Incentive and Coordination Issues in the Mobile Banking Industry of Pakistan

By

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ABSTRACT

With the introduction of Branchless Banking regulations in 2008 by the State Bank of Pakistan a new opportunity for banks and telecoms was created to service the needs of the 85% of Pakistanis who lacked any formal or informal access to Financial Services. The first mover in this space was easypaisa, formed when a telecom company bought a microfinance bank. Its enormous success in the Utility Bill Payments and Domestic Remittances space attracted several other players to rush into the market with their own business models. These models varied in their choice of collaboration, from telecoms buying the bank outright to go-alone solutions by some banks. This thesis explores the coordination and incentive issues that may arise from the different types of collaborations between Telecoms and Banks to address this opportunity. The study also looks at the distribution channels for these firms and identifies some of the challenges the design of channels may result in. The thesis ends by making some recommendations on how these frictions and tensions may be minimized.

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ACKNOWLEDGEMENT

I dedicate this thesis to my mother Naela and the memory of my father Amir Turab Ali, who taught me how to persevere against odds and to love education and value knowledge. Whatever success has come my way thus far, I owe to my parents and the blessings of God. I would also like to thank my sister Sara and brother Shehryar for the support they have given me all these years, allowing me to pursue my dreams.

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1. Introduction

The mobile banking industry in Pakistan is a relatively recent phenomenon, making its first appearance in 2009 when easypaisa was launched by Telenor Pakistan and Tameer Microfinance Bank, but has already become a success story that is being quoted globally.

By 2011 Pakistan was described as "one of the fastest developing markets for branchless banking in the world" by CGAP (Bold, Branchless Banking in Pakistan, 2011) and also described as "a unique laboratory for innovation". However the seeds for this industry to take off were sown much earlier, with the introduction of the deregulation policy for telecom by the Pakistan government in 2004.

1.1 Background

The tele-density at that time stood around 6.25 % of the population[1] and consisted mainly of fixed lines only. 3.29% out of the 6.25% was the cellular mobile density. By 2009 the total density had grown to 62% and cellular mobile density stood at 58%. To observers the trend was clear. People in Pakistan were turning in droves to mobile phones and there was hardly any growth at all in the fixed line business.

The historical reasons behind this trend were easy to understand. The fixed line business, run solely by the Government run Pakistan Telecommunication Corporation (PTC), before its privatization in 2006, was essentially a monopoly. This monopoly had defined the industry for decades before the deregulation policies came into effect to give the State Owned Corporations some competition. This typically meant poor customer service and getting a PTC fixed line could take years of waiting. As a result the fixed line penetration in 2004 stood at an abysmal 4.5 million connections in a country with an estimated population of 140 million people.

[1] http://www.pta.gov.pk/index.php?option=com_content&view=article&id=269&Itemid=599

While the demand for telecom services remained underserved, there was yet another industry where Pakistan lagged far behind its neighbours: Financial Services. In 2008 only 15% of Pakistanis had any sort of formal or informal access to financial services (McCarty & Bjaerum, 2013). The banks in operation were very much brick and mortar and thus limited in their rollout capability. Pakistan only had about 11,000 branches for a population of 160 million in Pakistan.

The rapid proliferation of the mobile industry created an exciting window of opportunity for all the industries that were seeking greater access to the Pakistani population living beyond the infrastructure barriers. Here was an opportunity to leapfrog over the painstaking, slow and costly rollout of infrastructure and let technology fill the gap. For example it was virtually impossible to scale up quickly with traditional brick and mortar branches to offer financial services to the 85% of Pakistanis lacking the access. However with 58% of the population already owning a cell phone connection by 2009, all that was needed was to find a way to transact over this channel.

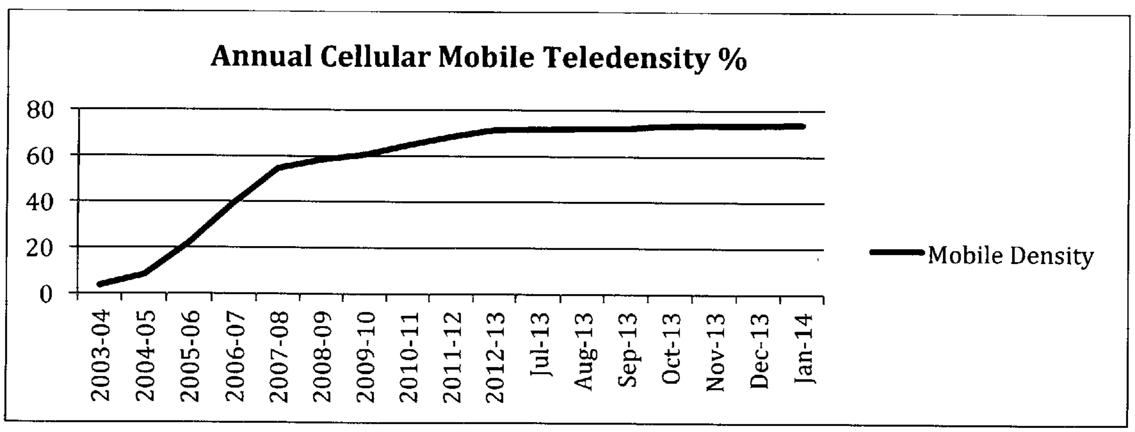

Figure 1: Growth of the Cellular Industry in Pakistan[2]

The recognition of this opportunity led to the creation of the Mobile Banking industry in Pakistan and the Branchless Banking regulations were issued by the State Bank of Pakistan, the regulatory body overseeing banking in Pakistan. The first step in this space however was not taken by a

[2] Data taken from website of Pakistan Telecommunication Authority (http://www.pta.gov.pk/index.php?Itemid=599)

telecom company, but by the First Microfinance Bank (FMB), which piloted a disbursement of its loans with the Pakistan Post Office in 2008 (Bold, Branchless Banking in Pakistan, 2011). In the pilot FMB stationed its staff in the post offices to disburse loans and there was not much use of technology involved. While it saved FMB the cost of establishing separate branches by sharing space with the PPO, it nevertheless did not take advantage of any technological innovation. The next step in this space was taken by Telenor Pakistan, a Norwegian telecom FDI in Pakistan that bought 51% controlling stake in Tameer Mircrofinance Bank. These organizations came together to launch easypaisa[3]the first branchless banking brand over a mobile network in Pakistan in 2009.

1.2 Initial Success

This made sense as Telenor Pakistan had a retail footprint across the country in excess of 150,000 and at least some of these could be converted to easypaisa retailers. The first few years of easypaisa showed a rapid mushrooming of the easypaisa retail footprint till it reached its current strength of more than 30,000 retailers countrywide and roughly 5 million transactions per month. The majority of the transactions focused on two main types that were also the first services to be introduced:

1. Utility bill payments for electricity, gas, telephone and internet connections
2. Domestic remittances from person to person

All of these transactions were done Over The Counter (OTC) and were handled by the easypaisa retail footprint. Both these services addressed a dire need in the market where people normally had to wait in long lines at banks to pay utility bills, or transmit money using hand to hand transfers if they did not operate bank accounts. The need was especially dire in the rural areas of Pakistan where a bank branch would typically not be within convenient distance.

The apparent success of easypaisa did not go unnoticed and other players started joining the industry in a scramble for market share. UBL Omni followed in 2010, with Muslim Commercial

[3] http://www.easypaisa.com.pk

Bank, Waseela Bank, TCS Bank, Askari Bank, Bank Alfalah, Habib Bank Limited and Kashf in hard pursuit. By 2013 there were several players in the branchless banking industry in Pakistan and a fight over the market share had already begun. In several cases the competitors were sharing the same retail footprint laying the grounds for commission wars.

1.3 Services Offered

Though initially the services offered were only restricted to utility bill payments and domestic remittances, the path to offering true financial inclusion meant that the organizations had to extend banking services to the clientele. The concept of the Mobile Wallet was introduced and with it came value added services like savings, insurance, salary disbursements, ATM cards, loan disbursements and recovery and even retail purchasing. However the uptake on these has been limited thus far and most of the transactions happening in the mobile banking industry are still driven by domestic remittances and bill payments using the retail agents. This can become a strategic risk for the industry over time as transactions are heavily driven by the OTC channel, which creates huge dependency on the retail agent.

1.4 The tensions

The branchless banking industry for all its success raises important questions around the coordination and distribution of incentives in the value chain. Given that the permissible branchless banking formats must be bank driven, as stipulated by the regulations laid down by the State Bank of Pakistan (State Bank of Pakistan, June 2011), there have been several 'marriages' between telecom companies and banks in the last few years to launch branchless banking services. These have been horizontal diversifications for both industries, bringing the banking experience on one side together with the retail outreach of the other. However it does raise questions about two areas of the value chain;

1.4.1 The Banking – telecom partnership

It is worth exploring how the underlying tensions of horizontal diversification affect the working of these two different industries coming together to launch a brand new industry. What are the incentive issues that may spring up when two independent entities start operating under one roof to offer a service? How do the models that are operating in the industry keep the balance between value creation and value capture? This is especially important when the value may be created, or perceived to be created, in one part of the organization and value capture may be captured or perceived to be captured in another part of the organization. Furthermore, should decision making in the newly formed branchless banking products be centralized or de-centralized? How will the two organizations coordinate with each other to share resources and information that will benefit the new brand? How much ownership do they feel they have of the new brand?

1.4.2 The distribution channel

The bank and telecom mergers have typically relied on the telecom becoming a super agent for the bank. This raises some interesting questions, as the new BB product actually now becomes part of the portfolio of products that the retail agents are carrying in addition to the GSM products. The question then is that are the retailers sufficiently incentivized to sell and in fact push the BB products? How do organizations ensure standardization in the communication and coordination amongst the retailers to ensure that minimum standards are being met. Fund transfer is admittedly a far more sensitive transaction than a mere sale of a top up card, as it involves much greater sensitivity to trust issues. As the scale of the risk in transaction is raised how are the retailers incentivized to stay willing partners? How are tensions in the distribution channels solved, especially if issues of fraud etc come up? The most important question is who owns the customer? Is it the retailers or is it the telecom company or is it the bank? Are the current models set up in a way to minimize these tensions? Additionally would retailers push Mobile Accounts onto their customers knowing that once a customer has created a Mobile Account, his or her reliance on the agent is reduced dramatically? Is that tension running counter to the long-term strategic objectives of the industry?

This thesis seeks to explore these issues by looking at the academic literature available on the subject and conducting an analysis of the current structure of the Mobile Banking industry in Pakistan. The thesis will close with recommendations on the way forward, keeping in mind the likely market to evolve in the coming years.

2. Industrial Overview

In this chapter I will give an overview of the Mobile Banking industry in Pakistan, starting with the branchless banking regulations that govern mobile banking and then moving on to describe some of the key players in the market and their business models.

2.1 Branchless Banking

The regulator for the branchless banking industry is the State Bank of Pakistan, which has been instrumental in setting up the industry with progressive regulations. This section will highlight the key portions of the regulations for the reader's sake. For additional details see "Branchless banking regulations – For financial institutions desirous to undertake branchless banking (updated June 20, 2011)", issued by the State Bank of Pakistan[4] (State Bank of Pakistan, June 2011).

Branchless banking is seen as an extension of financial services by financial institutions using technology to create cheaper channel alternatives to conventional brick and mortar outlets. These cheaper alternatives may include (but are not limited to) retail channel partners, mobile phones, Point of Sales (POS) machines etc.

2.1.1 Salient Features of the Regulations

- The Branchless Banking (BB) regulations address only Financial Institutions, defined as Commercial Banks, Islamic Banks and Microfinance Banks.
- The BB model has to be bank led. This is an important point, as regardless of who has the controlling stake in the bank (telecom or other), it is the bank that will ultimately be responsible. The technology partners are seen as agents of the bank that extend the branchless banking reach.

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[4] http://www.sbp.org.pk/bprd/2011/C9-Enclosure-2.pdf

- There is zero tolerance for fraudulent activities and the bank is held responsible by the SBP for investigating any event and terminating the agent's association with it if any culpability is established on the part of the agent.
- The SBP regulations allowed for a defined type of Bank-Agent relationship, using either agency arrangement or by creating a joint venture. The following types of BB models are allowed;
    - One to One

      This model allows one bank to enter into a joint venture or agency agreement with only one telco. This relationship does not require exclusivity so both bank and telco are free to form other relationships as well. The advantage of this model is that the focused relationship allows for greater product innovation and better customer service. The disadvantage is that customers will have to be tied to only one type of agent and so fewer customers may be reached
    - One to Many

      This model allows one bank to provide access to financial services over mobile phones using several telcos. The advantage of this is greater access to the clientele who do not now have to be tied to a specific telecom service. At the same time this also limits the banks ability to drive innovation with its telecom partners as the exclusivity of relationship is not present. An innovation in a service or product may, for example, require technological development or changes in the existing platform at the end of the telecom partner. A greater number of telecom partners would result in greater complexity and coordination requirements. It may also require renegotiation of transfer pricing between the bank and the telecoms, unless there is contractual protection.
    - Many to Many

In this version of the BB many banks and many telecoms come together to offer BB to customers. In this case a Third Party Service Provider (TPSP) must be set up to coordinate the flow of transactions. This TPSP must also be an FI or the subsidiary of an FI. The clear advantage is this arrangement is the reach of the model, which will virtually cover all customer types. However it also increases the complexity for coordination dramatically, as now a greater number of banks and telecoms are involved and agreement on any changes in the established platform or services would require agreement from all the stakeholders. The question of centralized versus decentralized decision making may also arise, with stakeholders looking out for their interests as competitors on a common platform.

- Carrying out due diligence at the time of activating a Mobile Wallet account is the responsibility of the FI. This involves a Know Your Customer (KYC) phase which must be carried out with each customer opening the account. SBP has defined levels of accounts ranging from 0 to 3, each with its unique transaction limits and KYC requirements. The idea is to increase the KYC scrutiny with each level that raises the transaction limits allowed. This is to counter fraud and money laundering.

2.1.2 The Agent

The relationship with the agent is very clearly outlined by SBP, which sees the agent as the real difference maker in the BB industry. Though they focus on technology, the regulations also allow for non-technology partners who join hands with the banks to roll out BB. A good example is of First Microfinance Bank, which partnered with the Pakistan Post to experiment with branchless banking by posting their staff at Post office to lend money.

The regulations require that the relationship between an FI and an agent should be formalized by an agreement and that the agent not be allowed to offer any type of services other than those specified in the agency agreement. Agents can choose to deal with multiple or a single FI.

Significantly the agent cannot change the fee structure provided by the bank in any way, nor allow itself to appear as an FI.

Agents can be broadly categorized into three types;

- Super Agents: Organizations with a broad base of retailers who typically manage sub agents.
- Direct Agents: These are medium to large sized stores.
- Sub Agents: Branches/ Outlets or franchise locations that are managed directly by a Super Agent. In practice these tend to be retailers for telecoms. They represent the largest proportion of agents.

Agent Due Diligence (ADD) is the responsibility of the FI and regulations require that this be done thoroughly to avoid any kind of fraudulent activity originating from the agent channel. FIs are required to have a formal penal system in place for agents of BB who indulge in any kind of fraud. This can include blacklisting an agent or terminating his agency.

The senior management of the FI is held responsible for keeping their agents in check and also monitoring their activities and providing reports if necessary to the regulator. Some of the relevant points from the agency agreement are listed below, which will have a direct impact on our study of the incentive and coordination issues in the channel;

- Define the scope of activities and also the revenue sharing structure with the agent.
- Not allow the agent to offer any service related to BB other than that mentioned in the agency agreement.
- The agent should not be involved in management functions or decision making or even act in a capacity equivalent to an employee of the FI.
- All information gathered by the agent relating to the activity of BB will be the property of the FI. This includes customer data and transaction data.

The FI is also held responsible for agent development so that the BB services they offer become more efficient over time. The FI even has to design products and processes that the agent must follow.

2.1.3 Services offered using BB

The SBP allows for the following services to be offered over the BB channel;

- Opening and maintaining a BB account
- Account to account fund transfer
- Account to Person Fund transfer
- Person to Person Fund transfer
- Cash in and Cash out
- Bill payments
- Merchant Payments
- Loan disbursement/ repayment
- Remittances

In addition to the above insurance has also been launched by easypaisa for its Mobile Wallet account holders. At the moment an overwhelming majority of users are focusing on just the Remittances and Bill Payments that they transact through the retailers (explained below).

2.1.4 The channels

Currently there are three main types of channels for access to services provided to the customer. Almost all of them involve the agent in some form or the other.

2.1.4.1 Over the counter (OTC)

This is by far the most used channel at the moment. In this channel the customer does not need to have a dedicated account with any service provider, telecom or bank, to avail the services of branchless banking. They simply need to be able to access a retailer who provides the BB services. Such retailers are usually identified by branding from the BB organization that offers services through that retailer. The most popular services provided OTC are Utility Bill Payments (UBP) and domestic remittances, which at the moment dominate the transactions taking place in the BB industry.

The convenience this offers the consumer is of course that there is complete freedom to use any service which best suits the consumer's needs, reach and pocket, without getting tied to a long term contract with a service provider. However this is not advantageous for the BB service providers who would ideally like to engage with their clientele for a longer relationship. The retailer involved makes a commission off each transaction that he enables, and is required to follow certain processes depending on the type of service, for example ID verification, taking cash in advance etc.

Retailers usually work on a prepaid model with the Super Agent (usually the telecom in the case of the BB industry). They can offer cash withdrawal and deposit services to the customer by either using a simple mobile phone, which identifies them as a retailer. They can also deploy Point of Sales (POS) machine at their shops, which removes the burden of having to arrange for cash at their own end. These POS machines were used very extensively in the BISP project which was carried out with the Government of Pakistan and aimed to disperse PKR 1000 monthly to target 8 million women living at the bottom of the pyramid.

2.1.4.2 Mobile Wallet

Mobile Wallet is in some respects the holy grail of BB. The idea is fairly simple: provide all of the BB services to the consumer through his mobile phone via a dedicated connection. The consumer accesses an actual bank account at the back end using their mobile phone. This dramatically reduces the dependency on the retailer in the middle and results in two key advantages for the BB services provider: one, it allows them direct access to the consumer and two it removes the need to split commissions with the retailer, thus raising margins. Furthermore, in the long term, the biggest advantage is that the consumer is now tied to a particular BB service and unlikely to shift easily. The BB service provider can then provide better quality service and product innovation to the consumer for a mutually beneficial relationship.

The retailer would still be needed for cash deposit and withdrawal but all other services can be supported on the mobile phone itself. The introduction of ATM cards with Mobile Wallets has helped to move away from the dependency on retailers, but the ATM deployment is limited and rarely available in rural areas where the real customer of the BB resides.

However, the uptake of mobile wallets has been very slow, falling far bellow expectations. The SBP sees Mobile Wallets as the litmus test of the health of the BB industry as it provides true financial inclusion of the unbanked. The question though remains: in a country with such low penetration of financial services, why have mobile wallets not been better received?

2.2 Market Overview

The BB industry in Pakistan continued to show sharp growth in the number of transaction and value of transactions. According to the Branchless Banking Newsletter for Jul- Sep 2013[5], issued by the State Bank of Pakistan quarterly, the third quarter of 2013 showed a healthy trend with 52 million BB transactions taking place in the 3 months period, with a value of PKR 224 billion[6]. This represents a 16% growth over last quarter in terms of number of transactions, and 29% growth in value of transactions. The growth in the value of transactions is possibly a more significant development that the absolute number.

The industry is still dominated by two players; easypaisa (61.2%) and Omni (27.6%) while the new players have made some inroads growing from 7.2% to 11.2% over two quarters.

[5]Most recent issue available at time of writing
[6]USD 2.13 billion, as per exchange rate at time of writing

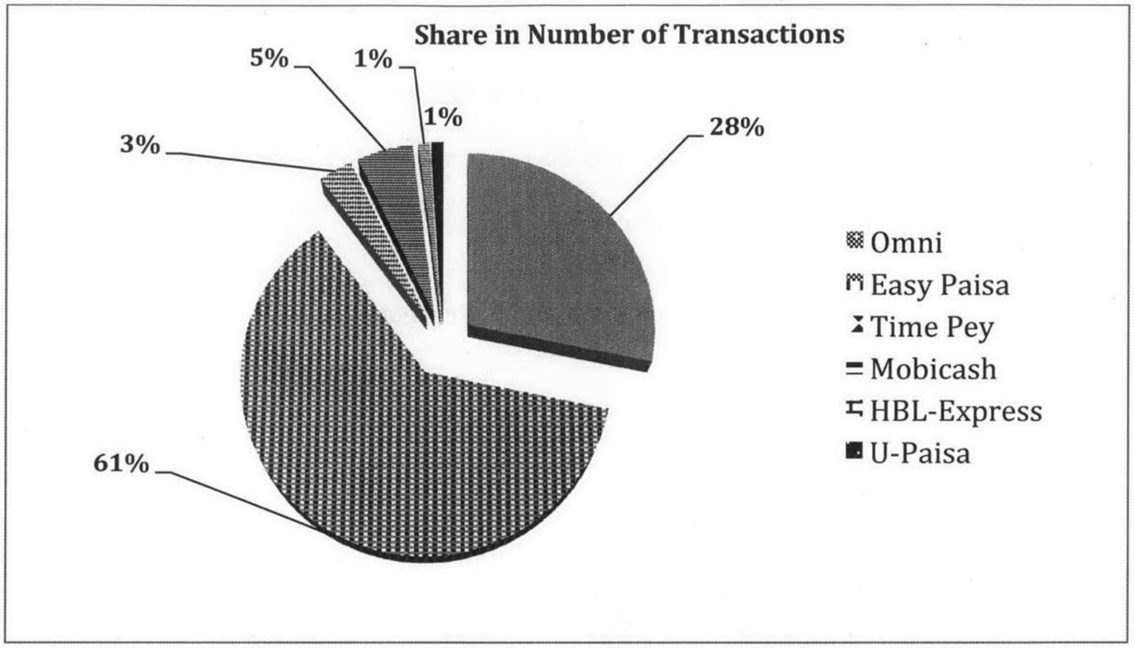

Figure 2: Market share for transaction from Jul - Sep 2013[7]

It will be interesting to watch the growth of new players especially because 81% of transactions are coming over the OTC channel rather than the Mobile Wallet. From the analysis above in 2.1.4 it is argued that the market share in OTC channel will be much harder to defend, since it is entirely dependent on the retailers who carry out the transactions for the customers and are given commissions per transaction by the BB services provider. Although the total agent network is expanding, most of the new additions in the agents are shared with other competitors rather than exclusive. How much of a role will commissions offered to these shared agents determine the service they decide to push will be an interesting question. There are also some trends worth noting in the agent network. Though the total stands at 110,214 agents for the industry as of Sep 2013, the number of inactive agents has grown to 25,387. Furthermore from Sept 12 to Sep 13 a sharp downward trend has been observed in the agent activity. In Sep 12 46% of the agents were doing more than 501 transactions per month. By Sep 13 this was down to 23% of agents. So while the agents have grown in number, the number of transactions per agent has actually

[7] Based on data in SBP report (State Bank of Pakistan, 2013)

reduced. SBP surmises that this may be because different BB organizations are now starting to share agents and so the growth in the number of agents may be misleading. The number has not expanded in horizontal reach, but rather has been a vertical growth because of various BB organization's reporting the same agent as a unique one.

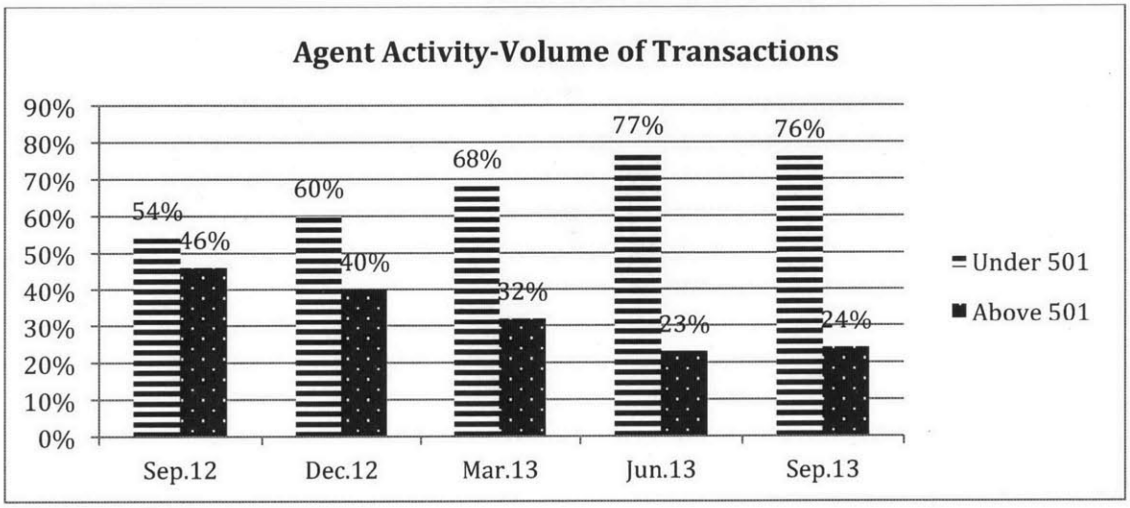

Figure 3: Agent Activity - Volume of Transactions [8]

The other industry trend to note is that there has been a markedly low uptake of Mobile Wallet accounts. The total number of Mobile Accounts as of Sep 2013 stood at 2.9 million. However, out of these 2.9 million, only 1.5 million are active accounts. Most of the growth has come in the level 0 and 1 accounts (which require the least stringent KYC phases) and may have been driven largely by one of the market leaders in the industry waiving the account opening fee and initiating a PKR 0.24 charge every time a consumer checked their mobile wallet account balance. This can be seen as a roundabout way of raising the number of active accounts as this operator contributed 25% of the overall active accounts. SBP cautions that the growth in Mobile Accounts should be "taken with a grain of salt". (State Bank of Pakistan, 2013)

The OTC transactions, which dominate the channel[9] are primarily made up of Utility Bill Payments and Domestic Remittances. Bill payments made up 46% of the transactions done over

[8] Based on data in SBP report (State Bank of Pakistan, 2013)

OTC and Remittances made up 44%. The other 10% were made up of Mobile top ups, Bulk Payments (Government to Person, Pensions) and Loan Disbursement and Recovery.

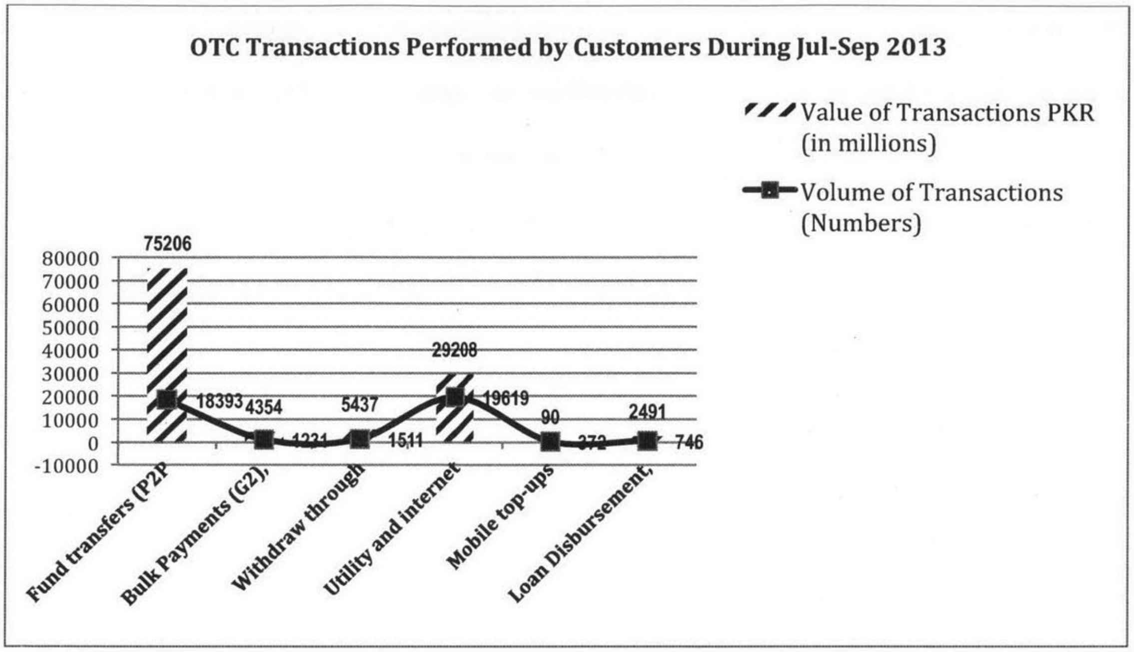

Figure 4: OTC transactions performed by customers Jul - Sep 2013[10]

2.2.1 The Market Players

As the section above pointed out, almost 90% of the market is currently split between easypaisa and Omni. However, new players are trying to expand their share in the industry rapidly. In this section I provide an overview of the major players in the Mobile Banking space.

2.2.1.1 Easypaisa

Formed after Telenor Pakistan bought 51% stake into Tameer Microfinance Bank, easypaisa (easypaisa, 2014) was the first Mobile banking service launched in Pakistan in 2009. Telenor Pakistan is the second largest mobile network in Pakistan with over 32 million customers and retail locations all over the country. At the time of writing easypaisa had in excess of 32,000

[9] 81% of the total number of transactions
[10] Based on data in SBP report (State Bank of Pakistan, 2013)

agents, which is currently the largest mobile banking reach in Pakistan. The easypaisa agents are the Telenor Pakistan GSM retailers who have now also opted to act as easypaisa agents. As such the Sales and Distribution team of Telenor Pakistan manages these sub-agents. Since easypaisa is a one on one relationship, only Telenor subscribers can open Mobile Wallets, however the retail channel provides the opportunity to do OTC transactions. Easypaisa currently has the largest portfolio of product offerings and has won numerous awards for most rapid expansion and brand establishment, including GSMA's Best Mobile Money Product 2014 and Best Mobile Money Service for Women from Emerging Markets, 2014[11].

2.2.1.2 UBL Omni

UBL Omni (UBL Omni, 2014) is easypaisa's biggest competitor at the moment though this landscape is fast changing. They are unique in that United Bank Limited (UBL) decided not to partner with any telecom company, instead opting to launch branchless banking using a combination of retailers that they approached and their 1300 bank branches. The total number of retailers they are using currently is 13,000. The footprint is much smaller compared to that of easypaisa and this might explain their lower market share as well, however they are acknowledged as being strong in the Government and Corporate sector. A reason behind this may be that unlike Tameer Microfinance Bank, UBL was already catering to the Corporate and Government sectors even before it launched branchless banking. Getting their customers to make a transition from conventional banking to branchless banking might have been an easier sell then bringing on new customers from scratch as easypaisa had to do. The technology being used is developed by an in-house vendor and Omni can offer its services over all telecom operators using the sms service. They also offer ATM cards to their customers while their retailers use the internet channel to coordinate services.

[11]http://www.globalmobileawards.com/winners-2014/

2.2.1.3 Mobicash

Mobicash (Mobicash, 2014) was formed by the 100% acquisition of Waseela Bank by Mobilink. Mobilink has been the market leader for GSM and was the first entrant in the GSM arena in Pakistan. Currently they have over 35 million customers and the largest network amongst the telecoms in Pakistan. Mobicash, which has recently launched its services, has been expanding its agent footprint rapidly and currently stands at more than 23,000 agents. Like easypaisa they are able to cater to all customers over the OTC channel, however are limited to only their own SIM users for Mobile Accounts. Mobicash also represents an example of the one on one model. They also currently have a smaller portfolio of product offerings.

2.2.1.4 Timepey

Timepey (Timepey, 2014) is formed as a joint collaboration of the Chinese telecom in Pakistan, Zong, and Askari Bank Ltd. Zong is one of the newest entrants into the Pakistan telecom arena, but also the one that has expanded the most aggressively with backing from its parent company, China Mobile, which is the largest mobile company in the world. Historically Zong has displayed an appetite for initiating price wars. The model is different from Mobicash and easypaisa in that there is no one owner of the service and is launched jointly as per a contractual agreement of terms. Timepey has more than 24,000 agents, mostly all from the Zong GSM business. Timepey also has a smaller portfolion of product offerings and their focus seems to be mainly the military salaries and pensions as a segment. They also offer OTC services to all customers, but Mobile Wallets only to Zong SIM holders. It is also an example of a one on one model.

2.2.1.5 HBL Express

Habib Bank Limited (HBL) (HBL, 2014) is one of the largest and oldest banks in Pakistan. Like UBL, HBL has also opted to stay away from a partnership with a single telecom company and instead opted to launch its own distribution network for branchless banking. HBL Express currently has 1500 bank branches, 200 agents and 5,500 NADRA kiosks. The partnership with

NADRA is an interesting move as it is a distinctly different channel. NADRA is currently in the phase of rolling out its National ID cards with chips, which will also be able to act as ATM cards and will be offered to all the Pakistanis who are age eligible.

2.2.1.6 Upaisa

Upaisa (Upaisa, 2013) was formed when Ufone, one of the largest telecom operators in Pakistan, bought 100% control of the Rozgar Microfinance Bank in 2012. The bank was renamed to U Microfinance Bank Ltd and the brand Upaisa was launched in 2013. This makes Upaisa one of the newest entrants to the Mobile Banking Industry of Pakistan and the third telecom to have bought a bank in order to enter the space. Ufone is a subsidiary of Pakistan Telecommunication Company Ltd (PTCL). Originally a State Owned Enterprise (SOE), the ownership of PTCL is now split with Dubai based Etisalat (26%) and the general public (12%). The remaining 62% remains as part of the SOE. Ufone is placed number three by volume of active SIMS in the Pakistani market with 25 million subscribers. Upaisa currently has a footprint of around 13,000 agents in the market, and is also mainly relying on the OTC channel for sales. It offers Mobile Wallet accounts as well, but only for subscribers of its GSM service.

	Easypaisa	Mobicash	Timepey	UBL-OMNI	Upaisa	HBL Express
Brand Positioning	Established Convenience Strengthening trust	Trust	Trust & Timely	Convenience	Trust	Trust &Convenience
No of Agents	32,000 +	23,000 +	24,000	1300 UBL Bank Branches + 13,000 agents	13,000	1500 HBL Branches + 200 agents + 5,500 NADRA Kiosks
Products	Money Transfer Bill Payments Mobile Accounts Air Time Top up Savings / Insurance Loan Repayments Salary and Welfare disbursements	Money Transfer Bill Payments Mobile Accounts Air Time Top up Savings / Insurance	Money Transfer Bill Payments Mobile Accounts Air Time Top up	Money Transfer Bill Payments Mobile Accounts Air Time Top up ATM Cards Loan Repayments Salary and Welfare disbursements	Money Transfer Bill Payments Mobile Accounts Air Time Top up	Money Transfer Bill Payments Mobile Accounts Air Time Top up
Organization Structure	Virtual Joint venture (51% Telenor in TB)	100% ownership of Waseela Bank	Partnership with Askari Bank	Stand-alone bank Own distribution	100% owned Ubank	Stand-alone bank Own distribution
Target Market	All customers for OTC Telenor SIM only for MA Strength in individual segment	All customers for OTC Mobilink SIM only for MA	All customers for OTC Zong SIM only for MA Strength in Armed Forces salary/pensions	All customers for OTC All SIMs for MA Core Market Strength: Corporate & Gov. Segment	All customers for OTC Ufone SIM only for MA	All customers for OTC All SIMs for MA
Channels	USSD & Handsets for retailers USSD for customers	USSD & Internet (for franchises only) USSD for customers	GPRS enabled POS machines for retailers USSD for customers	Internet for retailers SMS & ATM Cards for customers	USSD for retailers & customers	Internet for retailers SMS for customers
Technology	Fundamo platform	Utiba platform with direct access to USSD long codes	Innov8 local vendor	In house technology vendor	Sybase through Abacus	Sybase

Figure 5: Summary of major in the Branchless Banking industry

2.2.2 The revenue model

The revenues in the Branchless Banking industry mainly comes from two sources; transactions and deposits.

2.2.2.1 Transaction Charges

All of the BB services charge some nominal amount for the majority of the transactions they conducted, whether OTC or Mobile Wallet. These transaction charges may be paid by the customers buying a service, or the seller from whom the customer bought the services or both. As an example when customers pay bills for electricity, telephone or gas connections they may or may be not charged. There is however a flat fee which is charged to the providers of these services by the BB operator. Alternatively a customer sending money through the OTC channel will have to pay for the deposit into the system, and his intended recipient may have to pay a fee to withdraw the amount from another retailer.

Transaction fee is usually split between the BB operator and the retailer according to a pre-decided model.

2.2.2.2 Floating earnings

The other method of earning revenue is off deposits made into the BB system by customers and partner organizations. These may be large deposits such as the Benazir Income Support Program deposits that targeted millions of women. If the BB is formed from a partnership then a question of split of float earnings may get raised. Insurance and savings products envision earning off this model as well, where the customers are encouraged to open mobile accounts and deposit money in them for some time. The insurance product requires a certain amount of fixed deposit, after which the customer becomes eligible for 'free' insurance (easypaisa, 2014).

3. Literature Review

In approaching the analysis of the Mobile Banking industry of Pakistan I have drawn from contemporary literature that deals specifically with Coordination and Incentives issues in distribution channels and within the firm. In this chapter I highlight some of the key concepts that will be used as part of the thesis in the coming chapters to analyze the industry.

3.1 The core concepts

I begin by introducing the sources of Coordination problems and Incentive problems as defined by Simester and Roberts (Simester & Roberts, 2007)[12].

3.1.1 Coordination Problems

According to them coordination problems arise when a number of tasks that would be performed in a distribution channel need to be synchronized. This is logically going to be more of a challenge the bigger and more complex a distribution channel becomes. Channel breakdowns can occur when the distance between the decision makers and the information they need to make decisions becomes too large or when too many decision makers get involved. The distance between information and decision makers can especially become a problem when certain tasks become specialized in the firm. For example a product team developing new mobile banking services may become too far removed from the sales team and thus a breakdown in coordination may take place. The product team may become too specialized in its own task, developing its own unique communication language, which puts it at odds with the sales team. This can be exacerbated if the teams have competing objectives. The product team's objective may be to

[12] "Designing Supply and Distribution Channels", Simester D et Roberts J

ensure a roll out of the most robust products with due diligence, whereas the Sales team may just be incentivized to sell as much as they can.

Furthermore Roberts and Milgrom argue in their book "Economics, Organization & Management" (Milgrom & Roberts, 1992) that the need for coordination actually increases with the increased presence of specialization within the firms various silos. Wherever the need for synchronized action is present centralized decision-making is unlikely take into account the specialized information present in the firms ecosystem. This may lead to further inefficiencies in the firm, for example the assignment problem, where tasks start being duplicated within the firm.

Another issue that is particularly relevant to the mobile banking industry is the innovation attribute, where optimal resource allocation within a firm depends on information that is not widely available to any of the people working at the operating levels of the firm. In this case highly decentralized decision-making is bound to fail as each of the specialized silos may start making poor decisions based on the limited view they have. This does not automatically mean that the decision-making needs to be centralized. It is possible to function if someone is gathering the information required and disseminating within the organization to all the decision makers. These challenges in coordination are bound to come up when the firm is trying to innovate with a new product or entering a new market. In the design of systems, one needs to keep in mind the Hurwitz criterion that defines the optimal amount of information required to pick the most efficient plan out of the available options. This is important in order to have systems that are informationally efficient and do not result in the firm wasting its time and resources on providing too much or too little information to its decision makers.

3.1.2 Incentive Problems

The other type of problem to affect a distribution channel, and in our case the telco-banking model as well, is the fallout from lack of coherence on incentives. These sort of problems can typically arise when the objectives of the elements in a channel are not aligned with one another.

The origin of these problems may be from a perceived or actual disproportionate distribution of value capture versus value creation in the channel. Simester and Roberts argue that incentive problems can lead to either of two outcomes: adverse selection or moral hazard. Adverse selection can result from an inability to distinguish between desirable and undesirable partners. For example if the selection of the mobile banking retailer was done on the basis of the GSM sales alone, we might end up with a mobile banking retailer who views it as a threat to his existing business and thus does not push the product as much as he should. Moral hazard on the other hand is when participants in the channel chose to maximize their own share in the wealth distribution of the channel without taking into account the welfare of the other participants of the channel. An example of this could be that if the retail channel is only incentives according to the number of Mobile Accounts they have opened, they would be tempted to bypass or minimize the Know Your Customer phase in order to process as many accounts as possible. Since their reward is only linked to the total number of Mobile Accounts sold, their motivation therefore is only to focus on the absolute quantity.

The key concept coming out of incentive problems is that it produces a negative outcome for the channel as a whole. Not only is there an inefficient distribution of wealth in the channel, but it can also lead to lesser wealth available to distribute overall.

3.1.3 Addressing the problems

Simester and Roberts examine Outsourcing as a possible answer to dealing with the coordination and incentive issues in a channel. They argue that a major source of the coordination issues comes from making the choice between centralized and decentralized decision making. When examining the pros and cons of both it can be summarized that centralized decision making is preferable when it can bring standardization but not if it comes at the cost of the decision makers being at a distance from critical information needed in making good decisions. Outsourcing does not really solve this problem entirely. If the organization becomes unwieldy and parts of it can be outsourced, the complexity in decision-making does not necessarily decrease. In fact now coordination may be required across two firms instead of just within one. As Milgrom and Roberts argue, *"In a system with both centralized and decentralized decisions, the centralized decisions serve to define the parameters of the decentralized ones and to put constraints on the local decision makers."* As a guiding principle it can be assumed that if multiple set of coherent decisions are possible at a local level, given a set of complimentaries, then it is a good idea to centralize the decision making process (or at least critical portions of it).

In the case of the incentive problem outsourcing can help by providing incentives to the partner firm to cut costs and operate efficiently. But it is also argued that it may result in partner firms acting in their own individual interest, without regards to the overall efficiency and wealth creation for the channel. For example, in the retail channel on which mobile banking is heavily dependent, individual retailers will choose to act in their own best interest, especially when selling competing products from competing firms. They will prefer to focus on their own commissions from sales as compared to the overall sales of a particular company.

One possible way to achieve coordination and efficient incentives may be to use the design of contracts to link individual wealth to overall firm wealth. The better defined this relationship is the more chances there are of elements of the channel coming together to work towards an overall efficient outcome. However as Martin Weitzman noted in his work on using transfer prices as planning instruments, "The price system as an allocator of internal resources does not pass the market test."[13] (Weizman, 1974)

3.2 Other Key Concepts

In addition to the concepts of coordination and incentives, it is also important to explore other key concepts that are likely to impact the study of Mobile Banking models.

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[13] "Prices versus Quantities," Review of Economic Studies, 41, October 1974

3.2.1 Moral Hazard

Moral hazards are likely to appear when there is a misalignment of interests between those who have critical information and those who are going to be making the decisions based on that information. Another critical condition for moral hazard to exist is that it is difficult to assess whether the contract terms are being followed and if they are not, it is difficult to enforce them. We must assume that individuals will act in their own best interests and if the incentives and interests have not been properly designed, the overall efficiency of the firm will be impacted by actions that will create short-term benefit for the individuals at the expense of the longer term benefit for the firm[14].

Moral Hazard is also described as an information problem. The flow of the information is either censored or manipulated to an individual employee's benefit. The origins of the term come from the insurance industry where people, once insured, would alter their behaviour to raise the overall risk profile of their activities secure in the knowledge that their losses would be covered by the insurance. This happens because the individuals taking the decisions do not bear the full impact of the consequence of their behaviour. Within the mobile banking industry the risk of Moral Hazard exists in the many steps of the value chain as it seeks to knit together independent actors into a coherent business model. This includes the Bank, the Telecom, the Retail channel and the suppliers of services.

Moral Hazard can be controlled by increasing the monitoring and verification within the value chain where handoffs are happening. Competing sources of information can also be used to cross verify information. This however may not always be possible because of higher costs and complexity in the flow of information.

Another way of controlling moral hazard is to reward good behaviour by monitoring the outcomes of a process (such as sales targets or profitability). This can be done by designing

[14] "Moral Hazard and Performance Incentives", Milgrom and Roberts, Economics Organization and Management

contracts to provide the right incentives. The only problem with this is that it's not easy in all cases to establish a clear link between outcomes and the unobservable actions that lead to them. The question then becomes: are we rewarding people or punishing them for the right reasons? After all the real goal of the incentives contract should be to establish goal congruence.

One possible method could be to remove the agent in the value chain altogether and for the firm to act directly on its own behalf. But in the case of the Mobile Banking industry this may well not be possible, where the spread of the agent network is real reason for its success in the first place. Interestingly mergers (such as the mergers between banks and telcos) also do not remove the incentives problems.

3.2.2 Influence Costs

The merger of banks and telecoms to bring a number of activities under one roof will inevitably give rise to high transaction costs within the new firm itself. Individuals within a firm will act in order to best preserve their share of the wealth distribution. Groupings of individuals are also likely to happen if it helps them safeguard their individual interests. The actions carried out by the individuals or groups to protect their share in the wealth distribution, even at the cost of the firm are called influence activities. The negative impact on the efficiency of the firm as a result of these influence activities is called influence costs. As such in a newly merged firm, especially in case of a horizontal diversification, the probability for groups originating from the historical firms to adhere to the same group loyalties as before is strong. These influence costs may have been behind the failed mergers of 60% of the firms Porter studied between 1950 and 1986.

One way of countering influence costs, which typically arise out of politicking, is to limit the flow of information that could be used by groups within the firm to carry out influence activities. Rent-distributing decisions within the firm for services rendered should be made once and for all. However there can be two possible fallouts of this. One possible issue of limiting the flow of information could be that if decision-making is decentralized this may affect the quality of decision-making and synchronization. The other possible influence cost that could arise is that office gossip and speculation could take over.

Milgrom and Roberts also argue that it is in the case of central authority making decisions on the allocation of wealth distribution that the incentive for influence activities is the greatest. Decentralization may possibly help here, however the question about balance is important. Generally speaking, efficiency within an organization can be promoted by protecting individuals and groups from adverse outcomes due to an organizational decision.

3.2.3 Vertical Boundaries

How much should a firm look to vertically integrate is a question that can have a huge impact on the competitiveness of the firm. As a general rule firms that have too small a scale for internalizing the design and manufacture of specific inputs are better off procuring externally. Similarly when there are economies of scale in place it is much better to use market procurement. Furthermore, in a business that has multiple activities, it is better to outsource to owners than to use employees to perform those activities. This is mainly because the design of incentives is more complex to ensure that the employee pays equal attention to all the activities. Furthermore as a buyer for services and inputs in the market, the firm has greater flexibility. It can procure from any supplier and this can result in greater efficiencies than a scenario where the firm is forced to procure internally. The question then arises; should core competencies be retained or outsourced?

There are certain advantages for vertical integration. One clear advantage is better coordination within the firm and a better protection of investments. This is especially true in the case that the product or service being procured is complex and specific to the firm. Seeking external vendors for it may result in loss of time and also an inefficient outcome. For new products especially it is better to vertically integrate rather than outsource. The suppliers are unlikely to make significant investments into developing new products unless the market for them is clear. Furthermore it may be difficult to monitor the attention a supplier is paying to the firm's needs, and thus the incentive for performance may be difficult to assign. The independent supplier in this scenario would become a more costly option. The cost is likely to be even higher if the independent supplier holds any sort of monopoly on the supply of inputs. In this scenario the business also incurs the risk of relying too heavily on an external supplier for a key input. Another contributor to the cost is the double marginalization, with inflation on the margins of the supplier and firm resulting in a higher priced product for customers.

A strategic objective for vertical integration could also be to raise entry barriers for potential competition by absorbing a key resource all firms in the industry would need. This would mean that either the entering firms would be forced to develop their own internal capabilities to produce the key resource or they would be forced to buy from the incumbent.

A franchise model is an example of vertical relationships that is relevant to the Mobile Banking industry. All large telecoms in Pakistan operate with franchise models that are spread across the country and drive the firms products. The Franchisee is the owner of the retail outlet and runs it but uses the brand name and the products from the Franchisor. The Franchisor in return collects the fees and royalties for use of its brand name and products. The advantage of this model is that it requires the franchisees to operate efficiently and keep costs low. At the same time the control exerted by the franchisor ensures greater economies of scale than the franchisee would have been capable of exerting on his own.

A disadvantage of the franchise model is that it raises the complexity for coordination. It becomes far more difficult to coordinate the roll out of new products for example, as training needs to be carried out on the new product with all the franchisees.

3.2.4 Horizontal Scope

The key question for firms, and extremely important for this thesis's study of the mobile banking industry is what is the horizontal boundary and scope of the organizations involved? Have they stayed within those boundaries or have they strayed beyond? The key objective for organizations to expand horizontally is to enter into a new set of consumer goods. However, there are perils of horizontal diversification that a firm must be aware of. Theoretically, firms expand into horizontal markets depending on the scale, scope and core complimentaries. In practice, however there are challenges to contend with.

The most obvious impact is of course that coordination becomes more complicated. As an organization grows too large, it starts to suffer from poor information flow and decision-making. As the organization expands, some amount of decentralization is forced and this has the effect of sacrificing some of the control necessary for synchronizing actions across the firm. Additional layers of management may also come in further complicating the flow of information.

Milgrom and Roberts in their chapter on "The Design and dynamics of Organizations" refer to the failed merger case of Rolm and IBM in the 1980's. Many of the reasons behind the merger failing could be traced to the different DNAs of the organizations. The sales focus and compensations offered were different. Not only that but jealousy was created between the firms employees on what they perceived to be the inequitable distribution of wealth. Externally the clients wanted IBM to bring in uniformity with Rolm in the pricing that they were offering. The lack of internal fit lead to an eventual breakup. Even though the business reasons were all sound, the merger could not succeed as employees within the merged companies could not succeed in working as one organization.

The performance measurement across a merged organization also becomes more complicated and thus costlier. This can exacerbate the situation. Once these negative forces are created in the organization, there is an escalation of influence activities leading to influence costs as manager compete to capture more of the rent for the services they are providing to the organization. It can be inferred that the larger the firm is the greater the impact of the influence costs.

The influence costs tend to be even higher if the merger has been formed as a result of a much bigger entity buying out a smaller one. This is a very relevant scenario to the mobile banking industry where large telecoms bought out small microfinance banks. Many of these influence costs have roots in the culture clashes that take place as jealousies and internal politicking take over. This leads employees to divert their attentions away from productive work and into looking for other jobs or inefficient behaviour.

One way to counter these influence costs is to erect legal boundaries between the two firms. This can help limit the influence activities and consequently the cost that arise. However it may not be a perfect solution in an environment where the organization must be seen by the customers to be one firm.

Business Alliances can also be formed when each participating organization brings a special resource to the alliance. Such alliances exist in the mobile banking space with the one to many model. However the risk in this sort of an alliance is that one of the participating firms may learn enough about the other firms products and services to be able to duplicate the offering to the customers if required. The risk of this is especially high if there are opportunities for vertical or horizontal integration.

3.3 The Internet Parallel

It might also be useful in the study to draw comparisons with the launch of the Internet as a distribution and sales channel. In a paper on "Internet Channel Conflict: Problems and Solutions", Andersen, Simester and Zettelmeyer examined the impact of a firm introducing a new Internet channel (Anderson, Simester, & Zettelmeyer, 2010).

They found in the study that the introduction of the internet not only increased the complexity of the coordination required but also affected the working of the traditional channels. In some cases the affect was to create competition between the new channel and the old. The complexity also increased with the introduction of the internet channel as information that was previously just available to of the traditional channels because openly available to consumers. This not only affected the sales pitch of the traditional channels but also effectively challenged the conventional mode of segmenting the market.

Examining the mobile banking channel there are clear similarities. The Mobile Banking channel creates a new access path for the customers to gain access to financial services. The customers no longer need to go to a bank branch to carry out their business and can instead go to a nearby grocer who also happens to be a mobile banking retailer and carry out their transactions (as long as they are covered under the umbrella of branchless banking). Additionally the introduction of the mobile banking channel has increased the requirement for coordination within the firm so that the specifications for the new products that are launched are communicated coherently across the retail channel. This can be a challenging task when there are over 30,000 retailers spread across the country. Furthermore, firms need to now identify who is the customer for the mobile banking channel and who is for the traditional channel. If there are overlaps, how should they be handled? The clash between traditional channels and the internet channels has its roots, according to the study, in the expectation that channel participants have in sharing the rewards of investing in the traditional channel. They may see the internet channel as a threat to the wealth creation capability of the traditional channel. This may even result in reduced returns from the current channels as consumer behaviour shifts to the more efficient solution. The internet also broke the monopoly of geographic reach that traditional channels enjoyed.

The fallout of this competition between different channels can be damaging for the firm overall. The channels might try to undercut each other instead of focusing on competing externally and create hindrances by withholding information from each other. Furthermore, and of acute relevance to the mobile banking industry, traditional channels might reduce efforts to push products that are available via the other channel. This point will be interesting to explore once we examine the Banking-Telco model being using in Pakistan. Most organizations still have separate sales staff for banks and for mobile banking. Are they in effect competing with each other?

3.3.1 Solutions proposed to channel conflict

Andersen et al suggest that the solution may lie in freeing the development of the alternate channel, the internet in this particular study, from investments from the traditional channel and by reducing the threat that the existing channels might face from the new one. There are also opportunities where both channels can benefit from each other by cooperating. If the new channel offers longer term efficiency to the customer then there may ways for the existing channel to piggy back on the new channel towards growth in revenue. This is another concept that will be explored in detail in the industry analysis.

3.3.1.1 Coordination Issues

The study also pointed to greater complexity in coordination within a firm with the increase in channels. Significantly, multichannel firms face challenges when coordinating sales leads. This is usually because the channels are competing with each other for revenue and thus are unlikely to pass sales leads or share information about the clients. There are also coordination issues which arise when the sale is made through one channel but the service delivery is expected from another channel. These coordination issues are highly relevant to the mobile banking industry. As mentioned above, there are in fact multiple sales teams operating from the banking, telecom and mobile banking channel.

A key reason for the increased complexity is the increase in the number of decision makers with the addition of new channels. Similarly information dispersion must also increase in order for all the decision makers to be on the same page. Additionally, the internet channel (or the mobile banking channel) is typically technologically and operationally quite different from the established channel. This over time may cause specialization and silo effect to creep into the firm as the two channels do not use the same language. We may then see tradeoffs coming into place between the need to specialize and the need to standardize.

3.3.1.2 Solutions to inter-channel coordination

Looking at solutions for the coordination problem a key question to be answered is whether to centralize decision-making or to decentralize it. It may seem better to reduce the number of decision makers by centralizing, but this also have an adverse effect of putting distance between the information required to make a decision and the decision maker. On the converse, decentralized decision-making can be problematic if different channels start developing their own specializations. In that case standardization would be sacrificed. A good way to look at it is as expressed by Andersen et al;

"If the current coordination problems arise because decision-makers are unsure about the decision of other decision-makers, then a more centralized structure is required. Alternatively, a less centralized structure will help if decision-makers lack more functional information, such as customer, inventory, product or manufacturing details"

3.3.1.3 Incentives in multichannel firms

The alignment of incentives is also an important factor to consider in multichannels to ensure that there are no opportunities for free riding being created. This is especially the case when channels can act as substitutes for each other and are kept separate by the organization.

This scenario may potentially be observed in the case of a bank maintaining a traditional and a branchless banking channel. There is a possibility that the traditional channel could benefit from the success of the new branchless banking channel and vice versa. Free riding could happen if positive word of mouth for one channel generates consumer interest in the parallel channel. This can lead to resentment amongst channels as they may view each other as competitors vying for division of the same pot of wealth created by the firm. The firm can thus start facing Influence Costs and opportunities for Moral hazard may arise.

4. Analysis

We begin our analysis of the Mobile Banking Industry of Pakistan by taking a closer look at the two key elements of the industry: the design of the firm and the organization of its distribution channels.

4.1 The Core model

At the heart of the industry lie the Branchless Banking regulations that have been designed and put forward by the State Bank of Pakistan. The regulations begin by explaining the rationale behind Branchless Banking, "**Branchless Banking (*BB*)** represents a significantly cheaper alternative to conventional branch-based banking that allows financial institutions and other commercial players to offer financial services outside traditional bank premises by using delivery channels like retail agents, mobile phone etc." (State Bank of Pakistan, June 2011)

The regulations go on to make it clear that the activities defined under Branchless Banking can only be offered by Financial Institutions, defined as Commercial Banks, Islamic Banks and Microfinance Banks. The regulations then go on to acknowledge that banks in Pakistan are not in a position to implement BB without active participation of technology partners, and specifically mentions the Telecom providers. However, SBP makes one very revealing suggestion, "As stated above, only bank-led model of branchless banking is allowed which may be implemented in different ways. Firstly, it can be implemented either by using agency arrangements or by creating a JV between Bank and Telco/non-bank." (State Bank of Pakistan, June 2011)

SBP, thus, in no unclear terms is suggesting an opportunity for telecom companies and banks to come together to deliver BB services. There are, however, two important limitations to take note of:

1. Whichever model is used, it has to be bank led
2. The telecom company can never be more than a Super Agent for the bank

These regulations created the space for a new industry to be born, but the way that various firms decided to respond to the opportunity has differed in its implementation. The industry has seen examples of horizontal diversification by telecom companies that decided to buy out banks or create Joint Ventures with them. On the other hand there have also been large banks that have decided to set up their own channels, without sharing ownership of the firm. We take a closer look at these two choices, and their implications for coordination and incentive issues within the newly formed firm.

4.1.1 The Telecom/ Bank model

In the spirit of the BB regulations, the telecoms and banks coming together as agents and FIs seemed to make sense. Telecoms have the largest footprints in the country for technology firms, with Mobilink and Telenor Pakistan claiming to have between 150,000 to 200,000 retailers, each, operated through a closely controlled network of a few hundred Franchisees. This network if made available to an FI holding a BB license would allow for banking services to reach the millions of customers living at the bottom of the pyramid and outside of financial inclusion. The firms, though, chose to respond in distinct ways to the opportunity.

4.1.1.1 Telecom Ownership of Bank

One of the main implementation models in the Mobile Banking industry of Pakistan is the buying out of a small bank by one of the telecom companies, to acquire the banking license to offer the services through its channels. This model in essence is a clear example of horizontal diversification from the point of view of the telecoms, as these firms sought to enter into a different line of products.

The implementation models of easypaisa, Mobicash and Upaisa, though, raise interesting questions around coordination and incentives between the banks and the telecoms.

The first implementation of a telecom company and bank coming together in Pakistan took place when Telenor Pakistan, a Norwegian based GSM giant, bought a 51% controlling stake in Tameer Microfinance Bank[15] to form a brand called easypaisa[16] in 2009. Telenor Pakistan, launched in 2005, was the second largest telecom operator with a customer base in excess of 20 million. Tameer Microfinance Bank, also launched in 2005, had been one of the first banks to acquire the branchless banking license but had a small footprint of around 30 branches. Tameer, a newly launched microfinance bank, was also a relatively small player, compared to the bigger commercial banks like UBL that were also studying the BB space with an intent to enter.

The success of easypaisa prompted other firms to rush to fill the vacuum for services. Mobilink, the largest telecom operator in Pakistan, with a client base of 35 million in 2011, bought 100% controlling stake of Waseela Microfinance Bank for a reported sum of PKR 1 billion. Interestingly though, Waseela did not hold the branchless banking license at that time and the application was made after the acquisition. It took a further one year for it to be approved. This indicates that the choice to buy Waseela may have had more to do with a large telecom company wanting to enter the banking space by buying into a relatively cheaper microfinance bank, than a desire to partner with a bank with working knowledge of branchless banking.

Upaisa, being the most recent entrant, has not made much of an impact in the Pakistani market yet, and has mainly focused on building its retail footprint. Ufone acquired 100% shares of Rozgar Microfinance Bank, a small firm, in 2012, changed its name to U Microfinance Bank and applied for the branchless banking license, which was granted by SBP in 2013. The ownership of the telecom does, however, raise some interesting points. PTCL the parent company of Ufone, was aggressively privatized in 2006, which led to Dubai based Etisalat buying 26% shares of the

[15] For details visit http://www.tameerbank.com
[16] For details visit http://www.easypaisa.com.pk

State Owned Enterprise for a reported sum of USD 2.6 billion. The payments to the Government of Pakistan were intended to be staggered, but the withholding of USD 800 million by Etisalat over transfer of assets has led to a simmering dispute that has still not been resolved[17]. Etisalat has management control of the company and intends to increase its shares to 51% once the dispute has been settled. Upaisa therefore, may already carry legacy coordination and incentive issues from its parent company, in addition to those that may arise from a large telecom buying a small bank.

The acquisition, whether partial or complete, does not however change one key fact: these were two entirely different firms operating in entirely different industries coming together to address a market opportunity. Furthermore, while the SBP, may have stipulated that the telecom company was to be no more than a super agent for the bank, the truth was that the telecom companies in all three cases now owned the bank.

Not only were the firms and industries different, but also the corporate cultures across the microfinance banks and the telecoms tended to be vastly different. Telenor, Mobilink and Ufone represented the very cash rich industry giants riding on the wave of a telecom boom in Pakistan. Telenor Pakistan, a 100% owned subsidiary of Telenor ASA, claimed close cultural kinship with its Norwegian head office, which did not believe in hierarchies or even individual offices for its most senior management. Everyone was required to sit on the same type of desks in an open hall, a practice that was almost alien to the Pakistani corporate culture. Mobilink, on the other hand, was owned by the Egyptian multinational Orascom Telecom and had been in the Pakistani market since 1994 a full 11 years before Telenor appeared in Pakistan. Mobilink had enjoyed a long run of dominance in the Pakistani market and had been extremely cash rich. However it had seen its fortunes fall. From 2003 when it controlled over 64% of the market, Mobilink's share had dropped to 30% by 2011, when it entered the BB space. Currently, their market share stands at

[17] http://www.cellular-news.com/story/Business/64739.php

28%. Ufone is partly owned by Etisalat, based in UAE, and partly by the Government of Pakistan, though the management control rests with the former. Ufone is going through a culture change with the new management trying to shake off the legacy of being a State Owned Entity.

Tameer, Waseela and Rozgar by contrast were Pakistani owned Microfinance banks with modest entrepreneurial beginnings. Tameer was established in 2005 and Waseela had not even started its operations at the time it had been acquired 100% by Mobilink in 2011. Waseela opened its first branch in May, 2012 in Islamabad[18]. Rozgar, incorporated in 2003, had been operating as a small district level bank in Karachi. The license to operate at a national level was acquired after Ufone bought the bank. The mission of all three banks had been to provide access to finance to the underserved and financially excluded by extending micro loans to them.

It is thus easy to see that there would be huge coordination challenges between these two types of firms when they have come together to launch a single set of products and services for the market. Clearly, the business sense for the telecoms to acquire the banks was sound; to take advantage of the opportunity created by SBP – but by doing so have they become one organization?

Easypaisa, Mobicash and Upaisa represent virtual organizations, which have been formed by bringing together Telenor and Tameer employees, Mobilink and Waseela employees and Ufone and Rozgar employees. However, it is key to note that while these employees may be working for the same brand of financial service, they may not be sitting in the same building or sharing the same incentives from their respective organizations. For example, Telenor and Tameer employees will be compensated for their services at different pay scales and benefits. Can this lead to possible influence costs within the firm, as jealousies may arise? How do the two firms decide on the wealth distribution between its employees? If Tameer were to start paying its employees

[18] http://www.thenews.com.pk/Todays-News-3-106553-Waseela-Microfinance-Bank-begins-operations

working in the branchless banking department the same salaries as the Telenor employees, would it not face a push back from the rest of its employees working in the loans and administration departments? There is a clear case for influence costs that may already be at work within and between these two organizations. The question for firms such as easypaisa, Mobicash and Upaisa to consider is who do the employees working in the branchless banking space consider to be their employer: the bank, the telecom or the new virtual branchless banking organization? It is probable that employees drawn from the bank and the telecom will retain their loyalties to their parent organizations, especially when both parent organizations maintain a distinctly different culture and incentive scheme.

It is also interesting to analyze whether decision-making can be centralized in this model and whether this model is informationally efficient? There is an obvious difference in the skill set and competencies of the employees from telecom and bank. They are required to bring these competencies together to create products and sell it in a newly established market. The literature on centralized decision-making would suggest that the management of easypaisa, Mobicash or Upaisa may suffer from a lack of information which they would need in order to make centralized decisions for the brand. This may be exacerbated if the products, pricing, marketing and sales are all done in different parts of the newly formed firm. For example, while the Know Your Customer phase (KYC) can only be carried out by the Bank it is the Sales force of the telecom that is driving the uptake of Mobile Wallets in the market and leading the process of selling solutions to the Corporates and Institutional clients. Once a solution has been sold to a client, the process is handed over to the backend team, which is the bank, for execution and account creation. It is conceivable that there are information and coordination failures in this handover, which may affect the overall customer experience. The KYC phase is known to be a possible bottleneck in the process for bringing new Mobile accounts on board. Where would the decision making happen regarding revamping or optimizing the KYC process? The sales information for the customer would be resting with the employees of the telecoms, whereas the process ownership and control would be resting with the bank employees.

Take for example the Benazir Income Support Project[19], under which the Government of Pakistan distributed PKR 1000 per month to millions of women living below the poverty line around the country. In this project the Government, in addition to a few conventional banks, engaged easypaisa, through Tameer Bank, to distribute the amount to the women. The accounts for the beneficiaries were opened through Tameer Bank but the disbursements were made through the Telenor retailers around the country. In this project a great deal of close coordination was required between the bank and the telecom on timely information sharing and processing as easypaisa at one point was serving over 1 million women as part of this project. While Telenor continued to act as the Super Agent for Tameer bank, it was the bank that was ultimately responsible by contract to the Government of Pakistan. Yet, the actual execution of the contract depended entirely on the Sales and Distribution channel of the Telecom, which even easypaisa did not have direct ownership of. Though the project was successful it was easy to see how coordination issues could creep into the project considering the volume of transactions that had to be coordinated between the Telenor Sales & Distribution team, the easypaisa Sales team (who maintained client interaction) and the Tameer backend teams.

However if they choose to decentralize decision-making, then the obvious downside is of two teams from different industries making decisions independently and developing their own separate languages and competencies. This would not seem like the desired model in the case of a brand looking to compete on innovation and aggressive market share. Thus the question remains of how best to address the centralized versus decentralized decision making.

A key tension between the bank and the telecom can also be that the chief revenue generator for

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[19] http://www.bisp.gov.pk

the Telecom as a super agent is the number of transactions going through its retail network, as it makes money on the number of transactions it enables. On the other hand for the Bank the chief interest is to secure deposits in its system for as long as possible to earn off the float. This means that there will be questions over how to split the value captured between the two parties, so that that it matches the value created by the respective elements involved in the value chain. It may be less of an issue in the case of Mobicash and Upaisa for example, where Mobilink and Ufone chose to buy Waseela and Rozgar outright, but may be a bigger friction point between Telenor and Tameer, where the ownership is still split 51% - 49%.

Turf war between channels over Customer Ownership

Furthermore, at least in the case of Tameer, there is already a history of doing microfinance in the Pakistani market before it sold 51% of its shares to Telenor. This means that the bank already has existing relationships with its clients in the market, and its own existing sales channels. Financial Services, as already mentioned, are to be sold through the sales staff of Telenor, as they are the super agents. As easypaisa moves up from the basic mass offerings to the more corporate products such as salary disbursements, loan disbursement and recovery and savings, it is conceivable that competition between the banks conventional business and easypaisa's sales staff may emerge. What for example would be the influence costs and moral hazards associated between easypaisa's sales staff approaching other microfinance banks to offer loan disbursement and recovery services? Would the other microfinance banks trust easypaisa, Mobicash or Upaisa as their agents in the market if they know that a competitor microfinance bank, Tameer, Waseela or U Bank (Rozgar) would gain access to information about their borrowers?

Furthermore, as pointed out in chapter 3, section 3.3.1, multichannel firms face challenges when coordinating sales leads. Since sales teams are motivated by the revenue that they bring to the table, it is conceivable that a turf war may start within the boundaries of the same firm, between the traditional sales channel of the bank and the new one employing the telecom. The possibility of a moral hazard existing is very real, where competing sales channels can suppress information needed by the other to increase their share in the distribution of the wealth of the firm.

It is hard to establish ownership of the customer outright. It may be beneficial to segment the customers into mass markets and niche markets to get a better sense of who is in control. This will be explored in greater depth in the section on the retail channel.

4.1.2 Pure Bank model

The other prevalent model in the industry is where the bank has decided not to merge or partner with any one particular mobile services provider, and have instead opted to retain sole ownership of the services.

UBL Omni is one such example. United Bank Limited (UBL) is one of the largest and oldest commercial banks present in Pakistan. Set up in 1959, UBL introduced its branchless banking services under the brand name of UBL Omni. How it differs from easypaisa for its customers is that instead of using the mobile phone's USSD menu, it uses SMS as a means for accessing the service[20]. Each SMS returns a set of options and the user works his or her way through the menu till the requested service is executed.

Since UBL decided not to partner with any one telecom, it faces a challenge of having to set up its own distribution channel. It has a network of 1300 branches, but has managed to create a retail network of 13,000 agents till date. It has not been able to match the roll out of easypaisa which enjoys a network presence of more than 35,000 agents across the country. However, UBL Omni still enjoys a healthy 28% of the market and is especially strong in relationships with Corporate and Government clients. Indeed, this may a key element of Omni's strategy in the coming years, as the Mobile Wallet becomes more and more important in the disbursement of funds.

[20] For details please see link
https://www.ubldirect.com/corporate/BankingServices/Omni/Services/ForAccountHolder/SMS.aspx

One other clear advantage that UBL Omni has is that, being a Commercial Bank, it has strong existing relationships with several clients. Convincing someone who already has a UBL standard account to switch to a UBL Omni account is likely to be an easier sell than for easypaisa or Mobicash to create brand new customers for their services, seen primarily as telecom led with small banks behind them.

Being a single firm branching out into another channel, it is conceivable that UBL Omni does not face the same coordination and incentive challenges as would be prevalent in the Bank-Telecom merger model described in section 4.1.1. However, the launch of UBL Omni does create a scenario of competing channels, as was described in section 3.3 on "The Internet Parallel".

So the key questions for firms choosing to follow this model of business would be how their traditional channel be impacted by the launch of this new channel? Can we expect elements of internal conflict on distribution of wealth, and consequent influence costs? The traditional sales team of the bank is well entrenched in the firm, both politically and in terms of process, whereas the new sales channel will need time and support to establish itself. It is conceivable that the traditional channel will view the new sales channel as a threat to their share in the wealth distribution. Are there grounds for moral hazard? I would argue that the opportunity for influence costs and moral hazard might be even greater than in the case of the Bank-Telecom model, as the traditional and new sales channel are competing for the same customer. Traditional channels are likely to want a share of the wealth for having created access to the consumers and may see the new channel as a threat to their existence and share of the firm's wealth. A scenario where the competing sales channel do not push the products of each other to the customer is quite likely. The sales force tends to operate independently, and will likely direct the customer to products from their own channel rather than the other, even if it does not give maximum value to the customer. This has the effect of raising the customers costs of searching for information and thus makes the value chain potentially more inefficient.

However, herein may also lie an opportunity for the traditional channel. If there is significant demand for the new branchless banking channel, the traditional channel has the opportunity to piggy-back with the BB channel and possibly enter new segments of the market. This however would require significant coordination and information sharing within the firm and between channels. The firm will have to be careful of the design of the incentive scheme, especially with regards to the Sales force so that grounds for moral hazard and influence costs are minimized.

UBL Omni has deployed an in house technology solution, whereas easypaisa has chosen to go to Fundamo, an external vendor. How does this impact time to market for new products and services? We discuss this in greater depth in the section below on Retail Channel.

4.2 The Retail Channel

The reach of the retail channel has been one of the key drivers of the success of the Branchless Banking industry. The retail footprint of BB now reaches 110,214 agents across the country. Compare this number with the 11,000 brick and mortar bank branches in Pakistan, and one begins to get a sense of how the reach of the industry has increased dramatically since its launch in 2009. However, in the race for a rapidly expanding footprint there are coordination and incentive challenges that have also surfaced.

In the case of the Telco/Bank merger, the model used the existing footprint of the Telecom as the extended reach of the bank. However, not all retailers are converted. Telenor Pakistan for example has in excess of 150,000 retailers through which it services its GSM customers for phone top ups and until recently, SIM sales. Out of these only 35,000 have been added as easypaisa retailers. The reason for this comparatively smaller number is that the State Bank of Pakistan has very strict guidelines around control and monitoring of the Branchless Banking retailers and the retailer has to be able to have enough financial strength to be able to work on a prepaid model.

A key point in this analysis is that the retailers are all under the monitoring of the Sales and Distribution departments of the Telecoms. This means that while the telecom acts as a super agent for the Bank (which it owns), the retail channel is owned and controlled by the Sales and Distribution channels of the Telecom companies, which may also be a separate part of the organization from the Mobile Banking section. The main focus sales for the retail channel, as far as Sales and Distribution departments are concerned, is still the GSM business. To put this in context, the Chief Strategy Officer of Telenor Pakistan in 2010, Mr Aamir Ibrahim, revealed that easypaisa made up of 0.4% of the total revenues of the telecom organization and the intention was to raise easypaisa's contribution to be 10% of the total revenues by 2014[21].

Even assuming that the target has been achieved, and easypaisa is contributing 10% of the total revenues to Telenor Pakistan, it still raises the question of which revenue stream would the retailer seek to focus on? There is no doubt that the profitability of the retailers offering financial services has increased with an additional service being offered through their channel. However, the prepaid model of the Mobile Banking industry also raises the risk profile of the retailers. For example, in the case of a fraudulent transaction conducted through the retail channel, the bank is obligated to not only investigate the incident but also impose penalties, including possible termination of relationship, on the retailer deemed guilty. The key question though here is: who controls the retailers? It's not the bank and not even the mobile banking section of the telecom. The retailer falls under the Sales and Distribution channel of the telecom, whose main revenue driver today are GSM sales. What, for example, would be the reaction of the Sales and Distribution channel to the bank looking to penalize or terminate the services of a high value GSM retailer that the bank finds guilty of violating the branchless banking codes? Would this in fact raise the scepter of internal competition?

The incentive issue in the retail channel is further compounded by the trend in the industry of new entrants 'poaching' retailers of the established players. Since there is no real exclusivity built into the relationship with the retailers, aside from the promise of a long mutually beneficial relationship, the retailers are free to offer services from competitors as well. This, though, has

[21] http://telecompk.net/2010/11/22/telenor-expanding-easypaisa-and-targeting-more-revenues/

implications for the first movers in the BB space, who invested resources to train and develop these retailers as Branchless Banking agents, only to have the competition now capitalizing on that effort and entering the BB space with relative less investment.

Figure 6: A retailer offering 4 competing brands of Branchless Banking

Such tensions are not limited to the firms who have chosen to merge. As discussed in chapter 3, the roots of the clash come from the expectations that channel participants have in sharing the rewards for investing in the traditional channel. This would clearly be the case when UBL Omni seeks to convert some of its customers using the traditional channel over to the Branchless Banking platform. Traditional commercial banking requires heavy emphasis on the strength of the relationships its accounts managers develop with large corporations and the government. However, by opening a parallel channel to these customers, the strength of the relationship risks being diluted. Not only that but in fact it raises the risk that the Relationship Manager of the traditional channel has to manage. For example, if there are problems with service delivery for a customer who has added on the new branchless banking channel, in addition to the traditional channel he already uses, what impact would it have on the relationship the traditional channel enjoys with the customer? Consequently, how is the wealth distribution in the new scenario compensating the managers of the traditional channel?

4.2.1 Who owns the customer?

The issues are bound to increase as the footprint of the industry expands. However the Industry is also dependent on the retailer as it is extended reach that separates branchless banking from the conventional banking services. It would seem the emphasis on Mobile Wallets is not misplaced then, as the real differentiator in the years ahead. However, overwhelmingly and despite multiple campaigns the Pakistani population has chosen the Over The Counter channel over the Mobile Wallets.

For the branchless banking industry this has an important implication: the reliance on the retailer and motivating him to push your own service is greater than ever. The trend in the market is now moving away from exclusivity as more and more of the retailers are being shared by different Mobile banking service providers. In essence this means that commission wars are not far away as service providers attempt to ensure that the retailer pushes their service above others.

The question of who owns the customer is an important one. Would the customer prefer a particular service brand over others and chose to walk away if the retailer does not provide that service? Or does the retailer play a key role in the decision making for the customer?

I would argue that there may be two broad categories of customers. Those who are living in cities and suburbs and thus have access to many retailers who may be carrying several brands, and those who are living in the rural parts of the country where there may be only a single retailer in the village. The retailer with a sole presence is more likely to own the customer than the mobile financial services provider, whereas the retailer who is competing with several retailers around him will be less likely to be able to assert too much influence on the customer.

In both scenarios though, the Mobile Banking Services providers will be under pressure to split as much of the value capture as permissible once the commission wars start.

4.3 What ails the Mobile Wallet?

There is little doubt that firms offering Branchless Banking services would prefer for their customers to shift to Mobile Wallets as this would reduce the dependency on the retailers as a middleman. However this goal has not been met, despite the State Bank of Pakistan's strong push on all Branchless Banking operators.

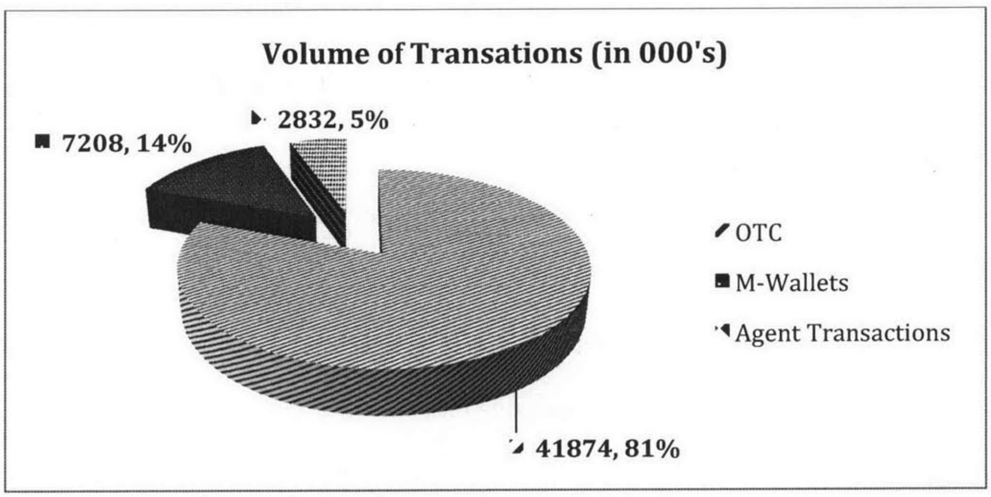

Figure 7: Division of transaction channels (in 000s) Jul - Sep 2013[22]

The business need is obvious. While currently easypaisa and Omni occupy 61% and 28% of the market respectively, only 14% of all market transactions come from Mobile Wallets, while 81% still flow Over The Counter. This has the implication that the retail agent network is playing a key role in the Branchless Banking industry, playing the role of the middleman in 81% of all transactions. This not only implies division of wealth with the middleman, but also a crippling dependency. The situation is further exacerbated now as most of the growth in retailers is coming

[22] Based on data in SBP report (State Bank of Pakistan, 2013)

from those that are being shared between several firms. The State Bank of Pakistan notes in its newsletter;

"As the agent network grows, and the productivity of agents subdues, it hints that the growth in agent numbers does not represent a horizontal growth in the network; rather it mostly signifies a vertical expansion of shared agents." (State Bank of Pakistan, 2013)

The retailer's incentive in providing transaction services is going to be driven by the strength of the relationship with the various BB firms and also by the Rake rate he is given as a share of the transaction he enables. It is conceivable that a commission war may be on the horizon for the BB industry in the near future as more players rush into market with their BB offerings. SBP further goes on to say:

"With each new quarter, the branchless banking industry is getting competitive; however its biggest test remains moving beyond money transfer and bills payments, and to accelerating registration and usage of customers' m- wallets." (State Bank of Pakistan, 2013)

This may give an indication as to why Mobile Wallets have not been able to take off as well as the Over The Counter transactions have. Currently, the Utility Bill and Internet Payments represent 46% of the total OTC transactions. Domestic Remittances account for another 44% of the total OTC transactions. Thus 90% of the OTC transactions, which represent the bulk of the transactions overall in the branchless banking industry are essentially coming from just two products – products that are heavily driven by the retailer channel that is fast becoming a shared one. This paints a worrying picture for the Branchless Banking firms, unless they are able to break away from the dependency that they have on retailers and move their customers towards Mobile Wallet accounts. So the question is: why have they failed in doing so thus far?

4.3.1 The tale of two regulators

One reason for number of Mobile Wallets not rapidly increasing could be that the opening of the Mobile Wallet is not governed by one, but two regulators. While the Branchless Banking falls under the State Bank of Pakistan, getting a SIM connection itself falls under the Pakistan Telecom Authority (PTA). This means if a customer wants to open a Mobile Wallet, he must first get a SIM that he can link to the account. In Pakistan there is a predominance of prepaid connections over postpaid, with 98.4% of the 130 million odd GSM subscribers opting for prepaid[23]. This results in poorer data collection about the SIM ownership at the point of sale and becomes a problem at the time that the consumer tries to open a Mobile Wallet account on the same SIM. The Know Your Customer phase that the banks are required to carry out for opening a Mobile Wallet involves at the very least some amount of verification of customer provided data. Thus the combined effect of facing PTA regulations and then SBP regulations to get a Mobile Wallet might be one reason behind the slow uptake of the offering.

4.3.2 Lack of ownership of Mobile Phones by Women

Women represent one of the most underserved segments of the market for Financial Services. According to an SBP report (Development Finance Group, 2014) women in rural and remote areas face additional constraints in their access to financial services because of their mobility, which can be attributed to cultural reasons. Furthermore, it is customary for there to be only one mobile phone in a household, which is normally in possession of the male head of the family. GSMA quotes a study saying a woman is 37% less likely to own a mobile phone if she lives in South Asia (GSM Association, 2013). This can limit access to female consumers for Mobile Accounts which would require her not only to have a SIM in her name but also to get a Mobile Account opened, which would require a KYC phase. However, in this segment also lies the greatest opportunity for Mobile Banking, as it addresses a dire need for inclusion. GSMA

[23] http://www.dailytimes.com.pk/business/06-Jan-2014/postpaid-sims-can-wipe-out-security-concerns

estimated the global opportunity for telecom to be worth $ 13 billion just by addressing the mobile penetration gap between the genders (GSM Association, 2013). A project carried out by easypaisa with Care International, which won them the GSMA award for Best Mobile Banking Service for Women in Emerging Markets, targeted precisely this group of women by giving them mobile phones and creating Mobile Wallet accounts for them. There are learnings in this project that can guide the Mobile Banking industry on how Mobile Wallets can serve a niche in the market.

4.3.3 Why open a Mobile Wallet?

Perhaps the more important question to ask would be what value is the Mobile Wallet creating for the Consumer, and does the consumer recognize this value? We can at least safely say by looking at the low uptake of Mobile Accounts that the answer to the latter question is no.

As mentioned above, roughly 90% of the transactions happening in the Branchless Banking space are either Utility or Internet Bill Payments or Person to Person Funds Transfer (Domestic Remittance). Almost all are taking place using the OTC channel, via the retailer.

There are services such as insurance and savings, offered by easypaisa, that are offered exclusively to the Mobile Wallet account holders but these seem to have not been a big enough draw for people to take the trouble to open accounts. The fact that total number of Branchless Banking accounts for the industry have reached around 3 million out of which only 1.5 million were active as of third quarter 2013, indicates that BB services providers need to reassess the approach they have taken towards BB account to date. Contrast this with the 191 million transactions that took place in the Branchless Banking space in 2013, and the divide in consumer preference of channel is clear.

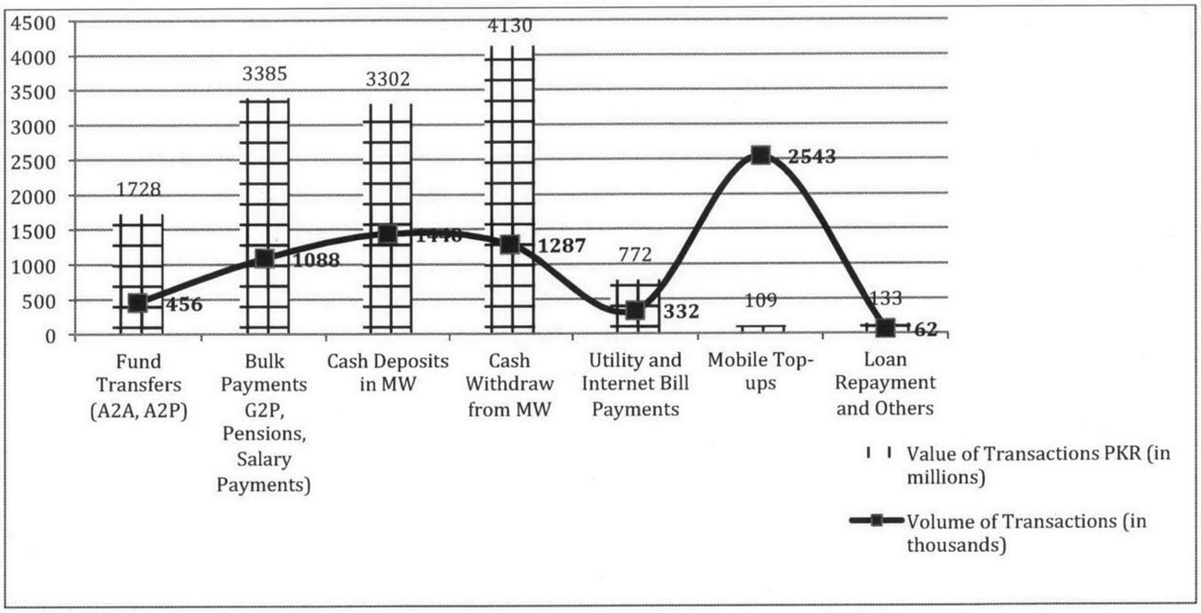

Figure 8: M-wallet transactions performed Jul - Sep 2013[24]

Any attempt to address this issue must begin by recognizing the segment of customer that is to be served. The reasoning behind launching branchless banking in the first place was financial inclusion of the unbanked. The vision was to bring those people into the formal net of the economy that normal brick and mortar banks cannot or will not serve because of their low value as customers to conventional banks. This segment of customer then is the digitally unsophisticated, possibly uneducated customer who lives in an area where banks typically do not have many branches. Indeed, according to a CGAP study carried out in 2011, 45% of customers carrying out transactions over the easypaisa channel were people who had never used a bank account in their lives (Bold, Does Branchless Banking reach Poor People? Evidence from Pakistan, 2011). In the same study, CGAP reported the following breakdown of customers;

Easypaisa customers living on less than	%
$ 1.25 a day	5
$ 2.50 a day	41
$ 3.75 a day	69

[24] Based on data in SBP report (State Bank of Pakistan, 2013)

The data indicates that the emphasis of the customer segment would seem to be transactions as opposed to savings. However if branchless banking is to grow beyond being a bill payment and funds transfer mechanism it must become a part of people's everyday life. It is not clear what value is created for people living at the bottom of the pyramid by owning a bank account, which they can operate over a mobile phone, when they may have negligible income to put in the account as savings. This was acknowledged by Mr. Nadeem Hussain, President and CEO of Tameer bank, in a presentation made by him in 2010, where he said that the majority of the un-banked are not seeking bank accounts but "something better than cash"[25]. He went on to say that though the initial opportunity was transaction processing, it could develop into a deposit taking opportunity.

There may be also further apprehensions on part of the customers about depositing their money in the hands of the branchless banking retailer, who may or may not be able to allow them to withdraw money in times of need, and may also charge an amount for the transaction. These customers have typically never deposited their savings with any institution and are likely to have trust issues around the service and a small Willingness To Pay for the service.

For Mobile Wallets to become desirable to the target segment, it must offer more than just savings and insurance options. Mobile Wallets must become a part of the everyday economic life of consumers and solve a problem they can identify with. The study by CGAP seemed to point to an opportunity as well: 65% of all respondents were repeat customers, using branchless banking to send money at least once a month. Can the Mobile Banking industry convert this transaction-based customer to a deposit customer by offering more value to suit their needs – or can the industry increase the portfolio of transaction services to capture more of the pie?

[25] http://www.sbp.org.pk/MFD/pbbc/Nadeem-hussain.pdf

5. Recommendations and Possible Solutions

The Mobile Banking industry in Pakistan is facing a turning point. While easypaisa enjoyed a few years of monopoly, as it was the first mover in the industry, it is now facing the prospect of stiff competition in the coming years from a number of firms that are entering the space. As the firms look to scale up quickly, it is clear that they will all look for the largest footprint to serve two main products, which are also the easiest entry points into the space: Utility Bill Payments and Domestic Remittances. This would indicate a clear battle looming over the largest chunk of the retail footprint, since the industry is currently dominated by Over The Counter sales channel.

This chapter will make some recommendations that will address the key challenges faced by firms in the Branchless Banking space in the Pakistani market.

5.1 Recommendations to improve Telco/Bank relationship

Firms opting for a model that brings telecoms and banks together must address the coordination and incentive issues that will arise between the legacy firms, as detailed in chapter 4. One of the most important factors to consider is the benefits of centralizing versus decentralizing decision making.

5.1.1 Outsourcing

A bank that is in the process of making a market entry, or considering it, may benefit from looking at outsourcing the agent model as an option, instead of vertically integrating with a telecom company.

The advantage of this approach is that decision making within the boundary of the firm will remain centralized and closer to the expertise of the organization. UBL Omni, which has opted to set up its own retail channel, may want to explore this possibility, by looking to offer its branchless banking services through the retail channels of major telecom services providers. It is also conceivable in this case that UBL Omni engage with a third party vendor who can manage all relationships in the background with different telecom services providers.

One possible way forward is to test this concept with a limited deployment of products in a closed segment of the market to assess the process efficiencies that may result from such a model. The bank may thus verify the robustness of the outsourcing model before making a full commitment to it with a telecom partner, or deciding to go its own way.

The challenge in following this solution of course is that it increases the complexity for a firm adopting this model, as it will be looking to coordinate across the boundaries of different firms. While it reduces frictions within the firm itself with regards to decision-making, it does require communicating externally with the agent channel, and also motivating it adequately. There is also a key strategic implication: the distribution channel for the firms services will now be external so the question of who has ultimate ownership of the customer remains open: is it the super agent or the bank who will decide the customers purchasing pattern?

The Bank in this case must ensure that it is its own Sales force that drives the uptake of the BB products and services, not just in the mass-market space but also with institutions and corporates. The telecom retail footprint should only be treated as a transaction point for the customer and not the actual driver of the transaction sale. There should also be minimal informational dependency on the telecom in the planning and execution of Sales strategy for the bank.

5.1.2 Creating a spin off organization

There are organizations such as easypaisa that are a result of a large telecom company buying a smaller bank. As discussed in chapter 4, there are potentially several influence costs that the virtual firm easypaisa might face as it tries to bring together organizations from different industries to work together. As explained earlier, there are many differences between the telecom and bank, such as pay scales for the employees, organizational cultures, areas of specialties and even location where the two organizations sit.

One of the reasons the joining firms are constrained in bringing the employees on the same scale and creating a common culture is that the respective employees still belong to their firms, that is, either the bank or telecom. Creating a common culture and organizational structure for these employees might mean alienating them from their parent organization and is likely to be met with resistance.

There is benefit in exploring setting up firms such as easypaisa as separate legal entities. That is, instead of creating a virtual organization, one way of developing a working model is to set up the branchless banking service as a unique entity, with its own management, culture and organizational set up. One clear advantage of this model is that it will minimize the influence costs that the firm may be facing otherwise and also reduces the chances of moral hazard between competing channels. The firm will start to develop a unique DNA of its own whereby its employees will start to see themselves as belonging to the same organization, instead of nurturing loyalties to the parent organizations they were drawn in from.

The other important advantage of setting up a separate legal identity is that it reduces the dependency on the traditional channels and parent organizations for funding and support, thus allowing the BB firm to chart its strategy with more freedom. It means that there is less managerial interference from the parent organizations thus centralizing the decision making within the BB firm, where the newly developed competencies for the industry lie. It is likely to make the organization much more informationally efficient by removing the influence costs and moral hazards that would have otherwise led to information suppression in the case of competing employees and channels.

Another key advantage is that spin off organization can develop its own Sales force that focuses on the BB products and services. The current sales forces in the industry are either drawn from telecom or from traditional banking, and thus carry the legacy of relationships with the parent organizations. The new BB firm has the opportunity to take more ownership of the sales directly, instead of having to coordinate across firms, with the Sales and Distribution channels of the telecom for leads generation and the backend teams of the bank for accounts processing, as is the case currently. This will greatly improve the time to market for the products and services that the BB firm offers and also allows the firm to develop its own internal language and culture which best suits the new industry.

It is understandable why this model was not followed at the start by easypaisa, for example, because the future of the industry was unknown. However, now that the success of Branchless Banking as an industry has been established, firms like easypaisa must be positioned in a way that enable them to perform efficiently without any internal influence or moral hazard costs that may restrict its ability to respond to the changing market conditions rapidly.

5.2 Recommendations to improve the retail channel

The battle over the retail channel is going to heat up in the coming months. As mentioned earlier, there is now an overlap of retailers starting to happen between different competing firms as they try to capitalize on trained retailers of branchless banking, who also in all likelihood have a flow of consumers who recognize and trust them as the providers of branchless banking services in their community. There are already indications in the market that firms may opt for a commission war to win over as many of the retailers as possible to their footprint.

5.2.1 Develop Niche retail footprint

With greater sharing of the retail footprint, there is a danger for the Mobile Banking industry to embark on a commission war to motivate retailers to push their services. This scenario would be a mistake, and parallels can be drawn with the pricing wars that have already damaged telecom Average Revenue Per User, which are speculated to have dropped to an industry average of USD

2.4 in 2012 from USD 8.3 in 2004[26]. Indeed it prompted Mr Walid Irshad, CEO and President of PTCL to say in 2011 that "Pakistan Cellular rates are the cheapest in the world. This cannot continue. This market has to consolidate, otherwise this will be a losing proposition for every operator."

One possible response could be to expand the retail footprint to serve niche markets, so there is less exposure in the mass market and thus reduce the chances of commission and price wars. An example of this is the vastly underserved segment of women customers. As referred to in section 4.3.2, a GSMA study has shown that ownership of mobile phones is 37% less likely in the case of women living in South Asia. This can present an opportunity for Mobile Banking if they can expand their retailer footprint to include roving 'ambassadors' who can offer transaction services to women by travelling to their homes in villages and small towns. Cultural reasons may hinder women from going to conventional Branchless Banking retailers. Creating female 'roving agent' will not only serve to address this gap but also expand the retailer footprint.

Other niche agent footprints can target the cottage and farming industry, where a lot of the economy works on the flow of credit. There are already middlemen working in this credit space with strong established relationships with the community. Bringing them into the Mobile Banking retail space with would simply convert the transactions happening in cash to digital. As a further value addition, firms with good standing in the market can leverage their relationships with Micro Finance Institutions to make credit accessible via Mobile Banking on an exclusive basis to this niche category of retailers.

5.2.2 Redefine the Retailer relationship with Branchless Banking firm

Firms, especially those working through telecom footprints can choose one of two ways to build on the existing relationship with retailers. As explained in Chapter 4, the ownership of the retail

[26] http://propakistani.pk/2012/10/19/declining-cellular-arpu-in-pakistan-and-its-impact-on-economy-part-1/

channel really rests with the Sales and Distribution of the Telecom, with the bank obligated to use the same channel, through contractual agreement.

5.2.2.1 Leverage the existing GSM relationship

One way of strengthening the relationship with the retail footprint is leveraging the already existing relationship that a telecom has for its GSM sales with the retailer. Conceivably, the retailer could be paid for his performance in both GSM and Branchless Banking sales, instead of allowing him to maintain two separate relationships with the same service provider.

Maintaining control over the retail channel is even more important as the value created by the first movers in this space. For example, easypaisa is threatened by new competitors, who will not have to invest resources to train the retailer on Branchless Banking concepts and services, nor invest too much in generating a customer pull to the retailer. The retailer in all probability already has a loyal customer base that comes to him for branchless banking services.

The retailer could therefore be tied into a closer relationship with the telecom by using the GSM revenue, which is still the main stream for the retailers in general, as the stick, with the carrot being the promise of greater revenue streams from the expanding Branchless Banking market.

However this approach presents coordination challenges to the Branchless Banking firm, as control over the retail channel will remain firmly with the telecom. There is room for influence costs to create hindrances for the BB firm, especially in the case where the business goals of the telecom require the retailer to focus more on the GSM sales than on the Branchless Banking services. In such a scenario the BB firm might find itself limited in its ability to act independently and would have to rely heavily on the cooperation of the Sales and Distribution teams of the telecoms to drive sales.

5.2.2.2 Greater integration with retailer

Another possibility is for the BB firms to take a greater role in retail management, by asking the telecom to allow direct access to the retailer. In this case the BB firm will be able to provide incentives directly to the retailer for pushing its services without having to coordinate through the telecom.

While this approach may take care of the coordination issue by allowing greater centralization of decision making and information access, it can also create a scenario where the Telecom may feel threatened that its own relationship with the retailer may be damaged or eroded if multiple firms coordinate directly and set incentives independently for the retailer. Would the Telecom be willing to relinquish its control as the Super Agent?

The firm must choose to experiment with both types of deployment to assess which retailer relationship will work best. The idea in the end should be to maximize the surplus for the entire value chain, instead of trying to capture value along the chain. The industry is more likely to flourish whenever all players in the value chain get the maximum surplus.

5.2.3 Differentiation by Innovation

As explained in 5.2.1, the trap of a commission war should be avoided. Instead, the service provider can try to improve the likelihood of the customer demanding its products and services when he/ she approaches the retailer to make a branchless banking transaction. In effect, the service provider would have greater ownership of the customer than the retailer does. As a result, it does not have to solely focus on motivating the retailer to push its services. The service provider can do this by using innovation in both service delivery and product offerings to differentiate from the competition. The retailer could then be motivated by the promise of a long-term relationship and the opportunity to provide innovative new solutions. This will allow the retailer commissions over greater value created for the customer, rather than merely destroying existing value for the services provider.

An example of this proposal is the pension and salary disbursement solutions that can be offered to the military and government officials using branchless banking. The current process involves arduous waits and long lines at the banks to withdraw pensions and salaries. Branchless Banking can cut through these wait times and inefficiencies, and provide better and real time reporting to the Military and Government administrations on withdrawals.

However the stumbling block in this remains biometric verification at the time of withdrawal, as for the Military and the Government it is critical to have the surety that the funds have only reached the intended recipient and none other. A branchless banking services provider who can also provide biometric verification could gain a large chunk of this market segment. This sort of differentiation requires innovation and experimentation in not just the product offering but also the method by which the service is delivered through the retailer. Hence instead of looking for lowest cost solution, the Mobile Banking industry should instead try to increase the sum of the consumer, retailer and firm surplus, by creating more value to be captured.

5.3 Recommendation to boost Mobile Wallet usage

Ultimately, however, the game changer for the Mobile Banking Industry in Pakistan is going to be the firm that cracks the Mobile Wallet code. As long as the Branchless Banking firm is dependent on the retailer for transactions to take place, there is no real ownership of the consumer and their experience in using the services. The BB firm will remain dependent on the retailer to 'sell' the firm's image and service, especially in the scenario of shared retailers.

However the continual lack of uptake on the Mobile Wallets would indicate that the branchless banking firms have failed to sell the concept to the consumers. It may be time to reexamine what value is being offered to the customer in a Mobile Wallet above the Over the Counter solution. Since the portfolio of services offered by the Mobile Wallet is really not much different from the OTC channel, the incremental value added may not be worth the effort the consumer will need to go through to open a Mobile Wallet account. Furthermore, for most Pakistanis living at the bottom of the pyramid, indeed the main target market for this sort of service, a critical change in consumer behavior will also be required for the service to be successful: that of giving their small savings away as a deposit to the retailer, with the knowledge that they might be charged for withdrawing that money later on. At the moment it seems there is both a lack of consumer trust and consumer belief in the value of these services.

5.3.1 Building Ecosystems for trade

Perhaps a better approach is to build ecosystems that the Mobile Banking services can plug into, so that the service offers more value to the financial excluded. These ecosystems could be based on technology platforms that connect buyers, sellers, lenders and borrowers together and shift the focus from deposits in the Mobile Wallet to trade.

The question must be asked: what are the aspirational goals of the consumers who will use the Mobile Banking services? Financial Inclusion by itself may not have much appeal to a consumer who has little concept of what it can mean for him/ her in the long run. Perhaps a better question to ask when designing the Mobile Wallet products is, financial inclusion to what end? The Mobile Wallets must connect the consumer to an ecosystem of transactions where there is incentive for the consumer to stay engaged, instead of carrying out a one off transaction and then deactivating the Mobile Wallet account because of lack of relevance to his goals and needs as a consumer.

Pakistan is a country that is still lacking in infrastructure that would connect people together, and this can translate into geographical isolation for communities living in rural parts of the country. Mobile Banking can be one effective way of providing a trade link between these excluded communities and the mainstream economies in cities. One such project exploring Mobile Banking opportunities in Agriculture was carried out by easypaisa that sought to connect buyers with farmers and also provide microfinance access to the farmers[27]. More opportunities for establishing such ecosystems of trade exist in other cottage industries of Pakistan, where mobile commerce could provide instant access to markets. It is surmised that establishing such ecosystems would make the consumer's incentive to open a Mobile Wallet account much stronger.

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[27] http://www.telenor.com/sustainability/initiatives-worldwide/farmers-cut-a-better-deal-with-their-mobile-phones/

5.3.2 Partnerships at Base of Pyramid

Mobile Wallets also provide an exciting opportunity for International and Local NGOs to reach the base of the pyramid. An example of this opportunity's potential is the Benazir Income Support Program[28], which was started by the Government of Pakistan to provide income support to up to 8 million women living at the base of the pyramid. UBL Omni and easypaisa were both invited along with other major banks to help channel these funds to the recipients.

The transparency, efficiency and low cost offered by branchless banking as a means for funds transfer is an attractive proposition to any large Government or NGO body that is looking to channel grants or loans to the BoP.

Another example is the partnership between Care International and easypaisa, under which Mobile Wallet accounts have been created for women in rural communities to receive their salaries over mobile phones. In most cases the women were owning a mobile phone for the first time in their lives.

The success of both BISP and Care International projects won easypaisa the GSMA award 2014 for Best Mobile Service or Product for Women in Emerging Markets[29]. Such awards indicate that the value of such partnerships is recognized globally and can help in making Mobile Wallets relevant and a part of everyday life for consumers at the base of the pyramid. Mobile Banking firms would benefit greatly from filling this space and partnering with capacity building organizations to reach the segment of society for which Mobile Banking services were originally targeted: the financially excluded.

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[28] http://www.bisp.gov.pk
[29] http://www.gsma.com/newsroom/gsma-winners-2014-global-mobile-awards/

6. Conclusion

The Mobile Banking industry in Pakistan has made huge leaps and taken center stage in the world as one of the fastest growing markets. There is a lot for the Pakistani industry to be proud of. It has been referred to by CGAP as a "Laboratory for Innovation"[30] and continues to be a fertile ground for experimentations in this space.

While the industry has enjoyed rapid growth in the years since easypaisa launched its service in 2009, it may now be facing a turning point. The initial success has drawn several players into the market to fill in the vacuum for supply of services. However, at the moment all the branchless banking firms seem to be focusing on the same pie: Utility Bill Payments and Domestic Remittances. This cannot remain a healthy market as competition intensifies, lowering prices and raising commissions for retailers. Essentially the same pie will now be divided between more and more players, with nothing new to offer. The lack of differentiation has the potential to reduce the branchless banking market to a commodity in a short space of time.

The industry must innovate away from this scenario. It must not get engaged in a price/ commission war. Instead the industry must look to boost usage of the Mobile Wallet by offering services like trading opportunities and insurance. The industry must not lose focus of who its target segment is: the people living outside the financial net. To bring them into the formal economy, bridges may need to be built to manage the transition and create value for the consumer.

Organizations doing capacity building work at the base of the pyramid can provide one vehicle for partnership for the Mobile Banking community to create a win-win scenario. Additionally, ecosystems can be developed around the technology to make Mobile Wallets relevant to the daily lives of the targeted consumers.

[30] http://www.cgap.org/publications/branchless-banking-pakistan-laboratory-innovation

The firms operating in the Branchless Banking space also need to be conscious of the choices they are making to establish the business model and its implications for Coordination and Incentives. The Bank-Telecom model is particularly tricky considering it's a marriage of two industries that are not necessarily perfectly compatible. The firm must make hard choices about the model it wishes to follow and be cognizant of the tradeoffs between choosing a bank only model and a bank-telecom partnership. It is advisable for the firms seeking to enter the industry to test the robustness of the model they seek to follow for the target segments.

There also needs to be greater focus on the design of the retail channel, which will likely suffer from greater coordination and incentive challenges as more market players start to share the same retailer. There is a danger that this could destroy value as firms compete to capture more share of the wealth created by the industry. The coordination with Sub-Agents through a Super-Agent, such as a telecom, is a particular challenge for the banks as the ultimate question remains of 'who owns the customer'?

The industry has thus far grown organically as there was a virgin market to explore. However now as the market is seeing several players enter, it is critical for the firms to deal with internal coordination and incentive issues immediately or risk losing market share to the more efficient competitors.

While State Bank of Pakistan and Pakistan Telecommunication Authority will remain as strong regulators, they must ensure they do not squeeze out value from the branchless banking industry by imposing too many boundaries around the model that may be followed. Branchless Banking, as it is taking shape in Pakistan, is unique and needs space to develop a model that suits its environment. This is crucial since it is the environment that will shape the decisions about which strategy is likely to work best, and the organizational design that can best help achieve the strategy. This means that the firms need space to test and experiment with the business models before settling on the best choice for the segment they operate in.

There is immense potential in the Branchless Banking industry in the coming years to bring a large percentage of excluded Pakistanis into the economy. The value that this industry can create can be revolutionary, which is all the more reason for firms to keep innovating around the design and delivery of services to the bottom of the pyramid. Indeed in a study conducted by the Boston Consulting Group, the impact of Mobile Banking on the national GDP was projected to be significant. According to the research, "With mobile financial service adoption, Pakistan could see a GDP increase of US$ 20 billion, or 3 percent, by 2020" (The Boston Consulting Group, 2011). It further quotes a study by the World Bank that says that a "1 percent increase in financial inclusion corresponds to a 0.51% increase in business creation, and a 15% inclusion increase leads to employment growth of 1 percent." (The Boston Consulting Group, 2011) The Mobile Banking industry therefore holds a lot of promise for Pakistan, by creating ecosystems built on branchless banking services that offer opportunities for financial inclusion to the most excluded of Pakistanis.

Global acknowledgements such as GSMA's Best Mobile Money Product or Service award for easypaisa in 2014[31] is a testament that the Pakistani industry has responded well to the opportunity. However the key question going ahead now is how firms design themselves to be more efficient for the increasing competition in this space.

[31] http://www.globalmobileawards.com/winners-2014/

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