the Easypaisa value chain	16
Table 1: Growth of the mobile money market in Pakistan (Jun 2011–Dec 2012)	2
Table 2: Summary of fund transfers by customers (Oct–Dec 2012)	3
Table 3: Portfolio of Easypaisa services as of June 2012	11
Table 4: Members of TMFB’s BoD after Telenor-Pakistan’s stake in TMFB	13
Table 5: Competencies of TMFB and Telenor-Pakistan	21
Box 1: Summary of the key revisions made to the Branchless Banking Regulations of 2008	3
Box 2: P2P funds transfer process	4
Box 3: Mobile financial services in the Telenor Group	10

ACRONYMS AND ABBREVIATIONS

A2A	Agent-to-agent	MFI	Microfinance institution
A2F	Access to Finance (survey)	MNO	Mobile network operator
A2P	Agent-to-person	MoIT	Ministry of Information Technology
ADD	Agent due diligence	MSC	Mobile switching centre
ARPU	Average revenue per user	MW	Mobile wallet
ATM	Automated teller machine	NADRA	National Database and Registration Authority
BB	Branchless banking	NATP	New-agent take-on
BMGF	Bill and Melinda Gates Foundation	NGO	Non-governmental organization
BoD	Board of directors	OTC	Over-the-counter
CDD	Customer due diligence	P2P	Person-to-person
CEO	Chief executive officer	PMN	Pakistan Microfinance Network
CFO	Chief financial officer	POS	Point of sale
CGAP	Consultative Group to Assist the Poor	PTA	Pakistan Telecommunication Authority
CMO	Chief marketing officer	SAT	SIM application toolkit
CRO	Chief risk officer	SBP	State Bank of Pakistan
EBITDA	Earnings before interest, taxes, depreciation and amortization	SMS	Short message service
FI	Financial institution	TMFB	Tameer Microfinance Bank
FRMU	Fraud and risk management unit	UBL	United Bank Limited
GLP	Gross loan portfolio	USD	United States dollars
GPRS	General packet radio service	USSD	Unstructured supplementary service data
JV	Joint venture	VP	Vice president
KYC	Know-your-customer	WAP	Wireless application protocol
MFB	Microfinance bank		

This page has been intentionally left blank.

1. INTRODUCTION

This document presents a study of the partnership between Tameer Microfinance Bank Ltd. (TMFB), a microfinance bank (MFB), and Telenor-Pakistan, a mobile network operator (MNO). This partnership aims to provide mobile money transaction services to customers in Pakistan.

Operational in 38 of 120 districts¹ and seven tribal agencies in Pakistan, TMFB is an MFB licensed by the State Bank of Pakistan (SBP) in August 2005. As of December 2012, TMFB had the largest market share (17.6%) in terms of gross loan portfolio (GLP) outstanding of PKR 6.67 billion (USD 68.76 million, using an exchange rate of USD 1 = PKR 97) (Pakistan Microfinance Network [PMN] 2012a). Amongst microfinance institutions (MFIs), TMFB is also the largest provider of deposit services with a total value of savings touching PKR 8.37 billion (USD 86.29 million as at December 2012, exchange rate of USD 1 = PKR 97) by December 2012 (PMN 2012a).

The Telenor Group is an international provider of high quality tele-, data-, and media-communication services with mobile operations in 13 markets across the Nordic region, Central and Eastern Europe and Asia. The Telenor Group is among the largest mobile operators in the world with over 165 million mobile subscriptions and a work-force of approximately 40,000. Telenor-Pakistan is owned entirely by Telenor ASA (the Telenor Group) and adds on to its operations in Asia (Telenor-Pakistan in Pakistan, Grameenphone in Bangladesh, dtac in Thailand, DiGi in Malaysia and Uninor in India). Telenor-Pakistan launched its operations in March 2005 as the single largest direct European investment in Pakistan. In 2012, Telenor-Pakistan reported the highest revenue share in the telco sector in Pakistan. It is the second largest telecom operator in Pakistan in terms of market share (number of subscribers).

In 2008, Telenor acquired a majority share in TMFB. In 2009, Telenor-Pakistan partnered with TMFB to introduce branchless banking (BB) services for the first time in Pakistan. The pioneering mobile money transaction service was named Easypaisa. Since its launch, the Easypaisa service has won numerous awards including a Mobile Money Transfer Award. It has also inspired subsequent partnerships between Pakistan-based banks and MNOs to replicate the service and capture the market for mobile money transaction services unveiled by TMFB and Telenor.

The Telenor-TMFB model for providing mobile money services through Easypaisa is seen as a successful model both in terms of the endurance of the partnership between a bank and an MNO in delivering mobile money transac-

tion services and in terms of its ability to reach significant scale in a short span of time (since its launch in 2009). This study is broadly aimed at identifying the factors that have made the Telenor-TMFB partnership workable. It aims to:

1. Document the salient features of the regulatory framework that enabled Telenor-Pakistan and TMFB to jointly launch mobile money services through a BB platform;
2. Document the salient elements of the partnership and delivery model for Easypaisa;
3. Document the operational and technological integration between various Easypaisa stakeholders, specifically between TMFB and Telenor, for the effective delivery and expansion of mobile banking services;
4. Highlight the unique mix of factors and model design that has led many in the industry to believe Easypaisa was a highly successful example of mobile banking.

1.1 STATE OF MOBILE BANKING IN PAKISTAN

Mobile Banking in Pakistan has demonstrated impressive development in only half a decade since 2007 when the SBP included leveraging BB for financial inclusion in its “Expanding Microfinance Outreach Strategy”. The SBP then proceeded to issue the Branchless Banking Regulations in 2008. In 2009, the first BB/mobile money channel, Easypaisa, was launched as a joint venture (JV) between TMFB and Telenor-Pakistan. In the same year, the SBP issued a license to United Bank Limited (UBL) to pilot the launch of its mobile money service “UBL Omni”. By the end of December 2012, there were five banks providing mobile money services in Pakistan while five other banks were at the stage of piloting the deployment of their mobile money services (SBP 2012a). The market in Pakistan has responded strongly to mobile money as a channel, though currently, primarily for money transfers. In a period of approximately three years since the launch of Easypaisa in 2009, the total size of the BB agent network stood at 41,567

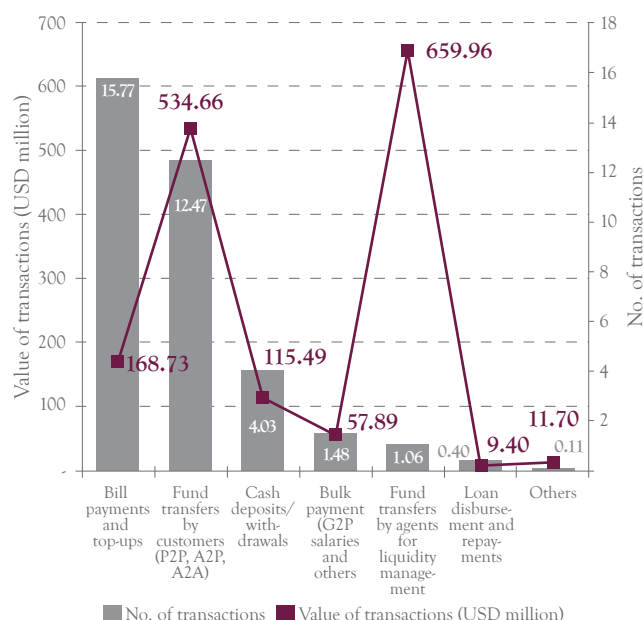
¹ The districts of Pakistan form the third tier of government in Pakistan; subdivisions of the country's provinces.

mobile money transactions were made over the October–December 2012 period. **Table 1** shows the growth of the mobile money market against key performance indicators over the June 2011–December 2012 period.²

Of the total mobile money transactions, approximately 80% are money transfers by customers (person-to-person [P2P], agent-to-person [A2P] or agent-to-agent [A2A]) and bill payments and mobile money top-ups (**Figure 1**).³

While the number of BB accounts or mobile wallets (MWs) is increasing steadily and had crossed two million by December 2012, over-the-counter (OTC) and P2P transactions accounted for approximately 97% of the total fund transfers by customers over the October–December 2012 period. According to the SBP (SBP 2012a) the low usage of MWs is due to the fact that as of December 2012, only 27% of agents could open accounts due to operational constraints in completing know-your-customer (KYC)-related digital procedures. Some providers also charge an account opening fee. Providers have to charge account opening fees as KYC requirements incur National Database and Registration Authority (NADRA) verification costs that are then passed onto the customer. Easypaisa subsidizes this cost for customers, and on May 1, 2013, completely removed mobile account-opening charges. Similarly, withdrawal (cash-out) charges hinder the account usage for daily transactions.

FIGURE 1: Summary of mobile money transactions in Pakistan (Oct–Dec 2012)



The non-interoperability of MWs across providers is also cited as a constraint. As new players start entering the market, interoperability between MWs will take place automatically as all banks are connected to the local 1-Link switch through which funds can easily be transferred from one mobile account to another.⁴

TABLE 1: Growth of the mobile money market in Pakistan (Jun 2011–Dec 2012)

No.	Mobile money indicators	Jun-Sep 2011	Oct-Dec 2011	Jan-Mar 2012	Apr-Jun 2012	Jul-Sep 2012	Oct-Dec 2012	Compound quarterly growth rate
1.	Total number of active BB agents	15,829	22,512	26,792	29,525	31,637	41,567	17%
2.	Total number of active BB accounts	236,464	500,453	1,059,519	1,447,381	1,815,611	2,112,052	44%
3.	Number of BB deposits to date (PKR million)	146	503	594	753	839	1,055	39%
4.	Number of transactions (millions)	12.5	20.6	25.3	28.4	31.89	35.32	19%
5.	Value of transactions (PKR million)	41,000	79,410	85,092	115,304	139,011	151,108	24%
6.	Average size of transaction (PKR)	3,280	3,855	3,367	4,065	4,420	4,279	5%
7.	Average number of transactions per day	138,889	228,855	280,798	315,178	349,411	392,378	19%

² The data in Table 1 is based on the branchless banking newsletters issued by the SBP for the corresponding periods.

³ *Ibid.*

⁴ 1-Link is the leading shared ATM network of the banking sector in Pakistan. 1-Link (Guarantee) Ltd. is a consortium of local banks that own and operate the network.

Table 2 (data from SBP 2012a) provides a more detailed breakdown of the number and value of transfers by customers - P2P, A2P and A2A.

TABLE 2: Summary of fund transfers by customers (Oct–Dec 2012)

No.	Type of transfer	No.	Value (USD million)
1.	Account to account transfers	33,714	1.35
1.1	MW-to-MW transfers	20,862	0.26
1.2	MW-to-customer bank account transfers	6,591	0.77
1.3	Customer banking accounts-to-MWs	6,261	0.32
2	MW-to-person transfers	368,298	14.69
3	P2P transfers	12,063,180	518.61
3.1	Sending	5,851,328	252.05
3.2	Receiving	6,211,852	266.56

1.2 REGULATORY FRAMEWORK FOR MOBILE BANKING IN PAKISTAN

The regulatory environment provides an overall perimeter for an operational model for mobile money service provision. The underlying basis of any regulation is to minimize systematic risks within the industry. The SBP issued the Branchless Banking Regulations in 2008, delineating the scope of BB and establishing who could engage in BB and what constitutes regulated or unregulated activity. The SBP revised the Branchless Banking Policy in 2011 to remove operational challenges posed by some of the perimeters of BB operations set in the Branchless Banking Regulations issued in 2008. A summary of the revisions made is given in **Box 1** (SBP 2011a).

BOX 1: Summary of the key revisions made to the Branchless Banking Regulations of 2008

1. Introduction of a simplified level “0” account providing flexibility to agents and financial institutions (FIs) for opening basic BB accounts while rationalizing KYC requirements in line with transaction limits.
2. Increased transaction limits on specific BB accounts to encourage a greater volume of transactions.
3. The requirement of biometric fingerprint scans for the opening of BB accounts, either at a bank branch or through an agent, was withdrawn. This reduced the operating cost of opening accounts in far-flung areas and will provide room in considering remunerative low balance accounts.
4. Limits on throughput (debit/credit) on basic BB accounts were withdrawn to encourage the use of BB accounts for mobile money transactions.
5. A new category of fund transfer from BB account holder to non-account holder and P2P fund transfers with monthly transaction limits, were introduced to encourage account-based transactions and to facilitate low-income migratory workers.
6. BB accounts were allowed to pay returns/mark-up to account holders on balances maintained in the BB accounts to encourage BB accounts and promote savings.
7. The SBP instructed FIs to adopt a zero-tolerance policy against alleged fraudulent agents to protect customers from agents’ fraudulent activities.

The remainder of this section will highlight salient provisions of the SBP’s Branchless Banking Regulations, 2011, that form the basic parameters for BB operations in Pakistan. These regulations are applicable to commercial banks, Islamic banks and MFBs, which are collectively referred to as financial institutions (FIs). Entities not regulated by the SBP, such as non-governmental organizations (NGOs) or cooperatives, cannot engage in BB directly. Unregulated agencies, however, can leverage the BB services of eligible regulated organizations. For example, an NGO microfinance organization may enter into an agreement with a bank providing BB to facilitate loan

repayments from, or loan disbursements to, the NGO's clients. In such a scenario, the NGO will open an account with the bank providing BB services and the bank will facilitate transactions (such as disbursements or repayments) through the NGO's account for a fee. Activities outlined in these regulations as BB cannot be offered by any person or institution other than FIs.

1.2.1 Permissible BB models

Only a bank-led model of BB is allowed, which may be implemented in different ways. Firstly, it can be implemented by creating a JV between a bank and a telco/non-bank, or by using agency arrangements.

- i. Mobile phone banking can be implemented using the following models:
 - a. *One-to-one*: One bank offers mobile phone banking services in collaboration with a specific telco/MNO.
 - b. *One-to-many*: A bank offers mobile phone banking services to customers using the mobile connections of any telco/MNO.
 - c. *Many-to-many*: Many banks and many telcos/MNOs join hands to offer services to virtually all bankable customers.

Annex 1 shows the various models adopted. Currently, just the one-to-one and one-to-many approaches are being adopted in Pakistan. At the same time, the means for interoperability is being developed in Pakistan by mobile money technology platform provider, Monet (Pvt.) Ltd., to allow many-to-many models.

- ii. BB can also be done using agents other than telcos (fuel distribution companies, the Pakistan Postal service, chain stores, etc.) and using technologies such as general packet radio service (GPRS) and point of sale (POS) terminals.

1.2.2 Permissible BB activities

- i. **Opening and maintaining BB accounts opened and operated by a customer with a bank through BB channels:** Account capabilities and limits are commensurate with the level of customer due diligence (CDD) and the KYC procedures the customer has undergone.

Annex 2 shows the KYC requirements for the respective BB activities below.

- ii. **Account-to-account fund transfers:** Customers can transfer funds to/from their BB accounts from/to other pre-registered, regular accounts (current accounts, saving bank accounts, loan limit accounts, credit card accounts, etc.).
- iii. **Account-to-person fund transfers:** Customers can transfer funds from their BB account to other non-BB account holders.
- iv. **P2P fund transfer:** Persons not holding BB accounts can also transfer funds to any other non-BB account holder (**Box 2**).

BOX 2: P2P funds transfer process

1. Customers shall produce to agents both originals and photocopies of their computerized national identity cards (CNICs), their mobile phone numbers and other necessary information, including basic data required by FIs to remit or withdraw funds.
2. Agents shall mark CNIC copies as "original CNIC seen" and shall send it to the FI. Alternatively, the agent will capture a legible image of customers' original CNICs using scanners or digital cameras.
3. Agents shall send customer data to FIs physically or electronically.
4. Transactions shall be allowed once the requisite information has been received by FIs/agents.
5. Agents shall accept the amount from senders to be remitted or give the receiver the remittance amount in return for an acknowledgement receipt.
6. FIs shall carry out NADRA batch verification of senders' and receivers' CNICs. Upon confirmation, they shall register senders and beneficiaries in the system for subsequent transactions.
7. FIs shall link the registrations of senders and beneficiaries with their CNIC numbers and mobile phone numbers.
8. FIs shall blacklist customers from further transactions if their particulars are found to be incorrect.

Source: State Bank of Pakistan. 2011. *Branchless Banking Regulations, 2011*. Karachi: State Bank of Pakistan.

- v. **Cash-in and cash-out:** Customers can deposit and withdraw funds to/from their BB accounts using a variety of options including bank-branch counters, automated teller machines (ATMs) and authorized agent locations.
- vi. **Bill payments:** Customers can pay utility bills using BB accounts.
- vii. **Merchant payments:** Customers can use a BB account to make payments for purchases of goods and services.
- viii. **Loan disbursement/repayment:** FIs, particularly MFBs, may use BB accounts to disburse loan amounts to borrowers who have BB accounts. The same accounts may be used by customers to repay their loan installments.
- ix. **Remittances (international):** BB accounts may be used to send/receive remittances, subject to existing regulations.

1.2.3 Key roles and responsibilities

A bank-led model as envisaged under the SBP's regulations for BB implies that the "ultimate responsibility for BB lies with the FI" (SBP 2011b). The FI, however, may manage risk arising out of the actions of its agents, service providers or partners by taking appropriate steps deemed necessary.

The FI's board of directors (BoD) is responsible for strategic decisions and developing relevant policies with respect to BB. The FI's senior management is responsible for implementing BB strategy and for compliance and audit functions.

The FI is responsible for the following with regard to reporting to the SBP:

- i. Submit the agent expansion plan on a yearly basis, one month in advance, for SBP approval. Upon obtaining SBP approval for the plan, the FI will update the SBP on a monthly basis, providing requisite details with regards to its agent network.
- ii. Submit quarterly reports on the financial data of BB initiatives to the SBP on a prescribed format and provide, on a monthly basis, customers' complaints of fraud and forgery incidents and the action taken by the FI.

The FI is responsible for maintaining an effective system of internal controls and for providing oversight of agents' activities. Specifically, the FI is responsible for developing and implementing well-documented agent due diligence (ADD) procedures including new-agent take-on procedures (NATPs).

The FI is also responsible for developing and implementing product and operational manuals, accounting procedures and systems and for designing the necessary stationary to be used by its agents.

1.2.4 Agent-assisted banking

The BB agent can perform any or all of the permissible BB activities allowed under the Regulations, depending on the agency type and as per the agreement between the FI and the agent. Agents may not alter charges or fee structures provided by the bank in any way and are responsible for clearly communicating this to customers.

The Regulation allows for one agent to provide services to multiple banks, provided the agent has a separate service-level agreement with each bank. Banks may choose to brand their agent network under any brand name. However, the use of words like bank, financial intermediary, microfinance bank or any other word suggesting that the agent is itself an FI, is not allowed.

Broad categories of agents identified under the Regulations are (SBP 2011b):

- i. **"Super agents:** These may be organizations possessing well-established, owned or franchised retail outlets, or a distribution setup. These will be responsible for managing and controlling sub-agents. These may include fuel distribution companies, the Pakistan Postal Service, courier companies, chain stores, etc".
- ii. **"Direct agents:** These may include large- to medium-sized stores, etc., which have a separate agency-/

service-level agreement with the FI”.

- iii. **“Sub-agents:** These are the branches, outlets or franchised locations managed by a super-agent and not directly controlled by the FI on a day-to-day basis. However, in the case of franchised locations, these must have a similar service-level agreement with the super-agent as the super-agent will have with the FI”.

1.2.5 Risk-based information/data security requirements

Information and data security requirements are based on a risk-based CDD concept. *“The Regulations stipulate the minimum required standards for data security based on level of account FI has permitted to its customer. FI must ensure the service to customer must be provisioned on the channel that is mentioned under the respective account level to ensure the financial transaction and also the end-customer account security. These channels like short message service (SMS), unstructured supplementary service data (USSD), wireless application protocol (WAP) and SIM application toolkit (SAT) are mentioned keeping in view the Mobile communication system in Pakistan. However FIs can use any other channel subject to SBP assessment that ensures the required level of security as provisioned by these protocols for different level of accounts” (SBP 2011b).*

1.2.6 Additional measures for risk mitigation

Recommended security measures in addition to minimum standards prescribed under the regulations include:

- i. Client financial transactions should be logged for evidence purposes for auditing and facilitation during forensic investigations in case of criminal incidents.
- ii. The BB application server should be able to properly handle exceptions and reporting errors.
- iii. The physical premises of telcos—mobile switching centres (MSC), FI and technology service provider data centres access—should be properly managed with the requisite infrastructure and standard operating procedures.

- iv. The BB application server should profile client behaviour (spending patterns) so that illegitimate and/or abnormal usage can be detected at an early stage.
- v. FIs should ensure that client PINs and profile data are encrypted and that appropriate controls are in place to ensure data integrity.
- vi. Telcos, FIs and technology service providers should possess appropriate technology infrastructure backups, disaster recovery plans and technical security infrastructure to ensure timely service availability to all clients.
- vii. End-users should be aware of the fact that they should not store PINs and other critical information on mobile phones.

1.3 GROWTH AND CHALLENGES FOR THE MOBILE SERVICES SECTOR IN PAKISTAN

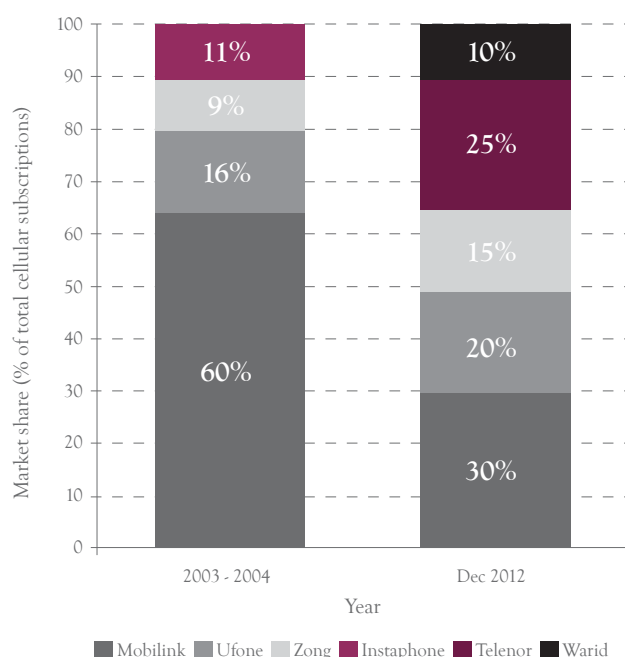
Since deregulation in 2004, Pakistan’s mobile services sector has developed exponentially to become a leading emerging market in terms of service and market penetration. From an approximate market penetration rate of 3.29% in 2003–04, mobile cellular service market penetration (tele-density) had reached 68% by February 2013 (Pakistan Telecommunication Authority [PTA] 2013). During the same period, annual cellular subscribers increased from about 5 million to 121 million. Of the total mobile phone subscribers in Pakistan, approximately 98.4% are pre-paid subscribers. According to the PTA, the bulk of mobile service subscribers belong to the lower-income population (PTA 2012). This reflects the potential high price sensitivity of the majority of Pakistan’s mobile phone service subscribers.

A deregulated and enabling environment has encouraged approximately USD 7.6 billion in investment in the cellular services sector over the 2006–12 period (PTA 2012). The investment reflects the establishment and development of

infrastructure for the provision of cellular services, as well as the conversion of Pakistan's sector from a monopolistic to a highly competitive sector.

Figure 2 (based on data from PTA 2013) shows how market share concentration has shifted among MNOs since 2003–2004.

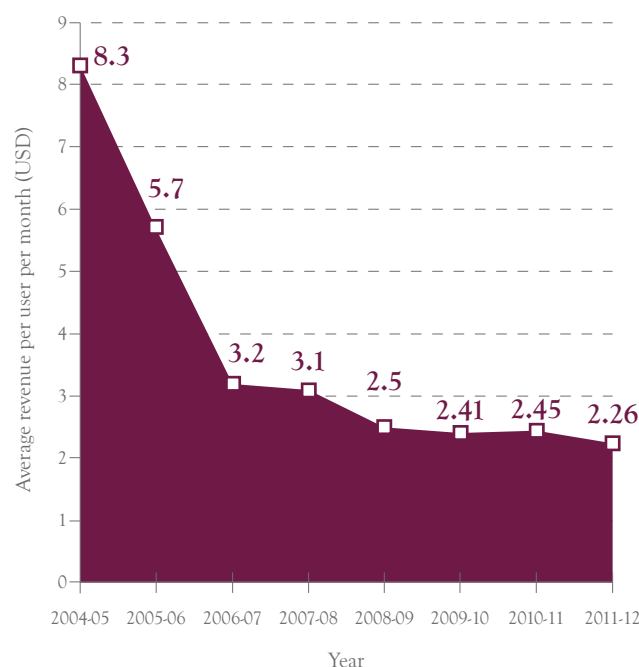
FIGURE 2: Comparison of MNO market shares between 2003–4 and Dec 2012



Competitive pressure on prices and tariffs in Pakistan's cellular sector has led to a considerable lag between the rate of growth in "real" revenues and the increase in the subscriber base; the latter has far outstripped the former. Hence, as voice and SMS tariff rates in Pakistan declined significantly, the average revenue per user (ARPU) per month declined to approximately USD 2.26 in 2012 from USD 8.3 in 2005 (**Figure 3**) (PTA 2011; PTA 2012).

In such a competitive market, subscriber retention and acquisition has become the main focus of service providers (Khan et al. 2012). Hence, Pakistan's cellular mobile service providers have surpassed concentration on voice and

FIGURE 3: Pakistan's cellular service sector's average revenue per user per month



are now endeavouring to provide various value-added services such as mobile banking services to increase or at least maintain the ARPU and counter the revenue impact of intense price competition.⁵

In addition to the declining ARPU, some of the other challenges MNOs face in Pakistan's competitive cellular service sector are the need to maintain network quality and capacity to meet the traffic generated by an increasing subscriber base.

1.4 ACCESS TO FINANCIAL SERVICES IN PAKISTAN

An Access to Finance (A2F) survey conducted in Pakistan in 2009 revealed that only 14% of Pakistani adults used the services (credit, savings, insurance, payments and remittance) of the formal financial sector; 36.2% of the adult population relied on the informal sector (committees, moneylenders, shopkeepers, *hawala/hundi* money transfers, family and friends). Approximately 49% of the

⁵ GSM ARPU does not contain any financial services. This ARPU is used as a benchmark in the local and international industry so Telenor does not customize it to include financial services.

potential market used neither.

Access to formal financial services—in terms of the number of potential users of financial services being able to acquire such services—in Pakistan is one of the lowest in the region. By contrast, 32% of Bangladesh’s population has access to the formal financial system in the country. This ratio is 48% in India and 59% in Sri Lanka (Nenova et al. 2009).

Some of the key challenges to increasing the access to formal financial services in Pakistan are supply-side related. Scheduled commercial banks tend to target a limited, higher income, primarily urban market segment. On the other hand, development finance institutions targeting underserved markets face the resource challenge of expanding their outreach through cost-ineffective traditional brick and mortar branch networks.

Despite the phenomenal growth of microfinance in Pakistan since 2000, penetration is estimated to be less than 8.6% with a total of 2.36 million active borrowers (PMN 2012b). By year end 2012, microfinance branches (including those of MFBs and non-bank MFIs) numbered 1,981 with 64.8% of them located in Punjab - just *one* of four provinces (PMN 2012b). With 9,838 branches of scheduled banks⁶ operating in Pakistan by year end 2012, the combined total brick and mortar outreach of FIs was only 11,819 (SBP 2012b).

⁶ Scheduled banks include public sector commercial banks, local private banks, foreign banks operating in Pakistan and specialized banks such as Industrial Development Bank of Pakistan and Zarai Taraqiati Bank Ltd.

2. INCENTIVES FOR LAUNCH, SUCCESSFUL DELIVERY AND EXPANSION OF EASYPAISA

MFI typically incur higher operational costs in terms of infrastructure outreach, staff effort and transportation to facilitate transactions of small amounts. Mobile banking offers MFIs the opportunity to expand their outreach and increase their financial services to clients cost effectively. Studies have shown mobile banking to be less costly (by approximately 19%) than traditional banking services (McKay and Pickens 2010). BB can potentially enable MFIs to become virtual banks and serve a significantly larger number of clients without investing proportionately in traditional branch infrastructure and overheads. As a result, more and more MFIs have adopted technological enhancements in mobile and telecommunications to deliver microfinance products.

For telcos, mobile money can mean broadening service usage. If the mobile money transactions and services are SMS based, it means greater SMS revenues. If telcos are able to increase their active MWs or BB accounts, a successful mobile money service can lower client turnover; clients tend to be very sensitive to cost changes, often switching to other providers. Bundling products and services together means greater customer loyalty.

2.1 RECOGNIZING THE STRATEGIC VALUE OF LAUNCHING MOBILE MONEY SERVICES

Recognizing the potential of technology for optimizing operational costs, whether related to cost-effective outreach networks, cash handling or managing transactions, TMFB envisaged leveraging technology to improve the bank's service levels to its target customers. This is clearly reflected in TMFB's mission statement:

“To set new standards of excellence in value-added micro-finance and related services through innovative technology and a highly skilled/professional staff for customer convenience and satisfaction”.

Prior to launching Easypaisa through a JV with Telenor-Pakistan, TMFB had been the only MFP in Pakistan to experiment with technology-based alternative distribution channels like biometric ATMs and POS devices.

In November 2006, the Government of Pakistan established a stakeholder forum to deliberate on Pakistan's approach to BB. While the participation of the majority of stakeholders declined over time, the “SBP, the Ministry of

Information Technology (MoIT) and Tameer remained as the main participants” (CGAP 2011).

By 2008, prior to the purchase of the shareholder stake by Telenor-Pakistan in TMFB and the launch of Easypaisa's JV with Telenor, TMFB had begun exploring agent network development for BB through the use of mobile phones and POS. This endeavour was assisted primarily through a USD 1.4 million grant from the Consultative Group to Assist the Poor (CGAP) and co-funded by the Bill and Melinda Gates Foundation (BMGF) in early January 2008.

Similarly, Telenor-Pakistan had been exploring avenues for launching mobile money services in Pakistan even before the SBP issued the Branchless Banking Regulations in 2008. Pakistan was not to be the first country for the Telenor Group to provide mobile-based financial services (**Box 3**).

The regulatory stipulation for the bank-led model coupled with TMFB's need for capital injection in 2008 created a situation ripe for partnership between Telenor-Pakistan and TMFB - a partnership aimed at mobile money service provision.

The regulations' requirement that BB must be a bank-led model made it necessary for Telenor to partner with a bank. One of the banks Telenor explored for this opportunity was TMFB.

As an MFB, TMFB was eligible under SBP regulations for operating BB. Furthermore, TMFB's management shared the interest and commitment to expanding financial service outreach through innovative BB.

By early 2008, however, TMFB needed a capital injection to maintain its capital adequacy ratio. TMFB commenced operations in 2005 with a paid-up capital of

PKR 600 million (USD 10.1 million⁷). However, its equity had fallen to PKR 293.34 million (USD 4.82 million⁸) by March 2008. Until the end of 2008, TMFB had to raise its

capital to PKR 500 million (USD 8.2 million) to meet SBP requirements.⁹

BOX 3: Mobile financial services in the Telenor Group

Pakistan

Easypaisa was introduced by Telenor-Pakistan in collaboration with TMFB in 2009 with an aim to bring financial inclusion to Pakistan. With over 22,000 retail merchants, Easypaisa enables customers to pay their bills, make domestic and international remittances, open their own mobile accounts, utilize donation services, purchase air tickets and subscribe to savings and insurance services. It also offers cash disbursement solutions for businesses and government institutions.

Bangladesh

MobiCash has offered BillPay services since 2008. This is an agent-assisted utility bill payment service that targets the semi-urban and rural segment of the population. It also offers ticketing services made available through mobile phones.

Thailand

dtac and KBANK introduced the ATM SIM Project to customers in 2007. ATM SIM enables dtac subscribers with KBANK accounts to conduct basic transactions conventionally done through ATM on dtac's ATM SIM. This co-branded banking service offers bill payments, fund transfers, balance checks and ticket purchases. Paysbuy, a dtac subsidiary company, provides online payment processing through a variety of payment channels, including credit cards, bank direct debits, cash at counters (at 7-Elevens and Tesco Lotus) and e-wallets.

Serbia

Telenor-Serbia offers Platimo, a complete electronic payment system based on a SIM application. Users can pay their Telenor bills, top-up prepaid accounts, authenticate transactions and transfer money.

Hungary

Mobile shopping services offer a wide range of services, including payment for parking and motorway vignettes. The mobile payment service allows customers to pay for certain products and services, transfer and receive money and settle Telenor mobile phone/utility bills.

Malaysia

DiGi's financial services comprise DiGi SendMoney, DiGi Simple Prepaid Card and DiGi Insurance.

India

Uninor customers will be able to purchase movie tickets using their mobile account balances.

Source: Telenor Group.

<http://www.telenor.com/innovation/financial-services/>

In 2008, Telenor-Pakistan invested approximately USD 12 million and acquired a 51% equity stake in TMFB valued then at about USD 24 million.¹⁰ On October 15, 2009, Telenor-Pakistan and TMFB launched their JV, Easypaisa. By the end of 2011, Easypaisa had facilitated over 39 million transactions worth PKR 76 billion (USD 844 million) (TMFB 2011).

A survey conducted by CGAP showed that about 41% of Easypaisa users live on less than USD 2.50 a day (in 2005 PPP adjusted dollars) while about 45% of all Easypaisa users did not have a bank account at all (TMFB 2011).

2.2 EASYPAlSA GENERATES ADDITIONAL REVENUE AND CUSTOMERS PRIMARILY THROUGH OTC TRANSACTIONS

Revenue from BB that went to TMFB accounted for six percent (USD 1.1 million) and eight percent (USD 2.5 million) of the total TMFB revenue in 2010 and 2011, respectively (TMFB 2011).

According to the Telenor Group's 2012 annual report, revenues from financial services contributed approximately 3.5 percentage points to overall revenue growth (of 17% in local currency) for Telenor-Pakistan in 2012. It also contributed to "subscription growth and improved the contribution margin" leading to an improved earnings before interest, taxes, depreciation and amortization (EBITDA) margin before other income and expenses (Telenor Group 2012).

The majority of Easypaisa transactions have been facilitated by Easypaisa agents. This reflects the nature of Easypaisa services, the majority of which do not require an Easypaisa mobile account. **Table 3** lists the Easypaisa services being offered as of June 2012. Five of ten services being offered require neither an Easypaisa mobile account, nor a Telenor SIM.

⁷ At the 2005 estimated exchange rate of USD 1 = PKR 59.4.

⁸ At the 2008 estimated exchange rate of USD 1 = PKR 59.4.

⁹ JCR-VIS Credit Rating Company Limited. 2008. Rating report.

¹⁰ Hussain, N. (President, TMFB). 2013. Personal communication.

Easypaisa focused on OTC-based services initially, since the majority of mobile service subscribers (regardless of mobile service provider) in Pakistan were accustomed to OTC transactions for their mobile phone balance top-ups. These transactions occurred either through prepaid cards or through mobile service provider agents,¹¹ and subscribers

TABLE 3: Portfolio of Easypaisa services as of June 2012

No.	Easypaisa service name	Purpose	Type of transaction involved (OTC/MW transaction/both*	Mobile account required (yes/no)	Telenor SIM required (yes/no)
1.	Easypaisa mobile account	Accounts are actual bank accounts and work just like normal bank accounts, with pre-specified limits. Account holders can make: Money transfers (MW-2-MW, MW-2-P, MW-2-B), bill payments, international home transfers, Easyload, donations.	MW	No prior bank account or mobile account required to open an Easypaisa mobile account	Yes
2.	Easyload	Allows Easypaisa mobile account holders to purchase prepaid balance and pay post-paid bills for the Telenor mobile service anytime, anywhere using a mobile phone.	MW	Yes	Yes
3.	EasyPay Solution for companies	Businesses registered for this service are provided with a corporate Easypaisa mobile account number, which they can communicate to their customers. Customers in turn can then make payments to the businesses via Easypaisa agents/shops or via an Easypaisa mobile account.	Both	For businesses: Yes For customers: No	For businesses: Yes For customers: No
4.	Khushaal Beema	A savings product through which Easypaisa mobile account holders receive life and accidental death insurance of up to PKR 1 million, free on maintaining a savings balance of PKR 2,000 or more in their mobile accounts.	Both: Deposits and withdrawals of a minimum balance in MW have to be made using an Easypaisa agent.	Yes	Yes
5.	Easypaisa Khushaal Munafa	A savings product offering customers competitive returns on the savings held in their mobile accounts.	Both (deposits and withdrawals against the mobile account can be made using an Easypaisa agent)	Yes (customers without an existing Easypaisa mobile account can subscribe for the product. Subscription results in the opening of an Easypaisa mobile account)	Yes (for opening an Easypaisa Mobile Account)
6.	Easypaisa money transfer	Any person with a valid CNIC can send or receive money through an OTC transaction facilitated by an Easypaisa agent.	Both	No	No
7.	Easypaisa bill payment	Allows the payment of utility bills (electricity, telephone, gas, water and internet) through an Easypaisa shop/agent, Telenor franchise, Telenor sales and service centres or TMFB branches.	Both	No	No
8.	Easypaisa international home transfer	Allows user to receive foreign remittance sent via Easypaisa remitting partners abroad.	Both	Not necessary for receiving payments	Not necessary for receiving payments
9.	Donations through the Easypaisa shop	Customers can send donations to philanthropic organizations through the Easypaisa programme at any time via Easypaisa agents/shops across the country.	Both	No	No
10.	Easypaisa ticketing solution	Allows customers to pay for Pakistan International Airline (PIA) tickets via Easypaisa mobile accounts or Easypaisa agents/shops.	Both	No	No

¹¹ Bjaenun, R. (VP, Financial Services, Telenor-Pakistan). 2013. Personal communication.

were therefore more ready to adopt OTC-based services than make transactions via mobile accounts.

However, as the next section explains, both TMFB and Telenor-Pakistan have an incentive to increase the ratio of total transactions conducted through MWs/mobile accounts. TMFB and Telenor-Pakistan expect that more transactions will be conducted through mobile accounts as client trust and comfort levels increase. This is supported by the fact that after launching several OTC products, Easypaisa has launched two savings products (Khushhal Beema and Easypaisa Khushhal Munafa) that require the use of mobile accounts for transactions.

A proportion of fee paid by the customer for an OTC transaction is the commission the agent earns on facilitating that transaction. The remainder of the fee, net of the agent commission, is divided between Telenor-Pakistan and TMFB. As per the agreement between TMFB and Telenor-Pakistan (also TMFB's holding company), revenues from Easypaisa are shared between TMFB and Telenor-Pakistan in the ratio of 13% and 87% (2010: 25% and 75%) net of agents' commission, respectively (TMFB 2011). Given the fixed cost—including personnel costs, technology platform costs, marketing costs and agent network set-up costs—behind Easypaisa operations, increased OTC transactions facilitated by Easypaisa agents will achieve economies of scale, thereby decreasing the average unit cost of Easypaisa operations. The expansion of OTC transactions through an agent network is in the interest of both TMFB and Telenor-Pakistan as they have invested in fixed costs to support Easypaisa operations within their respective domains of responsibility and function.

2.3 INCENTIVE TO ENCOURAGE MOBILE WALLET-BASED TRANSACTIONS

Both MNOs and FIs have an incentive to maximise MW transactions over OTC transactions from the perspective of maximizing revenue, reduced cash handling and agent monitoring costs, client retention/turnover reduction (in the case of MNOs) and the cross-selling of other core

services (in the case of both MNOs and FIs).

Over time, MW transactions have the potential to reduce and/or negate the role of agents who charge a commission (proportion of the transaction fee paid by customers) for every transaction they facilitate. By reducing the agent's role, mobile money service providers can increase the total net revenue net of agent commissions with a given service fee structure. This means that both MNOs and FIs earn larger revenue shares. This is, however, considered to be a long-term eventuality as it will require heavy up-front client education in order to develop sufficient ease with the delivery channel.

Easypaisa is a one-to-one model whereby banks offer services via a BB account through a single MNO, either by means of an agency or a JV agreement with the MNO or through an agent network (SBP 2011b). Easypaisa mobile accounts are opened and managed by TMFB; customers must own Telenor SIMs to conduct any mobile money transaction through mobile accounts. For TMFB, a new mobile account holder means more accounts that can be leveraged for the cross-selling of both mobile banking and traditional banking products including saving, insurance and loan products. For Telenor-Pakistan, it means:

1. Increased Telenor SIM subscriptions;
2. A reduction in subscriber turnover as subscribers will incur greater costs using other mobile service providers.

2.4 INTERESTS ALIGNED BY EQUITY SHARE

While both Telenor-Pakistan and TMFB share an incentive to successfully deliver and expand Easypaisa services based on both OTC transactions and mobile accounts, their interests are further aligned by Telenor-Pakistan's ownership stake in TMFB and the resulting representation of Telenor-Pakistan in TMFB's governance structure. By virtue of owning 51% of TMFB equity, Telenor-Pakistan benefits from TMFB's increased profitability and market value. Furthermore, an intimate engagement of Telenor-Pakistan representatives in TMFB's governance structure also

cements the alignment of interest and strategy between TMFB and Telenor-Pakistan.

TABLE 4: Members of TMFB's BoD after Telenor-Pakistan's stake in TMFB

No.	Type of member of the BoD	Name	Primary company and designation
1.	Chairperson	Tine Wollebekk	VP, Financial Services, Telenor Group
2.	President and TMFB CEO	Nadeem Hussain	President and CEO, TMFB
3.	Director	Irfan Wahab Khan	CMO*, Telenor-Pakistan
4.	Director	Lars Christian Iuel	CEO*, Telenor-Pakistan
5.	Director	Karl Erik Broten	CFO*, DiGi Communications-Malaysia
6.	Director	Nizar Noor Mohammed	Represents a private investor in TMFB
7.	Director	Salim Raza	Independent director

CMO = chief marketing officer;
CEO = chief executive officer;
CFO = chief financial officer

With the purchase of a 51% equity stake in TMFB, Telenor-Pakistan acquired a predominant representation in TMFB's strategic governing body, the BoD. The BoD provides the general direction and superintendence of affairs and business (Government of Pakistan 2000). The BoD is presided over by a chairman. As per SBP rules, MFB presidents also serve as bank CEOs and ex-officio directors of the BoD. TMFB's BoD consists of seven members, four of whom represent Telenor-Pakistan and the Telenor Group. **Table 4** lists the names and designations of TMFB's BoD members.

For the efficient discharge of its functions, TMFB has appointed the committees as following:

i. Human resource management and planning committee

Chairman	Lars Christian Iuel CEO, Telenor-Pakistan Director, TMFB BOD
Member	Irfan Wahab Khan CMO, Telenor-Pakistan Director, TMFB BOD
Member	Nizar Noor Muhammad Director, TMFB BoD

ii. Branchless Banking steering committee

Chairman	Irfan Wahab Khan CMO, Telenor-Pakistan Chairman, TMFB BoD
Member	Nadeem Hussain President and CEO, TMFB
Member	Karl Erik Broten CFO, DiGi Com Malaysia Director, TMFB BOD
Member	Lars Christian Iuel CEO, Telenor-Pakistan Director, TMFB BOD
Member	Tine Wollebekk VP Financial Services Telenor Group Chairperson, TMFB

iii. Audit committee	
Chairman	Salim Raza Independent director, TMFB BOD
Member	Karl Erik Broten CFO, DiGi Com Malaysia Director, TMFB BOD
Member	Nizar Noor Muhammad Director, TMFB BoD

As the constitution of the BoD and the committees shows, the acquisition equity stake in TMFB has allowed Telenor-Pakistan to wield better strategic control over key areas of TMFB in general, and over its approach to mobile money service operations in Pakistan.

iv. Risk management committee	
Chairman	Salim Raza Independent director, TMFB BOD
Member	Tine Wollebekk VP, Financial Services, Telenor Group Chairperson, TMFB
Member	Karl Erik Broten CFO, DiGi Com Malaysia Director, TMFB BOD
Member	Irfan Wahab Khan CMO, Telenor-Pakistan Director, TMFB BOD

3. ORGANIZATION OF EASYPAISA

Easypaisa is not a legal entity or an organization. It is, however, considered a “virtual organization” in terms of how functions and roles and responsibilities are organized to deliver Easypaisa services.¹²

The term “virtual organization” implies that firstly, both Telenor-Pakistan and TMFB team their resources to support Easypaisa operations.

Secondly, rather than being organized as subsets of the respective functional departments in Telenor-Pakistan and TMFB, the primary functions—marketing, product development, sales and distribution management, customer grievance management, risk and compliance management, technology management, banking operations management/float management—involved in the value chain of Easypaisa service delivery are organized as distinct functions under the Easypaisa business line.

Thirdly, the functions are distributed between Telenor and TMFB based on their core competencies:

- i. Telenor took the lead on branding, marketing and distribution. The Easypaisa functional teams managed by Telenor-Pakistan are organized under Telenor-Pakistan’s vice president of financial services and are housed in the Telenor-Pakistan head office in Islamabad.
- ii. TMFB took the lead on risk management, compliance and liquidity management. The functions housed in TMFB come under the purview of the head of Easypaisa operations and are conducted from TMFB’s head office in Karachi. The head of Easypaisa operations reports directly to the president of TMFB and the BB steering committee.
- iii. Some functions are shared between Telenor and TMFB, including product development and technology.

And finally, the BB steering committee (refer to **section 2.4** for details) meets six to eight times a year to govern the management of Easypaisa operations between Telenor-Pakistan and TMFB.

3.1 LEGAL AGREEMENTS SHAPING OPERATIONAL ROLES AND RESPONSIBILITIES

The SBP’s Branchless Banking Regulations allow for only bank-led models for BB service delivery. A bank-led model, as defined by the SBP, allows banks to leverage external competencies through partnerships under an agency agreement or a JV. Some functions and responsibilities, such as those involving reporting to the SBP, developing and ensuring the effectiveness of internal controls, risk management and ensuring compliance against SBP regulations are the direct responsibility of the bank. Furthermore, according to the regulations, the bank’s BoD is responsible for strategic decisions and developing relevant policies with respect to BB.

Given the broader parameters of roles and responsibilities laid down by the SBP for banks and partners in providing BB, TMFB and Telenor identified comparative competencies to carry out the various functions required for operating a BB business line.

The delineation of roles and responsibilities was then structured under a set of agreements.¹² Agreements include:

- i. A super agency agreement making Telenor-Pakistan responsible for developing and managing the agent network on behalf of TMFB, and under TMFB’s close supervision from the perspective of risk management and compliance.
- ii. A JV agreement whereby some of the primary functions such as product development, sales/marketing and distribution of Easypaisa service delivery were made the primary responsibility of Telenor-Pakistan. The agreement also defines a revenue sharing model whereby the revenue is to be shared in approximate relation to the cost of delivering on respective responsibilities.

- iii. Agreement on BB platform hosting whereby the

¹² Bjaerum, R. (VP, Financial Services, Telenor-Pakistan). 2013. Personal communication.

¹³ Despite any agreement, all strategic decisions are approved by TMFB’s respective BoD subcommittee(s) and then by the BoD itself. Telenor-Pakistan cannot make any strategic decision in isolation.

platform by Fundamo (which is owned by TMFB) is hosted at Telenor-Pakistan and transaction-related data is shared between both parties at a specified frequency.

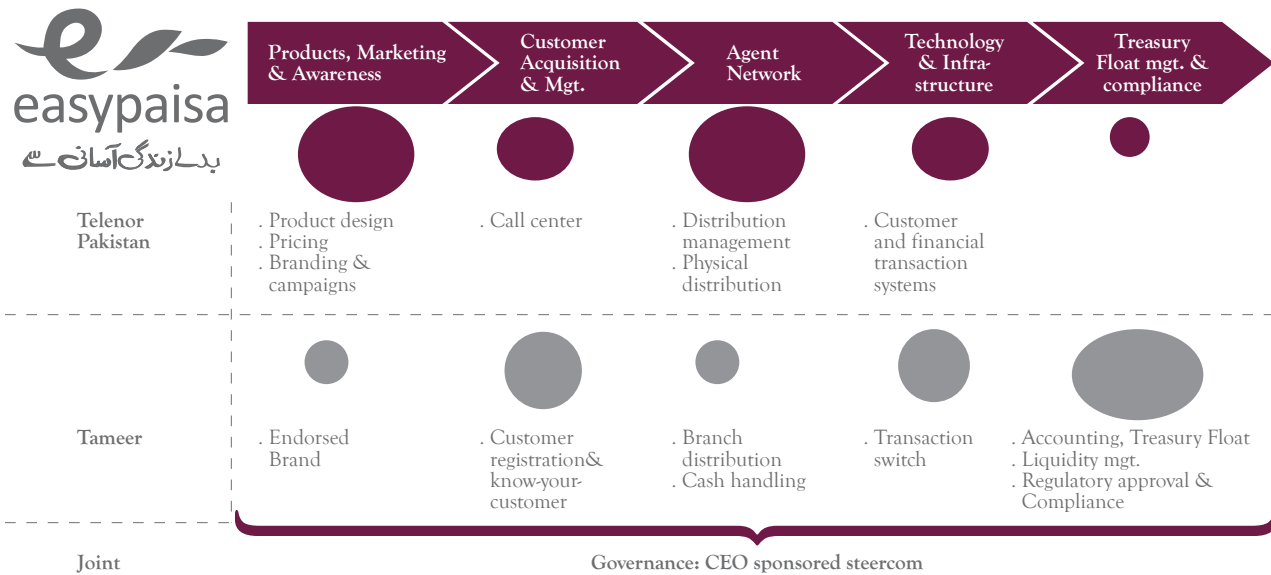
3.2 RELATIVE COMPETENCIES AND DIVISION OF ROLES AND RESPONSIBILITIES

The primary stakeholders engaged in the delivery of Easypaisa services are TMFB and Telenor-Pakistan. Other stakeholders include the Easypaisa agents who are responsible for facilitating Easypaisa transactions and the opening of mobile accounts. They are also often a source of insight into targeted customer cash flow management behaviour and preferences. **Figure 4**¹⁴ summarises the roles of Telenor-Pakistan and TMFB in delivering Easypaisa services. The circles in blue and green below each value chain function reflect the relative role of Telenor-Pakistan and TMFB respectively in performing a specific function.

The following is the summary of roles, responsibilities and perceived comparative competencies of Telenor-Pakistan and TMFB against the key value chain functions:

- i. **Strategic decision-making:** Strategic decision making is the responsibility of TMFB’s BoD as per the SBP’s Branchless Banking Regulations. TMFB’s BoD, however, has a strong representation from Telenor; the chairman of the BoD is a representative of the Telenor Group, the CEO and CMO of Telenor-Pakistan, and the CFO of DiGi Communications-Malaysia are all directors in TMFB’s BoD. The BB steering committee (which coordinates strategy with regards to BB services) reports to the TMFB BoD and has as its members the President and CEO of TMFB, the CEO and CMO of Telenor-Pakistan and the Chairman of the BoD.
- ii. **Product development:** The Easypaisa product development team draws on the competencies of both the telco and the bank to design and deliver Easypaisa products. For example, the design of OTC products that mimic OTC mobile balance top-up services and aim at high volumes of low-value OTC transactions, benefit from the MNO’s relevant experience and competencies. Also, an MNO’s experience and expertise with regard to product design aspects related to customer interface, contributes to the design of Easypaisa products. Aspects related to customer interface include determining how a customer may initiate the transaction and the nature and timing of GSM confirmations involved.

FIGURE 4: Division of roles in the Easypaisa value chain



¹⁴ Shared by Telenor-Pakistan.

Similarly, the Easypaisa product development team benefits from the bank's experience and expertise in the design and launch of products, offering financial services such as savings, insurance and loans. This is because the nature of TMFB's business is such that it possesses a competency advantage over an MNO in terms of the design of financial service products. Furthermore, since an MNO cannot provide financial services beyond facilitating payments and transactions, it will need closer coordination with the bank in designing mobile financial services.

Therefore, TMFB had a greater role in the design of the recently launched Easypaisa savings (*Khushhali Munafa*) and insurance (*Khushhali Beema*) products. The design of these products was led by the product development team at TMFB. The same team at Telenor had assigned a liaison from within its team to provide inputs with regards to product design aspects related to customer interface.

iii. Marketing: Easypaisa is marketed as a distinct brand and is co-branded by both TMFB and Telenor-Pakistan. Other than the fact that Telenor-Pakistan may be in a better position to afford the aggressive mass marketing required to promote a mobile money service, an MNO may be better placed than a bank to lead the marketing drive. Given the much larger target customer base of MNOs as compared to that of banks, MNOs tend to have a stronger experience in mass marketing. Furthermore, the brand awareness of an MNO tends to be far greater than a bank's given that MNOs, especially those such as Telenor-Pakistan with its leading market share, have a significantly larger customer base. Thus, the use of an MNO's brand can prove to be an asset for marketing and raising awareness of mobile banking services.

iv. Customer acquisition and management: Both Telenor-Pakistan and TMFB are equally engaged in customer acquisition and management. Telenor-Pakistan's customer call centre in Islamabad addresses customer queries for both its GSM and Easypaisa services. TMFB has a call centre located in Lahore, addressing both TMFB branch-related and Easypaisa queries. The first line of approach available to Easypaisa customers for queries is the Telenor/Easypaisa call centre. The staff at the Easypaisa call centre are equipped to guide and

respond to basic process-related queries that do not involve details related to the calling customers' transactions.

TMFB's call centre staff provide the second line of approach to customers' transaction-related queries. Any caller who wants to make a complaint or a query with regards to transactions calls the aforementioned helpline connecting the customer to the Easypaisa call centre. Upon determining the nature of the query as that to be addressed by TMFB, Telenor-Pakistan's call centre transfers the call to TMFB's call centre in Lahore. All matters such as determinations, clarifications, updates and compensation to the customer are addressed by TMFB. All compensations to customers are reflected in the overall Easypaisa accounts and affect the total revenue that is to be divided between TMFB and Telenor-Pakistan.

v. Agent and distribution network: As a super-agent for TMFB, Telenor-Pakistan is responsible for developing and managing the Easypaisa agent network under the close supervision of TMFB. As the super-agent, Telenor's responsibilities include identifying, selecting, on-boarding, training and monitoring and assisting with agent liquidity.

Agents are one of the primary contact points for customer acquisition and management. They are engaged in both facilitating mobile money transactions and fulfilling documentation requirements under SBP regulations or the bank's own standard operating procedures. Under SBP regulations, the bank is ultimately responsible for ensuring compliance, setting up internal control systems and monitoring operations for operational risk.

The audit and monitoring of agents takes place at four levels and Telenor-Pakistan and TMFB are equally involved:

- **Level 1:** Telenor-Pakistan conducts random audits of Easypaisa to monitor agent compliance with both Telenor-Pakistan's own policies and those laid down by the SBP.
- **Level 2:** TMFB's internal audit team conducts frequent and random audits of agents against the

compliance guidelines outlined for agents. It also recommends actions against non-compliant agents.

- **Level 3:** An independent third-party audit is contracted by the Easypaisa team to audit compliance by Easypaisa agents.
- **Level 4:** The SBP conducts audits of the agent network.

vi. Agent liquidity and float management: Liquidity or float refers to the “stock” of cash or electronic money that agents hold. For an agent, liquidity management is the process that ensures that the agent has the required cash or electronic money when the customer asks for it. Cash floats are required by agents to make OTC payments to customers who are recipients in the mobile money transaction. Agents require electronic money float to make electronic payments to another agent or to another mobile account on behalf of a customer. Effective liquidity management is required to efficiently serve customers and improve their experience at outlets, enable agents to increase profits and to maximize the number of transactions through agents at any given time.

Agents contact TMFB through a helpline when they require cash liquidity and need to convert their e-money floats into cash. TMFB helpline staff instruct agents with regard to the process and place—the nearest bank branch or TMFB’s cash van—at which e-money floats can be converted to cash. All associated back-end reconciliations with partner banks are managed by TMFB.

vii. Risk management: The primary responsibility of risk management lies with TMFB. TMFB, however, directs Telenor-Pakistan’s Easypaisa team at various levels to gather information for risk management purposes. TMFB and Telenor-Pakistan manage and monitor risk (including operational, systemic, technological, financial and compliance risk) at various levels:

- a. Board-level risk committee:** This is the highest-level committee that reports to the TMFB BoD and meets quarterly to discuss risks associated with TMFB’s core banking and BB operations. The

senior management at TMFB and Telenor-Pakistan engaged in risk management, internal audit and monitoring, report to the committee.

- b. TMFB’s internal audit/risk management:** Risk management in TMFB is organized under the TMFB’s chief risk officer (CRO) who reports directly to the President and CEO of TMFB and to the BoD’s risk committee. The CRO oversees dedicated risk and compliance units organized for BB and for TMFB’s core banking functions, respectively. The internal control unit at TMFB develops guidelines and manuals for compliance with regulatory requirements and also drafts the penalty matrix for various degrees of non-compliance by agents.

- c. Fraud and risk management unit (FRMU):** The risk management and compliance unit within TMFB for Easypaisa is referred to as the FRMU and is located in Lahore. FRMU is responsible for agent audits on behalf of TMFB and monitors compliance with respect to service-level agreements, contracts, product guidelines and standard operating procedures. The FRMU is also responsible for the resolution of customer compliance and reporting of any fraud detected.

- d. Easypaisa risk management unit:** This unit has been set up under the Easypaisa team. The risk management collates risk audit reports from various sources, including TMFB’s internal audit team, third party audits, the SBP’s audits and compliance audits conducted by the Easypaisa team, and follows up on all internal and external audit observations to bring them to a closure. It also carries out risk assessments of all new processes and changes in current processes and new products to ensure that the system is free of anomalies.

- viii. Technology infrastructure:** TMFB has deployed a BB platform solution developed by Fundamo to support Easypaisa transactions. The Fundamo platform is hosted at Telenor-Pakistan in Islamabad, where it is integrated with Telenor-Pakistan’s USSD platform (a communication channel). All Easypaisa mobile accounts and transactions are recorded on the Fundamo platform.

The Fundamo platform is also connected with TMFB's core banking system through TMFB's core banking financial "switch" IRIS.¹⁵ IRIS is further linked with the 1-Link system¹⁶ that allows TMFB's core banking system to talk, when required, to the core banking system of other banks on 1-Link.

P2P or OTC transactions are completed on the Fundamo platform. For any transaction involving Easypaisa mobile accounts, Fundamo talks to the TMFB core banking system via TMFB's core banking switch IRIS. When a transaction involves the movement of balance between TMFB and another bank, the transactions are communicated between the banks through 1-Link interbank transactions.

Although the Fundamo BB platform is integrated with Telenor-Pakistan's USSD platform, Telenor-Pakistan does not have access to the data recorded on the BB platform. Through an agreement, TMFB and Telenor-Pakistan have agreed to share specific Easypaisa transaction-related data at a specified frequency with each other, while maintaining the respective confidentiality requirements that both Telenor-Pakistan and TMFB have with their customers.

¹⁵ IRIS is the Next Generation Enterprise Switching Middleware based on Phoenix technology. IRIS lays the foundation for alternative banking distribution infrastructure on which channels and services can be added with great ease and in a very short time span. IRIS builds frameworks for banks, allowing them to immediately deploy support for various delivery channels (ATMs, IVR, call centres, POS networks [at branches/merchants], internet banking, cellular banking and bill payments).

¹⁶ 1-LINK (Guarantee) Limited is a consortium of major banks that own and operate the largest representative interbank network in Pakistan.

4. CONCLUSION

Easypaisa is seen as a success on several counts. Since its launch in 2009, Easypaisa has become one of the largest financial service networks in the world.

By December 2012, three years into its launch, Easypaisa services were being offered in 750 cities across Pakistan through a network of approximately 20,000 agents. In the same period, it was servicing nearly four million users and five million transactions per month (Bjaerum 2012). CNN has touted Easypaisa as “the model of the future” (Telenor Group 2013). According to CGAP, Easypaisa was the third largest mobile money service in the world in terms of customers by 2012. Easypaisa is also a subject of interest around the world for the enduring partnership between two separate entities, TMFB Ltd. and Telenor-Pakistan. The purpose of conducting a study of Easypaisa’s operational model was to be able to identify key success factors that have enabled Easypaisa to reach scale and allowed for an enduring partnership between two separate legal entities. The overview of Easypaisa’s operating model suggests that there are several factors contributing to its success with regards to scalability, partnership and organizational efficiency. Beyond these factors, the macro environment (regulations and market readiness) determines the extent to which mobile money service provision has been enabled.

4.1 ABILITY TO REACH SCALE

For any business, the ability to achieve scale is important; it allows the business to spread its fixed costs over greater numbers of customers, thus reducing the average cost of service provision. This in turn renders the business more competitive. For the financial services sector, scalability is important for a sustainable impact in terms of expanding access to financial services. Key factors contributing to Easypaisa’s ability to reach scale include:

i. Business organization: Easypaisa is organized as a business line separate from the mainstream business of both TMFB and Telenor-Pakistan. Within Telenor-Pakistan, there are dedicated teams for key operational functions—product development, sales and distribution, technology and risk management—for Easypaisa. These dedicated teams report to the VP for financial services, Telenor-Pakistan. Similarly, a dedicated operations team led by the head of operations for Easypaisa is assigned at TMFB. The head of operations for Easypaisa at TMFB coordinates all bank-related

backend operations related to Easypaisa, and risk management and compliance functions on behalf of TMFB and reports to both the President/CEO of TMFB and Telenor-Pakistan’s VP, Financial Services.

Organizing Easypaisa as a separate business line allows for a greater operational and strategic focus of effort by both the senior management and functional teams. It also allows for greater financial and personnel performance accountability with respect to Easypaisa. Separation of the business line has allowed Telenor-Pakistan and TMFB to obtain a better overview of the cost of providing Easypaisa services than if Easypaisa functions were primarily carried out by teams and resources used for the delivery of other business lines. This enables improved pricing and cost management strategies.

ii. Telenor-Pakistan’s agent network: Telenor has the second largest agents network amongst mobile service providers in Pakistan. In 2008, Telenor-Pakistan had approximately 160,000 distribution agents for GSM services, including 125,000 scratch card agents, 110,000 Easyload top-up points and 60,000 SIM distribution agents. Currently, (2012–13), it has a network of over 180,000 retailers, franchises and sales and service centres. Easypaisa was able to leverage the pre-existing large network of Telenor GSM distribution agents to scale up and provide services across Pakistan quickly.

iii. Brand recognition and consumer trust: By the end of December 2011, Telenor had a subscriber base of approximately 28.11 million and a market share of 24%, making it the country’s second largest mobile operator. The growth in the subscriber base has been accompanied by mass marketing that is a norm for MNOs. Hence, the Telenor brand name enjoys wide target market recognition and acceptance. Furthermore, GSM service customers in Pakistan have been using OTC mobile balance transfers and mobile balance top-up programmes for some time now and are already comfortable with the concept of OTC transactions or transfers of value through mobile sets and MNO agents. These factors have been complemented by the backing of the SBP’s regulations for BB and the association of Easypaisa with TMFB, a regulated bank,

all providing a further basis for consumer trust.

4.2 PARTNERSHIP AND ORGANIZATIONAL EFFICIENCY

If critical business partnerships flounder, the businesses in question face the risk of failure regardless of the business model. The Easypaisa partnership between TMFB and Telenor-Pakistan has endured so far. Some of the reasons for this endurance are:

- i. Alignment of interest between partners:** Both TMFB and Telenor-Pakistan benefit from economies of scale and additional revenue as Easypaisa OTC transactions increase. Both partners also have a common incentive to encourage MW-based transactions to reduce the cost of agent commission and increase revenue per transaction. Their interests are further aligned as Telenor-Pakistan owns a 51% equity stake in TMFB and therefore has a corresponding stake in TMFB's profitability. Telenor-Pakistan's equity stake in TMFB has also allowed a strong representation of Telenor-Pakistan in TMFB's BoD, further ensuring a shared vision between the two.
- ii. Balance between flexibility and structure to the roles and responsibilities of the partners:** Both TMFB and Telenor-Pakistan affirm that the operational model for Easypaisa has evolved. In terms of the respective roles and responsibilities, the model has been determined on the basis of the organizations' respective competencies; both partners were able to negotiate and agree on their respective roles and solidify that consensus formally. Hence, the Easypaisa partnership is defined by a set of formal agreements between the two.

While the agreements provide a legal and contractual structure to the roles and responsibilities of the respective partners, there remains some room for both TMFB and Telenor-Pakistan to adjust their respective level of effort and proceed as per the need of the market. A robust alignment of interest between them is a strong contributor to the partnership's ability to evolve in

terms of respective roles, revenue shares and contribution to the success of Easypaisa.

- iii. Complementary competencies:** TMFB and Telenor-Pakistan bring to the partnership competencies that complement each other's in delivering Easypaisa services (Table 5).

TABLE 5: Competencies of TMFB and Telenor-Pakistan

Telenor-Pakistan	TMFB
i. Large overlap between Easypaisa potential users and Telenor-Pakistan's existing second largest GSM subscriber base in Pakistan	i. MFB license and the ability to conduct backend functions related to mobile money transfers
ii. Large agent and distribution network	ii. Knowledge of customer needs for financial services, especially of potential customers in low-income segments of the population
iii. Strong brand presence and recognition	iii. Competency in the development of financial products (loans, savings, insurance)
iv. Competency and experience in launching and managing OTC transaction-based services (mobile balance top-ups and transfers)	iv. Relationships to develop partnerships with other banks to support operations such as float and agent liquidity management
v. Experience in mass marketing	v. Risk management and compliance with SBP regulations
vi. The Telenor Group's prior experience in providing mobile money services in other countries and varying environments	vi. Relationship with the SBP

Supporting all of the aforementioned points is the fact that Pakistan has a regulatory and monitoring framework for BB operations that provides potential customers some level of comfort in terms of consumer protection. The high mobile phone service penetration in Pakistan is another factor that has enabled mobile money transfer services to be readily accepted and scaled up. Furthermore, the prior experience

of GSM/mobile service users in transferring value, either through mobile sets or through MNO agents to top-up or transfer mobile balance, ensured a basic level of market receptivity for mobile money OTC transactions facilitated by agents.

Easypaisa's success has quickly been followed by many competitors (**Annex 1**). Pakistan is now hosting various operational models of mobile money service provision under the broader bank-led framework allowed by the SBP. Of the ten BB programmes at various stages of operations in Pakistan by the end of 2012, five were based on a bank's partnership with an MNO.

The mobile money service industry will benefit from comparing the various operational models to further define distinct factors contributing to the competitive strength of these models.

5. REFERENCES

1. Bjaerum, R. 2012. "Easypaisa: A Pakistan success story in "branchless banking". Sixth Pakistan Microfinance Country Forum 2012. 5 December, 2012.
2. CGAP. 2011. Technology program country note: Pakistan. Washington D.C.: Consultative Group to Assist the Poor. Available online: <http://www.cgap.org/sites/default/files/CGAP-Technology-Program-Country-Note-Pakistan-Apr-2011.pdf>
3. Government of Pakistan. 2000. Microfinance bank ordinance, 2000 (Ordinance XXXII of 2000). Islamabad: Government of Pakistan. Gazette of Pakistan, Extraordinary, Part I, 4 August, 2000.
4. Khan, R. A., A. A. Shaikh, and S. A. Shah. 2012. Prospect of switching mobile services in Pakistan. *Journal of Emerging Trends in Computing and Information Sciences*, Vol. 3, No. 7.
5. McKay, C. and M. Pickens. 2010. Branchless banking 2010: Who's served? At what price? What's next? Washington D.C.: Washington D.C.: Consultative Group to Assist the Poor. No. 66, Sep 2010. Available online: <http://www.cgap.org/sites/default/files/CGAP-Focus-Note-Branchless-Banking-2010-Who-Is-Served-At-What-Price-What-Is-Next-Sep-2010.pdf>
6. Nenova, T., C. T. Niang, A. Ahmad. 2009. Bringing finance to Pakistan's poor: Access to finance for small enterprises and the underserved. Washington D.C.: The World Bank. Available online: http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2009/11/24/000333037_20091124235900/Rendered/PDF/518340PUB0Paki101Official0Use0only1.pdf
7. PMN. 2012a. No title. *MicroWatch: A Quarterly Update on Microfinance Outreach in Pakistan*. Issue 25, Quarter 3 (Jul-Sep). <http://www.microfinanceconnect.info/articles/MicroWatch%20Issue%2025.pdf>
8. PMN. 2012b. No title. *MicroWatch: A Quarterly Update on Microfinance Outreach in Pakistan*. Issue 26, Quarter 4 (Oct-Dec). <http://www.microfinanceconnect.info/articles/MicroWATCH%20Issue%2026.pdf>
9. PTA. 2011. Annual report 2011. Islamabad: Pakistan Telecommunication Authority. http://www.pta.gov.pk/annual-reports/pta_ann_rep_11.pdf
10. PTA. 2012. Annual report 2012. Islamabad: Pakistan Telecommunication Authority. http://www.pta.gov.pk/annual-reports/annual_report_11-12_1.zip
11. PTA. 2013. Telecom indicators. http://www.pta.gov.pk/index.php?option=com_content&task=view&id=269&Itemid=658.
12. SBP. 2011a. No title. *Branchless Banking Newsletter: Leveraging Technologies and Partnerships to Promote Financial Inclusion*. Issue 2, Quarter 4 (Oct-Dec). <http://www.sbp.org.pk/publications/acd/BranchlessBanking-Oct-Dec-2011.pdf>
13. SBP. 2011b. Branchless banking regulations, 2011. Karachi: State Bank of Pakistan.
14. SBP. 2012a. No title. *Branchless Banking Newsletter: Leveraging Technologies and Partnerships to Promote Financial Inclusion*. Issue 6, Quarter 4 (Oct-Dec). <http://www.sbp.org.pk/publications/ACD/BranchlessBanking-Oct-Dec-2012.pdf>
15. SBP. 2012b. Annual report: Statistical supplement FY12. Karachi: State bank of Pakistan.
16. Telenor Group. 2012. Annual report 2012. Oslo: Telenor Group. Available online: http://www.telenor.com/wp-content/uploads/2013/04/tg_annual-report-2012.pdf
17. Telenor Group. 2013. Easypaisa is a 'mobile money sprinter'. <http://www.telenor.com/news-and-media/articles/2013/easypaisa-is-a-mobile-money-sprinter/>
18. TMFB. 2011. Annual report 2011. Karachi: Tameer Microfinance Bank Ltd. Available online: http://www.tameerbank.com/pdf/The_Ability_to_Be_Tameer_Bank_Annual_Report_2011.pdf

ANNEXES

ANNEX 1: Branchless Banking Models in Pakistan

No.	Bank name	BB model	Name of super-agent (only for one-to-one model)	Technology platform	Status
1.	TMFB	Easypaisa (one-to-one model)	Telenor-Pakistan	Fundamo	Live (2009)
2.	United Bank Ltd.	Omni (one-to-many model)	-	Developed in-house	Live (2010)
3.	Waseela Microfinance Bank	MobiCash (one-to-one model)	Mobilink GSM	Utiba	Live (Q4 2012)
4.	Askari Bank Ltd.	Timepey (one-to-one model)	Zong	i8 Microbank	Live (Q4 2012)
5.	Habib Bank Ltd.	HBL Express (one-to-many model)	-	Sybase 365	Live (Apr 2013)
6.	MCB Bank Ltd.	MCB Lite (one-to-many model)	-	Fundamo	In pilot
7.	U Microfinance Bank Ltd.	One-to-one model	Ufone GSM	Sybase 365	In pilot
8.	Bank Alfalah Ltd.	One-to-one model	Warid Telecom	Monet	In pilot
9.	Meezan Bank	One-to-many model	-	Fundamo	In pilot
10.	Dubai Islamic Bank	One-to-many model	-	Developed in-house	In pilot

Source: SBP 2012a.

ANNEX 2: KYC Requirements for Approved Branchless Banking Activities

Account/ transaction type	Description	KYC/account opening requirements/conditions
Level 0	Basic BB account with low KYC requirements and low transaction limits	<ol style="list-style-type: none"> 1. Customer's original CNIC 2. Legible image of customer's original CNIC 3. Digital photo of customer 4. Transfer of customer's data electronically to the FI 5. Copy of terms and conditions form to customers 6. Verification of customer's particulars with NADRA 7. Allowing one deposit and one withdrawal transaction during account opening
Level 1	Entry-level account with adequate KYC requirements commensurate with transaction limits	<ol style="list-style-type: none"> 1. Customer's original CNIC 2. Copy of customer's CNIC or legible image of customer's original CNIC 3. Digital photo of customer 4. Physical account opening form 5. Confirmation of customer's mobile phone number 6. Verification of customer's photo, signature and at least one of the two unique particulars with NADRA records, and by follow-up with customer 7. Allowing three deposits and one withdrawal transaction during account opening/activation process
Level 2	Top-level account for individuals as well as businesses offering all BB facilities and subject to full KYC requirements	<ol style="list-style-type: none"> 1. Account must be opened in a bank branch 2. Filling and signing account opening form 3. Fulfillment of all KYC requirements specified under the Prudential 4. Regulations (PRs) issued by the SBP as amended from time to time (presently given under regulation M-1 of the PRs) 5. CNIC verification by NADRA 6. Customer profiling for identification and monitoring of associated risks
Level 3	Account specifically for merchants, businesses, banking agents, technology service providers and corporations These accounts may also be utilized for various disbursements such as salaries/payrolls, pensions, grants, donations, etc.	<ol style="list-style-type: none"> 1. The account shall be opened in a bank branch 2. Fulfillment of all requirements of level 2 account 3. Fulfillment of additional requirements as specified by the FI and risk-based CDD under PRs 4. Customer profiling for identification and monitoring of associated risks
A2P	Fund transfers by BB account holders to other persons (non-account holders) P2P fund transfers (non-account holders)	<ol style="list-style-type: none"> 1. Original CNIC of beneficiary at time of payment 2. Digital photo of beneficiary (for payments exceeding PKR 15,000) 3. Image or copy of beneficiary's original CNIC 4. Mobile phone numbers of remitter and beneficiary 5. Attachment of CNIC and mobile phone number of beneficiary for authenticity of transaction 6. Random verification of CNIC of beneficiaries by NADRA
P2P	Persons availing this service shall be registered by the FI after the due verification process for subsequent transactions	<ol style="list-style-type: none"> 1. Original CNIC of remitter and beneficiary at the time of transaction 2. Image or copy of remitter's and beneficiary's CNICs 3. Mobile phone numbers of remitter and beneficiary 4. Attachment of CNIC and mobile phone number of customer for authenticity of transaction 5. Random verification of CNIC of customers by NADRA

This page has been intentionally left blank.

The South Asia Micro-entrepreneurs Network (SAMN) is a regional association working to enhance financial inclusion among low-income groups in the region. SAMN achieves this by improving knowledge, business environment and capital flows for the microfinance industry across six countries in the region, namely Afghanistan, Bangladesh, India, Nepal, Pakistan, and Sri Lanka. Initially launched as a project in 2008, SAMN was registered as a non-profit limited guarantee company under the Companies Act, No. 07 of 2007 of the Government of Sri Lanka, in 2013.

With members in six countries, SAMN is the representative and collective voice of the South Asian micro-finance industry, reaching over 50 million low-income customers in the region. For more information please visit www.samn.eu or email us on info@samn.eu.

Grameen Foundation is a global non-profit organization that helps the world's poorest people achieve their full potential by providing access to essential financial services and information on health and agriculture that can transform their lives. Founded in 1997, it delivers solutions that respond to the needs of the poor, as well as tools that help poverty-focused organizations become more effective. It focuses on initiatives that can achieve widespread impact and uses an open-source approach that makes it easy for other organizations to adopt them broadly. Nobel Laureate Dr. Muhammad Yunus, founder of Grameen Bank and the Grameen family of companies, is an inaugural member of its Board of Directors, and now serves as director emeritus. Grameen Foundation is headquartered in Washington, D.C., with offices in the U.S., Asia, Africa and Latin America and the Caribbean. For more information, please visit www.grameenfoundation.org or follow us on Twitter [@GrameenFdn](https://twitter.com/GrameenFdn).

Hussan-Bano Burki is a management consultant with more than nine years of experience in the financial services sector, small and medium enterprise (SME) development and International trade. She holds an MBA from the Lahore University of Management and Sciences (LUMS), Pakistan. She has headed significant components of USAID projects on access to finance, trade facilitation and the development of economic zones. Her expertise as a management consultant include designing comprehensive monitoring and evaluation systems and tools for leasing companies and microfinance banks. She has also been involved in developing business strategies and models for specialized financial institutions and special economic zones in Pakistan.



ACTED
Agency for Technical Cooperation and Development



MFIN
Microfinance Institutions Network



Centre for Micro-Finance



**Lanka Microfinance
Practitioners' Association**



Pakistan Microfinance Network

