MicroSave

Market-led solutions for financial services

E/M-Banking Volume III

Optimising Performance and Efficiency Series

MicroSave's

Inspiration:

"A world in which all people
have access to high-quality affordable
market-led financial services"

Mission:

"Strengthening the capacity of
financial service providers to deliver
market-led financial solutions"

MicroSave

Market-led solutions for financial services

Presents

Optimising Performance and Efficiency Series

E/M-Banking Volume III

The Optimising Performance and Efficiency Series (OPE Series) brings together key insights and ideas on specific topics, with the clear objective of providing microfinance practitioners with practical and actionable advice. Based on *MicroSave's* acclaimed Briefing Notes and India Focus Notes series, the Optimising Performance and Efficiency Series provides succinct guidance on a variety of topics from product innovation to delivery system optimisation. Each of the booklets addresses a key topic that can transform a microfinance institution for the better. The Series will help improve microfinance institutions' double bottom line – both the business and its social performance.

Also in this series…

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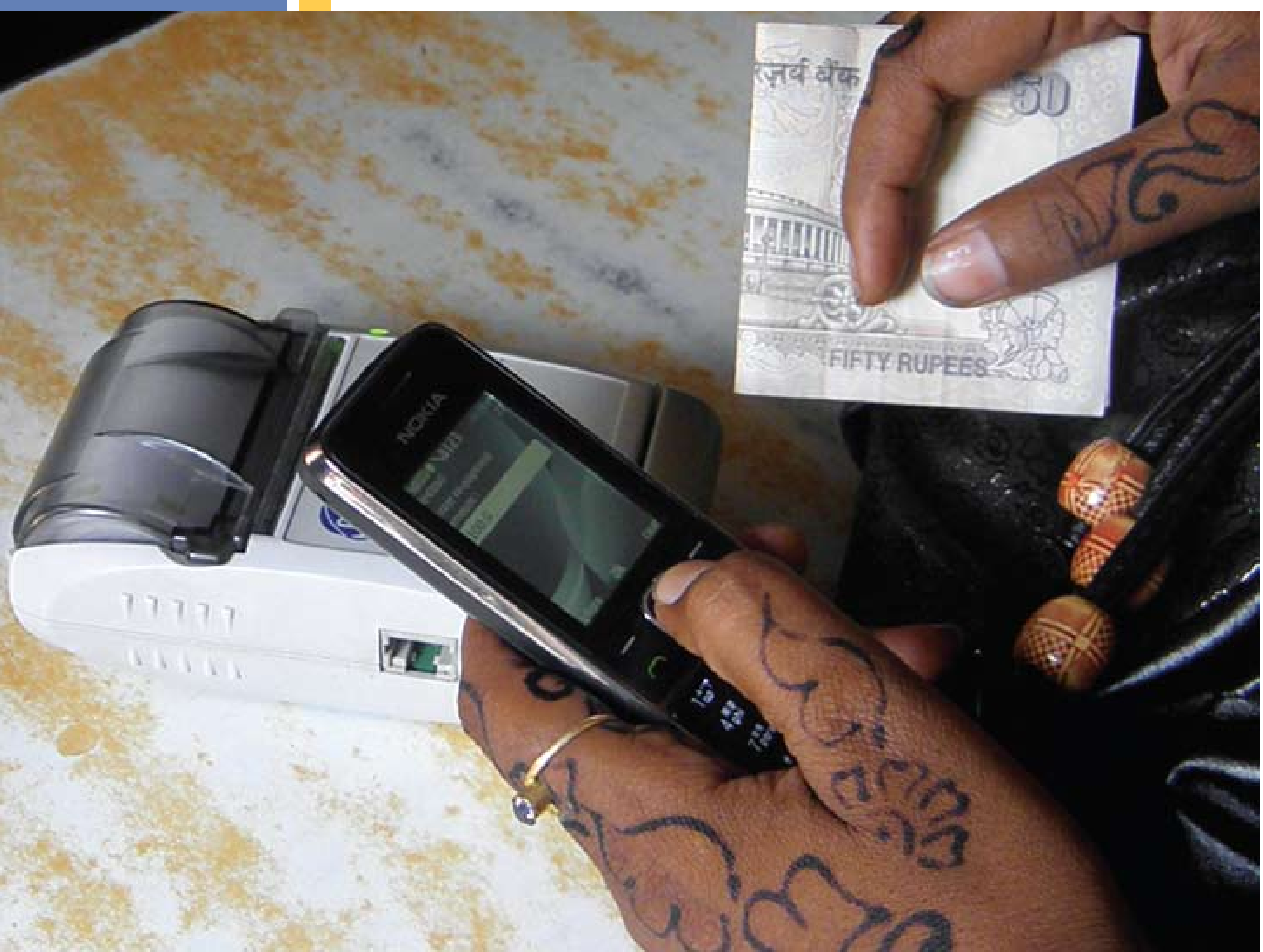
Electronic and Mobile phone-based Banking: Opportunities, Issues and Challenges



Background

There is growing consensus that e-banking offers a unique opportunity to address mainstream banks' two major barriers to serving the low-income market: the need for a branch infrastructure and managing high volumes of low value transactions. The potential of e-banking to significantly extend the reach of financial institutions into rural areas, without investing in "bricks and mortar" branches, is widely acknowledged.

For several years now, *MicroSave* has been closely involved with several e- and m-banking initiatives in Africa, Asia and Latin America, in particular working on the "soft side" of e/m-banking where the technology interfaces with the customer. *MicroSave* provides support conducting market research, process mapping and analysis, pilot-testing, brand/marketing and financial education etc. *MicroSave* has worked on e-/m-banking with leading banks (in Bangladesh, Colombia, India, Indonesia, Kenya, Papua New Guinea, South Africa and Tanzania); agent network managers (in India, Kenya and Papua New Guinea); and mobile network operators (in Kenya and India). For more details about *MicroSave*'s work in this area, please see: http://www.*MicroSave*.net/sites/default/files/MBankingBrochure.pdf

MicroSave also coordinates the Banking Correspondent Network Managers' Forum in India, which brings together all of the leading Indian agent network managers to identify and address issues, as well as to exchange information and data about the industry.

In addition, *MicroSave* periodically holds "M-banking Dialogues", to bring together a select group of providers that are actually implementing m-banking solutions. These allow practitioners to discuss some of the nitty-gritty details and challenges involved with developing, testing and rolling out e- and m-banking solutions. These Dialogues have proved immensely valuable for participants, who leave with significant learning through the peer-to-peer exchanges.

In response to repeated demands from practitioners, *MicroSave* has developed this third compendium of brief publications on e- and m-banking. This compendium mines *MicroSave*'s rich experience including the acclaimed analysis of dormancy in India no frills accounts and Indian households' willingness to pay for agent-based financial services, as well as the recent analysis of the role of M-PESA in the landscape of Kenya.

Additional information and interviews with leading m-banking practitioners can be found in short films available from *MicroSave*'s MicroFinance Podcast:
http://www.microfinancepodcast.com/category/products-and-services/mobile-banking/ .

This compendium offers guidance on a wide range of opportunities, issues and challenges for e/m-banking. The papers presented are as follows:

1. ***Why People Do Not Use Present Banking Systems – A Case For BCs***
   Akhand Tiwari, Ritesh Dhawan and Vartika Shukla

   This chapter examines the difficulties faced by low income households accessing banking services and presents a case for the acceptance of BC model for expanding the reach of banking services. It concludes that the key objective of financial inclusion, to offer all households affordable financial services, can potentially very well be achieved with BC as a delivery channel, if it can be made viable for banks and BCs.

2. ***Comparing Business Correspondent With Informal Saving Avenues***
Akhand Tiwari, Anurodh Giri and Vartika Shukla

This chapter focuses on comparing informal saving avenues with "Business Correspondent" (BC) services on a variety of attributes. The dimensions for comparison have been derived from respondents' perception of qualities that should characterise an ideal saving avenue. These primarily include trust, frequency and convenience of small deposits, benefits such as rate of return, ease of withdrawal, security of the deposits, cost incurred, understanding of the procedures for accessing a particular saving avenue, and other product offerings such as credit.

3. ***Successful Banking Correspondents Need a Compelling Product Mix***
Christopher Murdoch and Graham A.N. Wright

To date, the business case for BCs remains uncertain, despite the Reserve Bank of India's (RBI's) efforts to relax policy to encourage successful growth of BCs. Nonetheless some commentators do still see the future of financial inclusion and microfinance in India dependent on successful BC models. This chapter lays out why a compelling product mix is central to a successful BC network. A client-responsive product mix is likely to create the level of activity necessary to make the BC channel sustainable for both banks and the BC network manager, as well as for individual BCs themselves ... thus creating true and meaningful financial inclusion.

4. ***What Do Clients Want in E/M-Banking Agents?***
Denny George and Venkata N. A.

This chapter describes clients' preferences for desired agent profiles in India, and looks at how this data could be used when selecting agents. It concludes that agent selection must consider many aspects key to the viability of the business, such as the capacity to scale up and the ability to manage cash. However, client preferences for agent attributes are perhaps more important than other considerations, since these will be one of the main factors driving transactions. Organisations wanting to adopt agency banking models should take cognisance of this and exercise adequate due diligence in identifying key characteristics that clients desire and selecting agents according to those traits.

5. ***Sustainability of BC Network Managers (BCNMs) in India: How are BCNMs Paid?***
Ghiyazuddin A. Mohammad, Shivshankar V. and Chris Linder

There have been various studies carried out on international branchless banking commission structures highlighting the benefits and drawbacks of different pricing methods for the end user/customer, and the importance of these for adoption. However in the case of bank-led branchless banking operations, the agent network managers (BCNMs in India) doing the heavy operational lifting in the field, are often forgotten when it comes to commissions and sustainability. This chapter examines the different product revenue drivers based on how banks remunerate BCNMs, provides an overview on different commission calculation methods adopted by banks, and analyses different scenarios related to revenue maximisation.

6. ***Sustainability of BCNMs: Review of Commission Structures***
   Ghiyazuddin A. Mohammad, Shivshankar V. and Chris Linder

   Business correspondents (agents) and their managing support organisations, BCNMs, play a very important role in promoting Financial Inclusion in India, yet they often face the biggest challenge of sustainability. This chapter critically analyses the different commission structures and the implications this has on the top-line revenue of the BCNMs. For this purpose, *MicroSave* analysed six actual branchless banking commission structures offered by three major banks in India. The objective of this chapter is to present common ways banks use to compensate BCNMs for various services and provide an indication of commissions that may be relatively more rewarding.

7. ***Sustainability of BCNMs: Business Scenarios and its Effects***
   Ghiyazuddin A. Mohammad, Shivshankar V. and Chris Linder

   This chapter reveals results from analyses of three different scenarios that played out over time for one of *MicroSave*'s partners and how each influenced customer enrolments, transactions and revenues. Since the number of customers enrolled and the value and volumes they transact have a direct impact on revenue, BCNMs should understand the critical role that these typical business scenarios play to create an overall revenue generation strategy and in assisting them in future negotiations (or renewals of existing agreements) with banks.

8. ***Innovation and Adaptation on the M-PESA Rails***
   Mukesh Sadana, George Mugweru, Joyce Murithi, David Cracknell and Graham A.N. Wright

   This chapter examines some of the savings and related services offered to the low income market segment using M-PESA 'rails', and highlights the challenges they face. The institutions using M-PESA are working in different areas of financial services, offering savings, loans, health and life insurance, pension and investment products. It concludes that: 1. the whole cycle of deposit and withdrawal (or indeed loan repayment) through M-PESA therefore becomes an expensive proposition for the customer; and 2. at present financial institutions appear unsure about the overall costs and benefits arising out of their partnerships with M-PESA. All are busy sorting out the operational issues due to integration challenges, and the difficulties of communicating the proposition to customers.

9. ***Riding the M-PESA Rails: Advantages and Disadvantages***
   Mukesh Sadana, George Mugweru, Joyce Murithi, David Cracknell and Graham A.N. Wright

   By riding on M-PESA rails, most banks, MFIs and Deposit Taking Microfinance Programs (DTMs) are looking for cost reduction, increased staff efficiency and convenience of customers, which ultimately should lead to more deposits/transactions. This chapter examines if, how and where financial institutions are realising the potential of M-PESA to make their systems more efficient and their products more accessible. It concludes that financial institutions that have agreements with M-PESA are not heavily promoting the opportunity, despite the potential benefits. They are aware of the issues faced by customers as well as the back-end challenges of reconciliation and so on, and are thus cautious about large-scale rollout.

10. ***Do the M-PESA Rails Contribute to Financial Inclusion?***
Mukesh Sadana, George Mugweru, Joyce Murithi, David Cracknell and Graham A.N. Wright

A substantial proportion of the Kenyan population is using M-PESA as an addition to bank savings accounts, and less frequently, as a full-scale substitute. The worry among financial inclusion proponents and banks is that poor people will use M-PESA as a substitute for formal institutions. This chapter examines progress towards financial inclusion in Kenya, and concludes that while M-PESA's rails offer the potential, Kenya may yet have to wait to realise comprehensive, commercially sound, affordable and effective financial inclusion.

11. ***Speculation on the Future of Financial Services for the Poor in India***
Graham A.N. Wright

In the long-term, as multiple products are offered across the mobile money platforms, this will revolutionise financial inclusion, and the poor will have access to savings, remittances, payments, insurance, individual cashflow-based loans and air time top-up, plus a host of other services through agents based with a few yards of their houses.

12. ***The Business Case for Branchless Banking: What's Missing?***
Ann-Byrd Platt

We are in the process of reinventing how these people send and receive money in remote locations, how they pay bills and loans. How they save and insure against emergencies, and for increasing numbers, how they enjoy greater freedom and control over their financial future. The dilemma is how to make all these new ways of banking—by mobile phone, via card readers and enhanced ATMs, and with third-party agents who act on behalf of branch staff—either profitable or at least sustainable. Every other industry has had to revise how they make money in new markets with new technology. Banking may finally be forced to as well. There may be no traditional "business case" for financial inclusion. The scope and needs of these customers are too different. This reality may ultimately persuade banks to share risks, and rewards, with MNOs and—watch this space—the post office, global consumer brands, and technology service providers. Each brings new value and possible solutions that banks alone cannot solve.

13. ***Can Bank-led Models Really Deliver on the Promise of Mobile Money?***
Graham A.N. Wright and Shivshankar V.

There is some debate, but perhaps not enough, about the potential profitability of the mobile money solutions that are so widely promoted as the answer to financial inclusion. In the previous chapter 'The Business Case for Branchless Banking - What's Missing?', Ann-Byrd Platt argues that banks are not interested in the potential business at the bottom of the pyramid because: 1. it requires a radical re-work of their old business model; and 2. the burgeoning middle class in developing countries already present a tremendous business opportunity that is both easier and fits the current business model. This is true for the vast majority of banks. However, there are potentially important exceptions highlighted in this chapter. A diversified product range could provide tremendous opportunities to increase revenue streams, while de-congesting banking halls, both for loan application and for deposit and repayment transactions. The potential for profitable mobile- and agent-based financial services is clear.

14. ***Branchless Banking Update: Should We Bank on Phones or the Post?***
Ann-Byrd Platt

The term "branchless banking" may no longer be the most accurate way to describe what is currently going on in financial inclusion and microfinance. Are banks and branches even the two most important components? For the past five-six years, most efforts to move money via mobile phones or point-of-sale (POS) terminals have required full bank participation, or at least bank partnership and oversight. Reasons include deposit insurance, customer and payment authentication, fraud control, G2P government disbursements, and the actual issuing of money. This chapter discusses these issues and concludes that for the present, the answer is yes: a full banking license and a safe place in which to conduct banking business will remain necessary for full financial inclusion to succeed.

15. ***NextGen Mobile Wallets: The Slim Billfolds May Prove More Lucrative***
Ann-Byrd Platt

Mobile wallets are often discussed, and often misunderstood, as the new way to think about payments and banking services-for both rich and poor. Mobile phones may be the only technology that is equally interesting to both ends of the economic spectrum right now. Mobile wallets are no different from any other aspect of financial inclusion. The dominant player is still usually the bank. Nevertheless, seamless cooperation amongst all players matters more for m-wallets than most inclusion efforts. And two recent announcements-a Google-Citibank-First Data collaboration and Square, a new m-wallet led by Twitter's founder Jack Dorsey-augur well for both low-income customers and retailers around the world without credit-card terminals, electronic cash-registers, and other expensive POS devices.

16. ***Revival: Responding to High Dormancy Levels in No Frills Accounts***
Anjaneyulu Ballem and Sachin Bansal

To March 2010, about 50.6 million No Frills Accounts (NFAs), with an outstanding balance of Rs.53.86 million, were opened by banks. However, a significant number of new customers acquired by banks under the inclusion effort have remained dormant. This chapter concludes that although there is high dormancy in the NFAs, these accounts represent a large potential client base. Banks need to work on designing innovative products, improved delivery mechanisms, and appropriate marketing and incentives for the BC model. Customers are willing to pay for the banking services offered by BCs and this user-friendly financial inclusion model can go a long way towards boosting the use of NFAs substantially.

17. ***Clients' Willingness to Pay "Reasonable Fee" for BC Services***
Akhand Tiwari, Sachin Bansal and Vartika Shukla

This chapter discusses whether end customers are willing to pay for financial services delivered by Business Correspondents, and if yes, how much are they willing to pay. It concludes that the majority of customers are willing to pay a fee for a convenient banking facility close to their homes. The service, however, has to offer a range of products suiting to their needs. The chapter gives insight into factors and mechanisms that could guide the decision on the fee to be charged. It provides a backdrop for service providers to start with what can be termed as a 'reasonable' fee; and once again, clearly highlights the importance of listening to clients.

18. Measuring Willingness to Pay
Akhand Tiwari and Minakshi Ramji

This chapter presents the development and the implementation of an innovative qualitative research tool directed at determining the level of 'Willingness To Pay' (WTP) for BC services. The WTP tool has been designed to allow stakeholders to understand how low-income households think about pricing and cost. It is also an effective way to estimate what potential customers of BC services would be willing to pay for the services. The WTP tool helped to elicit some interesting results on the potential of charging 'reasonable fees' from potential BC customers.

19. Interbank Mobile Payment System (IMPS): Will It Catalyse Financial Inclusion?
Mukesh Sadana and Graham A.N. Wright

IMPS is a service offered by the National Payments Corporation of India (NPCI). The IMPS provides a platform for account holders of participating banks to transfer money to any other account holder in the network. The only prerequisite is a mobile handset. Currently eight banks (representing about half of the bank accounts in India) are participating in the network while six others are under IMPS certification. The present regulations provide ample scope for banks and financial institutions to explore ways of reaching out to the un- and under-banked. Cooperation and coordination will be required to take advantage of the potential of these technological solutions and to create the type of inter-operable solutions that will lead to massive uptake and financial inclusion.

20. Unique Identification (UID) and Financial Inclusion – Solution or Not?
Sandeep Panikkal, Krishna Thacker and Jitendra Balani

The objective of this chapter is to share some initial insights on UID with financial service providers and other stakeholders, to help them leverage this new development and support/catalyse financial inclusion in India. It analyses the potential benefits of UID for financial inclusion as well as its potential risks. The Note concludes that the combination of UID, mobile and bank account numbers could truly enhance financial inclusion.

21. UID for Mobile Banking in India
Akhand J. Tiwari, Anurodh Giri and Priyank Mishra

Among various expected benefits of the Unique Identification (UID) card, one is supporting the financial inclusion agenda in India - by providing everyone with a UID card linked to a mobile phone number, and/or linked to a bank account. Financial inclusion has many hurdles in India, but the two of the most troubling of them to regulators and customers are: 1) authentication of individuals without a fixed address or formal documentation; and 2) secure access to banking services in remote areas. This chapter takes a closer look at how UID can make m-banking more accessible in India. It concludes that UID can play a big role in proliferation of m-banking and financial inclusion in India. The success (or failure) of the UID will lie in its ability to provide a secure, safe and accessible platform for m-banking on the basis of its identity database.

22. *“SBI Tatkal” – From Cash to Cash Cow*
Abhishek Lahiri and Swati Mehta

What Maggi is to Nestle, Lifebuoy is to HUL, Alto is to Maruti and Horlicks is to GSK, perhaps “Tatkal” is to Eko. Ever since this direct deposit product was launched in August 2010 by Eko, it has emerged as the flagship product for this Delhi based business correspondent (BC) and technical service provider (TSP), providing technology for m-banking and agent based financial inclusion services.

Why People Do Not Use Present Banking Systems – A Case For BCs

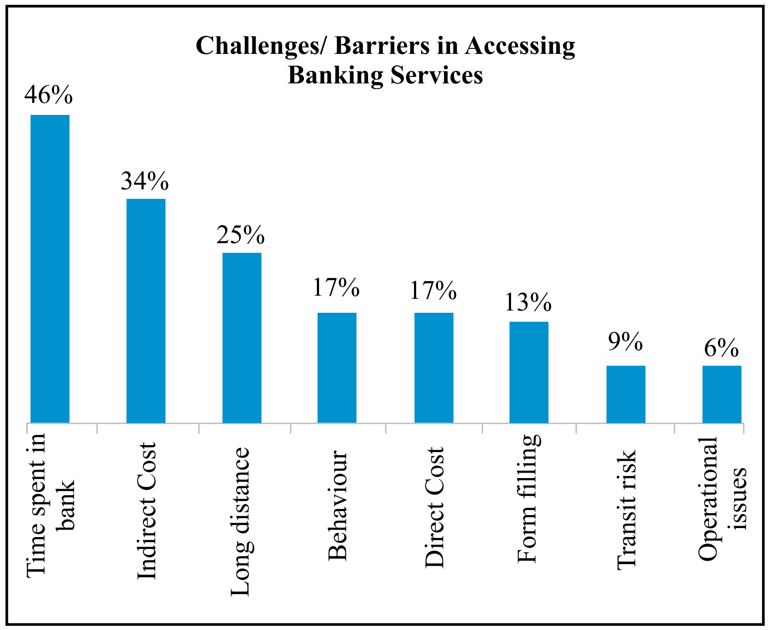
Akhand Tiwari, Ritesh Dhawan and Vartika Shukla

Introduction

Reserve Bank of India's (RBI) financial inclusion drive to cover the un-banked Indian population,[1] has led to initiatives such as the "No Frills Account" (NFA) and "Business Correspondent" (BC) model. This chapter examines the difficulties faced by low income households accessing banking services and presents a case for the acceptance of BC model for expanding the reach of banking services. The note draws from the recent primary research conducted by *MicroSave*. [2]

Challenges and Barriers in Accessing Banking Services

The difficulties that clients encounter in accessing banking services are at two levels: first in reaching the bank, and second in transacting. The former is mostly about distance, conveyance, travel time and other direct and indirect costs (e.g. opportunities to sell labour lost); while the latter arises from processes involved and other exogenous factors at the bank. The graph below presents various difficulties highlighted by respondents. The percentages indicate the number of times a particular issue came up in discussion groups.



Time Spent in Bank

One of the biggest deterrents to using banks is the amount of time one has to invest to transact. Though various factors contribute to this, including literacy levels of bank users, customers believe that the limited number of staff at rural branches means that they are overburdened – as well as inefficient. In addition, at the time of benefit payments like NREGA, customers reach bank in large groups that add to the crowd, resulting in extended waiting time at the bank.

> ***"Linon mein lago to do ghante tak khade rehte hain"-***
>
> **"If one stands in queue, it could take two hours to reach the cashier."**
>
> **(CWP research Rajasthan)**

Indirect Costs

Customers incur several indirect costs when they go to a bank. Indirect (and direct) costs increase further when customers are required to visit the branch more than once to complete the transaction (see below).

[1] 41% population in India lack access to formal banking services, Financial Inclusion: Perspective of the Reserve Bank of India' report dated September 29, 2010.

[2] **Platt** et al. "The Answer is 'Yes'- Cost & Willingness To Pay" *MicroSave*, 2011

> ***"Gramathula yarum chuma iruka mattom. Velaiku polainalum keera pudingitu varuvom, veragu porikitu varuvom. Anniku bank pona kaikari vanganum kerosene vanganum – athu nashtam thane!" –***
>
> **"In villages no one sits idle. Even if we don't go for work, we gather greens and collect fire wood for cooking. If we go to bank, then for the day we have to buy vegetables and kerosene, aren't there indirect costs?"**
>
> **(CWP research Tamil Nadu)**
>
> ***"Kam se kam 4-5 ghante kheti kar lete toh aadhe din ka kaam ho jata" –***
>
> **"If we work in the field for at least 4-5 hours we finish a half day's work." Respondent group explaining opportunity loss.**
>
> **(CWP research UP)**

Time Lost in Travelling Long Distances

Clients often have to travel long distances to reach bank branches located far from their homes. Customers either have to wait (sometimes for hours) to get a conveyance, or walk kilometres, to reach to the bank. For this reason, such clients prefer not to use banking services for regular savings or other products. These customers typically use their bank accounts (when they have one) to receive government benefits, and therefore primarily for withdrawals. A few customers with substantial, regular income and savings do use bank accounts for deposits, but even they access their accounts only when they happen to be in the vicinity of a branch (often for work).

Behaviour

> ***"Adikiramathiri pesuranga" –***
>
> **"They speak like they are going to beat us." Respondent group explaining uncouth behaviour of bank official.**
>
> **(CWP research Tamil Nadu)**

Bad conduct or behaviour by the bank staff is also a deterrent for many customers. Behavioural patterns are important as they can encourage or discourage customers from using their bank accounts.

Direct Costs

Reaching a bank branch from remote parts of the country-side can cost as much as Rs.100. The costs incurred are mainly on conveyance and snacks.[3] For small value transactions, these direct costs are a considerable percentage of transaction amounts, thus preventing such transactions. One could argue

[3] The research shows that respondents do associate the cost of snacks to the direct cost incurred in reaching bank. They articulate that these snack costs would not have been incurred had they not gone to bank.

here that in many instances bank visits are combined with other work, so the direct cost should not be a big deterrent. However, the study demonstrated that: firstly, only a small proportion of account holders have other work to do near bank branches; and secondly, the majority of account holders visit the bank specifically to transact.

Form Filling

Inability to fill forms, combined with limited understanding of banking services due to illiteracy, discourages customers. This factor, coupled with behavioural issues of bank staff, further discourages the use of banks, as poor people usually need support to understand and fill out forms, a service that is rarely offered.

Operational Issues

Lack of connectivity of smaller and remote branches with main branches in the city creates operational challenges. Respondents also refer to technical issues preventing or slowing down transactions, and add that there is higher frequency of these issues in the rural branches compared to branches in cities. At times, lack of sufficient funds in remote bank branches requires customers to either wait for long time, or leave without cash. For daily labourers this also results loss of daily wage, thus adding to indirect cost.

Lack of Appropriate Products

In addition to the challenges mentioned above, banks do not offer suitable products to meet the needs of low income households.[4] *MircoSave*'s research shows that low income households prefer quick deposit facilities, with the opportunity to deposit or withdraw in small amounts, from their accounts.[5]

How Business Correspondents Fit The Bill

The BC model enables banking services to be brought close to the customer, and thus is a potential solution to many of the problems discussed above. The graph below presents factors that come out as respondents discussed the benefits of the BC model.

Convenience and Saved Costs

BCs emerge as an appealing option for low income customers, as they promise quick, easy and proximate service. People can transact small amounts without the stress of standing in long queues or travelling long distances. People believe that BC services can lower the opportunity cost of wages lost, lost child care and loss of important household work, as it provides a quick transaction facility. In addition, BC offers the cheapest way to make transactions, as no/limited travel is involved. The savings on transportation and miscellaneous expenses on shopping, snacks and so on makes BC an attractive option to save.

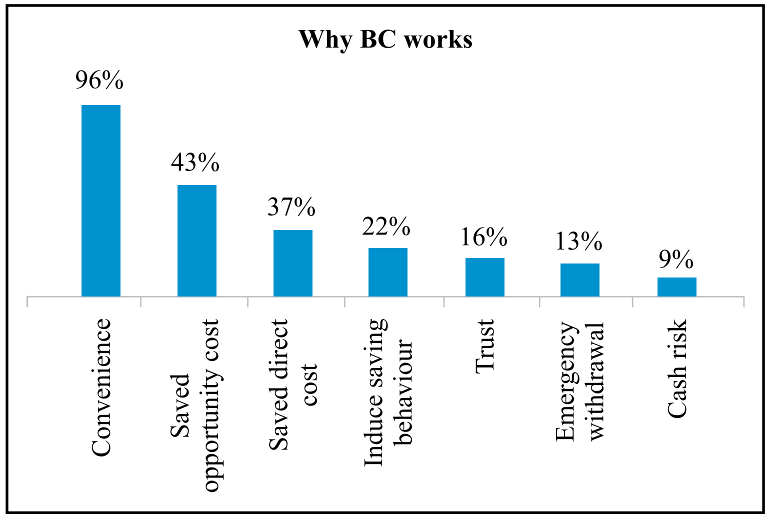
Inducing Saving Behaviour

BCs offer customers the flexibility to save at the time, and in the amounts, of their choosing. They will therefore be incentivised to make more frequent deposits, even if these are small in value. Female account holders also like the possibility of a separate, and perhaps clandestine, account which they control, and to which their husbands do not have access.

[4] http://mmublog.org/wpcontent/files_mf/meetingthemicrosavingschallenge.pdf
[5] "Deposit Assessment in India", *MicroSave*, 2011

No Cash Risk

While considering BCs as a potential banking service provider, customers also appreciate that BCs could reduce their risk of carrying cash, as incidences of thefts of cash from people travelling to/from banks seems to be quite frequent in remote areas.



Trust and Service

Some customers believe that BCs as service providers will be more trustworthy and helpful than bank staff. They perceive that BCs provide better access and support whenever they have queries or need help with forms.

Conclusion

The key objective of financial inclusion, to offer all households affordable financial services, can potentially very well be achieved with BC as a delivery channel, if it can be made viable for banks and BCs. The channel has the potential to deliver a range of financial services[6] to the millions of un- and under-banked in India, as it can address many challenges and barriers faced by customers while banking.[7,8]

[6] See *MicroSave* India Focus Note # 65 'Successful Banking Correspondents Need a Compelling Product Mix'

[7] Trust in the BC agent is the most widely mentioned concern and a very significant deterrent for the uptake of BC service. Almost all groups mentioned this issue irrespective of distance from the bank. How the bank guarantee the integrity of agent-based transactions and ensure that agent does not run away with savings, are some crucial questions with the customers.

[8] See *MicroSave* India Focus Note # 64 'Comparing Business Correspondent With Informal Saving Avenues'

Comparing Business Correspondent With Informal Saving Avenues

Akhand Tiwari, Anurodh Giri and Vartika Shukla

Background

A variety of informal savings avenues exist in India. This chapter focuses on comparing informal saving avenues with "Business Correspondent" (*BC*) services on a variety of attributes.[1,2] The dimensions for comparison have been derived from respondents' perception of qualities that should characterise an ideal saving avenue. These primarily include trust, frequency and convenience of small deposits, benefits such as rate of return, ease of withdrawal, security of the deposits, cost incurred, understanding of the procedures for accessing a particular saving avenue, and other product offerings such as credit. These factors have been derived from a wide variety of *MicroSave* research studies 2009-2011.[3]

Trust

The fact that a person saves money with a service provider implies that s/he trusts that provider. Beesis are deemed trustworthy not because of their structure, but by virtue of the leadership. A *beesi* is as strong as its leader; whereas *BCs* draws their trust by the virtue of their association with banks. *Friends/ Relatives*, (hereafter referred to as "*relatives*"), and *moneylenders* are trusted because of their familiarity, length, and nature of association.

Attribute (in order of importance)	BCs	Friends/ Relatives	Saving with the Money-lenders	Beesi/ Chit Funds
Trust	👍	👍	👍	👍
Risk of losing money	👍	👉	👎	👎
Accessibility	👍	👉	👉	👍
Size of deposits	👍	👎	👉	👍
Frequency of deposits	👍	👉	👉	👎
Ease of withdrawal	👍	👍	👉	👎
Interest rate	👍	👎	👎	👉
Possibility of a loan	👉	👍	👍	👍
Cost of accessing the channel	👎	👍	👍	👍
Understanding of the process	👉	👍	👍	👍

Risk of Losing Money

Informal savings avenues are fraught with the risk of the users losing money. With *relatives* and *moneylenders* this mostly arises out of fraud or refusal to repay parts of the dues or the entire amount. In *beesi* losses usually arise from foreclosure wherein some member(s) have not paid their instalments. With *BCs* the risk is seemingly lower since there is a perception that money, once deposited with the bank, will not be lost. However, even with *BCs* one cannot guarantee that there will not be loss of money from agent frauds – indeed these seem to be common with many other agent-based financial services.[4]

Accessibility

All of these avenues score positively on accessibility, which is a common strength of informal systems. However, some *BC* agents go personally to the customer everyday to take smaller deposits, thus giving an added advantage to the *BC* model. Furthermore, *BC* brings formal savings services to the doorstep of customers, who otherwise could or would not have accessed those services.

[1] C1 Each of these channels has a unique operational model and costing of their own. These channels allow savings of varied amounts starting from as low as Rs.10. Savings with friends/relatives is essentially keeping money with them for the purpose of saving and asking it when required, for further readings on beesis/chit funds and moneylender please see:
http://web.williams.edu/Economics/neudc/papers/klonner1.pdf, http://www.ifmr.ac.in/sefc/publications/Chit-Funds-Innovative-Access-to-Finance.pdf, http://www.ifmr.ac.in/sefc/publications/Business-Logistics-of-Informal-Lending.pdf
Reddy, Somashekhara, "Diary of Moneylender" Economic and Political Weekly, July 21, 2007
MicroSave Studies Deposit Assessment in India and NE Savings

[2] The comparison for the service/ product attribute is done on the prominence basis. That is if the service channel provides the facility predominately. The thumbs up, thumbs down, and thumbs neutral is only a representative of degree of which a saving avenue stands on positive side of respective factor. Authors base these comparisons and explanations on the basis of their field work in UP, Rajasthan, and TN. An important fact to note here is that among the informal channels discussed in the note there is no standard format of operation.

[3] *MicroSave* Studies: Savings Systems in the North East of India, Dormancy in No Frills Accounts, Agent Network, Cost and Willingness to Pay, Deposit Assessment in India. The list of factors is not exhaustive and is chosen per author's experience.

[4] http://www.indianexpress.com/news/bank-agent-flees-with-customers-savings-probe-on/776926/

Size of Deposits

In alignment with the low earning and small saving capability of low-income customers, *BC*s allow deposits of smaller amounts. *Beesi* group members usually decide on the amount to be saved collectively, though the leader has a disproportionate influence over this. Small deposits are usually not kept with *moneylenders* or relatives due to hassles of accounting for smaller deposits.

Frequency of Deposits

Matching the income cycle of daily wage earning customers *BCs* provide options for daily deposits, thus scoring positively on this parameter. With *beesis*, deposits can be made only on fixed dates. With *relatives* and *moneylenders* the frequency of deposit could be frequent or irregular – depending on the proximity; the customer's and *relative's* or *moneylender's* comfort; and the customer's cash flow.

Ease of Withdrawal

The *BC* model allows customers to withdraw money as and when required. With *Beesi*, one withdraws only when one wins the auction or lottery that governs payout, which typically only happens once in a month. In some *beesis* where there is no auction, the leader needs to be informed beforehand and the leader has to agree. In addition, the chances of getting money on the due date become bleaker if other members win the auction or come up with emergency demands on the date of auction or lottery. It is not certain that *moneylender* will be available at all times to entertain withdrawal requests. Also, one can not be sure with *moneylenders* and *relatives* that a request to withdraw will be met on time and/or fully and this also depends on the cash availability with the *moneylender* or *relative*.

Interest Rate

As an extension of the bank, *BCs* provide around 3.5% annual interest, whereas in some (auction) *beesis* members earn from the member taking the lump-sum at a lower value or by paying an extra margin, which in turn becomes earning of group. In some rare occurrences villagers have reported earning interest from *relatives* and *moneylenders*, but typically they do not pay interest.

Possibility of Availing a loan

One can avail loans of varying sizes from *beesi, moneylenders* and *relatives* with varying degrees of negotiation. The association with a beesi provides a member a lump-sum amount, which is similar to getting a loan, only in this case the repayments are possible both pre and post loan. In a few cases *moneylenders* were found to have kept some savings and then provided a loan on the *basis* of these savings. At present *BCs* can only provide support to the lending process and are not authorised to approve and disburse any loan or overdraft. Nonetheless, where banks are offering overdrafts on no frills accounts, the loan is paid and repaid through the *BC* channel.

Cost of Accessing Channel

There is no cost involved in using the *relatives* or moneylenders to save. Becoming a bank customer through a *BC*, might require paying no or a small fee, however there are costs attached to fulfilling the requirements such as photographs, KYC documentation, photocopies etc. While some *BCs* like Eko charge an account opening fee from customers, FINO does not charge any fee for account opening.[5] Moreover, RBI has now allowed banks to charge "reasonable" fees for accessing services through the *BC* model, so costs for using *BC* will escalate. Some *beesi* groups charge a membership fee, while others do not.

[5] Eko (www.eko.co.in) and FINO (www.fino.co.in) are BCs to public and private sector banks in India.

Understanding of the Process

Users of *beesi* are most comfortable in terms of understanding the procedures and terms and conditions – as they are the ones managing the operations and functions. In the case of *relatives* and *moneylenders* there is no specific process involved, but users are usually aware of the customs and hidden protocols associated with these avenues. The involvement of technology intimidates illiterate customers and complicates the *BC* procedures. This coupled with banking rules, makes the BC process even more complex for them.

Conclusion

MicroSave's research has demonstrated that *BCs* fare better compared to banks given the challenges and costs associated with accessing formal banking services.[6] Informal savings avenues form a major part of financial services used by low income households.[7] The BC model seems to be able to deliver better quality financial services than some of the more common informal avenues. It scores well on important aspects like trust, security, accessibility and flexibility – both in terms of frequency and amounts of transactions.

The fact that *BCs* link low income households to formal financial services better than informal and currently available formal channels, opens a gateway to offer other financial services like remittances, insurance and, of course, credit products to the bottom of pyramid market.[8]

[6] See *MicroSave* India Focus Note # 63 'Why People Do Not Use Banks – A case for BC'; Platt et al. "The Answer is 'Yes'- Cost & Willingness To Pay" *MicroSave*, 2011

[7] Collins et al. "Portfolios of the Poor"

[8] Understanding Remittance Networks, *MicroSave*, 2011 (Forthcoming) *MicroSave* India Focus Note # 61 'Interbank Mobile Payment System: Will It Catalyse Financial Inclusion?'

Successful Banking Correspondents Need a Compelling Product Mix

Christopher Murdoch and Graham A.N. Wright

Introduction

BCs, or agents, are expected to underpin financial inclusion efforts in India. However, to date, the business case for BCs remains uncertain,[1] despite RBI's efforts to relax policy to encourage successful growth of BCs. Nonetheless some commentators do still see the future of financial inclusion and microfinance in India dependent on successful BC models.[2] This chapter lays out why a compelling product mix is central to a successful BC network.

Product Up-Take Has Been Poor To Date

The 2009 Skoch Report[3] noted that 89% of No Frills Accounts (NFAs) were dormant. Subsequent *MicroSave* research has nuanced this, revealing that:

1. Dormancy may be marginally lower than this in part because of legacy issues: many NFAs were initially opened with little intent to create transactional accounts, but rather for banks to report numbers to the RBI or for political purposes.
2. The rate of dormancy depends heavily on: a) the through-put of electronic benefit transfers (EBTs) – particularly MGNREGA[4] payments; b) whether the BC is bank branch-based, or more convenient if the agent is located in, or regularly visiting, the villages.[5]
3. The cost of operating bank branch-based accounts is often high in terms of direct costs (transport etc.) and opportunity costs (travel and the time customers have to wait for service in many branches). 77% of respondents in a recent *MicroSave* study lose Rs.10-50 in direct costs for branch visits, more if lost wages are included.[6]
4. Poor people have aspirations for more than a "No Frills", "Basic" or "Tiny" account. As *MicroSave* research in South Africa also demonstrated, unsurprisingly, people do not like the implicit label of being poor, or unworthy of full banking facilities. They aspire to full service account - ideally with card and cheque facilities (even if they are unlikely to use these).

Yet Research Shows An Enormous Need

An estimated 400 million Indians remain unbanked – and many more under- or poorly-banked. This despite the growing international consensus on poor households' need for savings services – most recently and powerfully elaborated in "Portfolios of the Poor"[7]. It is clear from research around the world that poor people need a variety of savings services to:

1. Smooth erratic cash flows, thus protecting nutritional in-take, keeping children in school etc.
2. Respond to emergencies and shocks arising from illness, accident, death etc.
3. Build-up lump sums to invest in business, land, social functions like weddings etc.

This variety of needs cannot be met by a single transaction account as characterised by the NFA. Poor people also need a recurring deposit account to give discipline and structure to the process of saving.

The deposits achieved by the itinerant agents of Sahara and Peerless bear testimony to the need for opportunities to save regularly through convenient channels.

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[1] See *MicroSave* India Focus Note # 24 'Making Banking Correspondence Work in India" and # 32 "Crossing the Second Break Even'.
[2] See *MicroSave* India Focus Note # 60 'Speculation on the Future of Financial Services for the Poor in India'
[3] Kochhar, Sameer, "Speeding Financial Inclusion", Skoch Foundation, 2009.
[4] The Mahatma Gandhi National Rural Employment Guarantee Act, which provides guaranteed 100 days of paid labour for poor households across India.
[5] Platt et al. "No Thrills – Dormancy in NFA Accounts", *MicroSave*, 2011
[6] Cost & Willingness to Pay report, *MicroSave*, 2011
[7] Collins et al., "Portfolios of the Poor", Princeton University Press, 2009.

	Sahara	Peerless
# of agents	>415,000	>140,000
# of deposit accounts	20,800,000	Not available
Rs. Deposits (December 2010)	18,055.7 million ($401 million)	Not available
Rs. Deposited & Redeemed since 1987 (Sahara) and 1956 (Peerless)	415,630 million ($9,236 million)	177,930 million ($3,954 million)

In addition, some households also need a fixed deposit account to set aside harvest proceeds or lump sums generated from the sale of assets such as livestock etc.

The Alternative Options For The Poor Appear Unattractive

Because of the pressing needs highlighted above, and in the absence of access to safe, convenient and easily accessible options to save in banks, the poor resort to managing their money through informal systems. These include hiding money in the homestead (typically in bamboo or under the mattress), joining village savings clubs or chit funds[8] or signing up with one of the itinerant deposit collectors that make the rounds in so many Indian marketplaces. All these options have risks:

1. Money kept at home is often spent, simply because it is there; which is exactly why almost all people interviewed in *MicroSave* studies talk about needing to "get money out of reach – out of the house".
2. Savings clubs and chit funds are risky, and sometimes members do not meet their obligations, or run off with the pooled money.
3. Even if the deposit collectors do meet their obligations, they charge exorbitantly for the service they offer. Typically, a deposit collector prints a card with 30 boxes on it (one for each day of the month) and the saver commits to saving a certain amount each time the deposit collector visits. Once the card is full, the deposit collector gives the saver the lump sum generated, less one box as a fee. Thus if the saver commits to saving Rs.50 per day, she will get Rs.1,450 at the end of the month.[9]

The willingness to pay really quite significant sums for the convenience of a deposit collector highlights the potential for delivering a convenient, lower risk formal sector alternative through local BCs operating in the markets and villages.

High Volumes Are Required To Make The BC Model Viable

But it is not easy, or low cost, for banks to deliver savings services to the poor. Low income people typically make high volumes of low value transactions, and maintain limited balances in their accounts (or at least their transaction accounts). These behaviour patterns challenge the traditional economics of banking. In Africa, where transaction charges are commonplace, the charges levied by mobile phone-based banking systems are easily accepted. There are concerns that this might not be the case in India. Indeed, initially the RBI prohibited the levying of transaction charges; however "reasonable charges" are now acceptable. However, research by *MicroSave* suggests that many people are indeed willing

[8]Chit funds are Rotating Savings and Credit Associations (RoSCAs) – under which a group of people pool their savings regularly (usually weekly or monthly) and give the lump sum thus generated to each member in turn until all the members of the group have received the lump sum. Thus a 7 person RoSCA completes after 7 meetings and all members have received the lump sum.
[9]30 days of saving Rs.50 = Rs.1,500 less the fee of Rs.50 paid to the deposit collector.

to pay for a safe, convenient and accessible service.[10] 56% were willing to pay 1% and another 23% were willing to pay around 1-2% of the value of each withdrawal. But there may be considerably more resistance to paying for deposit transactions.

Nonetheless, setting up a BC system is an expensive proposition. In addition to the very significant investments required in technology (particularly for card-based systems that require point of transaction devices), the development and rollout of an effective, well trained, appropriately incentivised and tightly monitored agent management is also a costly and challenging proposition.[11]

High Volumes Will Attract Banking Partners

Commercial banks in India are under significant pressure from the RBI to set and then meet financial inclusion targets. These targets are now set in terms of both the number of accounts opened, and also of the activity in those accounts, so the old approach of opening accounts and then letting them lapse into dormancy is no longer a realistic option.

With the sanctioning of "reasonable fees", banks with a commitment to serving the low income market, such as the State Bank of India, now have the real opportunity to do this on a commercial basis and further extend their customer base. A well-managed network of BCs could provide the safe, convenient and accessible local banking service that so many poor households want.

By diversifying the range of services offered through the BC channel beyond the basic EBT and NFA, banks can drive the volumes and revenue streams to make the channel profitable. The latent demand for commitment savings is clear. Well structured and incentivised recurring deposit products could yield substantial stable balances and thus float for banks. In a similar vein, bancassurance products, which are largely used by poor households as long term savings mechanisms, are also likely to be a popular use of the BC channel. Over time banks can begin to offer automated overdraft/ emergency loan facilities on the basis of individual account holder's transaction history.[12]

This type of client-responsive product mix is likely to create the level of activity necessary to make the BC channel sustainable for both banks and the BC network manager, as well as for individual BCs themselves … thus creating true and meaningful financial inclusion.

[10]Cost & Willingness to Pay report *MicroSave*, 2011

[11]See *MicroSave* Briefing Notes # 73 and # 74 'Managing Agent Networks to Optimise E- and M-Banking Systems'

[12]Indeed some banks (including Central Bank of India, CBI, State Bank of Bikaner and Jaipur and Punjab National Bank) are already experimenting with this and offering very small overdrafts along with the NFAs as people open the account, in order to allow them to build a credit history.

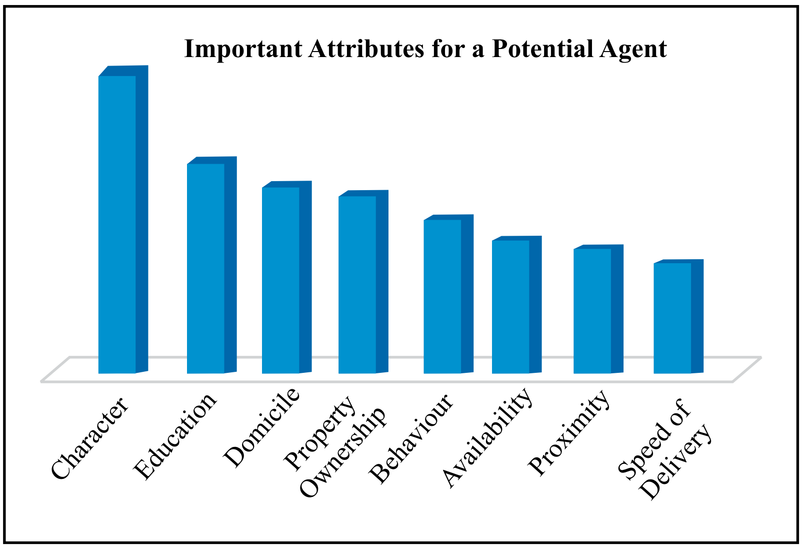
What Do Clients Want in E/M-Banking Agents?

Denny George and Venkata N. A.

Introduction

With agent banking models being implemented across the globe as a viable alternative to branch-based banking, the selection of the right agent has become of paramount importance. Previous *MicroSave* Briefing Notes[1] dealt with this issue, but primarily from a viability standpoint. This chapter describes clients' preferences for desired agent profiles in India, and looks at how this data could be used when selecting agents. The feedback was generated from several field research initiatives undertaken by *MicroSave* with its clients throughout India.

What Do Clients Look For?



The chart[2] below shows the attributes clients generally considered most important in agents, with 'Character' and 'Education' being the most preferred attributes.

- ***Character:*** Honesty is the most important personal trait that clients look for in a prospective agent, who is (unsurprisingly) expected not to commit fraud. This is especially true when the primary focus of the service - as in agent banking models – is savings mobilisation. Many clients have already had bad experiences with agents for financial services, such as chit funds, who ran off with their savings, and are extremely cautious when it comes to conducting transactions with agents.

> **"A person who is dishonest will speak more sweetly."**
>
> **– Clients on assessing character**

- ***Education:*** Respondents considered banking to be an activity involving complex processes, like book keeping, and felt only an educated person would be capable of undertaking such activities. Clients also felt that an uneducated agent would not be able to assist them in choosing suitable products.
- ***Domicile:*** Domicile indicates familiarity, and is an important attribute in establishing credibility as it also refers to the period the prospective agent has resided in the community. The longer the period, the greater the trust.
- ***Property Ownership:*** Clients prefer an agent owning property to reassure them that their money is safe; they feel that having immovable property could act as a deterrent for fraud and flight. Respondents also mentioned that property could act as collateral.

[1]See *MicroSave* Briefing Note # 81 'M-Banking Agent Selection'; #73 'Managing Agent Networks to Optimise E- and M-Banking Systems (1/2)' and # 74 'Managing Agent Networks to Optimise E- and M-Banking Systems (2/2)'

[2]Based on a recent research project covering 395 respondents conducted by *MicroSave* on Agent Networks in Rajasthan and northern Uttar Pradesh. The 'Y' axis denotes relative importance as scored by the respondents on a scale of 1-5, 5 being high.

- ***Behaviour:*** For clients, being well behaved is critical to provide superior customer service. The importance of "behaviour" was brought up primarily as a result of bad experiences respondents have had with banks.

> **"Behaviour of the shopkeeper holds the key. If he does not talk properly then no one will go."**
>
> **– Clients on the importance of behaviour**

- ***Proximity:*** Proximity has direct bearing on the accessibility of the services and the time spent in going to/returning from the service point. The importance of this stems from transactional and indirect expenses, such as lost time and sales.
- ***Availability:*** Clients expected that the agent should be available for as many days in the week as possible and have long working hours to suit client needs.[3]
- ***Speed of Service Delivery:*** Speed of service delivery was mentioned to be important, since clients want to spend minimal time conducting financial transactions.

Surprisingly, some attributes, such as age, gender and space, did not come up as important, or received mixed reactions across locations. In some instances, younger people were perceived to be better as they understood technology; while in others, they were not considered trustworthy. Likewise, in areas where safety of the agent was a concern, men were preferred; while in others, women were preferred because they behaved better. Also, the space provided, in terms of appearance or adequacy, did not emerge as critical for most clients.

Common Agent Profiles

For the purpose of simplicity, service providers tend to focus on different 'segments' of potential agents. However, clients tend to focus on individuals. Even though *MicroSave* research has identified common agent profiles below, one must be careful to identify key agent characteristics clients prefer based on local conditions.

Two *MicroSave* clients in India - one in the urban south and the other in the hill areas of the north - independently came up with the idea of using auto rickshaw/jeep drivers as agents, as they were ubiquitous and open to enabling transactions. However, the research in both areas indicated that clients do not consider these drivers as trustworthy due to their less than ideal reputation and their transient nature.

Provided below are the four most common categories[4] that clients identified as potential agents in India, and their performance on the customer preferences above.

- ***Grocery/Kirana Shops:*** These stores were popular because respondents were typically very well acquainted with the village grocer over a long period of time and generally perceived them to be approachable. They were also open for longer hours and accessible.
- ***Medical Shops:*** Medical shop (pharmacy) owners are typically trusted due to the nature of their service. (Pharmacists often provide medical advice for those who cannot afford doctor visits). Moreover, their shops are normally clean and well organised, and hence considered to be ideal for

[3]See Platt et al. "The Answer is 'Yes'- Cost & Willingness To Pay" *MicroSave*, 2011
[4]Clients came up with other categories as well, but these were the most recurring profiles.

transacting. Pharmacists are also generally well educated and thought of as capable of delivering financial services.

- ***Mobile Recharge Shops:*** Mobile recharge shops received a mixed response. On the one hand, it was perceived that these shops are manned by people more knowledgeable about technology solutions and hence may facilitate fast and efficient service. On the other hand, they were considered to be very busy, thereby limiting their capability to deliver. Another negative aspect mentioned was that they typically were manned by younger people not considered especially trustworthy for money matters.
- ***Financial Service Agents:*** Existing financial service agents, such as those of Sahara, chit funds and insurance, received a mixed response. They were considered to be familiar with financial services, well behaved (in general) and were appreciated for providing doorstep service delivery. However, many clients did not like the fact that many were not from the same locality, and past experiences were less than satisfactory on account of misbehaviour and even cases of fraud.

How to Incorporate Clients' Feedback?

Many of the attributes mentioned by clients are qualitative in nature and by definition, difficult to measure. This brings to the fore the need for field-based verification or putting in place adequate proxies while selecting prospective agents. For example, during the application stage, the community can be involved by providing referrals for obtaining agent profiles. Behavioural tests could, on occasion, act as proxy for character measurement.

The table below outlines some thoughts on how each of the key attributes can be measured during agent recruitment. Organisations may want to screen the agents on "easily verifiable" criteria first, and then run the more "qualitative" screening with a smaller group of potential agents so as to maximise efficiency.

Attribute	Indicator
Easily Verifiable	
Education	• Verification of educational certificates • Test of literacy and book-keeping abilities
Domicile	• Proof of residence • Feedback from clients and villagers
Property Ownership	• Physical verification of shop / store • Verification of property documents
Availability	• Self reporting by potential agents combined with field observations • Feedback from clients or shopkeepers
Proximity	• Physical location verification of the shop versus where most clients reside or work
Qualitative / Subjective	
Character	• Credential checks from clients, villagers, and community leaders covering the agent and his/her family, their profession, economic status, acceptance by villagers etc.
Behaviour	• Feedback from clients
Speed of Delivery	• Feedback from clients

Conclusion

Agent selection must consider many aspects key to the viability of the business, such as the capacity to scale up and the ability to manage cash. However, client preferences for agent attributes are perhaps more important than other considerations, since these will be one of the main factors driving transactions. Organisations wanting to adopt agency banking models should take cognisance of this and exercise adequate due diligence in identifying key characteristics that clients desire and selecting agents according to those traits.

Sustainability of BC Network Managers (BCNMs) in India: How are BCNMs Paid?

Ghiyazuddin A. Mohammad, Shivshankar V. and Chris Linder

Introduction[1]

There have been various studies carried out on international branchless banking commission structures highlighting the benefits and drawbacks of different pricing methods for the end user/customer, and the importance of these for adoption. However in the case of bank-led branchless banking operations, the agent network managers (Business Correspondent Network Managers – BCNMs in India) doing the heavy operational lifting in the field, are often forgotten when it comes to commissions and sustainability.[2] They too must achieve basic economic thresholds of at least meeting expenses and earning a return; yet they are often squeezed between, and dwarfed by, large players such as banks, telecoms, IT providers and government agencies during pricing discussions and negotiations.

An earlier *MicroSave* India Focus Note (IFN) argued that BCs must cross two independent break-even points (first, by earning revenue through enrolment commissions, and second, through transaction commissions) before they achieve sustained profitability.[3] This series of notes examines the different product revenue drivers based on how banks remunerate BCNMs, provides an overview on different commission calculation methods adopted by banks, and analyses different scenarios related to revenue maximisation. This chapter looks at different revenue drivers based on how BCNMs in India are compensated by banks and offers a snapshot of commonly used commission calculation methods in Indian branchless banking. This chapter is of interest to entities who are exploring the option of becoming an BCNM in India; whereas the next two chapter could provide more insights to established BCNMs on where to focus their efforts and negotiations.

Product Revenue Drivers

The most common revenue drivers in India, account opening and transaction facilitation, are described below.

Account Opening: Since the first step of financial inclusion is opening an account for the un-banked population, almost all banks in India remunerate BCNMs for opening accounts. However, BCNMs cannot become too dependent on this commission as high rates of account opening cannot be sustained indefinitely – they will run out of customers. Hence BCNMs need to be careful while choosing the account holders and remember that their true long-term sustainability depends on transactions that the account holder performs post-account opening.

Deposit and Withdrawal Facilitation: Not all banks remunerate BCNMs for facilitating deposit and withdrawal transactions. The banks that do not compensate BCNMs for transactions usually pay for account maintenance or for the balances maintained by clients of the particular BCNM (see below). Among banks that compensate BCNMs for transactions, some pay a commission for facilitating only deposits or withdrawals, and some pay for both.

Money Transfers/Remittances/P2P Transfers: The success of SBI's *Tatkaal* product, which allows deposits into remote accounts, highlights the demand for remittances in India.[4] In India, banks offer money transfer facilities both 'within' the BCNM's customers for that bank and 'outside' the BCNM's network to any account of the same bank, such as those typically serviced at branches. However, the

[1]Please note that this set of chapter focuses exclusively on top-line revenue for BCNMs and does not take into account the relationship revenue maximising has with costs. Cost optimisation will be covered in further research.

[2]Please note that the price that a customer pays does not directly reach BCNMs in India, as BCNMs are not allowed to charge customers directly. The revenue earned by the BCNM is totally dependent on the commission paid by banks. For more information, see: Financial Inclusion by Extension of Banking Services – Use of Business Correspondents (BCs), RBI Circular No. RBI/2009-10/238, Reserve Bank of India, 2009.

[3]See *MicroSave* India Focus Note # 24, 'Making Business Correspondence Work in India', 2009.

[4] See *MicroSave* India Focus Note # 68, "SBI Tatkal"- From Cash to Cash Cow', 2011.

latter option is still rare compared to the former. Among banks that offer both types of transfers, the commission for outside network transfers is higher than for within network transfers. Inter-bank money transfer is still not very common in the Indian branchless banking landscape, but is being slowly rolled-out by the major banks.

Balance Maintenance: Though not as prevalent as other schemes, some banks also pay BCNMs for the balances maintained in the accounts operated through the BCNM's network, as banks ultimately earn revenue using depositors' money. The payment calculation for balance maintenance is generally performed on a quarterly basis. However, most banks do not offer balance based commissions and few BCNMs take a long-term, balance-focused view to push for it.

Account Maintenance: Some banks, especially those who do not pay for transaction facilitation, pay BCNMs for the accounts that are active during a specific period. (Most banks require a one-year period with at least one transaction to consider an account active.) By paying an account maintenance fee, banks compel BCNMs to encourage transactions in order to keep the accounts active, even though they are not remunerated for transaction facilitation.

Commission Calculation Methods

In order to assess the different methods of calculating BCNM commissions, *MicroSave* analysed the financial results of an Indian BCNM based on six different types of commission structures offered by three major banks in India over the course of 12 months. The dynamics of broadly used commission calculation methods in India are presented below.

Percentage vs. Flat: The overall results indicate that remuneration for facilitating a transaction is generally maximised for BCNMs when the commission payable is calculated as a percentage of the value of transaction. However, flat fees help cover fixed operational and financial costs incurred on low value transactions. For a BCNM that facilitates a large number of small value transactions (perhaps in the early roll-out period), a flat fee-based commission system would be more financially beneficial. However, of course, as the transaction size grows, percentage based commissions become more rewarding.

Tier-based/Hybrid Pricing: Tier-based/hybrid fee structures perhaps have the best features of both flat and percentage based commissions. In this scheme, low value transactions that fall under the lowest tier are paid on a nominal flat fee basis, and subsequent higher value transactions are paid either on a percentage basis or a higher flat fee basis. While these structures were not prevalent in earlier years, both are becoming more common with Indian banks. Below is an example of tier-based pricing.

Tier-based pricing model example

Range	Floor (Rs.)	Cap (Rs.)	Fee
Range I	1	499	2.00
Range II	500	2,499	5.00
Range III	2500	10,000	10.00

Of late, customers are also given the option to choose their pricing plans (though giving a choice is less common). The BCNM's commission is calculated based on the customer's choice of pricing plans. The following are two commonly offered pricing plans.

Pay-per-use Pricing Plans: Under the pay-per-use pricing method, the customer pays for every transaction that s/he performs, and BCNMs are compensated for every transaction that is facilitated through one or a combination of the calculation methods above. Pay-per-use pricing is generally the preferred plan for poor customers.

Subscription Plans: When customers opt for subscription plans, they pay an additional fee that entitles them to a certain number of "free" transactions for a specific period. For every active customer who opts for a subscription plan, the bank will share a part of the subscription fee paid by these customers with the BCNM, and they do not pay commissions to the BCNM for facilitating individual transactions. *MicroSave*'s analysis indicates that even when 50% of customers opt for subscriptions plan, both pay per use plans and yearly subscription plans yield about the same revenue for the BCNM, based on actual customer behaviours for one BCNM.[5] Most banks do not provide this choice to customers and generally offer only pay per use plans.

Urban vs. Rural Operations: Some banks offer different commission structures for urban and rural operations. Generally the commission structure for rural operations is higher than the corresponding urban commission structure, particularly for withdrawals and account maintenance. Higher commissions are offered, perhaps, due to India's central bank's (RBI) preference to focus on rural areas for financial inclusion, to compensate for the relatively lower volumes from rural operations, and to encourage BCNMs not to ignore rural operations.

Conclusion

This chapter primarily examines the broad types of product revenue drivers and commission calculation methods. While the easy and quick returns are from account openings, BCNMs should remember that sustained earnings are from transaction-based revenues. Offering balance or account maintenance-based commissions could be in the best interest of banks and BCNMs, however this needs a longer-term outlook by both. Though earlier either flat or percentage fees were offered by the banks, it now appears that tiered and hybrid pricing (a combination of both flat and percentage) is becoming more common. The next chapter "Sustainability of BCNMs in India: Review of Commission Structures" will present an indicative snapshot of branchless banking commission structures prevailing in India.

[5] A subscription plan yielded 4% higher revenue than a pay per use plan, with transaction levels kept constant.

Sustainability of BCNMs: Review of Commission Structures

Ghiyazuddin A. Mohammad, Shivshankar V. and Chris Linder

Background[1]

To achieve the objectives of financial inclusion it is important to ensure that all stakeholders in the ecosystem are given equal opportunity to survive and sustain themselves. Business correspondents (agents) and their managing support organisations, BCNMs, play a very important role in promoting Financial Inclusion in India, yet they often face the biggest challenge of sustainability.[2] The previous chapter presented the basics on the most common commission calculation methods and drivers in Indian branchless banking. This chapter critically analyses the different commission structures and the implications this has on the top-line revenue of the BCNMs. For this purpose, *MicroSave* analysed six actual branchless banking commission structures offered by three major banks in India. The objective of this chapter is to present common ways banks use to compensate BCNMs for various services and provide an indication of commissions that may be relatively more rewarding.

Common Ways of Paying BC Commissions

In this section, each revenue driver is analysed individually and common ways for calculating the commission for each is provided. For each driver, there does seem to be a pattern on how banks generally choose their commission structures.

Revenue Drivers	Commission Structures					
	A	***B***	***C***	***D***	***E***	***F***
Account opening	Flat	Flat	Flat	Flat	Flat	Flat
Deposits	%	Nil	Nil	Flat	Nil	%
Withdrawals	%	Nil	Nil	Flat	Nil	%
Transfers within network	Tier	Tier	Tier	Tier	Tier	%
Transfers o/s network	Flat	Flat	Flat	NA	NA	NA
Account maintenance	Flat	Nil	Flat	Nil	Flat	Nil

Account Opening: It is understandable that this commission is typically a flat fee paid for opening new accounts. Yet the range of the fees varies dramatically from bank to bank in Indian branchless banking. At the lower end some banks pay as little as Rs.10 per account opened, however, this can go as high as Rs.100 (or higher) for each new account. The average typically lies towards the lower end. Those with lower account opening fees usually focus on higher transaction fees.

Deposit and Withdrawal Facilitation: Most banks prefer remunerating BCNMs on a percentage basis for deposit and withdrawal facilitation. The range of commission percentages generally range between 0.5% and 1% calculated on the value of deposit and withdrawal facilitated. Some banks do pay a flat fee for every deposit transaction and typically seem to pay somewhere between Rs.2 to Rs.10 for every deposit or withdrawal transaction. Apart from flat and percentage based commissions, a few banks also offer tiered commission structures. Generally banks that have separate commission structures for urban and rural operations offer tiered commissions for withdrawals.

[1]Please note that this set of notes focuses exclusively on top-line revenue for BCNMs and does not take into account the relationship revenue maximising has with costs. Costs optimisation will be covered in further research as it is the next piece in the puzzle for BCNM sustainability.
[2]See *MicroSave* India Focus Note # 18 'MFIs as Business Correspondents – To Be or Not to Be?'

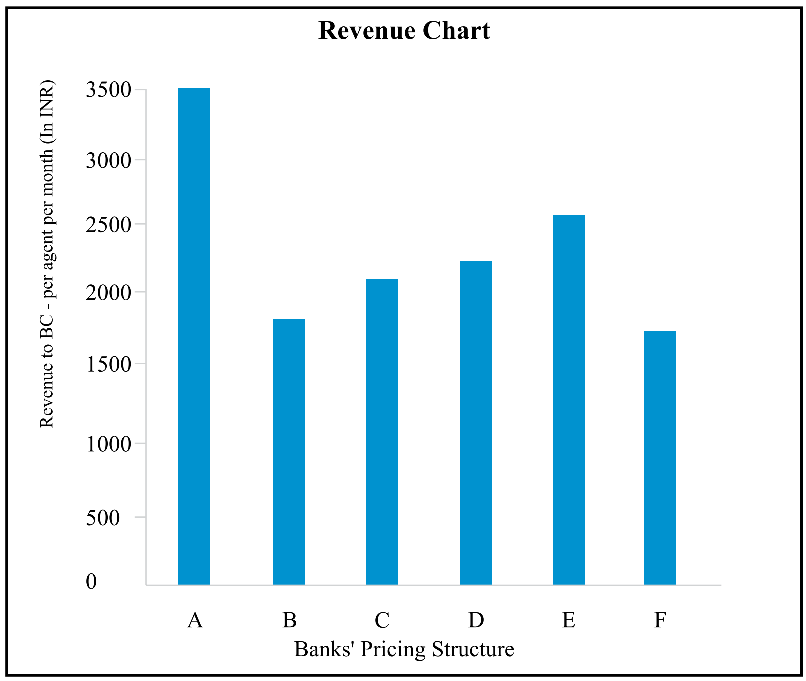
Transfers within Network: The most common method of remunerating for facilitation of transfers within a network is through a tier based commission based on the amount remitted (see next chapter for an example). Out of the six commission structures analysed, five commission structures offered tier-based commissions for transfers within the network. A few banks also offer percentage based commissions, but pure flat fee based commissions (without tiers) are rare.

Transfers Outside Network: Although transfers outside network is still not a common offering in India, banks that have this facility pay a higher flat fee per transfer outside network. Typically, Rs.10 per transaction is paid for every outside network transfer transaction. This product offering is very recent in India, and with the introduction of Inter-bank Mobile Payment System (IMPS), we can expect more innovation, usage and evolution of this product. [3]

Revenues to the BCNM

Having discussed each revenue driver individually, the commission structure is now analysed in its entirety. The graph below shows revenue that an BCNM has earned from one agent in one month, on average, analysed over a period of one year.[4]

It is quite clear that the remuneration from Bank A is the highest! Yet before drawing the conclusion that Bank A's structure is most promising, it is important to analyse the revenue break-up and understand which commission structure is more stable and sustainable.



Revenue Contribution

From the graph below, it is evident that each bank and its commission structure favour a 'primary product' and not all favour the same products equally. For instance, commission structures A, B and C target transfers outside network by heavily incentivising BCNMs for facilitating transfers outside network (and due to demand). As mentioned before, option A yielded the most per agent per month with this focus but also with a smaller but significant balance of fees from deposits (15%) and withdrawals (16%). Structure C also focuses on out of network transfers, but also has a significant percentage of its revenues from account opening (13.5%) and withdrawals (11%).[5]

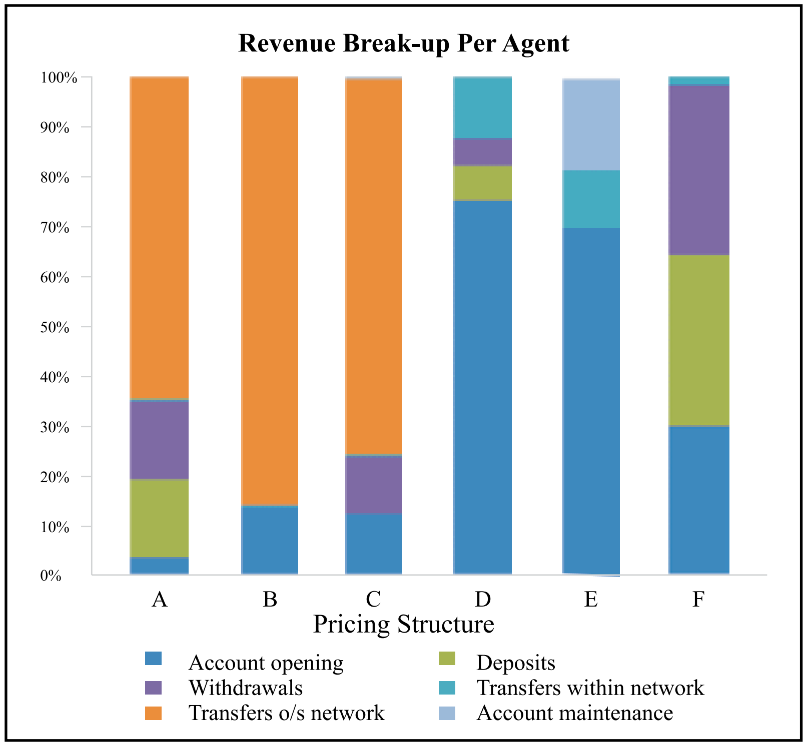
Unlike other commission structures, commission structure F's revenues are equally split between

[3]See *MicroSave* India Focus Note # 61 "Interbank Mobile Payment System: Will It Catalyse Financial Inclusion?'

[4]Other than commissions structures, all other variables were held constant, such as transaction volumes and number of accounts.

[5]Deposits were 0% as the bank may want to encourage customers to deposit as much or as little as they would like.

account opening, deposits and withdrawals in the ratio of 30%, 34% and 34% respectively. Commission structures D and E on the other hand target account opening. This focus on account opening seems to be an old practice due to RBI mandates to open accounts that is slowly being phased out by Indian banks after many mishaps and distortions (see next chapter). Even though options D and E seem to be the second and third most lucrative option, respectively, they are likely not sustainable in the long run, as banks continue to move away from focusing just on new accounts, and as new account opening growth will slow.



Urban vs. Rural Operations: While it may be true that certain models favour one product over another due to commission structures, it is also very much driven by customer demand. For *MicroSave*'s BCNM partner, there were higher revenues in urban areas for remittance services (where the fee is generally paid). The opposite was true with the same BCNM's rural customers, generating more commissions from account enrolments and typical deposits and withdrawals.

Diversify!

In most of the commission structures discussed, the contribution of revenues is skewed towards one revenue driver. While it does appear that having a good business in transfers is the key to revenue maximisation, it is also important to have a presence in other products as well. With evolving and newly emerging business models, rapid technological innovations, state initiatives and more players entering the market, competition will play an influential role through new product features, convenience and commissions. In this scenario, major dependence on one product could be a risky strategy.

It is also in the interest of the banks to offer a diversified commission structure, such as the emerging tiered commission structures, to ensure the success of branchless banking and financial inclusion initiatives. By pushing one product, banks will risk incentivising BCNMs to ignore other products and focus only on the most lucrative ones. BCNMs could also tie-up with more than one bank to diversify the risk as well as to cater to a wider customer base. And instead of offering the same products from multiple banks, BCNMs could also look to diversify into multiple products from multiple service providers. Services like merchant payments, airtime top-ups, international remittances, social security payments can ensure revenue diversity and stability for BCNMs. Loan repayments for banks and MFIs could also be lucrative and have not been extensively explored.

Sustainability of BCNMs: Business Scenarios and its Effects

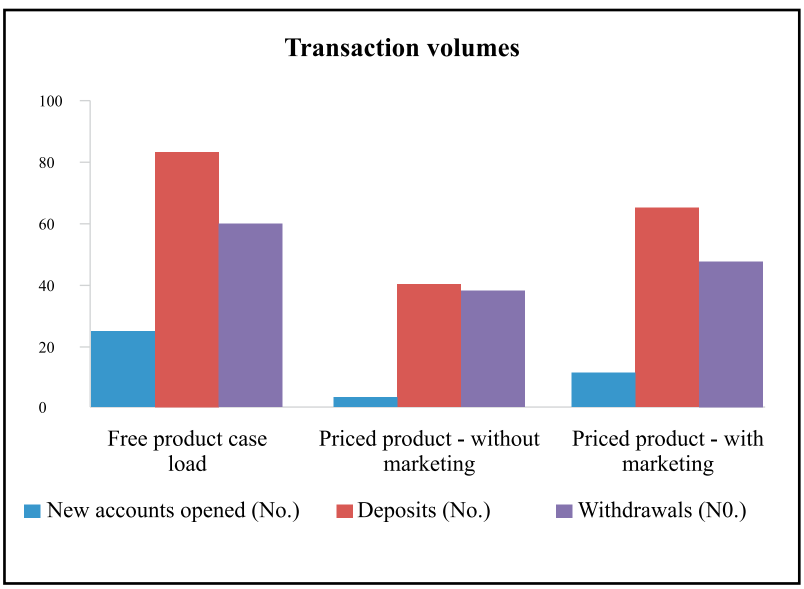
Ghiyazuddin A. Mohammad, Shivshankar V. and Chris Linder

Background

The previous two chapter analysed various banks' commission structures and highlighted the pricing methods that may work best for BCNMs. This chapter reveals results from analyses of three different scenarios that played out over time for one of *MicroSave*'s partners and how each influenced customer enrolments, transactions and revenues. Since the number of customers enrolled and the value and volumes they transact have a direct impact on revenue, BCNMs should understand the critical role that these typical business scenarios play to create an overall revenue generation strategy and in assisting them in future negotiations (or renewals of existing agreements) with banks. The business scenarios are first defined below.[1]

"Free Product" (6 months): In this scenario, the customer was not charged anything to open an account. Though the BCNM earned bank-established commissions as per the bank's tariff plan to open accounts, the bank did not charge anything from the customer directly. In this phase, no significant marketing activities were carried out by the BCNM.

"Priced Product" (3 months): In this scenario, the customer was charged for opening an account and to carry out deposit and withdrawal transactions. In this phase, no significant marketing activities were carried out by the BCNM.



"Priced Product with Marketing" (3 months): In this scenario, customers were charged for account opening and transactions, and the BCNM actively carried out "below the line" marketing activities such as street plays, canopies, promotions at village fairs, etc. These activities were carried out in an aggressive manner in order to increase customer outreach and transactions.

Business Scenarios and Transaction Volumes

The graph below shows the average number of transactions per month per agent of major revenue drivers, such as new accounts opened, deposits, etc. based on the three scenarios mentioned above.

It is no surprise that account opening and transaction volumes were highest for all the three revenue drivers when the products were offered to clients for free. Conversely, volumes were the lowest when the products initially cost the customers.[2] For example when a fee was first charged to open accounts, the average account opening volume per month fell from over 20 per month to just two per month, a fall of 93%!

[1]Please note that this data was collected from only one BCNM and is based on limited time periods in the nascent years of the organisation's growth. Other factors were certainly at play and cannot be strictly indicative of future performance.
[2]BCNMs were remunerated the same way, though the bank charged the customers.

> ***"Khate kholne me bahut dikkat hai pricing ke baad se, customer razi nahi hota aur bolta hai bank me to nahi lagte"***
>
> **[It has become very difficult to open/operate accounts after pricing is introduced. Customers don't agree to pay! They say it does not cost anything to transact at a branch.] - Agent**

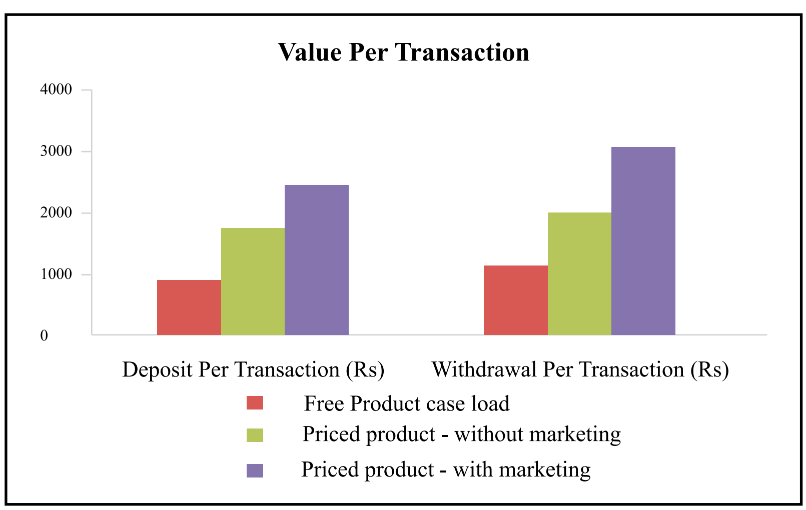
The third scenario shows that marketing efforts can make-up for some of the shortfall of lost volumes due to the introduction of pricing. For deposits and withdrawals, the effect of charging customers was almost entirely neutralised with the introduction of marketing activities (only lower by 8% and 20% respectively). The introduction of marketing activities also increased the volumes for each revenue driver by at least 50% compared to the scenario where the products were priced without marketing.

> ***"Canopies lagayi hai to logon ko dikhta hai. Jahan account 5-8 khul rahe the, ab 100-150 khul rahe hain."***
>
> **[With canopies in place, customers easily come to know about the product. Earlier we used to open only 5-8 accounts; now we open 100-150 accounts.] - Agent**

Furthermore, when products were offered for free, there was likely a distortion in the market, encouraging uninterested/neutral customers to join and maintaining an unsustainable scheme of "free pricing". Therefore, the true demand for the product was likely not reflected. Once customers were charged, this conclusion seems confirmed, as the original customers may not have seen real value in the product. Adding in marketing and informing customers not only improved financial results but attracted customer types desired for the long-run.

Business Scenarios and Transaction Values

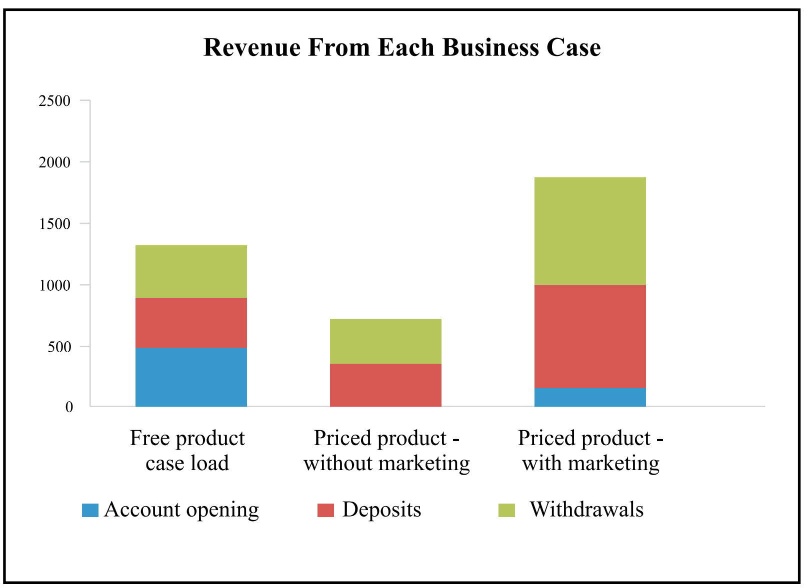
To further comprehend the effect of each of the three business scenarios, the effect on transaction values was also analysed. The graph below indicates the average per value transaction during each of the three scenario-time periods. The per transaction value was highest when the products were priced along with marketing and the lowest when the products were offered for free.



When marketing efforts were carried out and the customers were charged for the products, only those customers who found a significant value proposition likely enrolled for the services. Also since the products were priced at a flat fee, generally, customers may have increased the transaction size in order to make it cost effective.[3] Marketing efforts possibly imparted critical information and educated clients enough to encourage them to adopt BC services. What is interesting to note is that the value of deposits and withdrawals increased by 93% and 72% respectively even with customers being charged (without marketing). The possible reasons for this could be that true non-users were weeded out.

Business Scenarios and Revenue Generation

The following graph depicts the revenue that an average agent contributed to the BCNM in a month.[4] The BCNM agent earned maximum revenue levels when the products were offered for free to the customers. (The BCNM earned 83% of revenues for opening new accounts and providing account booklets). Many in the industry know that this dependency is a red herring and poses serious concerns to the true sustainability of the BCNM. Accounts cannot continue to be opened at a high growth rate forever, and many customers who do not find any value proposition in the services may have opened the accounts, leading to costly dormancy of accounts. As account opening fees are one-time revenue, BCNMs must focus real return expectations on more sustainable revenue sources such as transactions.



The BCNM earned the least when the products were priced with no marketing, but revenues recovered with the introduction of extensive marketing efforts. In this marketing scenario, the BCNM's agent earned a more balanced revenue mix from each of the revenue drivers (account opening 10%, deposits 45%, and withdrawals 45%), and as the revenue was more transaction driven it likely was more sustainable for the long-term.

Conclusion

In summary, it was observed that the average transaction value was the lowest, yet the transaction volume the highest, in the free product scenario. When pricing was introduced to customers, business significantly declined, with transaction numbers and averages values decreasing. Yet business sprang back once marketing efforts were carried out, explaining basic features and encouraging the "right" kind of customer to join. These conclusions: 1) offering free products is not sustainable and 2) marketing can overcome pricing resistance may not seem terribly ground-breaking; yet Indian banks and BCNMs continue to ignore this reality.

[3]Banks charged flat fees to the customers, while they paid percentage fees to the BCNM.
[4]Revenues from account opening, deposit and withdrawal transactions have been included as they contributed 99% of the revenues. The remaining was realised through account maintenance and balance maintenance fees earned.

With marketing and reasonable pricing, the customer, the BCNM and the bank find themselves in a win-win situation. The customer carries out transactions and pays for them because he finds value in doing so. The BCNM earns revenue which is regular, diversified and transaction driven. Best of all, banks gain the most as they need not subsidise financial inclusion initiatives by paying out of pocket to simply comply with RBI mandates. They also benefit from the increase in the value of transactions and balances maintained, as it generates additional "float". It would therefore behove all players, banks, BCNMs and the RBI, to provide more extensive and coordinated marketing efforts to promote BCs as a legitimate alternative channel.

Innovation and Adaptation on the M-PESA Rails

Mukesh Sadana, George Mugweru, Joyce Murithi, David Cracknell and Graham A.N. Wright

M-PESA is undoubtedly the biggest success story in the realm of mobile payments. Since its operations started in March 2007, it has grown from strength to strength. As of April 2011, it has 14 million customers serviced by a 28,000 strong agent network spread throughout Kenya[1]. It is estimated that 75% of M-PESA users save at least some money in their M-PESA account for reasons of ease (45%) and safety (26%) as the major factors[2]. This chapter[3] examines some of the savings and related services offered to the low income market segment using M-PESA 'rails', and highlights the challenges they face. The institutions using M-PESA are working in different areas of financial services, offering savings, loans, health and life insurance, pension and investment products.

The *MicroSave* research team gathered data for 14 financial institutions that have tied-up with M-PESA, through personal interviews with management, information available on web sites and calling the call centres. The team found that there was less "innovation" and more "adaptation"[4] by financial institutions for linking to the M-PESA platform. Only two institutions have designed new products specifically and exclusively available on M-PESA platform, and two more institutions have built their business model completely around M-PESA. The majority of financial institutions have only "linked" their systems at the back-end with Safaricom and are offering their 'existing' products through M-PESA as an alternative delivery/service channel.

Most financial institutions have linked to M-PESA's "pay bill"[5] platform to facilitate deposit by their customers into accounts with the respective institution. Withdrawal by a customer from his/her bank account through M-PESA requires the work of two important technologies. First is the bank's m-banking platform and second is Safaricom's Business to Consumer (B2C) service (bulk payment service).[6]

Innovations: New Products

M-KESHO

M-KESHO, launched as a joint product by Equity Bank and Safaricom, is probably the best known innovation in the list of savings products available on M-PESA rails. This product, aimed at all income levels, is available through the M-PESA platform and customers can register at select Safaricom outlets or at Equity Bank branches. Benefits to customers are:

- Facility of seamlessly moving money between M-PESA account and M-KESHO (a bank account) in Equity Bank via a mobile handset.
- The money is protected through the bank's participation in the national deposit protection fund.
- Mini account statement and balance are sent to customers via SMS and can be viewed on screen.
- It comes with (almost pre-approved) micro credit and insurance bundling (subject to conditions).

I&M Bank's M-PESA Prepay Safari Card

This international pre-paid VISA card is aimed at a higher-income target market. The card can be pre loaded in Kenya Shillings through M-PESA only, and can be used at over 1.7 million Visa ATMs and 28 million VISA merchant outlets worldwide. The I&M pre-activated card costs Ksh.250 ($2.90) and each top-up costs Ksh.125 ($1.47). Withdrawal from I&M and Kenswitch ATMs costs Ksh.30 ($0.35) and Ksh.100 ($1.18) from Pesa Point ATMs. Withdrawal from Visa ATMs outside Kenya costs Ksh.250

[1] www.safaricom.co.ke/fileadmin/M-PESA/Documents/statistics/M-PESA_Statistics_-_2.pdf
[2] Jack William and Tavneet Suri, "The Economics of M-PESA", MIT, August 2010.
[3] Developed on the basis of the larger paper Sadana, M et al. "Analysis of Financial Institutions Riding on M-PESA Rails", *MicroSave*, 2011
[4] A distinction first used by Jake Kendall of the Bill & Melinda Gates Foundation
[5] http://www.safaricom.co.ke/index.php?id=269
[6] http://www.safaricom.co.ke/index.php?id=270

per transaction. There is an annual fee of Ksh.250. The customer can surrender the card any time and get a refund of the remaining balance, after deduction of administrative charges, from any I&M Bank branch.

Innovations: New Business Models

Musoni MFI

Musoni's disbursements and loan repayments are made solely through the M-PESA channel using the deposit ("bill pay") and disbursement/withdrawal (B2C/bulk payment) channels. To improve technological performance, Musoni's middleware takes care of proper identification of individual customer account for each loan repayment and also ensures timely and proper upload of data to Safaricom B2C link for smooth disbursements. The cost of loan repayment for the client is Ksh.20 ($0.24) per transaction. M-PESA charges Ksh.30 ($0.35) for each transfer from M-PESA account, but Musoni bears Ksh.10 ($0.12) of this on customer's behalf. Disbursement through M-PESA is free for the customer – again Musoni pays Safaricom Ksh.30 for each loan disbursement; and the customer pays a minimum of Ksh.25 ($0.29) for each withdrawal from an M-PESA agent. The total cost of a "round trip" cash in/out costs the client $0.70 and Musoni $0.47.

Changamka Pre-paid Health Cards

Changamka is appointing agents to sell its health cards. These agents are small outlets, a chain of supermarkets and other individual NGOs and business places. These health cards can be used to pay for services at designated health service providers. A customer can top up the card by transferring money using M-PESA. User pays Ksh.20 to Safaricom for each top up. This charge is irrespective of the amount transferred by user from his M-Pesa account to his Changamka account. Changamka does not charge the user for top up, rather pays Ksh.10 for each transfer to Safaricom, because Ksh.30 is what Safaricom charges to the M-Pesa account holder.

Adaptations

All of the other financial institutions interviewed are offering their existing products through the M-PESA channel, trying to harness Safaricom's wide agent network. While transacting over the M-PESA platform, the customer is bound by the limits of amount that can be transacted on M-PESA channel – the minimum being Ksh.50 ($0.59) and maximum being Ksh.70,000 ($823.53). For example, if a customer of CIC M-Bima Jijenge savings plan saves Ksh.20 ($0.24) per day for deposit into M-Bima, since he/she is using M-PESA for money transfer to CIC, the transfer is allowed weekly and is for Ksh.140 ($1.65).[8] CIC does not charge its customers for transfer into M-Bima account, and even bears the Safaricom charges of Ksh.30 for each transfer.

A large number of financial institutions have opted for Safaricom's "pay bill" option to allow their customers primarily to deposit into their savings/ insurance/ pension/ investment accounts. Some of the more popular ones appear to be: PesaPap (from Family Bank); Pata Cash (from Kenya Post Office Savings Bank) and KCB Connect (from Kenya Commercial Bank). Deposit-taking microfinance institutions Faulu and SMEP have entered into agreements with Safaricom. Their clients can repay loans and deposit into their savings account using the "pay bill" option of M-PESA. Faulu has launched withdrawal service as well via M-PESA, while SMEP is in the pilot test stage.

[7] For withdrawal of loans disbursed

Customer Economics and Satisfaction

It is less expensive to save in an M-PESA account than shifting money to a bank account. This is because cash-in at M-PESA agent is free for the customer, but transferring money (deposit) to a bank account costs varying amounts. Similarly transferring money from bank account to M-PESA (withdrawal) itself costs the customer, and adding the cash-out charges makes it still costlier. The whole cycle of deposit and withdrawal (or indeed loan repayment) through M-PESA therefore becomes an expensive proposition for the customer. This is highlighted in the table below.

Institution/ Charges	Minimum Charges for Deposit using M-PESA (Ksh.)		Minimum Charges for Withdrawal using M-PESA (Ksh.)		Total for one deposit and one withdrawal (between Ksh.100-2,499)
	Into Account By Institution	Transfer By M-PESA	Out from Account By Institution	Cash-out By M-PESA	Total
M-PESA	--------	Free	---------	25	25
M-KESHO	Free	Free	30	25	55
Family Bank	35	20	60	25	145
KCB	20*	20	60	25	145
Postbank	Free	20	70	25	105
SMEP DTM	1 (for text message)	30	Free[7]	25	56

** KCB has an additional band of Ksh.100-1,000 for which customer is charged Ksh.20 and between Ksh.1,000 and 2,500 customer is charged Ksh.30 for deposits*

These costs will probably deter urban clients from accessing their bank accounts through M-PESA more than their rural counterparts. The proximity of bank branches makes the fee structure unattractive for urban users. However, rural users may compare the cost of transacting through M-PESA to other costs (travel, opportunity cost, risk of carrying cash etc.) and find it more favourable. Nonetheless, customers find charges levied for deposit and withdrawal "fair". They value convenience and accessibility of M-PESA agent points for transacting in their bank accounts. They also like the ability to withdraw from their bank account using M-PESA agent point in times of emergencies. But about 75% customers also told researchers that they have faced issues of delays in receiving money into their M-PESA account when transferring it from the bank account, severely limiting their ability to withdraw when they needed the money.

At present financial institutions appear unsure about the overall costs and benefits arising out of their partnerships with M-PESA. All are busy sorting out the operational issues due to integration challenges, and the difficulties of communicating the proposition to customers. Time will tell how the market will evolve …

[8] Ksh.20 saved for seven days makes it Ksh.140 which is the amount transferred to M-Bima account on a weekly basis by customer

[9] See *MicroSave* Briefing Note # 94 'Riding the M-PESA Rails: Advantages & Disadvantages'

Riding the M-PESA Rails: Advantages and Disadvantages

Mukesh Sadana, George Mugweru, Joyce Murithi, David Cracknell and Graham A.N. Wright

MicroSave's recent research with 14 financial institutions in Kenya revealed the perceived opinions as to the advantages and disadvantages of linking with M-PESA.

Advantages for Financial Institutions[1]

By riding on M-PESA rails, most banks, MFIs and Deposit Taking Microfinance Programs (DTMs) are looking for cost reduction, increased staff efficiency and convenience of customers, which ultimately should lead to more deposits/transactions.

Cost Reduction and Efficiency

By having their customers use M-PESA, many institutions have been able to achieve cost reductions because all or part of the cost is borne by the customer. For example, an MFI that disburses loans through its branches/groups spends huge sums on cash logistics, cash insurance and managing the risk of carrying cash. Disbursement through cheques is also costly as MFIs have current accounts and are charged for each cheque leaf and cheque clearing. Using the Business–to–Consumer (B2C) service of Safaricom,[2] the MFI only has to deposit money in its M-PESA account and provide a list of recipients and the amount to be paid to each. For this service Safaricom charges the MFI on a per transaction basis, but the charges are lower than what the MFI would incur for any other traditional mode of disbursement. Similarly, accepting deposits at a bank branch is more expensive on a per transaction basis to the institution as it incurs expenses for branch infrastructure, manpower, equipment and security arrangements. By asking customers to deposit or repay loans through M-PESA, the financial institution is essentially outsourcing teller activities to the M-PESA agent. This logic also applies to other financial institutions like insurance agencies, investment and pension plan providers or pre-paid instrument providers using the M-PESA platform and agents to collect premiums and deposits.

Using the M-PESA platform and its agents allows financial institutions to decongest their banking halls and offices. Removing crowds from branches gives staff more time to focus on product sales, business development, customer acquisition and related activities. They need to worry less about cash management and servicing the products, as deposit and withdrawal or repayment and disbursements can be done through agents. On this count, most financial institutions agree that linking to M-PESA has increased staff efficiency. However, the lack of back-end integration has created inefficiency as well. In a reported 10% of cases, staff has to manually match funds coming into the bank from an M-PESA customer, to that customer's account.

While financial institutions do indeed value cost saving and efficiency, they also face a challenge of potential under-utilisation of the existing branch infrastructure (including staff). Banks will need to either retrain, and redeploy, staff away from service functions (cash tellers etc.) and into sales functions (to grow the client base and/or cross sell products etc.), or create less expensive branch infrastructure. While this has not been seen yet, institutions are beginning to realise the opportunity, and challenge.

Customer Satisfaction

Customers do not have to come to the often-distant bank branch or deal with cashiers, nor do they need to queue and complete bank forms. There are too few actual users at this point to judge client satisfaction, but it seems likely that a bank which offers the convenience of M-PESA could maximise positive benefits (security, product offering, interest payments) and minimise the inconvenience of visiting a branch.

[1] *MicroSave* Briefing Note # 93 'Innovation and Adaption on the M-PESA Rails' discussed some of the financial institutions using the M-PESA infrastructure, this one looks at the advantages and disadvantages of doing so.

[2] http://www.safaricom.co.ke/index.php?id=270

Advantages for Customers

The biggest benefit for customers is that they need not travel to a bank branch or an MFI's designated point for transacting into their accounts. They can just deposit money into M-PESA account at the nearest M-PESA agent and transfer from M-PESA to their bank account. It brings to them the following benefits:

- *Cost savings* on travel expenses, opportunity cost of losing wages or turnover etc. (It should be noted, clients may need to pay transfer and withdrawal fees to the telco which may lessen the benefit).
- *Convenience* of transacting whenever/wherever: M-PESA agents are ubiquitous and if a customer already has sufficient balance in his/her M-PESA account for the loan repayment, then he/she does not even need to go to an agent.
- *Reduced risk* of carrying cash. M-PESA agents are nearer than the bank/financial institution's branch.

Disadvantages for Financial Institutions

The biggest challenge that financial institutions are facing is reconciling deposits initiated by M-PESA users to customers' accounts. While this is often due to customers keying in incorrect account numbers, it is also due to system incompatibility between the institution and Safaricom. Additionally, there is also a delay in the transfer of funds from customers' bank accounts into their M-PESA accounts. This is due to what is perceived as a slow response from Safaricom on customer initiated transfer of money from bank to Safaricom (withdrawal).

Deposit and withdrawal transactions become complicated because the bank cannot initiate deposit into, or withdraw directly from, a customer's M-PESA account without involving Safaricom. Similarly Safaricom cannot initiate deposits into, or withdrawals from, a customer's bank account without the bank being involved. The two systems have to communicate with each other. Issues arise when the systems are incompatible or when the link between the systems fails.

Commonly observed issues are:

- The wrong business (biller) number entered by the customer in the "pay bill" function. This leads to transfer of money from her M-PESA account into a different biller's account instead of her bank.
- The wrong account number entered by the customer. Under this condition, money is transferred from her M-PESA account to the right financial institution, but then the financial institution's system is not able to locate the right account, or credits a different account if an account with the number entered by the customer does exist.
- Delays in processing transactions. This issue arises at Safaricom's end as well as the financial institution's end. Some delays are expected due to cross checking and verification of inputs entered by customer, but other time delays are caused by reasons that are unclear to financial institutions.
- As a consequence of the above, manual reconciliation is often required.

Disadvantages for Customers

Everywhere/anywhere options are minimised by delays in receiving bank confirmation that money has been credited to the customer's account. This is, of course, exacerbated if the client has entered the incorrect business/biller number, or the incorrect account number. Additionally, each bank issues different instructions: most banks ask for the account number, but some give an option of either entering account number or the National ID number, or even the passport number. For borrowers, it becomes more complicated because in the same institution they may have both a savings and a loan account, making errors even easier.

Withdrawals from a bank account using the M-PESA channel can also be challenging as customers have to connect through the institution's m-banking platform and then transfer to M-PESA. Execution of the withdrawal instruction often takes a long time – as much as a few hours. The "clunky" interface between the back-end systems lead financial institutions to blame the slow response time on Safaricom.

The Consequences

> **"Safaricom is playing a bully. It dictates all terms and does not listen to the other partner's problems".**
>
> **- Senior manager of a large bank in Kenya**

Reduced Promotion
Institutions that have agreements with M-PESA are not heavily promoting the opportunity, despite the potential benefits. They are aware of the issues faced by customers as well as the back-end challenges of reconciliation and so on. They are allowing customers to subscribe to the service on their own (the early adopters) so that with low volumes and more knowledgeable customers they can first test the systems, improve processes and then (perhaps) promote more widely or implement mass registration.

The Search for Alternatives
Financial institutions are looking for alternative arrangements to mitigate the challenges of riding the M-PESA rails. Some, such as SMEP and Musoni are building middleware to better integrate with Safaricom's systems; others (including most banks) are seeking to reduce their dependence on Safaricom by signing agreements with other mobile network operators; many are waiting to see if Safaricom's promised improvements, particularly an application programming interface (API) will manifest; and four of the largest banks are building their own agent networks to avoid or compete with M-PESA's in offering access to a full-range of financial services.

Next chapter "Do the M-PESA Rails Contribute to Financial Inclusion?" looks at the market and strategic implications of these moves.

Do the M-PESA Rails Contribute to Financial Inclusion?

Mukesh Sadana, George Mugweru, Joyce Murithi, David Cracknell and Graham A.N. Wright

Background: The Core Business Proposition of M-PESA[1]

There is a sense of discomfort among the financial institutions about the success of M-PESA and the challenges of dealing with Safaricom. As discussed in the previous chapter, most financial institutions have had difficulties in their attempts to extend their products and services through the M-PESA channel. This may be, in part, because some of them hoped that by association, their products would take off the same way Safaricom's person-to-person (P2P) money transfer product did. For others, Safaricom appears to offer direct competition, particularly as a viable option to bank savings accounts.

Poor Man's Financial Inclusion?

This is, however, an over-simplified view of the situation. According to several industry experts, by design or by default, a substantial proportion of the Kenyan population is using M-PESA as an addition to bank savings accounts, and less frequently, as a full-scale substitute. The current pricing structure of M-PESA with its free deposits, does offer a tremendous opportunity for un- or under-banked people to build up what Stuart Rutherford would call "useful lump sums". In this sense it provides a very valuable service to facilitate saving up for future needs.

> **"I deposit whatever money I have with me whenever I visit M-PESA agent (point), and not only what I have to send home. Therefore most of the times my M-PESA account has some spare amount for emergency needs…it varies, but usually it is Ksh.400-500".**
>
> **- An M-PESA user in Nairobi.**

The worry among financial inclusion proponents and banks is that poor people will use M-PESA as a full scale substitute for formal institutions. One expert calls this "low equilibrium financial inclusion" – or put simply, "poor quality, high cost and potentially high risk, financial inclusion". Users of M-PESA do not get access to structured savings (such as recurring deposit) products, they cannot access loans and other financial services like insurance and pension plans from Safaricom, they do not receive interest on their savings balances, they do not receive a statement of their transactions, and often lack privacy because of the close involvement of agents. And with the standard charges of Ksh.30 (US $0.35) for transfer, and Ksh.25 (US $0.29) for cash out, the costs of transacting on the M-PESA platform remain quite high for low-value transactions.[2]

Basic, Valuable … and Increasingly Popular

M-PESA does provide excellent money transfer services and a very convenient, if basic, way to set aside money. Many research papers show that the average Kenyan is happy with the impact that M-PESA has had on their lives – see for example "Community Level Economic Effects of M-PESA in Kenya".[3] Furthermore, in focus group discussions a few clients expressed that they have confined themselves

[1] Chapter 'Innovation and Adaption on the M-Pesa Rails' and chapter 'Riding the M-Pesa Rails: Advantages & Disadvantages' discussed the current operational state of M-Pesa and how financial institutions are using it to offer their products and services through mobile phones. This chapter looks at the strategic implications of M-Pesa and the role it has played in furthering financial inclusion in Kenya.
[2] See *MicroSave* Briefing Note # 93 'Innovation and Adaption on the M-Pesa Rails'
[3] Plyler, Megan G, Sherri Haas and Geetha Nagarajan; Iris Center, Universtity of Maryland; June 2010

> **"M-PESA is a communication company. Equity are money people. People have more faith in banks, if M-PESA name was replaced with Equity it would be a huge hit!"**
>
> **- A user in a focus group in Nairobi.**

to saving on M-PESA, and thus may not be motivated to open accounts with banks. The recent FSD Savings Survey conducted in October/November 2010 showed that the average balance held on M-PESA had risen to Ksh.1,080 ($12.70) – a five-fold increase over the Ksh.230 ($2.70) recorded by the Central Bank of Kenya (CBK) audit in August 2009.[4]

Integration with the Financial System

Almost all commercial banks are of the view that Safaricom has a duty towards the clients and the economy, and it should develop systems to allow banks/financial institutions to integrate with it more effectively. While arguing "duty" may not carry significant weight in a free market economy, most bankers also feel that this makes business sense. Although the current scenario is not encouraging, with its integration and support related challenges, the potential of the M-PESA channel with the advent of better application programming interfaces (APIs) and negotiated agreements could indeed offer a way out of a low-equilibrium financial inclusion "trap".

All of the banks and financial institutions interviewed saw merit in getting into a relationship with Safaricom, but all are facing issues with back-end integration.[5] In March 2011, industry sources close to Safaricom hinted that Safaricom is indeed developing an application programming interface. It realises that competition is increasing, the regulator is tightening controls and customers are demanding more, better and cheaper products and services.

A recent development might increase the ability of banks and Safaricom to work together towards true financial inclusion. The CBK conditioned its approval on an increased upper-limit on transaction size, against a reduction in M-PESA customer tariffs. As this would put pressure on agent commissions (even if offset by increased volume), it may result in M-PESA agents also being able to sign agency/outlet agreements with a range of financial institutions.

MFIs are quite positive about Safaricom's ability to provide them the rails they need for cost reduction and increasing the efficiency of staff. It remains to be seen whether deposit-taking microfinance institutions are also able to persuade customers to route their deposits through M-PESA the way they are strongly encouraged to route their loan repayments. It will also be interesting to see the long term effects of M-PESA on group meetings – there is a clear risk that clients will simply send their loan repayments from their place of business or home, in preference to attending a meeting.

The Quest for Alternatives

Equity Bank and others are creating their own delivery channels by setting up agent networks with a focus on rural locations. There is an urgency to create a parallel system as no institution wants to depend solely on Safaricom. The past few months have witnessed a spate of agreements between financial institutions and MNOs. Even other MFIs, SACCOs, insurance companies and pension product providers

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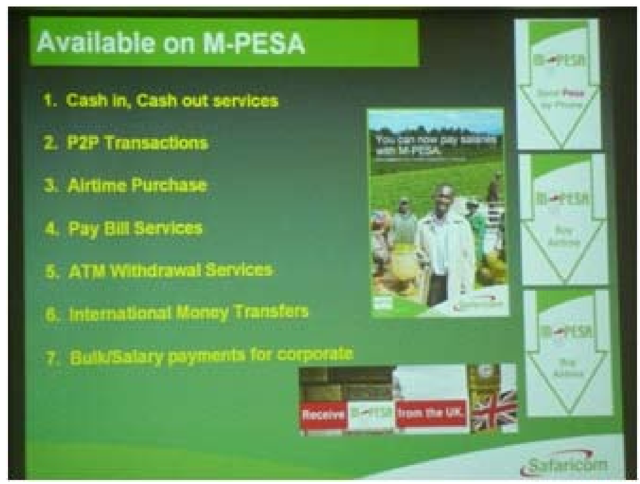
[4] An earlier report published by Ignacio Mas and Dan Radcliffe suggests that the average balance in M-PESA account was US $2.70 according to an audit by Central Bank of Kenya in August 2009.
[5] See *MicroSave* Briefing Note # 94 'Riding the M-Pesa Rails: Advantages & Disadvantages'

are tying up with MNOs other than Safaricom. The market share of Airtel and Orange has increased. At the end of Q1 (2010-11) Airtel increased its market share in the mobile market to 13.5%, up from 9.1% at the end of Q4 (2009-10). In the same period Orange has grown its market share from 2.7% to 4.0% while Safaricom's share has decreased from 80.7% to 75.9% of the total market. This change is due to many factors, including the on-going tariff war on voice and message rates, promotional campaigns etc. but it illustrates the reality that Safaricom will have to work hard to retain market share and keep customers from moving to other operators. A trend that is likely to increase with number portability being introduced by the Communications Commission of Kenya.

The Future of Financial Inclusion?



Multiple systems competing for customers are likely to result in significantly reduced costs, improved products and customer service, and eventually interoperability between the mobile money/m-banking systems. In Kenya, where the basic measure of financial inclusion has risen very significantly as a result of M-PESA,[6] these changes will enhance the quality of that financial access. The challenge will be for the financial institutions and MNOs to offer compelling products and services that maximise the competitive advantage of each player. This should result in significant reductions in the cost of mobile money-based services … and this is likely to come only as they increase the integration of the systems and range of services offered.

> **"M- PESA itself does not constitute financial inclusion. But it does give us glimpses of a commercially sound, affordable and effective way to offer financial services to all".**
>
> **- Ignacio Mas and Dan Radcliffe** *(ibid).*

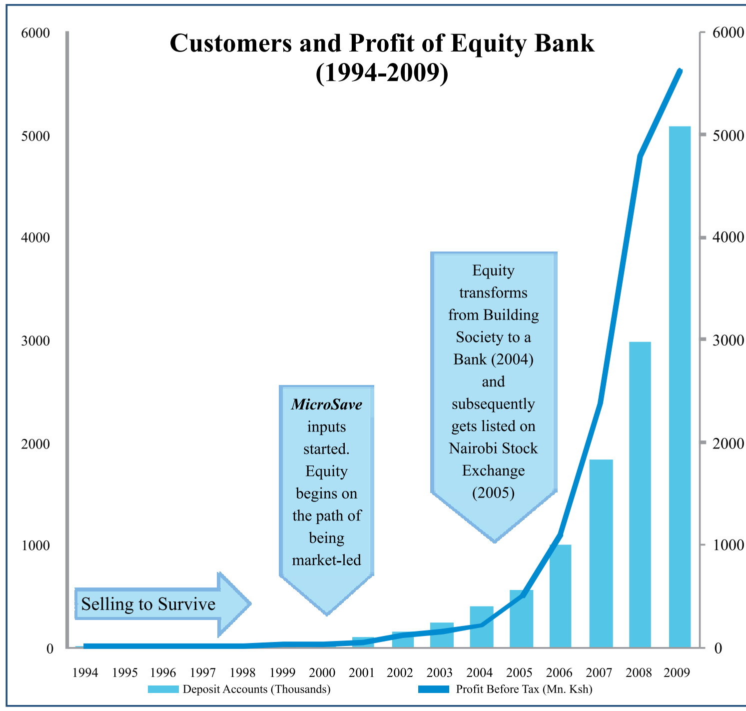
However, the dream of full integration and interoperability seems distant. In March 2011, CBK Governor Njuguna Ndung'u said, "Interoperability will help to reduce costs but if you reduce costs without following the rules of the game you will kill the innovation. There are proprietary rights that you have to respect".[7] Many industry insiders remain concerned that this approach will entrench what is now increasingly viewed as Safaricom's monopoly position – thus yielding low equilibrium financial inclusion. While M-PESA's rails offer the potential, Kenya may yet have to wait to realise comprehensive, commercially sound, affordable and effective financial inclusion.

[6] Even in 2009, FinScope showed that 23% of Kenyans were formally banked, but that an additional 18% had access through "Formal – Other". This latter percentage will undoubtedly have risen by May 2011 when M-PESA had over 14 million registered SIMs.
[7] Quoted in The East African, March, 14, 2011

Speculation on the Future of Financial Services for the Poor in India

Graham A.N. Wright

It is always dangerous to speculate about the future in public … particularly in print – so that's what this chapter seeks to do, not least of all to stir debate and discussion.

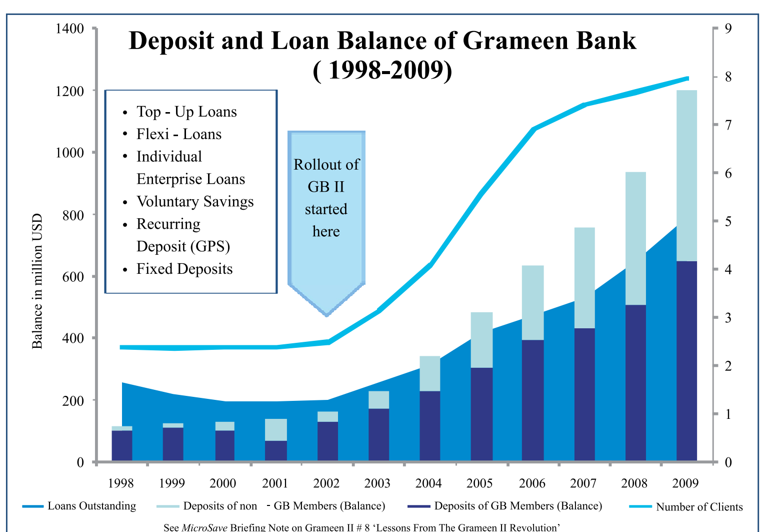


As Collins et al. note in "Portfolios of the Poor", three needs that drive much of the financial activity of poor households are:

1. *Managing basics:* cash-flow management to transform irregular income flows into a dependable resource to meet daily needs.
2. *Coping with risk*: dealing with the emergencies that can derail families with little in reserve.
3. *Raising lump sums:* seizing opportunities and paying for big-ticket expenses by accumulating usefully large sums of money.

To meet these needs, as a bare minimum, poor people need the following financial services delivered in a reliable, convenient, flexible and structured manner:

1. A current savings account into which they can deposit, and from which they can withdraw, conveniently.
2. An emergency or general loan that can be taken and repaid quickly.
3. Recurring, commitment or contractual savings products.
4. A loan that can be used for a wide variety of purposes.



After a period of selling-focused struggle and limited growth, Equity Bank consulted their clients and refined their products in 2001 … since then Equity has delivered these services, and witnessed extraordinary growth as a consequence.[1] This growth was built and maintained on a commitment to:

- Listening to clients and responding to their needs;

[1] See *MicroSave* Briefing Note # 63 'The Market-Led Revolution of Equity Bank'

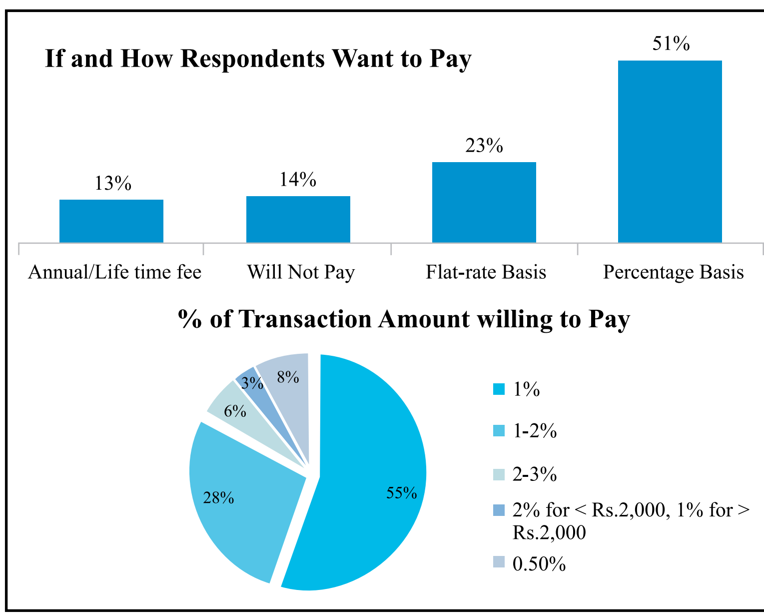
- Excellent customer service; and
- Technology/delivery channels: IT/ ATMs/POS/m-banking.

Similarly, Grameen Bank's under-recognised transformation in 2002 saw a massive increase in clients – including many who repaid loans that were long overdue in order to gain access to the new range of products offered by the bank.[2] As Stuart Rutherford noted in 2006, "Grameen took 27 years to reach 2.5 million members – and then doubled that in the full establishment of Grameen II" – since then the bank has added another 3 million members. But this has come with significant challenges - as can be seen from the graph. As part of it fund-raising drive, Grameen offered fixed and recurring deposit products not just to its poor members, but also to the better off people in the villages. These savings products were very generously priced, and now the bank has a significant, and growing (nearly $500 million at the end of 2009), excess of savings over the amount of loans it is able to push out to its members.

So what are the implications for India?

MicroSave has been advocating the use of banking correspondence models to offer a diverse range of financial services for a long time now.[3] It is clear that e-/m-banking channels can be used to:

1. Offer clients a suite of financial services in response to their full spectrum of financial needs – credit, savings, remittances, payments, insurance etc., thus deepening the relationship with clients.
2. Deliver proximity so that the transaction point is in the villages/slums where the clients reside – allowing them to transact easily and as often as they need.
3. Focus on convenience (including the ability to make small transactions) so that products respond to clients' needs, and not just those of the institution.
4. Leverage technology to increase transaction efficiency and reduce costs.



Until recently, when the Reserve Bank of India (RBI) sanctioned charging "reasonable fees" for transactions, this was largely a pipedream in India.[4] But, in the current regulatory environment, and the banks' realisation that the RBI is absolutely committed to achieving real financial inclusion with active accounts, supported by the growing number of mobile network operators and dedicated agent network providers available, the dream is set to become a reality. The Unique Identification (UID) Aadhaar project, linking each person's UID with a bank account and a mobile number, means that the potential for the rapid roll out of effective agent networks is significant.

[2] See *MicroSave* Briefing Note on Grameen II # 8 'Lessons From The Grameen II Revolution'
[3] See *MicroSave* India Focus Note # 26 'Market Strategy Development and 3rd Generation Microfinance in India'
[4] See *MicroSave* India Focus Note # 24 'Making Business Correspondence Work in India' and India Focus Note # 32 'Making Business Correspondence Work - Crossing the Second 'Break-Even''

With reasonable charges, the stage is set to move beyond the double break-even dilemma, under which it was more lucrative for agents to just sign customers up and then let the account lapse into dormancy. Because paying for remittances, withdrawals and payments is an accepted norm in Africa, it is ahead of Asia in the rollout of mobile money. But the poor in India are indeed willing to pay … *MicroSave*'s recent research in Uttar Pradesh suggests that transactions in rural bank branches are time-consuming (often 1-2 hours or more is required for a basic deposit or withdrawal) - resulting in cash losses and opportunity costs in the range of Rs.25-150. Unsurprisingly therefore, the poor are willing to pay for a convenient service close to their homes.

In the long-term, as multiple products are offered across the mobile money platforms, this will revolutionise financial inclusion, and the poor will have access to savings, remittances, payments, insurance, individual cashflow-based loans and air time top-up, plus a host of other services through agents based with a few yards of their houses. It is the deepening of this relationship that will allow the banks to better manage credit risk, and thus begin to make small advances to customers on the basis of their savings/insurance histories. For larger loans, detailed appraisals of the cashflows of both the household and the business to be financed will be required – but *MicroSave* estimates that these are indeed feasible for loans in excess of Rs.25,000.[5] The stage in India is set for very significant change...

[5] See *MicroSave* Briefing Note # 84 'Individual Lending for MFIs – Strategic Issues to Consider First' and Briefing Note # 85 'Managing Individual Lending'

The Business Case for Branchless Banking - What's Missing?

Ann-Byrd Platt

This is an interesting moment in the history of banking and money. It is especially important for the approximately 2.7 billion, or 72% of adults in the developing world, who have limited or no access to guaranteed deposits and other licensed banking benefits.[1] We are in the process of reinventing how these people send and receive money in remote locations, how they pay bills and loans, how they save and insure against emergencies, and for increasing numbers, how they enjoy greater freedom and control over their financial future.

And these numbers are growing. A recently released CGAP report on branchless banking in low- and mid-level income countries around the world shows an estimated 185 million active users for 2010, up from 137 million a year earlier, and though regular savers make up only 45 million of the total, their ranks show 174% growth, up from 16 million in 2009.[2]

The dilemma is how to make all these new ways of banking—by mobile phone, via card readers and enhanced ATMs, and with third-party agents who act on behalf of branch staff—either profitable or at least sustainable. But even if we limit the definition of this success to small or break-even gains for banks and others who underwrite these efforts, and even if we somehow monetise the broader benefits of financial inclusion, this dilemma is likely to remain unresolved with the current models. A useful example of leveraging the costs involved in opening and servicing low-income savings accounts is outlined in The Lydian Journal's, "Improving the Economics of Small Balance Accounts".[3] The focus is on internal bank costs, deposits, and margins—as in all conventional business models for banking—and the full burden for improving potential revenues lies in augmenting these individual deposits, reducing costly branch transactions, and extending margins and float.

No amount of creative math can really make this work. The reason seems obvious. This is not conventional banking any longer, at least not for the estimated 238 million registered users in what the World Bank now defines as branchless banking.[4] In most scenarios, new customer acquisition is the highest cost—anywhere from US$6 over a three-year period to $50 for inactive customers.[5] To put customer volume in perspective, Bank of America, rated number one globally in terms of tier-one (regulator-approved) capital and financial strength by The Economist and The Banker, has only 57 million retail customers. Citibank and ICBC (Industrial and Commercial Bank of China), two other retail banking giants, report 200 million and 158 million customers respectively.[6] None of these banks can boast an estimated 37% jump in active new accounts for 2010.

Branchless banking is about customer growth, potentially extraordinary growth, in ways that few large commercial banks need, or wish to pursue. It also depends on reliable mobile and other network technology, and an equally trustworthy cadre of agents in areas where branches are not easily accessible. Yet these three critical factors—new and active accounts, optimal technology pricing and collaboration, and a highly motivated agent network to serve them—are seldom the primary focus for most banks and regulators when they build financial models for the vast new markets 2.7 billion new customers represent.

[1]This often-cited 2009 World Bank figure may be even higher now, despite progress in many areas for financial inclusion. http://www.cgap.org/gm/document-1.9.38735/FA2009.pdf

[2]http://technology.cgap.org/2011/05/11/the-state-of-the-branchless-bankingsector/?utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+cgaptechnology+%28CGAP+Technology+Blog%29

[3]http://www.pymnts.com/improving-the-economics-of-small-balance-accounts/ Illustrating the Challenges, Levers for Reducing the Costs.

[4]http://technology.cgap.org/2011/05/11/.

[5]http://www.pymnts.com/improving-the-economics-of-small-balance-accounts/, http://technology.cgap.org/2011/01/25/thelurking-challenge-of-branchless-banking-activating-the-inactive-customer/

[6]http://www.economist.com/node/16486707

Why ever not? The first reason is the uncomfortable truth that most banks do not want this business. The burgeoning middle classes, already famous in India, are expanding in Africa as well. The Wall Street Journal recently reported 34% of the population, or 313 million people, now swell these ranks in all parts of the continent, not just the southern tip.[7] The conventional banking business model works just fine for these larger deposit accounts. And dormancy in the smaller accounts is an expensive problem that will not go away. CGAP reports inactivity as high as 70%, and it is apparently "not uncommon" for only 10% of the new mobile money accounts to be in regular use.[8]

Meanwhile, mobile network operators (MNOs) have a business model predicated on volume, more volume, and diversified services to minimise churn. Nothing creates more loyalty than banking, so operators would dearly love to take on as much mobile banking as regulators will allow, which is not much, unless the operator is lucky enough to be located in Kenya or an equally forgiving regulatory environment. Most MNOs are precluded from awarding interest on savings, managing investments or insurance, disbursing government benefits, and—most important to any customer—offering guaranteed depositor transfers.

This means that although local operators may now be able to transmit money instantly from mobile to mobile, if subscribers try to pay a bill or send part of their monthly wage to another phone or bank account and the money does not arrive, legally this is not the phone carrier's responsibility. The sender may have entered the phone or account or his/her passport number incorrectly, or the transfer may simply be delayed.[9] Unlike a bank transaction, however, the onus of proof lies with the customer. This only has to happen once for customers to have a new appreciation of licensed banks. Authentication, fraud, and other accountability issues also pose higher risks without bank-grade security systems. To offer the level of service and trust customers need, MNOs must partner with banks or obtain their own banking licenses.

Most banks, however, see few shared rewards in such joint ventures and numerous potential new liabilities. Until more success stories emerge—which means until banks can figure out how to make money on their own terms in branchless banking—the dilemma persists.

A final key piece are the third-party agents who serve either as cash-in/cash-out points for mobile and other branchless money transfers in remote areas, or as field officers with responsibilities for new accounts and basic financial planning. For the second group in particular, increasing numbers complain that their revenues do not sufficiently compensate for costs, time away from core business, and the extra sales effort and expertise required. But the principal problem for all agents involved in cash transactions is liquidity management (up to $1,250 for their 19-28 daily transactions). Many must pay the banks for advances necessary to cover peak cash-out periods and all run the risk of robbery—in their shops or en route to and from branches. Insurance covers some, but not all, such losses, and generally agents, not banks, must absorb the cost of both the insurance and the theft.[10]

There is also the subtler but equally important issue of control. Most agents cannot charge customers directly for deposits, withdrawals, money transfers or any other services they perform. Only banks can levy these charges and thus banks also decide on the fee structure (flat fee, commission, tiered service),

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[7]http://online.wsj.com/article/SB10001424052748703703304576296663397991894.html
[8]http://technology.cgap.org/2011/01/25/the-lurking-challenge-of-branchless-banking-activating-the-inactive-customer/
[9]See *MicroSave* Briefing Note # 94 'Riding the M-Pesa Rails: Advantages and Disadvantages, March 2011'
[10]http://www.cgap.org/gm/document-1.9.49831/AgentManagement_TG.pdf, Agent Management Toolkit, Building a Viable Network of Branchless Banking Agents Technical Guide, Mark Flaming, Claudia McKay, Mark Pickens, 2011 Consultative Group to Assist the Poor/The World Bank, pp.4, 28.

the fee amounts—and when and how agents get paid. Examples abound—in East Africa and India for example where some agents charge extra fees for no extra service—as to why banks need to supervise both fees and agents to protect customers. But the end result is unfortunate. Too often, agents feel their relationship with the bank is punitive and without trust.

Relations worsen when bonuses, and in some cases basic monthly commissions, are based on meeting goals for new accounts and more account activity with minimal attention to the regional and demographic differences. Both can heavily and unfairly skew results. In addition, few agents have access to bank IT tracking systems for customer complaints, valid paper receipts for legal disputes, promotional material for new services, and other basic financial-intermediary support needs.

For branchless banking to work and work well, agents must feel more valued and more involved. The first necessary split may be between sales agents—those who promote new accounts and services in more meaningful ways to poor customers—and cash-in/cash-out merchants who simply facilitate mobile and other money transfers. Both need more support and more clearly defined ways to earn trust from branch supervisors. Prospective agents should choose which role they prefer and understand the benefits and drawbacks of each.

Training, insurance, and better liquidity management are all significant costs, but this is the wrong column in the Excel chart from which to subtract in order to make the business case look better. A more productive challenge is to rethink all the columns. Every other industry has had to revise how they make money in new markets with new technology. Banking may finally be forced to as well. There may be no traditional "business case" for financial inclusion. The scope and needs of these customers are too different. This reality may ultimately persuade banks to share risks, and rewards, with MNOs and—watch this space—the post office, global consumer brands, and technology service providers. Each brings new value and possible solutions that banks alone cannot solve.

Can Bank-led Models Really Deliver on the Promise of Mobile Money?

Graham A.N. Wright and Shivshankar V.

Introduction

There is some debate, but perhaps not enough, of the potential profitability of the mobile money solutions that are so widely promoted as the answer to financial inclusion.[1] In India, despite the best efforts of the Reserve Bank of India (RBI), banks continue to shy away from offering real m-banking services. Instead, they seek to meet the targets mandated by the RBI by signing up as many customers as possible and then quietly encouraging the accounts to become dormant – not least of all because of the pain involved in making a transaction.[2] This strategy also works for the agents who make money from the sign-up of customers, but much less from the transactions.[3]

Profitable For MNOs

Safaricom now claims that it makes a profit from its remarkable M-PESA operations in Kenya – indeed in 2010 the gross revenues from M-PESA were up by 56% from the previous year to Ksh.11.78 billion ($157 million) – 13.3% of Safaricom's total revenue for the year. Safaricom made a profit of Ksh.13 billion ($173 million) in 2010, so M-PESA now looks to be a very significant part of its operations.[4] But much of the profitability may be unique to mobile network operators (MNOs). A study of MTN Uganda's MobileMoney noted that after 18 months of operation and nearly 400,000 active users, nearly half the gross profit arises from indirect benefits that only MNOs are in a position to realise.

> **"The service is now cash-flow positive on a month-to-month basis – and they crossed this critical threshold just 14 months after launch. MTN's peak financing requirement, or the amount that they had to finance before MobileMoney became cash-flow positive, was less than US$4 million. … We found that indirect benefits unique to MNOs – including savings from airtime distribution, reduction in churn, and increased share of wallet for voice and SMS – combined to account for 48% of MobileMoney's gross profit to date."**
>
> **– Paul Leishman, "Is There Money In Mobile Money?", GSMA, 2011**

Challenges and Opportunities for Banks

For consumers, however, there are several very important reasons why they would prefer to use banks offering financial services through convenient agent-based systems. These reasons can also be the basis for a financially viable bank-led model:

1. Mobile wallets are perceived be to too liquid – many people want a service that is marginally less liquid, and on which it is less easy to transact.
2. MNOs are not banks, and not entirely trusted – many people believe that MNOs do not provide the security (or deposit insurance) offered by banks.
3. MNOs cannot offer the range of financial services that banks can. Users of M-PESA do not get access to structured savings (such as recurring deposit) products, they cannot access loans and other financial services like insurance and pension plans from Safaricom, they do not receive interest on their savings balances, and they do not receive a statement of their transactions.

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[1]See *MicroSave*'s India Focus Notes # 72 and # 73 for a discussion of many of the key issues.
[2]See *MicroSave* studies on Dormancy in No Frills Accounts and the Cost and Willingness to Pay for financial services in India
[3]See *MicroSave* India Focus Note # 32, "Making Business Correspondence Work - Crossing the Second 'Break-Even'"
[4]See Safaricom 2010 results

> **"M-PESA is like having your bank account in your pocket. Your money can be given to you anytime by anyone. This is convenient, but then you end up spending much more. For example, when I am not driving my taxi, I tend to make calls and use more money just because I can transact using M-PESA."**
>
> **"M-PESA is a communication company. Equity are money people. People have more faith in banks, if M-PESA name was replaced with Equity it would be a huge hit!"**
>
> **-Respondents in Focus Group Discussions for *MicroSave*'s M-PESA Rails study**

In *MicroSave* Briefing Note # 97 "The Business Case for Branchless Banking - What's Missing?", Ann-Byrd Platt argues that banks are not interested in the potential business at the bottom of the pyramid because: 1. it requires a radical re-work of their old business model; and 2. the burgeoning middle class in developing countries already present a tremendous business opportunity that is both easier and fits the current business model. This is true for the vast majority of banks. However, there are potentially important exceptions.

Some banks really do see the potential of the low income market – Barclays Bank has made three attempts to push down market in Kenya over the last 15 years. And dotted across the globe there is a growing array of banks that are serious about providing financial services for the poor:

- ***Equity Bank*** has seen its number of accounts rise from 109,000 at the end of 2001 to 6 million by the end of 2010; and made a net profit of $95 million in 2010. Furthermore, Equity is based in Kenya – in "M-PESA land" and thus in an environment where the population is already well versed in, and reasonably comfortable with, making financial transactions on their mobile phones. The potential for offering a wide-range of financial services through a rapidly developing network of agents serving what is perhaps the best-loved bank brand in Kenya, is clearly very high. Equity Bank's excellence in retail lending, particularly the EquiLoan and Salary Advance products, means that it is uniquely positioned to realise the potential of offering these products, and pre-scored automatic overdrafts, over mobile phones.
- ***BanKO***, a collaboration Bank of the Philippine Islands or BPI, the Ayala Corporation, and Globe Telcom, is set to launch its savings product with the use of an e-wallet platform linked with BanKO's own network of cash-in cash-out agents called KASH, the BPI ATM network, and the Globe broadband infrastructure. BanKO intends to reach one million clients comprising the C, D and E market in its first year of launch – scheduled for September 2011.

> **With the financial inclusion of those in the base of the demographic pyramid as its primary objective, the new BPI Globe BanKO's strategic initiatives include the development of innovative products and services, the establishment of a market-oriented ecosystem and the use of alternative low-cost channels of delivery through the mobile phone.**
>
> **-BanKO's website**

- In South Africa, the four major banks have been compelled by the government to serve down-market, and appear increasingly interested in using mobile phones to penetrate the low income market after the largely ill-fated *Mzanzi* accounts. Standard Bank has started migrating *Mzanzi* customers to their mobile money and community banking delivered through *spaza* (small retail) shops. In 2010, Nedbank teamed up with Vodacom and launched M-PESA services in South Africa.
- IFC has invested in 13 green-field banks in Eastern Europe, Latin America, Africa and Asia. In addition to this, Kreditanstalt für Wiederaufbau (KfW); Netherlands Development Finance Company (FMO); the Dutch foundation (DOEN); the European Bank for Reconstruction and Development (EBRD) have also sponsored a number of such green-field banks across the world.

These banks all appear well-positioned to be among the first to demonstrate profitable m-banking operations for the mass market – not least of all because their primary credit model is individual lending. However, many banks or deposit-taking non bank financial institutions focused on the poor remain dependent on group-based lending approaches. Mobile phone-based systems are likely to be nemesis of group-based systems – persuading borrowers to attend group meetings when they can send their loan instalment over the mobile is a difficult ask. But for those that embrace mobile money and agent-based systems, the opportunities to decongest banking halls, serve significantly more customers with a range of savings, credit and bancassurance products appears very large.[5]

> **In this context, Grameen Bank appears perfectly poised to introduce mobile money-based banking. Its flagship savings product, the Grameen Pension Scheme, is a recurring deposit product that requires regular savings contributions to build up lump sums over 5 or 10 years. These savings balances could secure emergency loans issued by agents on behalf of the bank, displacing moneylenders that are still able to charge up to 10% per month for similar distress credit.**
>
> **Furthermore, Grameen Bank is beginning to offer larger-scale individual loans (see *MicroSave* Briefing Notes on Grameen II # 8, "Lessons From the Grameen II Revolution") that are much more amenable than the bank's original group-based lending to repayment through mobile- and agent-based systems.**

One of the keys to success of bank-led models will be to leverage the bank's ability to offer credit. This can be done in many ways that de-risk lending. In addition to the salary-based lending used by Equity Bank and so many others has perfected,[6] longer-term savings products with linked to immediate access to credit to 90% of the value of the savings balance held provide fully secured lending opportunities. These products are perfectly aligned with the benefits and attributes of mobile phone and agent-based systems, since they leverage the convenience and extended opening hours of local agents. And, for banks, they provide tremendous opportunities to increase revenue streams, while de-congesting banking halls, both for loan application and for deposit and repayment transactions.

The potential for profitable mobile- and agent-based financial services is clear in theory … in the next year or two, *MicroSave* hopes and believes that it will be demonstrated in practice.

[5]For a discussion of the importance of this, see *MicroSave* India Focus Note # 65, "Successful Banking Correspondents Need a Compelling Product Mix"
[6]Note that salary-based lending is not as easy, or risk free, as it first appears – see *MicroSave* Briefing Note # 45, "Microfinance Institutions and Salary Based Consumer Lending"

Branchless Banking Update: Should We Bank on Phones or The Post?

Ann-Byrd Platt

The term "branchless banking" may no longer be the most accurate way to describe what is currently going on in financial inclusion and microfinance. Are banks and branches even the two most important components? For the past five-six years, most efforts to move money via mobile phones or point-of-sale (POS) terminals have required full bank participation, or at least bank partnership and oversight. Reasons include deposit insurance, customer and payment authentication, fraud control, G2P government disbursements, and the actual issuing of money. (For detailed explanation, please see below)

There are several notable exceptions—Safaricom's M-PESA in Kenya, Telenor's EasyPaisa and Mobilink in Pakistan—whereby mobile network operators manage the money transfer and banks play only a secondary and supportive role. In general, however, most governments, particularly those focused on improving financial inclusion numbers like India and Brazil, have preferred to work through banks and bank regulators to ensure customer security and deposits. This is changing. India is a useful example of how the model can expand to include other players via the Interbank Mobile Payment System (IMPS) and unique biometric IDs, while still maintaining acceptable levels of surveillance.[1]

The range of interested participants is multiplying as well. Until recently, the debate was simply between banks and telecoms as to who was best suited to lead such initiatives. The list now includes technology firms partnering with telcos and banks to build agent networks (FINO, Eko, A Little World, and Nokia/Obopay in India, and EasyPaisa for clients without mobiles in Pakistan): global consumer brands who want to add financial services to their distribution networks (Unilever, Bayer, Coca-Cola and PepsiCo),[2] and the post office. The Universal Postal Union and the Bill & Melinda Gates Foundation aresupporting several efforts to restructure postal networks with mobile and point-of-sale (POS) technology to easethe problems of bank-authorised agents and cash management, and to improve financial access for the poor in rural areas already served by post offices.[3]

"Branchless banking" may no longer adequately describe how the estimated 2.7 billion low-income individuals around the world without access to formal banking services[4] manage their payments, savings, loans, remittances, and other transactions—now, and in the future. Branches, as we currently conceive of them, may become like brick and mortar storefronts in an ever-expanding universe of e-commerce: still important for branding, trust, and complex financial negotiations, but otherwise unnecessary. The definition of banking may also broaden, particularly in northern Africa and other developing economies, to include regulated e-bartering for groceries and other fast-moving goods (FMGs), pharmaceuticals, vehicles, and consumer electronics.[5]

In addition, m-wallets may finally have a more meaningful future for people with phones, but without credit or debit cards. Google, Citibank and First Data are collaborating on a mobile wallet that initially will work only on Google's Android phones and with U.S. retailers. Nevertheless, both Citibank, a pioneer in no frills accounts for Mexican border workers, and First Data, former owner of Western Union and current owner of India's ICICI Bank merchant services, are likely to have more patience and a better understanding of the solid, long-term potential 2.7 billion new accounts offer than their current m-wallet competitors (Bank of America, Visa, PayPal, Apple's App Store, and even FNB in South

[1]See *MicroSave*'s India Focus Note # 61 'Interbank Mobile Payment System: Will It Catalyse Financial Inclusion?' and India Focus Note # 69 "UID and Financial Inclusion – Solution or Not?"
[2]"Snacks for a Fat Planet," The New Yorker, May,16 2011, by John Seabrook; http://technology.cgap.org/2011/05/09/branchlessbankinggains-momentum-in-india/
[3]http://www.arcep.fr/uploads/tx_gspublication/Cahiers_ARCEP_01.pdf
[4]This often-cited 2009 World Bank figure may be even higher now, despite progress in many areas for financial inclusion.
http://www.cgap.org/gm/document-1.9.38735/FA2009.pdf
[5]Regularly referenced at the Swiss-African Business Exchange,16/17 March 2011, International Conference Centre, Geneva

Africa).[6] Square, a new m-wallet led by Twitter's founder Jack Dorsey, is targeting small businesses and the 27 million U.S. merchants who do not accept credit cards and currently have no access to the standard NFC (near field communication) technology other wallets use.[7] This, too, bodes well for both retailers and their customers anywhere else in the world without credit-card terminals, electronic cash-registers, and other expensive POS devices.

All this good news notwithstanding, we ultimately come back to banks—in their current, less expansive role—and the ambivalent, but essential, role they play in all new technology involving money. Banks are responsible for:

- guaranteeing deposits and money transfers, however small and unprofitable;
- authenticating customers, including those with no fixed address or formal identification papers;
- safeguarding against fraud in places where corruption and graft flourish;
- reconciling daily transactions, sometimes many days late;
- issuing cash for government and other disbursements since, in most cases, only banks can do so; and
- potentially more tiresome and problematic than any of these regulatory requirements—managing branches and agents in rural areas with unreliable IT, poor roads, crime, and insufficient resources to train and motivate both groups.

Banks are also the guardians of the financially underserved because, in most places, they are required by law to play this role.

Nonetheless, how banks cover costs, for rich and poor, has not changed much since 14th century Florentine goldsmiths invented modern banking: they buy and use money wholesale and they sell it retail. The convenience, deposit security, and the services they are selling have obviously advanced, but the business plan has not. Their reluctance to rethink it now in order to better accommodate new low-income customers around the globe is understandable. When deposits are small and transaction costs are high, the increased volume does not sufficiently improve potential revenues or offset individual expenses. Banks lose money and their real business—serving the middle-class and high-net-worth clients—suffers.[8]

Most other contenders in this space—mobile network operators, technology service providers, global consumer brands—have business plans that hinge on volume and ever-increasing transactions. The problem is deposit insurance. Government policy varies from country to country, but in most cases, full and guaranteed coverage is limited to commercial banks with specifically regulated reserves, even more strictly regulated audit procedures and bank-grade software, and the insurance guarantee remains under the strict control of the government or private entities with government backing. Before the 2007-2008 global credit crisis, eligibility for this type of insurance was easing, most notably for large phone companies, such as Norway's Telenor and Japan's NTT DOCOMO, who were already partnering with banks for mobile financial initiatives. Since then, not surprisingly, restrictions have tightened and are likely to remain in place for the foreseeable future. A well-funded telco could doubtless find an independent, mutualised insurance marketplace such as Lloyds to underwrite deposits. But most

[6]http://www.nytimes.com/2011/05/27/technology/27google.html?hpw, http://www.nytimes.com/2011/05/24/technology/24pay.html?ref=technology
[7]Ibid, and http://www.businessinsider.com/square-card-case-2011-5
[8]For For a more detailed description of banking and other business plans, please see *MicroSave* Briefing Note # 97 'The Business Case for Branchless Banking - What's Missing?'

regulators have no wish to extend the audit and IT protocols noted above to non-licensed financial intermediaries. And if the MNO were to merge or go under—all too likely in most developing countries—authenticating and reimbursing depositors would be almost impossible to guarantee.

This means that, despite the promise M-PESA and comparable mobile and branchless banking efforts seems to offer, too many low-income customers are highly vulnerable if an enterprise is managing their money without a full bank license or partner. Legally, the responsibility in case of loss or fraud lies with the customer. And bank fraud, estimated at US$2.9 trillion worldwide, according to the Association of Certified Fraud Examiners, only rises in places where the regulatory environment is lax and criminal activity is more prevalent. Once again, most banks are loath to assume the full burden for these losses in return for the benefits of improved technology or distribution.

The role of the post office in branchless banking remains an open question. They offer both “branches” (in most cases, better staffed and more locally accessible) and “banking”—just under half of postal revenues in Asian and Arab countries derive from financial services.[9] The cash-in/cash-out problem that bedevils all branchless banking efforts in rural areas is only partially solved with local shopkeepers and other bank-authorised agents. Given a choice, those currently without bank accounts, or with inconvenient dormant accounts, might open and more actively use postal accounts if the post office were close by and able to offer full banking services. These services would have to include credit, unavailable for example in India, and more timely cash management in any region that depends on internal or external remittances, plus of course guaranteed deposits.

The post office may inspire more trust than most mobile operators, technology providers, or vendor of soft drinks and snacks, but the safekeeping of money requires a level of security and confidence that most depositors only accord to banks. For the present, in answer to the opening rhetorical question: yes, a full banking license and a safe place in which to conduct banking business will remain necessary for full financial inclusion to succeed.

[9]http://www.arcep.fr/uploads/tx_gspublication/Cahiers_ARCEP_01.pdf

NextGen Mobile Wallets: The Slim Billfolds May Prove More Lucrative

Ann-Byrd Platt

Mobile wallets are often discussed, and often misunderstood, as the new way to think about payments and banking services—for both rich and poor. Mobile phones may be the only technology that is equally interesting to both ends of the economic spectrum right now. And wallets, because they involve money, are the bit everyone wants to figure out. There is of course a sharp divide between what an iPhone and Android wallet with an e-wad of credit/debit/loyalty cards can do in a shopping mall, and what more basic phones with prepaid or no cards at all can offer less affluent parts of the world. But that gap may be less significant and more quickly bridged than we imagine.

Their respective audiences have very different needs. The most obvious is that the high end of the market already has too many other payment options and a mobile "swipe" with special discounts or long-distance money transfer is novel, but not absolutely necessary. For lower income brackets, with no or limited access to banks and cash machines, mobile wallets are potentially far more meaningful.

The business case differs less. For both ends of the spectrum, some combination of mobile operators, banks, bank card issuers, credit and other card payment services, payment processing networks, and the technology companies that provide the requisite chips and software have to agree on: (1) who manages the wallet, including the many liability and security issues, and (2) how to divide up the tiny (usually less than 3%) flat, tiered, or percentage fees that wallet customers are willing to pay and the merchants and other payees are willing to forfeit.[1] This is not a business proposition for the impatient or anyone not already adept at revenue-sharing models. Perhaps the only surprise is how many participants in the U.S., U.K., Brazil, Zimbabwe, Kenya, India, Pakistan and the Philippines are eager to invest in wallet development at all. They include Google, Apple, (and rumoured soon, MicroSoft), Visa, MasterCard, Citibank, Bank of America, FirstData, PayPal, Nokia, Telenor, Telecel, Orange, Vodafone, Globe, and Safaricom … among others.

The next interesting question is why such an impressive roster and wide range of players all covet a tiny fractional piece of a complex and problematic business. Improving payment mechanisms for the poor and underserved—or for that matter, the rich and already surfeited—is a only a meaningful strategic objective for the corporate entities above if serious revenues and profits are involved. The first step toward understanding the monetary rationale for wallets, particularly for the underserved audience, begins with a list of the various types of m-wallets on offer. There are more than you might think.[2]

- <u>Authorised bank agent mobile wallets.</u> A branchless banking network allows trusted local agents to identify customers and act as their intermediaries. The agent's phone, coupled with unique ID security for each customer, can receive and send money on his/her behalf. Deposits, withdrawals, remittances, loan repayments, government benefits, and bill payments are all possible. Agents serve as cash-in and cash-out points and useful arbiters in case of disputes. (Eko in India and Pakistan's MCB Mobile are two examples).

- <u>Customer mobile wallets linked to bank accounts.</u> Agents are still necessary for cash-in/cash-out, dispute resolution, and back-up assistance, but customers manage their own payments and transfers via their own phones. Most current offerings are available in the US via smart phone apps (please pg. 2), but Telenor, an active player in South Asia, is also moving in this direction. For young rural and urban migrant workers, the independence and personal control of finances are strong incentives to bypass agents—and their service fees.

[1]http://www.nytimes.com/2011/03/24/technology/24wallet.html, http://technology.cgap.org/2010/02/04/a-mobile-wallet-and-the-price-ofmoney/
[2]Excerpted from http://www.gatesfoundation.org/financialservicesforthepoor/Documents/agent-banking.pdf

- Authorised mobile agent wallet. In this version, a trusted local agent, generally already performing airtime top-up and other phone-related services, can enable sending, receiving, and storing electronic money for their customers. Most countries' regulations require bank partners and the MNO m-wallets generally have less flexibility than the two bank-led models above. (Safaricom's M-PESA and Telenor's Easy Paisa with a microfinance partner are two notable exceptions).

- Customer mobile wallets linked only to MSISDNs (Mobile Subscriber Integrated Services Digital Network Number) and SIM card IDs. As with bank wallets, mobile wallets subscribers still need agents as cash-in/cash-out points, but they too enjoy greater freedom, lower fees, and the privacy of managing their own money via their own phones. Many apparently use this option less for payments and more as an alternative to bank savings.[3] (Celpay in Zambia and Fundamo working with MTN in Africa are two examples).

- Card options. For the moment, these alternatives only work with point-of-sale (POS) devices and do not include a mobile interface. That does not mean FINO in India and others cannot and may not soon.

- POS payment cards. An authorised bank agent with POS devices and bank enables customers to store money, make loan payments and recurring deposits, receive government benefits, and pay participating utilities, clinics, schools, and merchants. Examples include Brazil's Caixa Econômica Federal bank cards and FINO in India.

- Prepaid cards. Generally issued by banks as a "credit" card but pre-loaded with cash, these cards are expected to surge 40% to a projected US$59 billion in revenues in India alone in the next six years.[4] Governments in India, sub-Saharan Africa, Colombia and Brazil are also experimenting with prepaid cards for social security, unemployment, child-support, and pensions. Businesses are using them internally for payroll checks, insurance claims, and healthcare benefits, and externally for store refunds and promotions.[5]

If only to enable government benefits, healthcare, and insurance, the "why" suddenly becomes a bit more clear for all the various m-wallet participants, particularly those involved with payment cards and willing to enter developing markets. Governments make regular payments to upwards of 170 million poor people worldwide.[6] A recent Lloyds of London study estimates the microinsurance market to be between 1.5-3 billion policies globally, growing at more than 10% in some areas—and this is less than 5% of the potential total.[7]

M-wallets have three important barriers to adoption. The first is signing up merchants, institutions, and other vendors for new technology that most will have to help underwrite. The second is figuring out how to split the equivalent of three cents or less on every $1 transaction five ways (MNO, bank, cards, payments processor, and technology provider) and still make money. Finally, persuading potential customers that a wallet is a better, safer way to pay and be paid is a lot easier in places where other options are limited, but trust, convenience, and compelling need still matter before these customers will agree to try.

[3] Ibid.
[4] http://www.thehindubusinessline.com/features/investment-world/personalfinance/article2057487.ece?homepage=true
[5] Ibid, and the ILO Social Finance Network Micro-Insurance, Geneva, Sam Daley-Harris, March 30, 2011
[6] This 2009 estimate from CGAP's "Banking the Poor via G2P Payments" has almost certainly grown in the interval. http://www.cgap.org/gm/document-1.9.41174/FN58.pdf
[7] http://www.clydeco.com/knowledge/articles/growth-of-the-microinsurance-market-in-africa.cfm and Microinsurance Innovation Facility forecasts.

One solution that helps resolve all three is to eliminate "elective" use whenever possible. Non-elective wallets already exist in Brazil, India, Mexico and South Africa's government payment programmes. (Beneficiaries must use designated m-wallets to collect money, pay premiums, file claims, receive checks and reimbursements).[8] If all payments are processed via mobile transfers, administration costs drop, sometimes substantially, and fraud and leakage are easier to control.[9] And if mandatory for G2P or healthcare and insurance, institutions, merchants and other vendors are far more likely to choose m-wallets as their preferred payment/disbursement mechanism. The vexing arithmetic involved in splitting pennies among too many m-wallet providers becomes markedly less so when multiplying by hundreds of millions and billions.

Other problems remain, of course. One partner inevitably wants more control, more rewards, and fewer risks. Who "owns" is the customer is a critical question for all participants. Mobile wallets are no different from any other aspect of financial inclusion; the dominant player is still usually the bank.[10] Nevertheless, seamless cooperation amongst all players matters more for m-wallets than most inclusion efforts.

And two recent announcements—a Google-Citibank-First Data collaboration and Square, a new m-wallet led by Twitter's founder Jack Dorsey—augur well for both low-income customers and retailers around the world without credit-card terminals, electronic cash-registers, and other expensive POS devices.[11] The next logical step for Square is the same, vastly larger target everywhere else on earth. If money makes the world go round, then the next generation of m-wallets may in fact help it move around to more people in more parts of the world more easily.

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[8]http://www.cgap.org/p/site/c/template.rc/1.26.12640/
[9]Ibid. and http://www.gatesfoundation.org/financialservicesforthepoor/Documents/beyond-enablement.pdf and http://www.cgap.org/gm/document-1.9.41174/FN58.pdf
[10]See *MicroSave* Briefing Note # 98 'Branchless Banking Update: Should We Bank on Phones or The Post?'
[11]http://www.nytimes.com/2011/05/27/technology/27google.html?hpw, http://www.nytimes.com/2011/05/24/technology/24pay.html?ref=technology

Revival: Responding to High Dormancy Levels in No Frills Accounts

Anjaneyulu Ballem and Sachin Bansal

Background

Advocating financial inclusion, Reserve Bank of India's (RBI) Annual Policy Statement for the year 2005-06 notes:

"There are legitimate concerns in regard to the banking practices that tend to exclude rather than attract vast sections of population. While commercial considerations are no doubt important, the banks have been bestowed with several privileges, especially of seeking public deposits on a highly leveraged basis, and consequently they should be obliged to provide banking services to all segments of the population, on equitable basis".

RBI, since then, has undertaken a number of measures to attract the financially excluded population into the financial system. Banks were advised to make available basic No Frills Accounts (NFA) with low or nil minimum balances and charges to expand the outreach of such accounts to the excluded population.[1] KYC norms were also relaxed so that the needs of rural households that cannot establish their identity or address formally could be accommodated.

In January 2006, banks were also permitted to use the services of a host of organisations as intermediaries in providing financial services by acting as Business Facilitators (BF) and Business Correspondents (BC).[2] In addition to these measures, the RBI announced a drive for financial inclusion to be initiated in every state, whereby the State Level Bankers' Committees and the Lead Banks would be responsible for promoting 100 per cent financial inclusion in at least one district in their home state.

Current Status of No Frills Accounts

Even after so much interest taken by the central bank, only 59% of the adult population has access to formal bank accounts,[3] implying that nearly 41% of the population is still dependent on either the semi formal or informal sector to meet their financial needs.

In the four and a half years to March 2010, about 50.6 million NFAs, with an outstanding balance of Rs.53.86 million, were opened by banks.[4] However, evaluation of progress by an independent external agency at the behest of the RBI suggests that a significant number of new customers acquired by banks under the inclusion effort have remained dormant.[5] Similarly, a report by the Skoch Development Foundation[6] noted that only 11% NFAs are active. The customers' ability to transact on the newly opened accounts is severely limited because of physical and psychological distance between the customer and the bank branches.[7] A study conducted by *MicroSave*, demonstrated that most of the financially excluded target customers have opened NFAs simply to receive wages under the National Rural Employment Guarantee Act (NREGA) or other government benefits like pension and scholarships.[8] Poor households are either unaware of the various options NFAs offer or, for the vast majority, visiting bank branches to use these accounts for small transactions is simply too expensive, time-consuming, and generally an unpleasant and frustrating experience to pursue. Banks have done little to incentivise their BC's to actively promote the use of the NFAs by the customers. Hence, most of these accounts remain dormant as shown by the following graph from *MicroSave*'s recent study.[8]

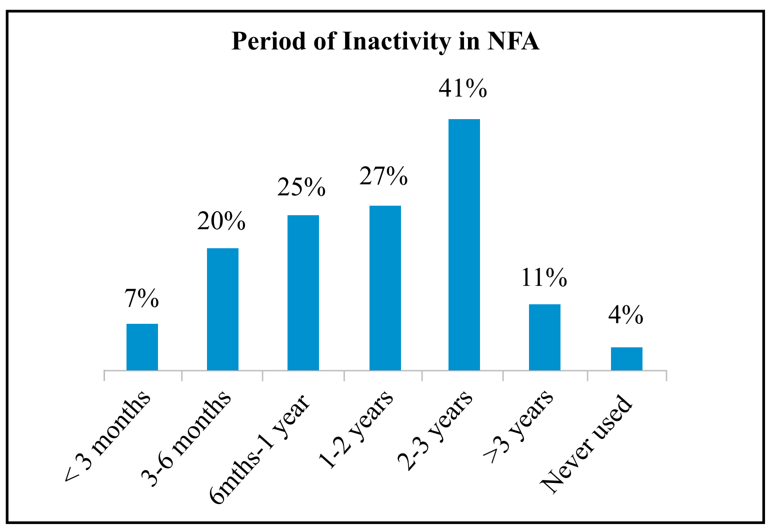
[1] RBI circular dated December 13, 2005 on Financial Inclusion through NFA
[2] RBI circular dated January 25, 2006 'Financial Inclusion by Extension of Banking Services - Use of Business Facilitators and Correspondents'
[3] Text of speech by Smt. Usha Thorat, Deputy Governor, RBI at the HMT-DFID Financial Inclusion Conference 2007
[4] RBI Annual Report, 2009-10
[5] RBI circular dated January 22, 2009 "100 per cent Financial Inclusion - Evaluation by External Agencies- Broad Findings"
[6] Kochhar, Sameer, "Speeding Financial Inclusion", Skoch Development Foundation, 2009
[7] Thorat et al., "Feasibility of Engaging Corporate Retail Networks as Business Correspondents of Banks – A Study", September 2010
[8] "Exploring Dormancy in No Frills Savings Accounts", *MicroSave*, India

> *"Bank me khata nahi ho toh tankhwaah nahi milegi isliye khata khulwaya"*
>
> **(If you do not have a bank account, then you won't get the wages. That's why we opened bank accounts.)**
>
> *"Bank me sahib log ke paas time nahi hai, woh log gussa karte hain agar bheed pahuch jaati hai"*
>
> **(Bank officials don't have time. They get angry if a large crowd reaches bank to transact.)**
>
> *"50 rupiya jama karane jao aur 100 rupiya kharcha karo"*
>
> **(One has to spend Rs.100 to deposit Rs.50.)**

Key Recommendations for the Revival of NFAs

Servicing the NFAs

Most of the banks make no concrete effort to ensure that the customers transact in their NFAs, and such accounts are opened largely to meet banks' targets. If transacting in such accounts is made easier, it would go a long way in building the trust of the customers and encouraging them to use the accounts on a regular basis. Also, reducing the distance of the transaction point from clients' doorstep would increase transactions. Customers are not able to use the account as the bank branch is quite far from their place and it costs a lot to travel to the bank to deposit money. Moreover, they also lose a day's work. Generally, the amount to be deposited is not big enough to motivate them to incur the travel and opportunity cost. If service is provided in the vicinity of their homes through the BC model, they can deposit even small amounts in line with their cash flows.



Routing Government Benefits Through NFAs

The channelling of NREGA payments and SSP (Social Security Pensions) through banks and post offices has seen very encouraging results across various states, and may enhance financial inclusion better than by just offering bank accounts. Unlike accounts opened simply to "encourage a savings habit", accounts used to transfer benefits see more transactions. These accounts also provide cash reserves to the bank, thus making banks more motivated to service such accounts. In some places, people tend to withdraw all payments as soon as their account is credited, but with experience, and education by bank staff, many account holders have started to maintain balances in their accounts.

Convincing customers about the safety of money in such accounts also motivates people to save more. However, as the bank branches are too distant and are often crowded, such accounts should ideally be serviced properly by a dedicated BC agent. These benefit-linked accounts give people a reason to visit the BC, and develop a relationship with him/her, which may, later, motivate them to use other banking services too, offered by the BC.

Proper Targeting

In many areas studied by *MicroSave*, it appears that very few new accounts have been opened by financially excluded households. Most of the NFAs have been opened by households that already had access to savings accounts, as banks were in a hurry to meet their NFA targets. Such customers have high expectations from the NFA, and do not find it useful with its limited features. So, better targeting is required, otherwise the basic purpose of providing banking services to the excluded will not be met.

Promoting Other Facilities

The NFA should be promoted as a "bank account" rather than just a savings account, as this has a lot more value for customers. For example, most banks can offer overdraft facilities based on the RBI guidelines.[9] State Bank of India, along with savings, offers remittance facility to all its NFA holders where they can easily remit money using their mobile phone.[10] Some banks also offer cheque book and ATM-cum-debit card facility to NFA holders. These additional facilities should be prominently highlighted during the marketing of NFAs. This will help attract more customers and motivate them to use their accounts more frequently, in-turn generating additional revenue for the banks.

Creating Awareness

MicroSave's research showed that there is very little knowledge amongst the customers about the features of, and uses for, NFAs. There is a need for greater marketing and education. In addition to low cost solutions such as financial literacy campaigns through NGOs or as part of banks' product marketing, aggressive marketing support from RBI and Ministry of Finance can go a long way in creating awareness and motivating people to use NFAs. Sustained financial literacy campaigns may include printing and distributing the material available with the RBI,[11] NABARD and others.[12] Customers' concerns about the safety of their money means that the role of and security of the Deposit Insurance and Credit Guarantee Corporation should feature prominently. Also, low income customers like to receive tangible proof for each transaction. This can be in the form of a receipt or an SMS in case of mobile banking. Periodic bank statements may also help to win the confidence of customers.

Conclusion

Although there is high dormancy in the NFAs, these accounts represent a large potential client base. Banks need to work on designing innovative products, improved delivery mechanisms, and appropriate marketing and incentives for the BC model. Customers are willing to pay for the banking services offered by BCs[13] and this user-friendly financial inclusion model can go a long way towards boosting the use of NFAs substantially.

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[9] RBI circular dated December 13, 2005 "General Purpose Credit Cards and Overdrafts Against 'No-frills' Account as Indirect Finance to Agriculture Under Priority Sector"

[10] http://eko.co.in/index.php and *MicroSave* India Focus Note # 68 'SBI Tatkal From Cash to Cash Cow'

[11] RBI Financial Education Initiative http://www.rbi.org.in/financialeducation/home.aspx

[12] http://eko.co.in/images/File/EKo%20Comic.pdf

[13] Platt et al. "The Answer is 'Yes'- Cost & Willingness To Pay" *MicroSave*, 2011

Clients' Willingness to Pay "Reasonable Fee" for BC Services

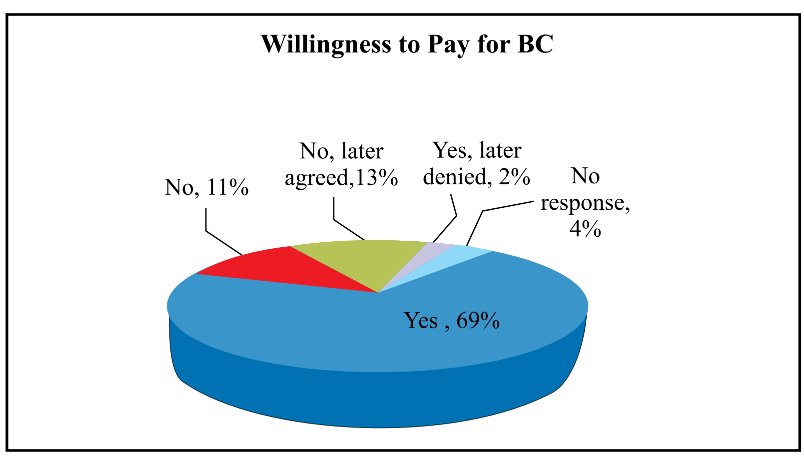
Akhand Tiwari, Sachin Bansal and Vartika Shukla

A major concern around the Business Correspondents (BC) model for both banks and BC is financial sustainability. Recent policy changes by RBI suggest that banks can levy a “reasonable fee” on the customers for various services provided through the BC channel.[1] Banks are still struggling to identify what is a “reasonable” fee. This chapter discusses whether end customers are willing to pay for financial services delivered by BCs, and if yes, how much are they willing to pay. This chapter draws from *MicroSave*’s recent “Cost and Willingness to Pay” research conducted in the states of Uttar Pradesh, Rajasthan and Tamil Nadu.

Factors Affecting Willingness To Pay

Willingness to pay for financial services delivered through BCs is directly proportional to the perceived benefits of using a BC, and the ability to pay for such services. The following factors make up customer’s mind to pay:

- ***Distance from the nearest bank branch:*** People who reside far away from the bank branch face more problems and incur costs to visit the bank and, hence, are more inclined to pay for BC services closer to their homes.
- ***Security concerns:*** People are willing to pay for BC services as it eliminates cash risk to a large extent. It also eliminates the risk of saving with private companies’ agents, who are often fraudulent.
- ***Direct costs:*** The costs of travel and snacks that occur when a customer visits the bank branch to make a transaction are saved.
- ***Opportunity costs:*** The cost of loss of work is saved; this varies from Rs.50 to as high as Rs.300.
- ***Ability to save regularly:*** With the convenience provided by a BC close to home, account holders are able to make more frequent savings deposits, even if those deposits are small.
- ***Withdrawal during emergencies:*** Availability of a BC service in the vicinity allows potential customers to make withdrawals in times of emergency.
- ***Increase women’s participation in banking:*** As banks are often located far from villages, women are not able to visit the branches. Proximity to banking services through BC encourages women to save. This also leads to increased saving base of households.
- ***Easier interactions with local agent:*** Customers do not always feel comfortable with branch staff. A local, trusted agent in the form of BC is preferred.
- ***Economy of BC:*** People understand that banks also have to incur costs to provide these services in the village; and that the agent offering these services must be able to recover his costs. So, many people are willing to pay some fee to cover such expenses.

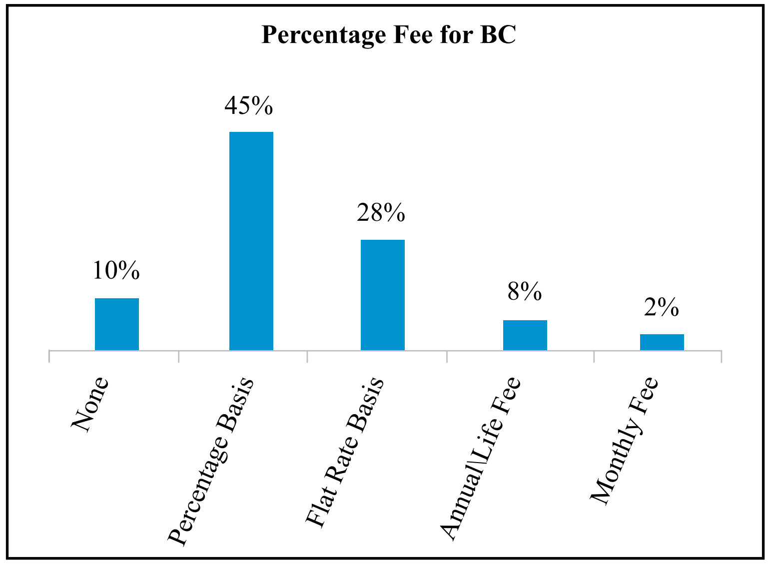


A portion of potential BC service users who initially do not wish to pay a fee, agree to pay once they understand the benefits of having a BC in their village to provide proximate, quick and easy banking (as can be seen in chart above in “No, later agreed” category).

[1] RBI circular dated November 30, 2009 on Financial Inclusion by Extension of Banking Services – Use of Business Correspondents

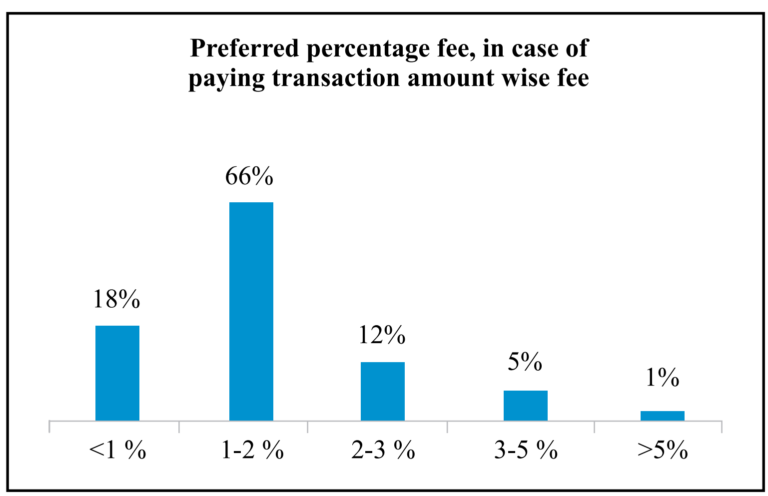
How Will They Pay?

The model of fee-to-be-charged can be based around either the amount per transaction (percentage basis) or a fixed charge for every transaction (flat rate basis).



- ***Percentage basis:*** Charging a percentage fee on the transaction amount
  <u>Rationale:</u> Customers willing to pay a percentage of the transaction are price sensitive, and have concerns about the affordability of low value transactions through a BC if a flat fee is charged. Customers transacting smaller value transaction do not want to pay similar fees to that of customers making high value transactions.

- ***Flat Rate Basis***: *Charging a standard fee every time, irrespective of the transaction amount*
  <u>Rationale</u>: Customers willing to pay on a flat rate basis (irrespective of the transaction value) linked their willingness to pay directly with the costs (mostly direct cost, but sometimes including indirect cost) they currently incur to perform a bank transaction without a BC. Though they understand that a flat rate may be punitive while transacting lower amounts, they feel this will be compensated as they will be transacting both high and low amounts in the long run and that the number of transactions will increase.



- ***Annual Fee/ Lifetime fee:*** *Charging one-time fee for availing the service*
  <u>Rationale:</u> Customers willing to pay one-off fees believe that paying a fee every time they transact might become confusing, so banks could charge an upfront fee for life time or on an annual basis.

Almost all the potential customers interviewed during the research were of the view that the overall fee should not exceed the cost of travelling to and back from the bank. A majority are willing to pay a fee only on withdrawals, and not on deposits, as levying a fee on deposits would act as a strong disincentive to save regularly. Furthermore, as banks and non-banking financial companies (NBFCs such as Sahara and Peerless) do not impose such charges for deposits, they feel that the BCs should not charge them either.

Why A Few Will Not Pay?

It is very hard to convince some people to pay for basic financial services that are available for free at bank branch locations. Also, as there are other agent models of insurance companies and some Residuary Non-Banking Companies (RNBCs)[2] that offer doorstep service free of cost, people expect banking services to be free as well. A section of potential customers might decide not to pay owing to:

- ***Security of savings:*** People who have had bad experiences saving with private, unregistered groups are reluctant to trust a local BC, even one authorised by a bank. Others find it hard to imagine depositing savings at a grocery store or with an individual. The security of deposits is understandably an issue of great importance to everyone.
- ***No charges at the bank branch:*** Customers mention that it would be unfair if a banking facility that is available free of cost to other customers (who transact in the branch) is made chargeable for them.
- ***Comparison with other savings options available:*** They compared BC services with other savings options like beesi, Sahara etc. available at their doorstep, without any charges.[3]
- ***Opportunity to travel:*** Several respondents note that BC services would take away one of the few reasons they have to go out of the village and into town.
- ***Preference for going to the bank:*** Going to the bank is sometimes combined with other activities like purchase of groceries and household supplies. Therefore, many people do not consider going to the bank a tiresome activity, or associate any cost for these visits. Also, some people find going to the bank to be interesting as they get to know about various new products and schemes.
- ***Lack of appropriate product offerings/features:*** Products like the 'No Frills Account' (NFA) are not very popular amongst some customers as they do not meet one of their major requirements: that of offering loans.[4] Also, more interest is often evinced for other savings options like recurring or fixed deposits. In addition, the NFA product lacks basic features and this also acts as a deterrent to paying fees and using the BC.[5]

What Do We Know Now?

In conclusion, the majority of customers are willing to pay a fee for a convenient banking facility close to their homes. The service, however, has to offer a range of products suiting to their needs. The chapter gives insight into factors and mechanisms that could guide the decision on the fee to be charged. It also provides a backdrop for service providers to start with what can be termed as a 'reasonable' fee; and once again, clearly highlights the importance of listening to clients.[6]

[2]See Frequently Asked Questions on NBFC for more details http://www.rbi.org.in/scripts/FAQView.aspx?Id=71
[3]These channels provide doorstep or within the village savings facility. While NBFCs like Sahara are famous for agent based models, where agents collect savings from households, Beesis are much more of village level ROSCAs
[4] "Exploring Dormancy in No Frills Savings Accounts", *MicroSave*, India
[5] See also *MicroSave*'s Briefing Note # 80 'Does Mobile Banking Require Cards?' ; India Focus Note # 37 'Listening To Clients of M-banking'
[6] See *MicroSave*'s India Focus Note # 47 "Who Says You Can't Do MicroSavings in India? Part 3: So Where to Go from Here?'

Measuring Willingness to Pay

Akhand Tiwari and Minakshi Ramji

In late 2009, on the recommendation of the Working Group to review Business Correspondent (BC) model, the Reserve Bank of India (RBI) announced that it would allow trial of 'reasonable fees' levied from the end users of the service.[1]

In order to understand the 'Willingness to Pay' of potential BC customers, *MicroSave* conducted a series of qualitative research studies in three states—Uttar Pradesh, Rajasthan and Tamil Nadu—on 'Cost and Willingness to Pay' (CWP) in the context of branchless banking.[2] This chapter presents the development and the implementation of an innovative qualitative research tool directed at determining the level of 'Willingness To Pay' (WTP) for BC services. This tool is referred to as the WTP tool and can be used to assess the extent to which existing costs of banking impact WTP.

Willingness to Pay

The WTP tool used in the CWP research builds on 'Participatory Rapid Appraisal' (PRA) techniques used in *MicroSave*'s Market Research for MicroFinance (MR4MF) toolkit.[3] The new WTP tool uses similar techniques as in other *MicroSave* PRA tools. At the same time, it allows respondents to think about the relevance of a product in their lives and to quantify this relevance with a price. It also allows them to compare the cost of a new banking service to their current costs of banking.

This WTP tool is noteworthy for two reasons. Firstly, it takes into consideration the respondents' context, which has a bearing on how s/he estimates her/his WTP. For example, we find that respondents who receive government payments via banks have a higher WTP than those who do not. Secondly, this tool takes care to ensure that respondents are not under- or overstating their valuation of the service. Facilitators can ascertain a realistic valuation through careful probing.

The WTP tool is conducted with small 'focus groups' of six to eight individuals, preferably from same socio-economic background. A facilitator moderates the discussion that revolves around the logistics of a BC arrangement, the relative merits of this arrangement, potential price levels for such a service and the rationale for the same. The facilitator also probes responses to uncover the reasons behind them. This is done through the following process:

Step 1: The BC concept is introduced to the group, using a standard script. The facilitator then checks to see if respondents understand the model. To do this, the facilitator asks one or more of the group members to explain the model in her/his own words.[4]

Step 2: The respondents are asked to indicate acceptable charges for availing the BC service. It is crucial to allow respondents enough time to think and respond to this question. Often, respondents will use this time to go back to Step 1, and to ask further questions about the model. While the facilitator must clarify any doubts about the model, s/he must not lose focus on the question of acceptable price levels. Usually, there will be differing opinions on this topic in the group, leading to multiple responses from the group and valuable discussion.

Step 3: All the different responses are recorded on flash cards and laid out in front of the group.

Step 4: The fourth step is to ask the respondents 'W' questions: "Why it is the most appropriate

[1] For more details, please refer to RBI's website www.rbi.org.in and http://www.rbi.org.in/scripts/NotificationUser.aspx?Mode=0&Id=5390
[2] See Platt et al. "The Answer is 'Yes'- Cost & Willingness To Pay" *MicroSave*, 2011 for a summary of the results.
[3] Please refer to *MicroSave*'s "Market Research for MicroFinance" toolkit, at http://*MicroSave*.net/toolkits/2/7
[4] The facilitator has some flexibility around this. Instead of asking a respondent to explain the product in his/her own words, the facilitator may just pose questions around the model to check if respondents understand of the model.

charge?", "What is the basis of arriving at this price?" etc. The facilitator probes the reasons behind all the charges that have come up in Step 3. During this step, as a result of the discussion fostered by the 'W' questions, respondents typically start increasing or decreasing the charge they recommended in Step 3. The facilitator records the reasons for the change. At the end of Step 4, the group has usually arrived at a consensus on an acceptable charge for the BC service. The charge which emerges as a consensus is usually expressed as a range.

Step 5: The fifth step is to increase the charge range from Step 3, to test the upper limit of the fees/charges that respondents would be willing to pay.[5] The facilitator should take care to increase the price in small amounts as small increments are the key to arriving at a realistic WTP. If the difference between the consensus price and the new increased facilitator-generated price is high, the respondents will reject the higher price outright. By the end of Step 5, the group has arrived at the maximum possible price which they would pay for the BC service. The facilitator records this price.

The Importance of Probing

To most respondents, the BC model is a new concept. As a result, the facilitator has a crucial role in ensuring that the respondents understand the model, eliciting a realistic WTP, probing to understand the rationale behind the WTP, while keeping the discussion focused and lively at the same time.[6] Prior to using the WTP tool, the facilitator typically asks some warm up questions to the group, which helps the facilitator understand the banking behaviour and literacy levels of the respondents. These questions also serve to establish a rapport between the facilitator and the respondents and build confidence, thus paving the way for effectively using the tool. This also helps the facilitator to probe deeper later in the discussion so that s/he can aid the group in giving voice to their thought process.

Below are some examples of facilitator probes.

- *"Why is 2% the appropriate price?"*
- *"What if it is 2.5%?"*
- *"Should the price stay at 2% of the total transaction amount if your transaction amount is Rs.500? or Rs.1,000? or Rs.5,000?"*[7]
- *"Would you be willing to pay both at the time of withdrawal and deposit? Why?"*

Challenges in Implementation

As with all market research, even if customers provide an estimation of acceptable prices, there is no guarantee that this will translate into actual behaviour once the product goes live. However, using this tool, the discussion provides significant insights into how customers think about pricing. For example, the kind of transactions they already do with bank or with informal channels has a bearing on the charges they are willing to pay. As noted above respondents receiving government benefits tend to report higher WTP.

Since many respondents have greater exposure to loans, they may try to shift the discussion to credit. As a result, some respondents compare the price for the BC service with the price to access credit. Their WTP shows perceptible increases in these instances. The facilitator should control these tendencies by moderating and maintaining the focus on savings.

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[5] WTP refers to the maximum amount, so the rationale of increasing the price range is to get that maximum range, beyond which respondents would choose not to use the BC service.

[6] Probing involves exploring all the responses that come during the discussion. It is important to give due importance to all points however insignificant they may seem as explanations often give insights that are important.

[7] This probe allows the group to do a quick reality check. Thus, varying transaction amount during the discussion is important.

Some respondents might also propose unrealistic charges while discussing the price. The facilitator can use the information provided by respondents on their average transaction amounts during the warm-up phase of the FGD to focus the attention of the group on a realistic transaction amount.

The following exhibit presents snippets from field research notes wherein a group arrives at a consensus price band of 1% to 2% of the transaction amount, for deposit transactions at a BC service point.

'Willingness To Pay' Tool in Action
Jungle Ekla No. 2 village, Gorakhpur district, Uttar Pradesh

Q1: Are you willing to pay for this service?
Respondents were willing to pay for this service, justifying it as follows. *"Bank kee suvidha is samay 99% logon ko chahiye par aisa ho nahin paa raha hai"* (99% of people want access to banking services, but somehow it seems to be impossible to achieve).

Q2: What factors influence your decision to pay for this service?
Respondents primarily talked about the significance of the time saved. *"Samay kee bachat ke anusar kuch diya jaana chahiye"* (Time saved by using the service will determine the amount that I will pay for the service).

The indirect cost of banking was also a factor. *"Ham bank nahin jaaynge to 150 bachega jiske hakdaar to aap hee honge. Par itna jyada paisa sahi nahin lag raha"*(If we don't go to the bank then we save Rs. 150, whose rightful owner is [the BC agent]. But such a high price for banking at one's village does not seem right).

Q3: How much are you willing to pay?
First response was Rs. 50 for Rs. 5,000.
Second response: 1% (same as Rs. 50 for Rs. 5,000)
Third response: 2%
During the third response, some respondents did quick back-of-the-envelope calculations. 2% seemed to a bit high for higher amount transactions. As a result, respondents decided that they would need some amount brackets/ ranges for the fess. Ultimately, the price range was as follows:
Rs. 100 - Rs. 2,000: 2%
Above Rs. 2,000: 1%
Respondents argued that people will deposit Rs. 2,100 instead of Rs. 2,000 to get a saving on commission.

Conclusion

The WTP tool has been designed to allow stakeholders to understand how low-income households think about pricing and cost. It is also an effective way to estimate what potential customers of BC services would be willing to pay for the services. The results obtained from using this tool have been summarised in Platt et al., "The Answer is 'Yes'- Cost & Willingness To Pay", *MicroSave*, 2011". While this tool has been designed to be implemented in a very specific environment, nevertheless it can be modified and used in other contexts as well. The WTP tool helped to elicit some interesting results on the potential of charging 'reasonable fees' from potential BC customers.

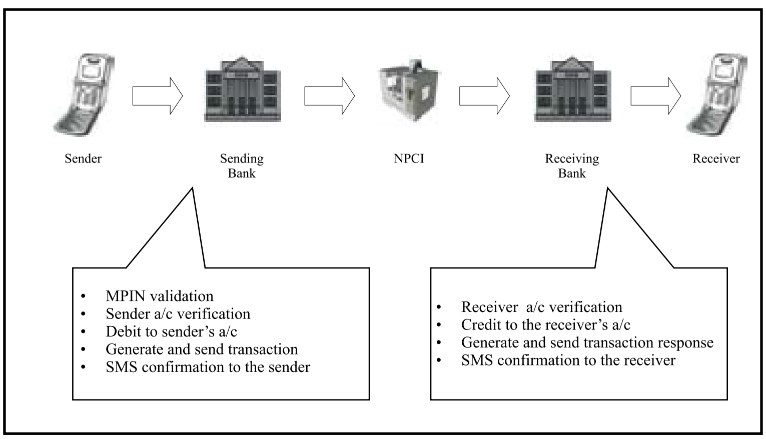
Interbank Mobile Payment System (IMPS): Will It Catalyse Financial Inclusion?

Mukesh Sadana and Graham A.N. Wright

Mobile telephony is one of the world's fastest growing industries and offers high potential for mobile money transactions.[1] Payment systems providers and mobile network operators are exploring innovative ways of popularising mobile phone-based financial transactions. Their offer is largely focused on the purchase of services, and some goods, on the mobile. Financial institutions, particularly banks, are exploring the mobile channel to increase outreach and help achieve financial inclusion. Some banks see mobile money as a business opportunity but for others, especially in India, it remains more of a means to meet a mandate.

IMPS: A Brief Introduction

IMPS or the interbank mobile payment system is a service offered by the National Payments Corporation of India (NPCI) through its National Financial Switch (NFS).[2] It offers an instant interbank electronic fund transfer service through mobile phone on a 24x7 basis. The service enables customers to use mobile phones as a channel to access their bank accounts, and to conduct interbank fund transfers with immediate confirmation. The participating entities are: the remitter (sender), the beneficiary (receiver), their respective banks and the NFS. The sender and receiver must link their mobile phone numbers to their account numbers in their respective banks. The banks will provide them with the Mobile Money Identifier (MMID), which is a randomly generated seven digit unique number linking the mobile number to the account number.[3] The sender can transfer money to a beneficiary by entering the mobile number and MMID of the receiver with amount to be transferred, authenticating the transaction by MPIN.[4]



Benefits to Customers and Banks

The IMPS provides a platform for account holders of participating banks to transfer money to any other account holder in the network. The only prerequisite is a mobile handset. Once a customer is registered for m-banking he/she can transfer funds from his/her bank account to other bank accounts. Provided there is sufficient balance in his/her account, he/she does not need to stand in queues at the bank branch or post office. And unlike, if the remittance is sent through courier[5] or a relative/ friend, there is no risk of the money not reaching the beneficiary.

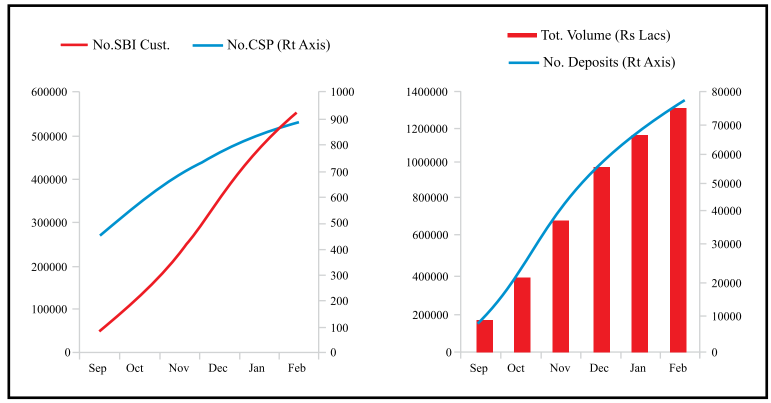
Currently eight banks[6] (representing about half of the bank accounts in India) are participating in the network while six others[7] are under IMPS certification. The existing network of participating banks

[1] See *MicroSave* India Focus Note # 4 'Electronic Banking: The Next Revolution in Financial Access?'"
[2] http://www.npci.org.in/aboutimps.aspx
[3] This is separate from the UID
[4] MPIN is the mobile personal identification number which is to be entered by the user to authenticate every transaction, just like an ATM PIN.
[5] Courier is the name given to informal/illegal money transferring agencies/ individuals that provide the money transfer service charging commission to users of their service. See *MicroSave* India Focus Note # 27 'Migrant Remittances – An Untapped Market'
[6] These are Axis Bank, Bank of Baroda, HDFC Bank, ICICI Bank, State Bank of India, YES Bank, Union Bank of India and Lakshmi Vilas Bank
[7] Development Credit Bank Ltd., Indian Bank, IDBI Bank, Syndicate Bank, Citibank and Karur Vysya Bank

is already huge (both in terms of customer base and branch network). As the number of banks using IMPS grows,

it will provide a significant opportunity for the banks to connect each others' customers.

Furthermore, as Eko and State Bank of India (SBI) have seen through linking the Eko platform to SBI's core banking systems (thus allowing account holders to remit across the country), the IMPS will provide a value proposition that customers understand immediately and value highly.



Uptake of 'Tatkal' product at Eko agent (CSP) outlets after SBI linked the Eko platform to its CBS

Opportunities and Challenges for Financial Inclusion

Apart from being a remittance service for account holders of banks, IMPS can also play an important role in catalysing the process of financial inclusion. The present structure of IMPS is for:

- Existing full Know Your Customer (KYC) account holders
- With a mobile handset
- Who register for mobile banking (m-banking) services, but
- They have to transact through bank branches, or in addition ATMs for withdrawal purposes.

Opportunities

When and where participating banks link IMPS to their Business Correspondent (BC) channel, the service can effectively create illusive inter-operability for remittances and payments and thus open a huge range of opportunities.

The present IMPS structure allows cash in/cash out through bank branches or ATMs only, and therefore the remitter has to visit a bank branch to top up her account, and the receiver has to visit her bank branch or ATM (although the remitter's and receiver's banks can be different) for cash out. However, if the remitter's and receiver's banks have linked their network to their respective BC channels;[8] both customers can perform the cash in/cash out at the neighbourhood BC agent.

This provides many benefits:

- Ability to remit money through mobile phone
- To family members/friends/relatives/children studying away from home etc.
- By registering only once for m-banking
- Without cash risks
- At a very low cost (depending on what the banks charge and what mobile network operator charges for connectivity and /or SMS)

[8] As Eko has now done with the SBI Tatkaal system

- By topping up the account at a BC outlet (for the remitter), and
- Withdrawing cash when required at another BC outlet (for the receiver)
- Leaving some money in the savings account if the whole sum is not required immediately.

The present transaction limit of Rs.50,000 per customer per day[9] appears sufficient for the low income customers given the average remittance amount they send home. For instance, the average money order sent through India Post during the financial year 2008-09 was for Rs.917.2.[10] For other channels of remittances (banks, 'courier' and other informal channels) estimates vary between Rs.2,000 and Rs.5,000, but it is certain that transactions of more than Rs.10,000 are very rare.

The service is free till March 31, 2011, after which a nominal switch fee of Rs.0.25 will be charged to the sender for each successful transaction. Adding the bank charges (whenever they start charging for this service) and the mobile network providers' charges, the per transaction cost will rise but should be cheaper than other options for remittance.[11] A money order through India Post costs 5% of the amount remitted; 'couriers' charge between 3-5%; and some banks charge up to Rs.25 for remittance amount of Rs.10,000. Moreover the transaction is completed almost instantaneously.

Challenges
Though the concept looks interesting and workable, it will face challenges during implementation.

First of all, for most banks, the BC channel itself has not yet stabilised. Issues of viability, logistics, agent and liquidity management and so on remain. Even recruiting the right entities/individuals as BCs is not an easy task.[12]

Customer awareness and financial literacy are the other areas that will present challenges. By definition, the unbanked (and even the "under banked") populations have never or rarely transacted in banks, or experienced conventional banking. As mobile money models worldwide have discovered, it is difficult to communicate and generate trust in a cutting edge technology where the money is moving in a 'cashless' manner between mobile phones. Security features of the system, like the MPIN and explaining to clients that the account number and MPIN must not be disclosed to third parties, will be also be critical for both security as well as establishing the all important 'trust' factor. Furthermore, liquidity issues at BCs may be exacerbated by IMPS, which is likely to result in large-scale demand for cash out in the first week of each month.

A robust customer complaint redressal mechanism will also be essential to take care of failed transactions, tracking transactions in case of disputes, rectifying erroneous transactions and so on.[13] If the customer experience is not good, they will just stop using the facility and bad word of mouth will prevent new customers from enrolling.

[9] Rs.50,000 if the mobile application supports end-to-end encryption and Rs.1,000 if it does not and the transaction instructions are on basic SMS. For BC customers, the daily limit of transaction is Rs.10,000 that will still be sufficient for majority of users.
[10] Calculated from Table 2 of India Post Annual Report 2009-10
[11] NPCI believes that interbank charges should be below Rs.5.
[12] See *MicroSave* Briefing Notes # 73 and # 74 'Managing Agent Networks to Optimise E- and M-Banking Systems'
[13] Between Jan 2010 and Jan 2011, the average percentage of disputes to the total number of transactions on the ATM switch has been in the range of 0.08% to 0.21%. This can be taken as a benchmark since these transactions also go through the NFS switch and the same banks are participating on the ATM network as well.

The Way Forward

Much of what has been suggested above will depend on the level of integration that banks allow between their core banking system (CBS) and the BC network. Few banks have linked the two platforms, most banks continue to keep BC transactions on a platform separate from the CBS.

Given the current regulation requiring BC outlets to be within 30 km away of the link branch in rural areas, banks with wider outreach (like SBI and Punjab National Bank) will have to take the lead in providing more BC outlets for the network. At the same time, it provides a tremendous opportunity for small or new banks with limited outreach to leverage the branch, ATM and BC network of larger banks to provide nationwide remittance services. It also provides a great opportunity for urban-centred private banks to provide remittance services into the rural areas. Thus there is a risk that the larger banks will drag their feet or use pricing mechanisms to reduce real access for their competitors.

The present regulations provide ample scope for banks and financial institutions to explore ways of reaching out to the un- and under-banked. Cooperation and coordination will be required to take advantage of the potential of these technological solutions and to create the type of inter-operable solutions that will lead to massive uptake and financial inclusion. There will be learnings on the way, but solutions will emerge as banks and financial institutions set out on the path to financial inclusion with conviction.

Unique Identification (UID) and Financial Inclusion – Solution or Not?

Sandeep Panikkal, Krishna Thacker and Jitendra Balani

Introduction

The Unique Identification (UID)[1] is one of the most ambitious projects by government of India and seeks to give identification to every citizen of this country.

- The UIDAI (Unique Identification Authority of India) will aim to create a database of bio-metric and identity details of citizens and provide a unique number to all (but not smart cards/stored-value).
- The authentication of the person's identity that is in the UID database would occur when the need arises such as for government schemes, such as NREGA payments, etc. and also for private transactions through insurance companies and banks.

The UID will encompass the collection of details, including a person's biometric data e.g. iris, fingerprints, etc., coupled with his/her demographic information and location in India. The census, which has just started, will collect data for UID standards, which will be available through a secured service provider and a highly secure data vault with precautions against threats such as hacking and intrusions. The database will have information on more than one billion people's biometrics, which is ten times bigger than any biometric database available currently in the world.

The objective of this chapter is to share some initial insights with financial service providers and other stakeholders. This should initiate internal discussions within these institutions as to how they can prepare themselves and leverage this new development and support/catalyse financial inclusion in India.

Potential Macro-Impacts on Financial Inclusion

The UID can really be a "game changer" especially in terms of financial inclusion. It can help foster true social security reform — to remove ghost clients and outright fraud by middle-men who prevent government benefits from reaching the poor. Many in the industry believe that the UID, catalysed by collaboration between telecom companies, banks and the government, can assist in the facilitation of improved financial inclusion services. Thus savings, etc. should become more convenient and less risky (without diluting security) at an affordable price for all involved. Other potential impacts are:

a) ***Regulatory Reform:*** The new UID system, if functioning well, could help the government to frame a more practical policy on micro-savings/insurance for poor people by perhaps loosening some of the restrictive measures, such as transaction limits, that currently hinder financial inclusion. The UID, with its reliable and credible identification process, should help overcome major challenges involved in fulfilling even the most basic Know Your Customer (KYC) norms.
b) ***Improve Access:*** The UID could challenge current location-bound systems and put the recipient at the centre, allowing choice, mobility and access. For example, since the UID can be authenticated from any location, a customer can access his/her account in his/her village or can do so in any other village or city through bank branches, Business Correspondents (BCs) or ATMs. `
c) ***Remove Complexity and Paperwork:*** Government-issued PAN and ration cards etc. are numerous and fragmented by purpose and region in India, which results in widespread bribery, denial of public services and loss of income, especially for poor citizens. UID could help in combining each of these identification forms into one, helping minimise/ eliminate duplicate identities and do away with entire levels of bureaucracy and paperwork.

[1] The project has since been renamed to be 'Aadhar' (meaning support, depend, the base or foundation) by the UIDAI, but this paper will use 'UID' throughout as this is what is known more commonly.

Potential Advantages for MFIs, Cooperatives & SHGs

Once implemented, the UIDs could also have a very positive impact on the microfinance, cooperative and SHG sectors, as financial delivery could become more affordable due to the reduced cost and increased credible identification processing. Some of the advantages that UID could bring to microfinance are:

Offer New Services

a) ***Savings and Insurance:*** Allow MFIs to offer additional services beyond credit, as processing time and cost for the account opening/authentication process through banks could be reduced.
b) ***Remittances:*** The remitter could send money to a specific person, minimising the risk of fraud and loss when using more informal channels.
c) ***ATMs:*** Micro ATMs, using simple wireless technology coupled with UID authenticated transactions, could be deployed by banks either directly or through service providers (e.g. BCs) to provide transactions such as deposits, withdrawals, fund transfers, balance inquiries and mini-statements. Vendors, telecoms and banks have already been in discussion about the deployment of such machines.[2]
d) ***Be a One-stop Shop:*** Beyond savings, insurance and remittances, other financial services could be offered, such as bill payments, NREGA and other social security payments, in a convenient location. This could also help to solve the challenge of sustainability for many stakeholders, including field agents and the larger institutions, by encouraging higher volumes.

Reduce Risks

e) ***Reduce Multiple Borrowing/over-indebtedness:*** UIDs could be used to track multiple borrowing through the new MFIN-supported credit bureau.[3]
f) ***Reduce Risk of Ghost Clients/fraud:*** *MicroSave* has increasingly seen increasing numbers of fraud cases, creating ghost clients, etc. in SHG- and JLG-based systems. The UID could provide an extra layer of control to reduce the likelihood of such activities, as everyone involved would be traceable and any odd transaction behaviours could be flagged much earlier.
g) ***Reduce Cash in the System:*** Cash transactions could be minimised as MFIs could directly credit (or debit) the loan amount to the UID-linked bank accounts of the clients. Fraud, theft, and even personal harm to staff, could be significantly reduced by removing as much cash as possible from the system.

Possible Risks[4]

General risks that arise from such a centralised solution includes possible errors in the collection and recording of information, difficulties in achieving the desired scale, technical hiccups, corruption of data from anonymous sources, and unauthorised access to or disclosure of personal information. Apart from the general risks, other specific risks when it comes to financial inclusion are:

a) Since the UID numbers will be long, many people, might not remember their UID and need to write them down. Awareness training for beneficiaries and staff of the licensing agencies on how to use the UID and its benefits will be essential.

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[2] http://economictimes.indiatimes.com/news/news-by-industry/banking/finance/banking/Banks-to-talk-ATM-expansion-with-telcos/articleshow/5397243.cms
[3] Recently, MFIN has recently announced it wants to become a formal partner for UID registration for this purpose. http://economictimes.indiatimes.com/news/news-by-industry/banking/finance/finance/Microfin-cos-want-to-be-a-UIDAI-registrar/articleshow/6136740.cms. But some industry observers note that MFIs essentially lend to households not individuals and thus the potential and usefulness of the UID for this purpose may be being over-estimated.
[4] For a more detailed and holistic overview on the risks involved, please refer to Sections 6 and 9 of the UIDAI Strategy Overview, available at http://uidai.gov.in.

b) Since the authentication from the UID database must be done online, connectivity could be an issue, especially with uploading and downloading large packets of data, such as biometrics.
c) The UID system is relying heavily on biometric data; however for the solutions in place throughout India and the rest of the world, biometric systems are not even close to being perfect. There are many cases of false negatives (right people being wrongly denied).
d) Some stakeholders (e.g. banks, insurance companies or field agents) may not fully buy into the UID system and require additional, back-up proof. It is very difficult to force large, bureaucratic organisations to change overnight, and for some, their livelihoods (legal or illegal) might be challenged.
e) Just as technology has not been a panacea for improving financial inclusion, UID too can only be a facilitator of processes and transactions. Financial institutions, be they semi-formal like MFIs or formal like banks, must still have the desire, creativity and resources to improve financial inclusion.
f) The UIDAI's goal is to have UIDs for 600 million Indians within the first five years, only half of India's population. Providers will need to devise interim solutions that are compatible with the UID project but also do not put efforts on indefinite hold.

What Lies Ahead

Over the last few years, India has seen critical reforms implemented to help create financial solutions for the poor. The UID number could help integrate these reforms and leverage the technology already in place into an effective low-cost solution, offering financial services to everyone at a short distance from their homes.[5] The combination of UID, mobile and bank account numbers could truly enhance financial inclusion. "Both the UID platform and the BC model, apart from existing platforms such as ATM, internet and mobile banking, will build up the required critical mass for getting closer to achieve financial inclusion in India", says Mr. Nandan Nilekani, the UIDAI Chairman[6]. The next chapter will discuss in more detail how the UID may affect mobile-banking in India.

[5] UIDAI has already been in discussions with the RBI, The Banker's Association (and SBI in particular), the Ministry of Rural Development (NREGA), insurance companies like LIC, and several donors and MFIs, such as SEWA. The RBI has asked all banks for a UID compliant financial inclusion plan to be rolled out in the next three years. Organisations are encouraged to initiate a dialogue with the UIDAI by contacting webadmin-uidai@nic.in.
[6] Mint, March 17, 2010, Unique ID Number will help bring in transparency: Nilekani, www.livemint.com.

UID for Mobile Banking in India

Akhand J. Tiwari, Anurodh Giri and Priyank Mishra

Introduction

The Unique Identification (UID) project, *Aadhaar*, "the base", as Mr. Nandan Nilekani, (Chairman of Unique Identification Authority of India, UIDAI) puts it, provides an identity infrastructure that will make identity portable; just as mobile phones made communication portable. Among various expected benefits of the UID card, one is supporting the financial inclusion agenda in India – by providing everyone with a UID card linked to a mobile phone number, and/or linked to a bank account.

The potential for m-banking worldwide to serve the financially excluded has been enthusiastically promoted.[1] India is also seeing burgeoning activity around m-banking, and large mobile network operators are making strategic tie-ups with leading financial institutions, to focus on financial inclusion.[2] Financial inclusion has many hurdles in India, but the two of the most troubling of them to regulators and customers are: 1) authentication of individuals without a fixed address or formal documentation; and 2) secure access to banking services in remote areas.

Aadhaar is seen as a way for people to establish their identity easily and effectively, to any agency, anywhere in the country, without having to repeatedly produce identity documentation.[3] The success of M-PESA in Kenya is partly due to the fact that Kenya has a national identification card. Conversely, the absence of an easy identification mechanism in Tanzania, has been identified as one of the many factors for the relatively slow growth of mobile money in Tanzania.[4]

The following discussion takes a closer look at how UID can make m-banking more accessible in India.

Authentication of Individuals

Aadhaar equal to identity/address proof and KYC

Department of Communications, Government of India (GOI) has recently acknowledged *Aadhaar* as a valid proof of identity (POI) and proof of address (POA) for the purpose of obtaining a new mobile connection. The Reserve Bank of India has also recently recognised UID number as an officially valid document to satisfy Know Your Customer (KYC) norms for opening no frills accounts with banks.[5,6] These two significant decisions provide impetus to the inclusion drive through mobile banking as it:

- Empowers people to join the financial system who could otherwise not obtain a mobile connection for the want of proper identity and address proof;
- Makes the bank accounts accessible to a large section of the financially excluded Indian population who have the UID numbers; and
- Also helps the bank to make the process of account opening relatively easy.

Secure Access to M-Banking

UID as an m-banking enabler: Account Mapper

The Account Mapper essentially facilitates the matching or verification the identification details of a

[1] See "Mobile Money in Developing Countries" http://english.cri.cn/7146/2011/04/21/2702s633311.htm, accessed on April 28, 2011. The RBI recently increased the transaction amount limit with mobile banking: RBI Monetary Policy 2011-12
[2] See "Are You Ready For M-banking" at http://www.business-standard.com/india/news/are-you-ready-for-m-banking/422760/, accessed on April 28, 2011
[3] For more details on ease and effectiveness of Aadhaar please see UIDAI website http://uidai.gov.in
[4] For further reading please refer to: Gunnar Camner & Emil Sjöblom, "Can the Success of M-PESA be Repeated? – A Review of the Implementations in Kenya and Tanzania"; Dr. Lennart Bångens and Björn Söderberg, " Mobile Banking Financial Services for the Unbanked?"; Paul Makin, "Regulatory Issues Around Mobile Banking"
[5] Vide circular number 800-29/2010-VAS dated January 14, 2011 , Department of Communications
[6] Vide notification RBI/2010-11/487: RPCD.CO.RCB.AML.BC. No.63/07.40.00/2010-11, dated April 26, 2011

customer with details in the UID database. The major challenge faced by m-banking service providers in India is identification of customers at the time of opening bank accounts and authentication during transaction.[7] This secure and quick authentication provided by the Account Mapper may be used as an integral part of the financial service delivery framework.

Doorstep authentication for micro ATM withdrawals
Micro ATMs allow customers to perform basic financial transactions using only their UID number and their fingerprint as identity proof. A micro ATM is a hand held device, for example, a mobile phone with finger print reader attached to it, which can be a suitable replacement of full fledged ATM machine. This way, the bank can reduce the cost of making money accessible to customers in distant villages by bringing down the cost of the device and the cost of servicing the customer. The process of transaction with micro ATMs is same as the normal ATM machines. Thus it involves going to a micro ATM, authenticating through the finger print reader and then performing the required transaction. The only difference is that (unlike a regular ATM) the micro ATM lies with, and relies on, a business correspondent (BC) of a bank. The BC executes the transaction for the customer after performing the required authentication.[8]

Facilitating transactions among villagers
The UIDAI's authentication process helps banks to verify distant customers and to authenticate transactions happening at far-off locations. This helps to reduce the dependence on cash and the need to maintain high cash balances at customer service points – thus reducing transaction costs. Eventually, this might also result in the reduction of the use of physical cash, which in turn, would give impetus to the flow of electronic money into the system and a cash-light economy.[9]

More potential BC options
The authentication service provided by UIDAI gives a variety of options for BC Network Managers to choose from, (such as SHGs, kirana stores, dairy agents), who earlier, due to lack of identification, could not apply to become BC agents. This allows banks to choose the best BC agent, based on the attributes that customers look for in a BC agent.[10] With the increased number of potential BC options, the bank can recruit more and better BCs for an area. Allowing multiple BC agents to operate at the local level increases m-banking options for the villagers. This could create a healthy competitive environment leading to service improvements – assuming that there are adequate customers to make BC agents' business viable.

Development of technological ecosystem
Aadhaar provides a solid foundation for technology service providers on which to build a technological ecosystem to provide a range of financial products and services through mobile banking. The possibilities in this field are numerous including, for example, building applications to route social benefit payments, provident funds and various other government subsidies delivered through the mobile banking platform.

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[7] TRAI consultation paper: Consultation Paper On Quality of Service requirements for delivery of basic financial services using mobile phones October 28, 2010 On Quality of Service requirements for delivery of basic financial services using mobile phones October 28, 2010
[8] Please read concept paper on micro ATM at http://uidai.gov.in/UID_PDF/Working_Papers/MicroATMStandards_v1Draft.pdf
[9] This is also echoed by Ignacio Mas at MMU blog, please see http://mmublog.org/blog/three-enemies-and-a-silver-bullet/
[10] *MicroSave*'s research paper, "Optimising Agent Networks"

Issues and Challenges of UID in M-banking

UID's challenge

The biggest challenge with UID right now is to accurately generate unique numbers. Another challenge is to capture the personal information from everyone, including the "uneducated" and "difficult to reach", and subsequently to enter the data collected without errors in order to issue the UID numbers.[11] Also, it is of prime importance that access to what is set to be the biggest database in the world is purely for authentication purposes, with systems to ensure the security and confidentiality of information.

Meeting customer anxieties

M-banking has its own challenges. M-banking security technologies are not still perfected.[12] There is a very fine line between optimal bank-grade security and acceptable levels of time and effort users will expend. Clients with limited education, literacy and particularly confidence in the banking system may be even less patient and forgiving – thus potentially putting the agenda of financial inclusion into reverse gear.

Socio-political

The idea of delivering government welfare payments through a UID/m-banking channel is also debated by experts who argue that getting access to social security schemes is the main hurdle for targeted populations and not their inability to prove identity. A customer with a UID linked, m-banking activated, no frills account sees no value if he/she is excluded from the list of those eligible for benefits or if his/her the money simply does not arrive. This could discourage future efforts to create financial inclusion.[13]

Technical issues

Only one bank account can be linked to a mobile number and UID number for the purpose of m-banking. Issues of downtime of database, incorrect authentication because of lack of iris detection devices with service providers (to compensate for the short-comings of fingerprint-based authentication), delays in authentication etc. all challenge the idea of m-banking using UID as the identification instrument.[14]

Summing up, UID can play a big role in proliferation of m-banking and financial inclusion in India. The success (or failure) of the UID will lie in its ability to provide a secure, safe and accessible platform for m-banking on the basis of its identity database.

[11] Census 2011 website: "India at a glance" http://censusindia.gov.in/2011-prov-results/indiaatglance.html

[12] A.B. Platt, interview, May 2, 2011, re authentication research at AT&T Interactive New Media Development Division, Morristown, NJ, USA , Axsionics, Biel-Bienne, Switzerland, October 2009, August 2010; KGFS, Dehradun, India, September 2010."

[13] EPW editions, http://epw.org.in
- Ruchi Gupta, Justifying the UIDAI: A Case of PR over Substance?, October 2, 2010 vol xlv n 136 o 40;
- Reetika Khera, The UID Project and Welfare Schemes, February 26, 2011 vol xlvi 38 no 9

[14] K Gopinath, Prof at IISC Bangalore has written extensively about technical issues with UID usage, http://indiacurrentaffairs.org/uid-project-some-technical-issues-ok-gopinath/ There are instances where customer is unable to provider fingerprints as authentication, in these cases iris authentication would play a measure role. *MicroSave* field research studies have shown that not all the customers using mobile banking like the idea of giving finger prints.

"SBI Tatkal"- From Cash to Cash Cow

Abhishek Lahiri and Swati Mehta

What Maggi is to Nestle, Lifebuoy is to HUL, Alto is to Maruti and Horlicks is to GSK, perhaps *"Tatkal"* is to Eko. Ever since this direct deposit product was launched in August 2010 by Eko,[1] it has emerged as the flagship product for this Delhi based business correspondent (BC) and technical service provider (TSP), providing technology for m-banking and agent based financial inclusion services. As Amit Mehta, Head - Sales & Distribution (Delhi-NCR) at Eko says, further corroborating the buoyant mood at Eko regarding this service, *"This is one product where we call the shots, and piggyback other ones on our channel partners comfortably"*.

What is SBI *Tatkal*?

Tatkal is an instant money transfer service that allows customers to deposit cash into any regular SBI branch based account at all existing Eko-SBI customer service providers[2] (CSPs) in Delhi, Bihar and Jharkhand. An SBI Mini Account (sourced by Eko for SBI) is not required, and the recipient only needs to have a SBI account for *Tatkal* to work. The customer is charged a flat Rs. 25 fee per transaction (this is same as the charge paid for a *Tatkal* transaction at any SBI "non-home" branch – a branch other than the branch where the recipient's account is held) with a limit of Rs.10,000 per account per day.

How Does This Work?

Tatkal literally means "this moment" or instant. In Eko's case, it is a fast track way of depositing cash into a remote bank account, which can, at times, take hours owing to long queues in bank branches. It is a simple two step process.

Step 1: A customer visits the CSP with the cash to be deposited. The CSP dials a USSD (Unstructured Supplementary Service Data) numeric string from his mobile phone to register the 11 digit account number - *543*11 Digit SBI A/c Number*Depositor Mobile Number*Receiver's Mobile Number (optional)#.

Step 2: The CSP dials another USSD string to deposit money into the SBI A/c registered - *543*11 Digit SBI A/c Number*Amount*CSP OkeKey with PIN#.

The first step returns the name of the beneficiary which is used by the CSP to confirm with the depositor. The actual deposit is completed in the second step. Once the transaction is completed the sender and the recipient receive a confirmation SMS on the mobile number(s) registered. Customers have to pay the service charge of Rs. 25 upfront.

User Profile

The target segment for this product includes migrant labors, daily wage workers, self-employed and small entrepreneurs working in the cities. Most customers use this service for remittance purposes (by depositing cash in the recipient's bank account), while others use it to make deposits in their own account. Remittances are mostly for personal use, but a small fraction also uses it to remit business payments. The average transaction size ranges from Rs.2,000-5,500. Typically the services are used by customers on a fortnightly or monthly basis.

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[1]Eko Aspire Foundation, is a Business Correspondent (BC) for State Bank of India (SBI), authorized to offer selected banking services under BC model of R.B.I of 2006.

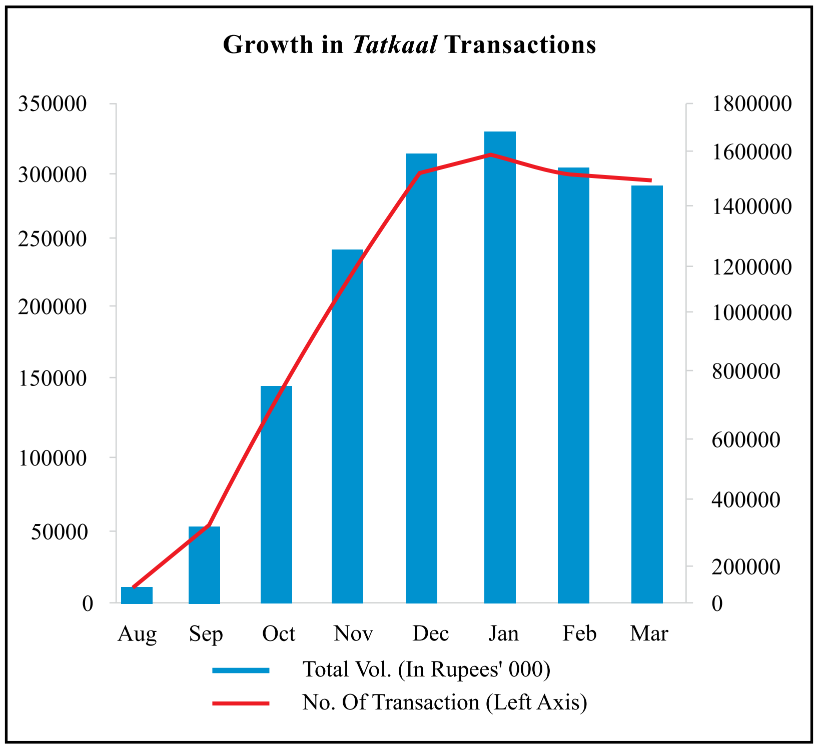
[2]Customer Service Points or CSPs are Eko authorised agents, typically a kirana shop, telecom, medical shop offering selective banking services.

Numbers Speak!

The growth and popularity of this new offering has been impressive. There has been a steady growth in both number and value of transactions since August 2010, when *Tatkal* was launched. CSPs have reported daily deposits over Rs.80 million each day in Delhi area alone. Transactions of more than Rs.8.7 billion have been made through this service till March 2011 with close to 1.6 million transactions. This service is being offered at more than 800 CSPs today.

Reasons for Growth

This growth has been achieved in a relatively small time frame when compared to other m-banking products in India, despite minimal marketing investments from Eko and SBI (banners at CSP outlets and canopy promotions have been used especially near SBI branches). This may be attributed to:



1. ***A "Pull" strategy:*** The product addresses one of the major pain points for banking customers. As discussed in India Focus Note 29 "Potential for M-Banking Enabled Migrant Remittances", increasingly remitters (that form the majority of *Tatkal* users) are using banking channels to make remittances. However, long queues at the branches and limited branch network as well as branch timings make this a daunting task. *Tatkal* at an Eko CSP is a way to speed up the process: where Eko has rolled out, there are many more SBI-Eko CSPs than bank branches and they all tend to work during hours when branches have shut; queuing in branches may take hours; visiting a CSP agent takes less than five minutes.
2. ***Word-of-mouth marketing:*** The top sources of information for the new users are either local SBI staff who direct clients to the nearest CSP location or friends/fellow remitters who have used the service. Both are credible sources of information which have helped establish trust in and authenticity of the service.
3. ***Good user experience:*** A good first-hand experience that is far more convenient than the earlier use of branch-based transactions and equally secure has further helped reinforce the trust. This has further helped the word-of-mouth marketing.

The Value Proposition

SBI-Eko's *Tatkal* product offers a strong value proposition for all stakeholders - a puzzle yet to be resolved by many m-banking implementations across the globe.

1. **Banks** have managed to de-congest over-crowded banking halls by cutting the long queues of remitters in urban centres. They are no longer afraid of losing their more affluent customers because of congested branches and can use the branch space optimally.
2. **Eko** has increased its customer base and thus visibility with this new product. This has also significantly added to its revenues.
3. **Customers** can enjoy quick and hassle free transactions.
4. **Agents** or CSPs experience a reasonably good footfall without the need for aggressive personal selling. The increased footfall also gives them an opportunity to sell other products (like stationery, or FMCG goods at a pharmacy) as well as SBI's No Frills Account sourced through Eko.

Road Ahead

In future, Eko seeks to optimise the visibility it has gained from this product. Eko's system can now reach any part of the country that has a SBI branch. *Tatkal* has proved that there is a market for demand-based customised services that offer significant value addition. For BCs and more importantly the agents, this helps achieve volumes and thus, an improved business case. Furthermore, the uptake of this product clearly demonstrates the hidden potential of mobile money in India. If the proposed Interbank Mobile Payment System (IMPS) from National Payments Corporation of India (NPCI) is successfully introduced, this could be the foundation for a revolution in financial inclusion in India.[3]

Turbo-*Tatkal* CSP!

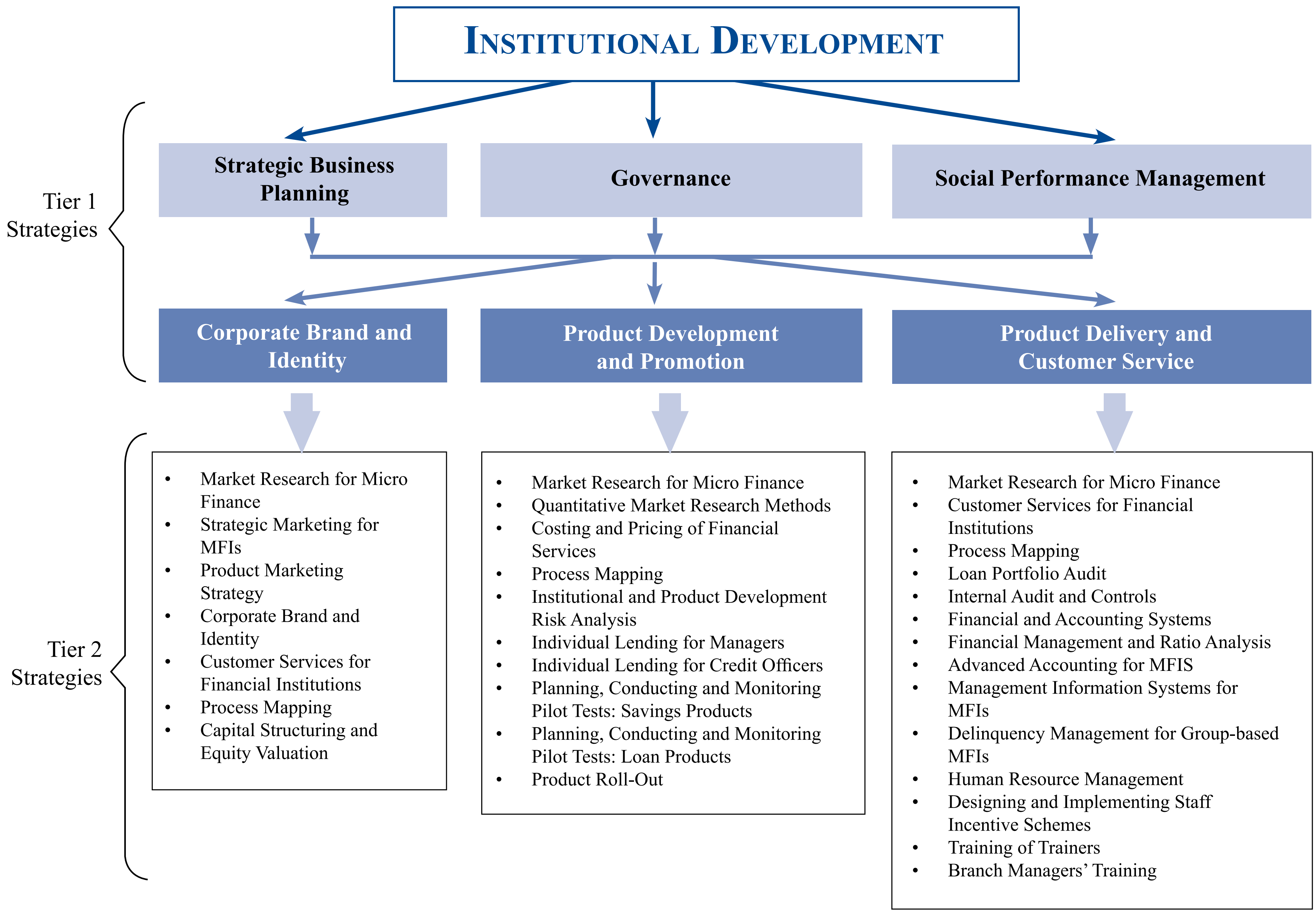
This picture is of a CSP in a semi-urban area Delhi. Located at a distance of half a kilometre from a SBI branch, he manages to service 50 to 100 *Tatkal* transactions everyday with average transaction size of Rs.5,000- 6,000. Most of the customers got to know about him from the SBI branch.

How does he manage this? He has transformed his shop into a four-man, super-efficient *Tatkal* processor where one person records customer and transaction details in the register and the second makes real time transfer and accepts cash. The other two service the non-Eko customers at the shop.

To service these transactions he loads Rs.500,000 of e-money every day onto his mobile account. This is a sizeable increase in his investment in Eko. In return, his commissions increased significantly. In one month his commissions jumped from Rs. 18,000 to Rs. 30,000!

Increased footfall brings an attractive opportunity – to capture the cash flowing in at receivers and senders end by routing it through the savings products available at the same CSP.[4] Additional products like small ticket size loans can be offered in due course, based on transaction history of customer. This will not only broaden the revenue stream of Eko as a BC, but also allow the bank to leverage the platform to widen their product range for these customers.[5]

[3]See *MicroSave*'s India Focus Note # 61 'Interbank Mobile Payment System: Will It Catalyse Financial Inclusion?'
[4]See *MicroSave*'s India Focus Note # 65 'Successful Banking Correspondents Need a Compelling Product Mix'
[5]Look out for the next second India Focus Note on SBI's Tatkal for more on this.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