MicroSave

Market-led solutions for financial services

E/M-Banking

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

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…

- **Individual Lending**
- **Product Development**
- **Savings**
- **Risk Management**

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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/m-banking initiatives in Africa and Asia, in particular working on the "soft side" of e/m-banking where the technology interfaces with the customer. Thus *MicroSave* has worked closely with a variety of providers including:

Kenya	India	Indonesia	South Africa
MPesa/Vodafone	Eko	Bank Andara	Standard Bank
Equity Bank	ICICI Bank		
Kenya Post Office Savings Bank	mChek		
	Standard Chartered Bank		

MicroSave provides support conducting market research, process mapping and analysis, pilot-testing, brand/marketing and financial education etc.

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/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 second compendium of brief publications on e/m-banking, which mines *MicroSave*'s rich experience, and blends it with that of leading consultants and practitioners in the field.

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. ***The Andhra Pradesh Crisis: What Should MFIs Do?***
   Graham A.N. Wright and Manoj K. Sharma

   This note examines how the Indian MFIs should respond to save their industry – denial is no longer an option. It examines how MFIs need to improve transparency of interest rates, governance and operations; as well as analysing and documenting their social performance management. It looks at the role of a credit bureau and concludes that ultimately, MFIs will have to move towards 3rd generation microfinance, probably on the mobile money platforms.

2. ***Market Strategy Development and 3rd Generation Microfinance in India***
   Anant Jayant Natu

   The "product-centric" approach of the first and the second generation microfinance (SHG-Bank linkage and the MFI led JLG model respectively) has proved rather inadequate to face up the challenges posed by the fierce competition resulting from a glut in microfinance service providers in certain regions. Response to these challenges calls for emergence of the third generation (3G) of MFIs that make a "tectonic shift" to the "client-centric" approach. The 3G-MFIs will put the client back at the centre of their business and will be early adopters of technology to unlock the benefits of cost reduction and efficiency.

3. ***Making Business Correspondence Work in India***
   Brett Hudson Mathews and Carolina Laureti

   This note summarises the findings of a 3-month project by *MicroSave* India to clarify prospects for a sound business model for Banking Correspondent operators under the current regulations. The study analyses three diverse cases that involve differing institutional arrangements with business correspondents and strategies for sustainability; concluding that achieving profitable operations will remain challenging under the current regulatory environment.

4. ***Exploring Domestic Remittances as a New Line of Business for Indian MFIs***
   Soumya Harsh Pandey and Vartika Shukla

   With the growing interest in remittances as an important product for the poor, this note assesses the options for microfinance institutions (MFIs). It looks at the demand for remittances, the structure of a potential remittance product, why and how MFIs might provide remittance services and the risks involved in doing so.

5. ***Potential for E/M-Banking Enabled Migrant Remittances***
   Nitin Garg, Krishna Thacker, Venkata N.A., Sachin Bansal and Graham A. N. Wright

   This note examines harnessing technology to optimise the delivery of remittance services – particularly for banks. It assesses the challenges for banks with the growing use of their core banking systems as a vehicle for remittances, and how they might transform these challenges into opportunities through using Banking Correspondents and e/m-banking. It analyses whether remittance recipients in rural areas have access to, and the ability to use, mobile phones for this purpose.

6. ***Understanding the 'Cost of Cash' for Low Income Clients: Why and How?***
   Veena Yamini A., Nitin Garg, Suresh K. Krishna and Valerie Rozycki

   Identifying the right Customer Value Proposition (CVP) is essential for the large scale adoption of m-banking or mobile money services. *MicroSave* developed a "cost of cash" tool specifically for understanding the pain involved in cash transactions (with an eye towards presenting an m-banking solution to alleviate the pain), which helps e/m-banking stakeholders to discover which suite of transactions to focus on. The initial research results helped mChek in India to refine its overall un/under-banked strategy and in developing new service offerings for its partners and end-clients. These are described in more detail in chapter "Removing the Pain from Using Cash: An M-Banking Solution?"

7. ***Removing the Pain from Using Cash: An M-Banking Solution?***
   Veena Yamini A., Nitin Garg and Valerie Rozycki

   This note expands on the cost of cash research, and presents the key findings from the study undertaken and provides insights on how an organisation may apply the tool's findings in an e/m-banking scenario. Understanding customer pain points and what value can be created by offering a new, improved one is important for mobile money stakeholders to deliver the right services to the right customers at the right price. The research tool used to assess these is described in more detail in chapter "Understanding the 'Cost of Cash' for Low Income Clients: Why and How?"

8. ***Listening to Clients of M-Banking in India***
   Nitin Garg and Swati Mehta

   This note examines the perceptions and demands of clients, the end-users of m-banking solutions. It concludes that m-banking services currently offered to the low income market in India do offer value to clients in terms of easy account opening procedures, easy deposit and withdrawal facilities, ability to deposit any amount any time etc. However, there remains significant scope for improving these services to encourage mass uptake and increased usage of the accounts offered. Diversifying the range of services offered would provide an improved value proposition for both customers, who could use m-banking for a wider range of uses.

9. ***Listening to Agents of M-Banking in India***
   Nitin Garg and Swati Mehta

   This note examines the perceptions and demands of agents, the front-line of m-banking solutions. It concludes that although present mobile banking solutions as currently provided in India do offer value to agents in terms of increased footfall, some increased revenues, opportunity to cross-sell etc., they still have a long way to go in terms of value offered to make it really attractive business proposition for agents to encourage mass uptake. That would require: 1. scale to bring more customers on to the m-banking platform; and 2. that those customers are transacting regularly. Driving regular transactions would require a strong and wider customer value proposition like remittances, savings products, payment products, etc. in addition to the current basic savings account offering deposit and withdrawal facilities.

10. ***Managing Agent Networks to Optimise E- and M-Banking Systems- Part 1***
    Graham A. N. Wright and Veena Yamini A.

    There is growing recognition that effectively managing agents is key to the success of e-banking and indeed m-banking systems. There is growing literature on the functioning of agent networks and strategies to get the best out of them. This note examines some of the international experience using the "8Ps of marketing" as a framework – focusing on the first 3Ps: Product, Price and Process. Chapter "Managing Agent Networks to Optimise E- and M-Banking Systems- Part 2" looks at 5 more Ps of marketing: Place, Physical Evidence, Promotion, Positioning and People.

11. ***Managing Agent Networks to Optimise E- and M-Banking Systems- Part 2***
    Graham A. N. Wright and Veena Yamini A.

    There is growing recognition that effectively managing agents is key to the success of e-banking and indeed m-banking systems. There is growing literature on the functioning of agent networks and strategies to get the best out of them. This note examines some of the international experience using the "8Ps of marketing" as a framework. Chapter "Managing Agent Networks to Optimise E- and M-Banking Systems- Part 1" analysed the agents of e-banking and m-banking systems in the context of Product, Price and Processes. This note extends the analysis into an additional 5Ps of marketing: Place, Physical Evidence, Promotion, Positioning and People.

12. ***M-Banking Agent Selection***
    David Cracknell

    Selecting the right agents is critical to the success of a mobile banking initiative, especially during the most difficult introductory period as the solution seeks acceptance in its target market. This note reviews agent selection, management and retention.

13. ***M-Banking Liquidity Management***
    David Cracknell

    Managing liquidity is critical to the success of any electronic banking initiative because in most emerging markets payment systems are still evolving and most transactions are still in cash, "cash is king". Ensuring agents have either e-money or cash when customers require it, is the essential challenge of m-banking liquidity management. This note examines how to design successful liquidity management systems and the issues that arise.

14. ***Practical Advice to Reach a Tipping Point in M-Banking Solutions***
    David Cracknell

    M-banking is maturing into a global industry, such that it is possible to determine the steps that providers have taken to reach a tipping point. This note seeks to provide pointers and ideas for achieving scale. It examines: providing value addition to cash; incentivising customers; building an agent network; transaction drivers; who pays and how; and where to provide services.

15. ***Mobile Payments: Ten Years On, What Has Changed?***
    Richard Ketley

    A decade ago it seemed clear that it was only a matter of time before mobile payments and mobile banking became a major part of the way in which poor people received financial services. This note considers some of the key developments. Providing that a dominant and interoperable transaction infrastructure emerges, there should be major opportunities for MFIs to re-engineer business process to reduce costs using the capabilities of mobile payment platforms. This is already happening in the Philippines, and in Kenya.

16. ***Does Mobile Banking Require A Card?***
    Richard Ketley

    Mobile banking was always going to be the alternative to cards, a cheaper easier to manage product/channel combination that would sweep away the straight jacket of pricing and rules associated with the card industry. However it now seems likely that realising the full potential of mobile banking is most likely to come from the integration of mobile and card solutions, products and channels.

17. ***Mobile Payments – Rethinking Partnership Strategies?***
    Richard Ketley

    Almost all mobile payment strategies require a close and complex set of relationships between mobile network operators, banks, reseller agents and payment solution providers. This note explores some of the key issues in defining these partnerships. For MFIs the key opportunity is the emergence, in some markets, of large networks that can be leveraged to transform the operations of a MFI without the need for a "partnership" with the provider.

The Andhra Pradesh Crisis: What Should MFIs Do?

Graham A.N. Wright and Manoj K. Sharma

India Focus Note # 56 "The Andhra Pradesh Crisis: So What Next?" highlighted the problems Indian microfinance now faces. This note examines how the MFIs should respond to save their industry.

Transparency of Interest Rates

First and foremost, MFIs need to respond to the accusations that their pricing is not transparent – a common charge that is echoed around the world in microfinance, and points to a clear and present need to change. However, it is worth noting that the pricing of loans with fixed process or passbook fees, coupled with an interest rate that is usually expressed in terms of flat rate on principal, means that the Annualise Percentage Rate (APR) may vary with each loan. Furthermore, clients do not always understand APR, as typically informal sector interest rates are expressed as "X% of loan outstanding at the beginning of the month", or "Rs.X per Rs.100 outstanding". Often clients are above all interested in how much they have to repay each week. So pressing for expression of interest simply on an APR basis may add little real transparency for clients. Bangladesh has recently introduced a requirement that interest rates be expressed on a declining balance basis and that the upfront fees (which are also being capped at Tk.15) are clearly expressed separately from the core cost of the loan. But, of course, this masks the real effective interest rate.

Other elements of the typical MFI's loan package that obfuscate real effective interest rates include grace periods, the number of weeks over which the loan is to be repaid and requirements/"encouragement" to prepay the loan (most of which would be addressed by a move to declining balance-based interest rates). In addition, the commonly bundled loan-life insurance cover, compulsory savings or loan insurance funds will need to be unbundled to promote transparency in pricing. Clearly there is a need for an industry standard way of pricing, and a real commitment to helping clients to understand the real cost of their loans.

Transparency of Operations and Governance

MFIs in India have a very real credibility problem when it comes to transparency of operations and governance – and continue to under-estimate how damaging this can be. The sudden and mysterious sacking of Managing Director and CEO Suresh Gurumani and his replacement with M. R. Rao, just two months after the IPO, resulted in a 6% dip in the organisation's share price. Discussions with bankers repeatedly show that the price of loans advanced to MFIs depend greatly on perceptions of their transparency and governance. However, MFIs, large and small, continue to ignore this sacred tenet.

But the challenges are in many ways more profound, India Focus Note # 41 "Microfinance – Time to Get to Back to Basics?" highlighted concerns about the lack of transparency in transactions amongst many of the larger MFIs. Professor Sriram's analysis of the dealings of some of the leading MFIs confirmed concerns that many industry insiders had long since harboured.[1] Whether the dealings are strictly legal or not is unimportant; in a politically and social sensitive environment like microfinance, it is essential to be, and be seen to be, transparent and honest in all dealings … as Professor Yunus and Grameen Bank discovered amid a maelstrom of negative press in early December 2010.[2] However, the strong response that Professor Sriram's article elicited from some quarters just showed that months' before the crisis, the industry was still in denial.

MFIs in India, and indeed elsewhere in the world, need to establish outstanding levels of transparency and governance – in all parts of their business, financial and operational. They deal with a sensitive segment, the poor of the country, and should not only do good, but should also be seen to be doing so.

[1]Sriram, M.S., "Commercialisation of Microfinance in India: A Discussion on the Emperor's Apparel", W.P. No. March 4, 2010, IIM Ahmadabad, March 2010

[2]http://www.bbc.co.uk/news/world-south-asia-11899506 and http://www.bbc.co.uk/news/world-south-asia-11947902

Improved Analysis and Dissemination of Social Performance

MFIs often collect data about the nature of the clients they serve, but this typically remains on loan application forms, unanalysed, in branch offices. But this data could provide important insights into how MFIs are reaching the very people that the Government of India is so keen to have served. Furthermore, very few MFIs are tracking their social impact – not least of all because of how difficult it is to do effectively without falling into attribution and selection biases. This problem is compounded because the tools available and currently being promoted focus on depth of outreach rather than how best to serve the poor. Analysing and acting on social performance analysed on the basis of client satisfaction and loyalty makes business sense – not just because it can be used to describe how the MFI is performing to external stakeholders, but also because it enhances the client responsiveness of the MFI.

Given the sensitivities involved and the vulnerability of MFIs' target customers, it is imperative that MFIs pay more attention to the basics of their business and the missions for which they exist: listening to and providing clients appropriate financial services. *MicroSave* has been concerned that the rate of growth of Indian MFIs and their loss of relationship with their clients for several years now.[3]

The concrete steps that MFIs can and should take are to:

- Follow stricter policies around client protection principles and do no harm. Maintaining transparent and fair pricing/interest rates, addressing multiple borrowing/lending and ensuring appropriate collection practices is the starting point (and the bare minimum). Understanding clients' perspectives of what client protection actually entails is also essential.
- Take steps towards ensuring client delight through offering a range of high quality, client-centric and flexible financial products in a manner that is appropriate and suitable for clients.
- Develop a strategy that makes sense for the company, the management and the mission – not copy-paste from others.
- Improve communication with the stakeholders such as government officials, media about the social side of the microfinance, the nature of, and the benefits for, clients served.
- Grow and expand, but at rates that are manageable and enables human resources to be integrated into the institution rather than becoming loan disbursal machines.

The points listed above seem clichéd. But despite repeating them on many occasions in the past, they have not be given enough attention, to the detriment of the entire fledgling industry. Meeting these challenges not only helps MFIs meet their mission and social performance needs, but also clearly makes business sense and enhances risk management (including strategic and reputation risks).

Establish a Credit Bureau?

The Indian MFIs that comprise the membership of MFIN are proposing to establish a credit bureau, which they believe, will allow them to mitigate the risk of over-indebtedness. However, even with the national unique identification number, a credit bureau may struggle to deliver information that is valuable in terms of reducing over-indebtedness for two important reasons. Firstly, MFIs effectively lend to a household not an individual … and it is from the household income and expenditure flows that the repayments will be managed. In the event of one member of the household being blacklisted on the credit bureau, another can easily step in and join another MFI(s). A second, related point, is that the informal sector will not participate in the credit bureau, and as the recent IFMR study[4] shows, the vast

[3] See *MicroSave* India Focus Note # 42 "Microfinance In India: Built On Sales Targets or Loyal Clients?"
[4] http://microfinance.cgap.org/2010/11/11/who%E2%80%99s-the-culprit-accessing-finance-in-andhra-pradesh/

majority of poor households' loans come from informal sources. So the database will only show a small proportion of the debt burden of the households registered.

Move to 3rd Generation Microfinance[5]

Ultimately MFIs need to provide a suite of products to their clients to reduce their vulnerability and enhance their ability to earn income. This cannot be done by delivering mono-product, group-based lending. Poor people need a wide range of financial services – and many need considerably larger loans than group-based MFIs (or indeed SHGs) are typically offering them. This provides a tremendous opportunity to use banking correspondents to offer the full range of financial services (savings, credit, remittance and insurance) and thus real financial inclusion to the poor of India.

This range of financial services delivered by banking correspondents would deepen the relationship between the client and the financial service providers. High quality saving services, so often demanded by clients in focus groups held by *MicroSave* in the villages across India, would allow poor people to build financial assets to help manage their household budgets and loan repayments through the lean seasons and household crises. Remittance and payment services could remove the pain of spending both time and money getting to, and waiting in, the bank to access the cash, which could be delivered in the village by the banking correspondent instead.[6] Microinsurance products, to reduce households' risk, or provide a long-term savings mechanism, could also be accessed through the banking correspondent too. Clients would repay loans to secure on-going access to wide range of valued financial services rather than because their group and a credit officer were pressurising them to do so – moving to a carrot- from a stick-based incentive.

MicroSave calculates that loans of Rs.20-25,000 are adequate to cover the costs of conducting a cashflow analysis of and reference checks on the borrower's business and household, and thus to offer an individual cashflow-based loan. Performed well, such analysis (while not perfect) may offer a better chance of assessing the risk of over-indebtedness than a credit bureau. Furthermore, if delivered on a mobile phone banking platform alongside other financial services, individual cashflow based lending could reinvent the way the MFIs' front-line staff interacts with their clients. The mobile phone technology could take care of loan reminders, collections and initial follow-up; thus allowing staff to focus on origination, appraisal, monitoring/client relationships and the (hopefully) few cases delinquency. Coupled with an agent based network, this could be the answer to a low cost model that India needs at the moment.

[5] See *MicroSave*'s India Focus Note # 26 "Market Strategy Development and 3rd Generation Microfinance in India"
[6] See *MicroSave*'s India Focus Note # 29 "Potential for E/M-Banking Enabled Migrant Remittances"

Market Strategy Development and 3rd Generation Microfinance in India

Anant Jayant Natu

Introduction

Microfinance in India has evolved over the past two decades since its inception in early 1990s. The SHG-bank linkage model, its first prototype, was an offspring from an unlikely marriage between the social intermediation role of the civil society and the financial intermediation of banks, with RBI and NABARD acting as more than willing midwives.

As the business potential of microfinance dawned on many, microfinance institutions (MFIs) took on the task of both the social and financial intermediation. Thus an alternate channel for microfinance arrived (somewhat belatedly by comparison to elsewhere in the world). This was second generation microfinance for India. Most of the MFIs adopted the Joint Liability Groups (JLGs) methodology and standardisation became the new mantra for achieving rapid growth. Over the past 2-3 years, NBFC-MFIs operating under predominantly JLG-based methodology have emerged as a significant and rapidly growing force.

Nonetheless, SHG-based systems still serve three quarters of the overall microfinance clients in India and have two-thirds of the total loan outstanding[1]. Some would argue that SHG-based models are still the most relevant model for certain segments of India's poor. Nonetheless, there is growing evidence of significant problems with SHG-based models' portfolios[2], and some issues within those of JLG-based MFIs, particularly in competitive areas of the country. With competition comes change.

The Changing Environment - A Tectonic Shift?

Interestingly, the formal, public sector financial institutions (Regional Rural Banks, Cooperative Banks etc.) are still not competing in the microfinance market.

But the burgeoning number of MFIs, and the relatively narrow focus of their products, has meant that intense competition has emerged, particularly in the southern states and in some limited areas of the east. This has provided microfinance borrowers with unprecedented access to credit. This has been a boon for them, but not without the concomitant vices of competition. Many of the larger MFIs are now responding to the demands of their commercial equity investors for very rapid expansion by adopting a "sales" driven approach for increasing outreach. The dash for growth has also seen several MFIs over-stretch their management capabilities and systems, resulting in significant portfolio problems.

In addition, there is growing evidence of clients "patching" loans together from several MFIs in order to meet their needs for finance. For example a high yield heifer costs around Rs.30,000 (USD $600) – more than any one Indian MFI will lend under a traditional group-based system. The proliferation and massive growth of MFIs has meant that (so long as they are willing to sit in the groups each week) clients can access three (or more) loans from different MFIs. Unsurprisingly, while many clients successfully take multiple loans to finance larger projects, others become over indebted – this has led to growing signs of stress in MFIs' portfolios, most dramatically evidenced in Kolar district in Karnataka[3].

To respond to the cut-throat competition MFIs are trying out different approaches that range from the desperate to the deliberate. The desperate measures have bordered on the unethical like "poaching" both credit officers and even groups from rival MFIs. Other more deliberate attempts have included offering individual lending (IL) product to their old clients[4]. But the design of many MFIs' IL product is little different from their group loans – except that group guarantee is replaced by a single guarantor.

[1] "Bharat Microfinance Report: Quick Data-2009", Sa-Dhan
[2] See *MicroSave* India Focus Note # 15 "Delinquency in Self Help Groups"
[3] See *MicroSave* India Focus Note # 25 "Dinosaurs and Rabbits"
[4] 6 of the top 50 MFIs in India are offering IL product. Refer "India Top 50 Microfinance Institutions; October 2009; CRISIL ratings

Basic evaluation of the enterprise is usually performed, but the product is rarely customised to respond to cash flows, or even the financing needs, but rather reflects a pre-defined stepped loan schedule. And few MFIs invest in the skill sets required for a successful IL programme[5].

In being “reactive” to the competition (and in some cases their private equity investors), many MFIs are losing sight of the raison d’etre of their existence - their clients. It is increasingly clear that the challenges of competition must be countered by bringing client back as the “focus” of their business. This shift in focus will bring a “tectonic” change in the way MFIs do microfinance and see the emergence of 3rd Generation microfinance institutions (3G-MFIs).

3G Microfinance Institutions: “Expansion” to “Engagement”

A 3G-MFI is continually asking itself one basic question: “What share of my client’s financial needs is being met by us?” It will seek to be a “one-stop-shop” for all her financial needs in manner that “delights” her. The very mission of the 3G-MFI sets it apart from its competitors, as it no longer treats its client as a headcount, but as an individual with dynamic needs.

One distinct feature of any 3G-MFI is their long term market strategy. They consciously choose to pursue the strategy of product modification and new product development over market penetration and geographic expansion. This shift of strategy from “Expansion” to “Engagement” is shown in the figure below[6].

		PRODUCT		
		Existing	**Modified**	**New**
MARKET	Existing	Sell more of our existing products to our existing customers **(Market penetration)**	Modify our current products and sell more of them to our existing customers **(Product modification)**	Design new products that will appeal to our existing customers **(New product development)**
	Modified	Enter and sell our products in other geographic areas **(Geographic expansion)**	Offer and sell modified products to new geographical markets.	Design new products for prospects in new geographic areas.
	New	Sell our existing products to new types of customers (Segment invasion)	Offer and sell modified products to new types of customers	Design new products to sell to new customers (Diversification)

3G-MFIs will see the growth in terms of improvements in their clients’ financial well-being, and the MFIs’ ability to serve them over a long time. Some MFIs are even looking at using full life time value of customer analysis as a basis of their planning. 3G-MFIs will also grow horizontally, but this will not be their dominant strategy; and they will grow horizontally only to an extent that does not compromise their engagement with existing client segments.

[5] See *MicroSave* India Focus Note # 14 “Challenges of Introducing Individual Lending in India” and *MicroSave* India Focus Note # 31 “Risks and Challenges in Individual Lending”

[6] See *MicroSave*’s India Focus Note # 29 “Potential for E/M-Banking Enabled Migrant Remittances”

3G-MFIs: How Will They Do It?

3G-MFI will operationalise the strategy of deepening engagement by:

1. Offering clients a suite of financial services in response to their full spectrum of financial needs – credit, savings, remittances, insurance etc.
2. Focusing on convenience for all clients – so that products respond to clients' needs, and not just those of the institution.
3. Leverage technology, particularly e/m-banking to increase transaction efficiency and reduce costs.
4. Add supplementary services, such as the "livelihood" services or education/food security services[7] or possibly even health services.

One of the pioneers of 3rd generation microfinance has been the IFMR Trust Holdings, which provides "Wealth Management" support to its clients. Wealth management is a notion that transcends product-centric thinking and the traditional focus on outreach alone. The wealth management perspective calls for institutions that are embedded within the community and growing vertically rather than horizontally. It means they will serve a limited set of clients in a more comprehensive manner, rather than be spread across a large number of clients across geographies. It also means that the institution offers its services to all people in the communities it serves[8].

Challenges for 3G-MFI

Since 3G-MFIs look at microfinance from a different perspective; they need do things differently from other MFIs, specifically:

1. Train the front-line staff intensively for them to be able to provide "wealth management" advice.
2. Offer savings services through Money Market Mutual Funds or other collaborations.
3. Tie up with other institutions to provide tailored remittances, insurance, pensions and other products and services.
4. Optimise the use of technology to allow tie-ups and reduce time spent on processing and back-end operations.

Conclusion

Given the saturation in a growing number of geographic markets, it is imperative for the MFIs to shift from a "product centric" to a "client centric" approach. The product-centric approach worked in uncompetitive markets with a huge demand-supply gap, and when the imperative was for rapid expansion. But as the number and outreach of MFIs has grown, supply is no more a constraint in many regions.

Clients are in a position to pick-and-choose the MFI that offers them the most value. The 3G-MFIs will be quick to sense this "tectonic shift" in the dynamics of the highly competitive markets, and do everything they can to put the client back at the centre of their business. This focus will translate into a respect for client's time and dignity, and into making the entire spectrum of financial services for her livelihood available to her – a welcome prospect for both clients and those who believe in microfinance as a service for development and poverty eradication.

[7] Equitas is building in such services
[8] IFMR Trust Synthesis Newsletter August 2009

Making Business Correspondence Work in India

Carolina Laureti and Brett Hudson Matthews

Background

As of 2007, 46% of the adult population in India lack a savings account.[1] The Business Correspondent (BC) initiative in India is a regulator-led effort to address the lack of convenient savings services for low income people. It was launched in January 2006,[2] but subsequent performance has disappointed. Many stakeholders now concur that the BC model must be transformed from its current status as a "social add-on" into a sustainable business.[3]

This note summarises the findings of a 3-months project by *MicroSave* India to clarify prospects for a sound business model for BC operators under current regulations. The study analyses three diverse cases that involve differing institutional arrangements and strategies for sustainability.

Eko – Eko Aspire Foundation and Eko India Financial Services Pvt. Ltd. were formed in September 2007 to extend banking facilities in unbanked areas via mobile phone-based technology and a network of retail outlets called customer service points (CSPs). As BC to the State Bank of India, Eko is now piloting a 'No Frills' savings account[4] in Uttam Nagar, a suburb in west Delhi.[5]

Prayas – Prayas JAC is a Delhi-based NGO that started its BC operations towards the end of 2007, partnering with ICICI Bank in two of its branches in Jahangir Puri and Bawana. Prayas offers the 'APNA' no frills bank accounts using a point-of-sale (POS) device, a dedicated smart card for each client, and biometric authentication. The technology is supported by FINO.

Drishtee – Through its network of village-based service delivery agents or 'kiosks', Drishtee Development and Communication Ltd. is delivering its own microcredit product. It has also partnered with two banks (SBI and HDFC) to deliver 'No Frills' savings accounts. Its POS-based technology is provided by A Little World (ALW).

Methodology

The study firstly estimates, for the three business models, costs and revenues of the current BC business ("reference" period) consisting in delivering no frills bank accounts with only cash withdrawal/deposit facility. It then analyses the behavior of costs and revenues under various scale-up scenarios in an effort to identify general principles for BCs that wish to achieve sustainability.

All parties (BCs, banks and technology companies) must make money. An important assumption in modeling was that the current offer prices of banks and technology companies do not change during scale up. Since the focus is on sustainability of the BCs, these prices can then be treated as a proxy for the sustainability of other players in the model.

[1] Report on Currency and Finance (2006-2008), Reserve Bank of India.
[2] RBI/2005-06/288 (RBI Circular dated January 25, 2006).
[3] As evidenced at the recent policy retreat on BC/BF (CGAP/Access, at the College of Agricultural Banking, Pune) on May 15, 2009.
[4] 'No frills' accounts are low cost accounts requiring no minimum balance.
[5] The Eko business concept is detailed by Sanjay Bhargava et. al. in 5 Whitepapers on Financial Inclusion (posted on www.eko.co.in).

Revenue: Transactions or Balances?

Bank commissions are the primary source of revenue for BCs. They are usually based on the number of new clients enrolled, the volume of transactions, and client balances. Each BC may also sell a limited number of products other than the 'No Frills' account (for example, recurring deposits or insurance). The table summarises revenue structures for the three cases.

Basis of Commission Payments	Eko	Prayas	Drishtee
Client enrollment (per new client)	Rs.10	Rs.30	Rs.10
Per transaction	none	Rs.1	none
On value of transaction	0.5%	none	0.5%
On balances outstanding (quarterly)	None	2%	None
On active accounts (quarterly)	Rs.40	None	None
Other revenues BC business	Yes	Yes	Yes

Note: Drishtee and Eko then pay commission to their agents and super agents from these revenues

There are two revenue models: one based on the value of transactions and the other based on the value of balances.

- The transaction-based model ties BC earnings directly to work activities performed. A commission of 0.5% on deposits and withdrawals discourages transactions of less than about Rs.150-200. Sadly, recurring deposits of less than Rs.100, which might appeal to poor savers, could bankrupt the BC as the cost of service delivery exceeds the income.
- The balance-based model (Prayas—ICICI) ties BC earnings to the overall balance/health of their clients' accounts. While this creates incentives for BCs to invest in client education, balances may be very small at first even if transactions are frequent. This makes the path to sustainability slower and less predictable.
- Revenues earned by the BCs from their agents (licensing and franchise fees, security deposits etc.) have no material impact on the profitability of the business models studied.
- Client enrollment fees are valuable but supplementary.

Cost Drivers

The chart presents the 7 cost categories of the models studied.

	Description	E	P	D
1. Fees to agents	Payout to the retail outlets (typically a portion of the commission the BC Company receives from the bank).	✓ +		✓ +
2. Marketing/ promotion	Financial education of customers, promotional materials (sign boards and pamphlets), and call center (for customer queries, grievance and satisfaction).	✓ +		
3. Channel management	Identification and training of agents and service personnel. Monitoring of outlets' on-going performance, client satisfaction and service quality.	✓		✓
4. Processing transaction cost	Opening/closing of accounts, processing of cash withdrawal/ deposit. Transport and insurance costs to handle cash. Cost of balancing the cash in the till.	✓	✓ +	✓
5. Liquidity cost	The opportunity cost of working capital required to meet cash withdrawal needs of the clients.		✓	✓
6. Technology cost	Hardware: front-end and back-end devices, communication hardware. Software: platform's development and maintenance and integration with bank data system (Core Banking System).	✓		
7. Overhead cost	Back office staff, running costs of the offices and depreciation of capital investments.	✓	✓	✓

E = Eko; P = Prayas; D = Drishtee.
(+) "Plus" identifies the most important cost categories for each case.

The main cost observations are:

- Access to a strong distribution system is critical, as no one can afford to build a dedicated system from scratch: Prayas and Drishtee are levering systems they already developed, while Eko is building a network of 'kirana' shops in the complementary business of mobile airtime.
- The technology-based 'self-service' model (e.g. in mainstream banking, the ATM) is not yet available. Service personnel are still needed to process transactions in every case. The cost per transaction remains significant.
- In the long term, the most relevant (variable) cost for both Eko and Drishtee is pay-out to their retail agents, typically a share of the commission received from the bank.
- Unlike the other models, Prayas delivers services directly through its staff, who also act as tellers in the NGO's offices. The result is a higher ratio of fixed to variable costs and a longer path to break-even.
- Balance-based models face potentially enormous client education costs to attract substantial savings.

Recommendations for BCs: Crossing the Double Hurdle

BCs and their agents must break even twice – first through sign-ups, and second through converting sign-ups into active users. After agents have signed up everyone they can in their service area, a very different skill-set, time horizon and marketing strategy are needed to hit the second stage of profitability. "A majority of No Frills accounts opened by BCs have remained non-operational. Retaining customers after the initial transactions proves to be a big challenge."[6]

Transaction-based BCs can achieve rapid sustainability by targeting clients who demand larger, one-time transactions like remittances, cheque deposits and time deposits. They must also discourage loss-making transactions like small deposits and withdrawals, and small recurring deposits. If recurring deposit limits are kept high, and time deposits actively marketed, losses from the former can be more than offset through profits in the latter. The willingness and ability of banks to accomplish system integration between their core banking system and the BC is another critical success factor.

Balance-based BCs require a longer investment horizon. Offering a wide range of useful financial products around the no-frills leader should impel a gradual rise in balances over time. Withdrawals and frequent small transactions must be discouraged. Moderately large recurring deposits (>Rs.150) have a major positive impact over time, especially if maturing ones can be retained/rolled over into time deposits.

In both models BCs can hit break-even faster through adding supplementary business lines with quick, profitable pay-back. For BCs with microcredit experience this is a natural add-on, since they have already incurred the cost of setting up and maintaining a viable distribution channel. The agent model can reduce the overall cost of delivery as agents can usually take on and manage more of the lending risks, and may require lower salaries than MFI staff. However, agents' activities are also subject to less direct control. The BC will be dependent on the agents' initiative for the pace of business growth, and dependent on their networks and business performance for portfolio quality.

As volumes increase, banks may increase product complexity and mix transaction- and balance-based incentives in their models. BCs should be careful to master one approach before focusing on the other, as the two approaches have very different institutional, control and marketing implications, and require different skill sets from staff and agents.

Conclusions

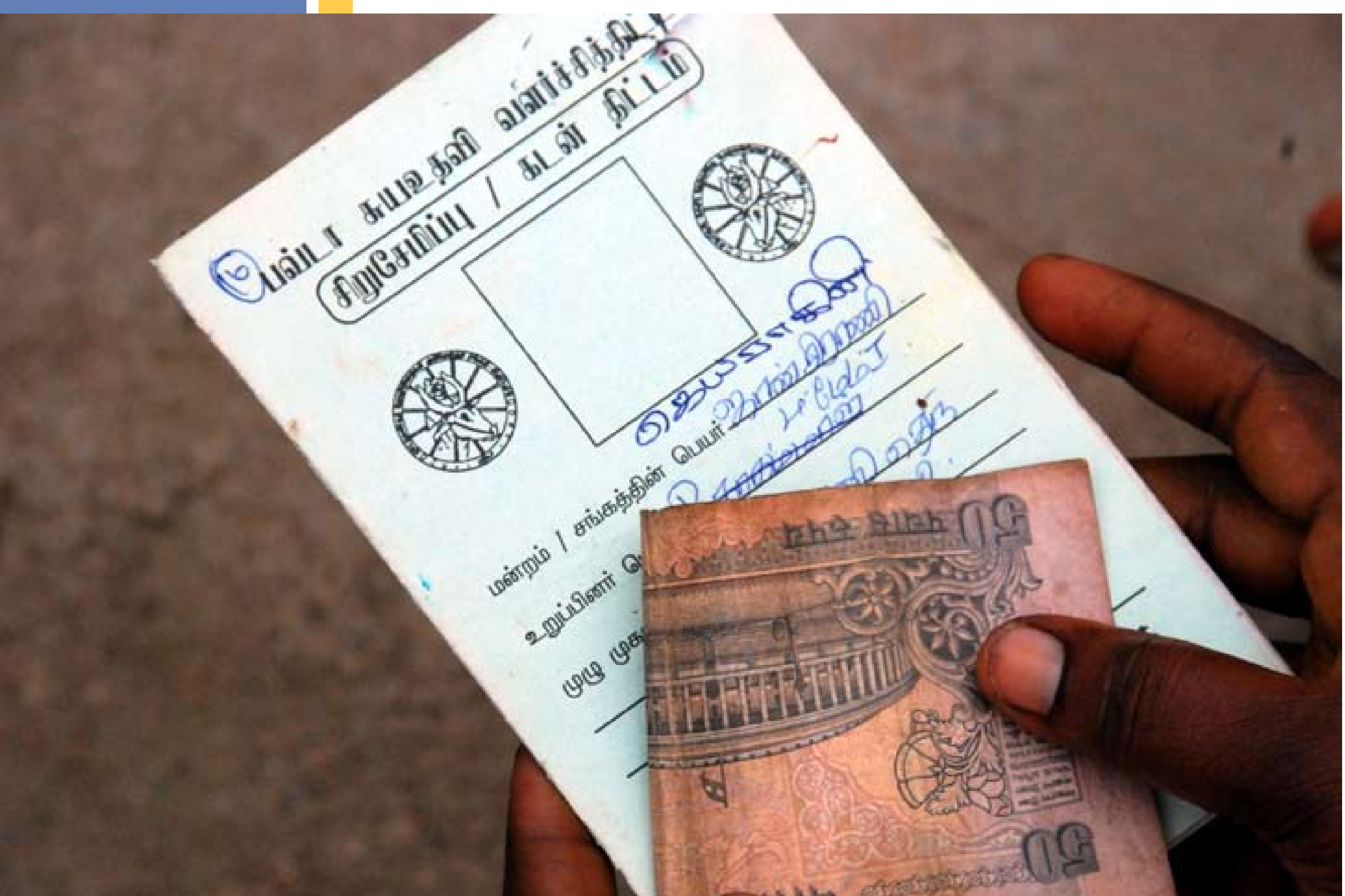
This study analyses three of the many experiences in branchless banking in India and attempts to reach general recommendations for making BC models sustainable.

In the long run, the incentives in balance-based models will greatly promote financial inclusion. However, these models are significantly more difficult and costly to manage than transaction-based ones. An evolutionary transition from a transaction-based approach to an integrated approach will be healthy for Indian microfinance.

[6] Report of the Working Group to Review the Business Correspondent Model. Reserve Bank of India, Mumbai, Aug. 2009, p. 12.

Exploring Domestic Remittances as a New Line of Business for Indian MFIs

Soumya Harsh Pandey and Vartika Shukla



Background

The domestic money transfer business offers a colossal opportunity for financial institutions in India. As a proxy indicator of the size of the domestic remittance market, India Post handled 96 million money orders last year.[1] With an average remittance of Rs.780 the total value comes to around Rs.75 billion. This is just a fraction of the total size of the remittance business in India, as most domestic remittances follow other formal and informal routes. However, despite their outreach and presence in remote areas, microfinance institutions (MFIs) have yet to tap the full potential of this market. One of the greatest impediments for MFIs to start a domestic remittance service in India is the present legal framework. The Reserve Bank of India (RBI) considers any collection of remittances as deposits and thus prohibits the service being offered by most institutional forms in which Indian MFIs operate.[2]

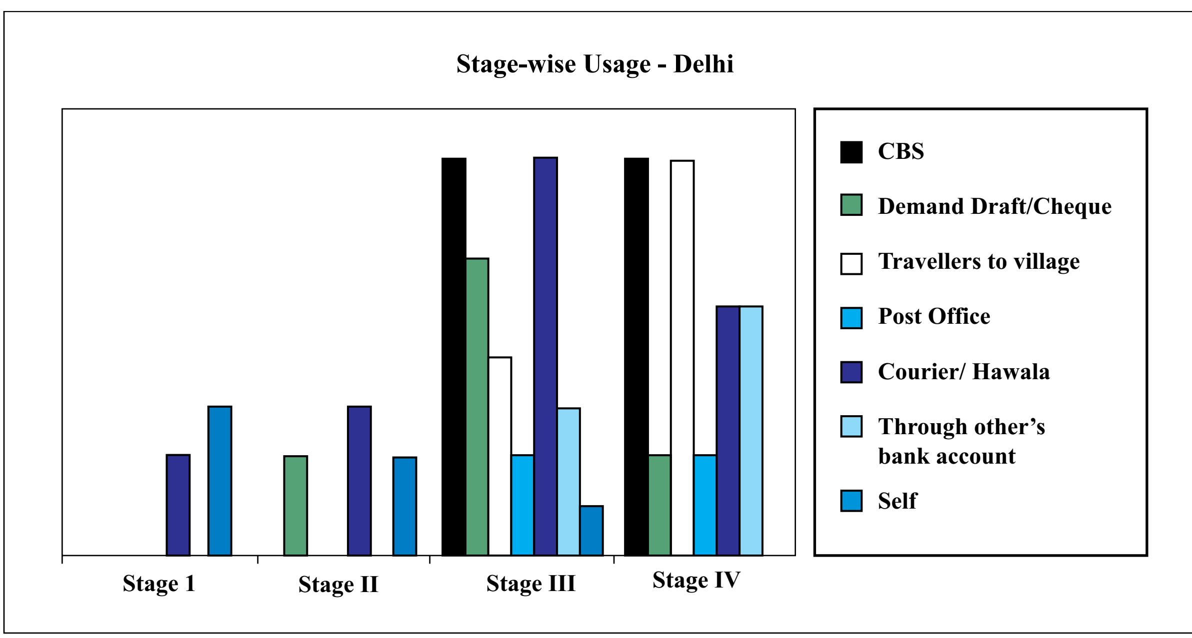
Given the size of the market and the potential for legal provisions to be relaxed, it is equally important for MFIs to understand the following before offering this type service: 1. what the existing options are (i.e. the competition); 2. who sends remittances; and what their preferences are and 3. what the major risks and challenges are when providing a remittance service.

Remittance Options Available in India

Even for the client segments that MFIs in India serve, there are multiple options for domestic money transfers. Recent market research studies, conducted by *MicroSave*, showed that (Instant) Money Order, Cash Deposits through Core Banking Solutions (CBS), Demand Drafts and ATM networks are used extensively as formal means to transfer money. [3] At the same time, and equally important, in terms of volume, many migrants use informal means like "Courier Wallahs" and friends and relatives.

Remittance Clients and Options Used

MicroSave's research categorised four stages of migration ranging from temporary migrants to resident migrants who have been living over 10 years - usually with family - but who still go back to their native



[1] P. K. Gopinath, Postal Staff College of India, 2009
[2] However in the 2009 'Report of the Internal Group,' RBI does mention certain enabling provisions for the 'Business Correspondent Model' to offer remittance services to the clients of the MFI. Report of the Internal Group to Examine Issues relating to Rural Credit and Microfinance, Refer URL: http://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/65111.pdf, July 21, 2009

village for special occasions. As seen in the chart above, each migration stage sees clients use different systems to remit. Stage III and IV migrants, who are a more settled category and have access to bank accounts, increasingly use core banking systems and demand drafts/cheques to remit money while the less settled Stage I and II migrants, who usually do not have bank accounts, use more informal means.

Even with availability of so many options, there is still a huge demand for MFIs to offer these services to the client segment they serve. This is primarily because of inherent weaknesses associated with both informal and formal means of remitting money. For the informal sector the problems are costs and security; while for the formal sector it is lack of "last mile" accessibility and time. This leaves significant gaps for MFIs to offer remittance services that are fast, secure and delivered from a convenient locale.

Preferred Product Attributes

After a careful analysis of the market research data, *MicroSave* has derived preferred product attributes of a remittance product for microfinance clients. As can be seen from the table below, product attribute preferences of migrants clearly emphasise the need for speed, reasonable pricing, security, simplicity and improved access.[4]

Product	Rs.2,500 to Rs.7,500
Price	1.5-3% up to Rs.5,000. Additional 1-2% for amounts >Rs5,000.
Promotion	Existing microfinance clients, migrant population in urban slums
Place	Door step through m-banking Confirmation through SMS
Positioning	Last mile operators
Physical Evidence	Existing branches/agents such as retail shops
People	Branch/field staff/agents
Process	Simplified and fast Little or no documentation Account to account transfer Account to non-account transfers

Risks Associated with Remittance Services

Remittances are something very new to the vast majority of Indian MFIs. Therefore, it is important to understand the risks associated with offering such a service to clients. The technical guide "Making Money Transfers Work for Microfinance Institutions", outlines some of the risks associated for MFIs offering remittance service including: [5]

1. *Cash Management Challenges:* related to the unpredictable nature of remittances and maintaining enough liquidity.
2. *Information Management Challenges:* managing the volume of transactions and ensuring transaction security.

[3] Market research study conducted in Delhi and Mumbai by *MicroSave* staff Nitin Garg, Sachin Bansal and Krishna Thakker
[4] See *MicroSave* India Focus Note # 27 "Migrant Remittances – An Untapped Market" for more details.
[5] Isern J, W. Donges, J. Smith, "Making Money Transfer Work for Microfinance Institutions", CGAP, 2006.

3. *Client Service Challenges:* related to the human elements of convenience and trust.
4. *Payment Medium Challenges:* exploring the right payment medium for the clients.
5. *Compliance Challenges:* related to ensuring on-going compliance with existing regulations - particularly KYC/AML.[6]
6. *Partnership Challenges:* managing different partners in the process of money transfer (banks, telecoms, agents, etc).

In the Indian context, there are very few significant examples or models to quote or follow. However, there are few organisations, like Al Najib, which offer remittance services to its clients.

The Power and Potential of Remittances

Al Najib Milli Mutual Benefit Ltd. was incorporated in April 1990 as a Mutual Benefit Company under the Indian Companies Act, 1956. It is delivering financial services through 45 branches spread across four states in India (Uttar Pradesh, Delhi, Maharashtra and Gujarat). Al Najib plays an important role in the communities it serves, and is respected, trusted and valued by its customers.

Al Najib offers a remittance product in two variants – one based on a money transfer order that can be encashed in any Al Najib branch; and another, faster, version that involves sending a fax to the branch where the money will be withdrawn.

Al Najib has 6 branches across various suburbs of Mumbai from where they serve many migrant clients, predominantly from the state of Uttar Pradesh. In spite of the overall rising trend of remitting through core banking services in Mumbai, the remittance products of Al Najib remain popular. Andheri, one of Mumbai branches visited by *MicroSave*, remits over Rs. 3 crores annually.

Conclusion

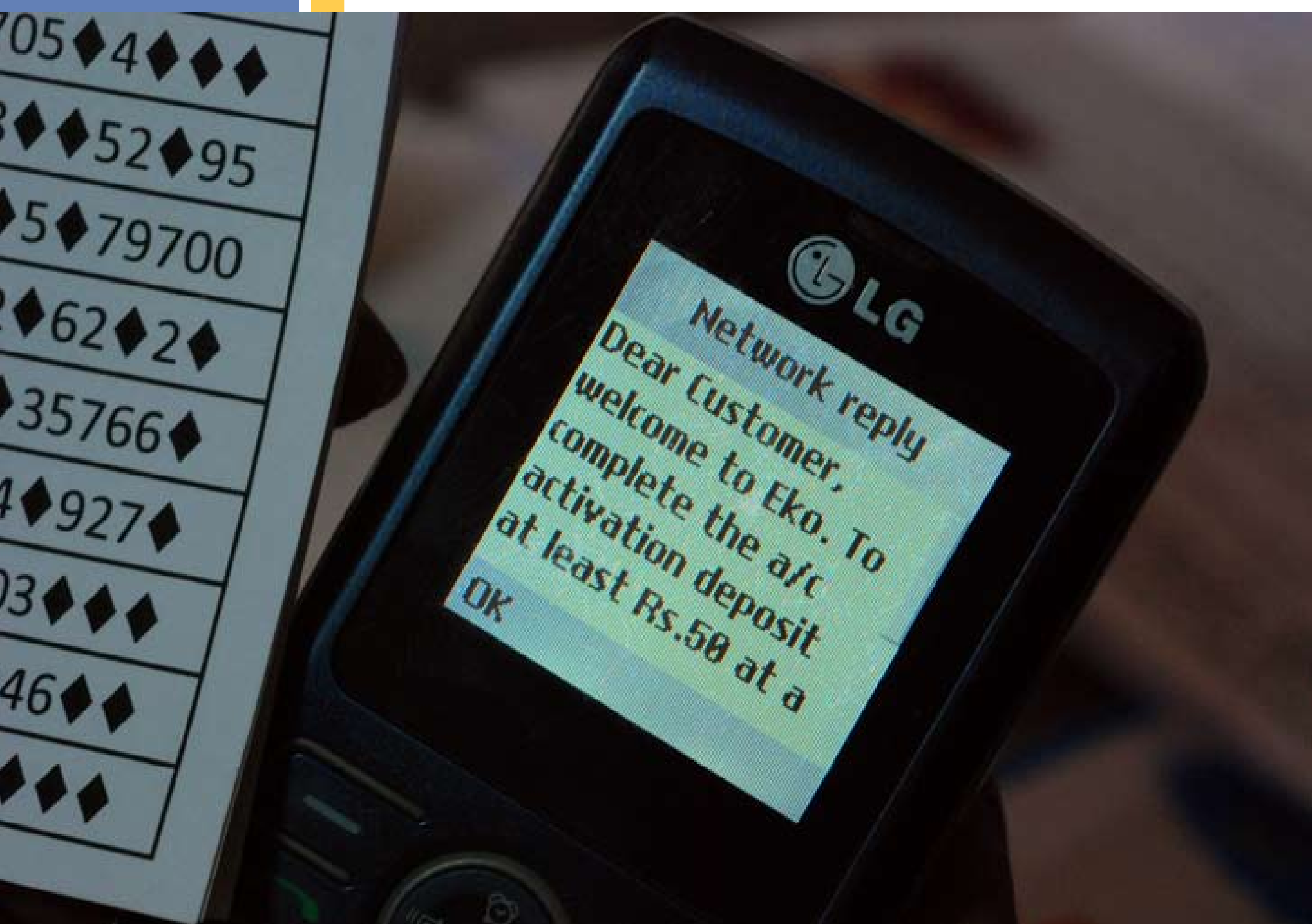
There is increasing interest in extending remittance services to the poor due to the growing involvement of telecos, private banks and technology companies providing mobile banking and other types of platforms.[7] Quite a few such experiments are now underway to develop a robust, secure yet simple technology based platform to be married with the network of ATMs and bank branches. While the cost, security and speed aspects are being addressed in these initiatives, one aspect is still often lacking: convenient access. This is where MFIs with a robust IT-based MIS can step in.

At the present level of maturity of the microfinance industry in India, the role of MFIs could be that of a service provider, to both collect and deliver remittances, thus generating new revenues on a commission basis from their bank partners. This in effect could mean offering a new high value-add service to its clients while earning a new revenue stream to support viability.

[6] Know Your Customer/Anti Money Laundering
[7] See *MicroSave* India Focus Note # 29 "Potential for E/M-Banking Enabled Migrant Remittances" for more details.

Potential for E/M-Banking Enabled Migrant Remittances

Nitin Garg, Krishna Thacker, Venkata N.A.,
Sachin Bansal and Graham A.N. Wright



Background

India Focus Note # 27 "Migrant Remittances – An Untapped Market" distinguished between four categories of migrants and three types of recipients, analysed their patterns of remitting money and assessed their preferences for remittance products and services. Chapter 'Exploring Domestic Remittances as a New Line of Business for Indian MFIs' assessed the potential role for MFIs. This note examines harnessing technology to optimise the delivery of remittance services – particularly for banks.

The largest challenge for banks that want to tap the huge market for remittances – estimated to be at Rs. 26,000-40,000 crore per annum – is to provide a convenient service at a very low price. As the table below shows, the market is evolving rapidly and both migrant remitters of money, and the courier services[1] that many of them use, are changing behaviour to use the opportunities offered by the rollout of core banking systems by the public sector banks.

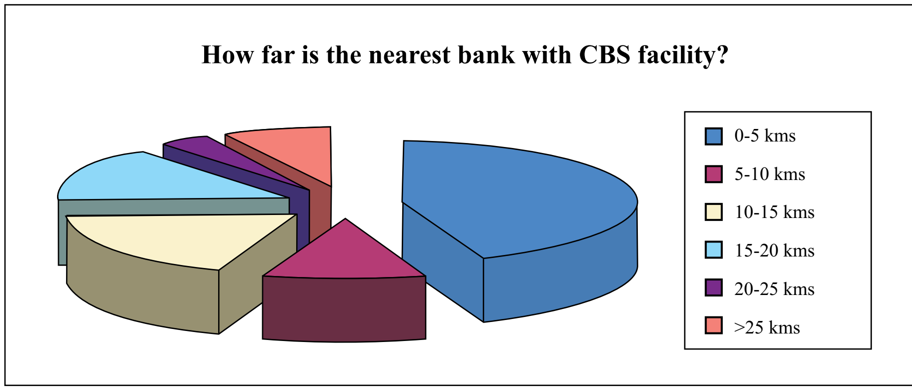
Place	Service Providers	Price	Time	Trend / Remarks
Kolkota	*Dakiya*/ Courier Family and friends	3-5% for money, Rs.5 per kg for any other material	5-7 days	Earlier people used to send money only through family and friends, but the convenience of *Dakiya* (informal courier) is replacing this approach. Family and friends returning to the village are still used to remit money, but this is now less frequent.
Delhi	Courier and ATM Self and ATM/ Bank	3-5% Free	1-2 days at times immediate or Transferred immediately, withdrawn on same or next day depending upon the need.	Earlier people were only sending money through courier, but now many of them have opened an account and use the core banking systems of banks to transfer money. The couriers are now also using core banking systems: the courier representative deposits money in the city and another courier representative in village withdraws it from nearest ATM for on-distribution to the recipient.
Mumbai	Self and ATM/ Bank Family and friends Courier	Free 3-5%	Transferred immediately, withdrawn on same or next day depending upon the need. 5-7 days	People are mostly using bank accounts to transfer money; this is because of a higher penetration of bank branches in Mumbai. Even couriers/family friends use bank accounts to transfer money.

[1] Courier – This is an informal way of transferring money through agents against a charge. These are normally referred to as couriers/hawala /hundi/dakiya

Challenges of Remitting Through Core Banking Systems

The move towards using banks' core banking systems to transfer money is taking off rapidly and has several implications:

1. Increased costs for the banks as they process the money transfers and manage the deposits and withdrawals;
2. Loss of potential revenue on demand drafts, etc. for the banks; and
3. Increased over-crowding of banking halls in Uttar Pradesh, Bihar and other states from where large numbers of migrants originate.



However for recipients, and (to a lesser extent) remitters, the use of core banking systems remains inconvenient. For all the rhetoric about financial inclusion, many banks simply do not want to serve the poor for fear of crowding out more affluent customers. So poor people entering the banking halls to remit or receive are often badly treated and have to wait a long time for service. Migrant remitters in particular do not have the time to wait; and often, banking hours are inconvenient for them because they clash with the hours migrants have to work. Where ATMs are used, many of the recipients are intimidated by technology and have to get help from friends and relatives to withdraw amounts remitted - with all the attendant additional costs and loss of confidentiality.

Furthermore, although account to account transfers are free using core banking systems, this approach is not without cost to the remitters and recipients. Both lose time, but recipients also very often have to travel considerable distances (sometimes as much as 30kms) at significant expense to go to the bank to pick up their money. This explains why a significant market remains for couriers, despite their relatively high charges - they deliver door-to-door service.

Implications for E/M-banking Systems

Unsurprisingly, banks are not promoting the use of their core banking systems as a way to remit money, and this provides a great opportunity for e/m-banking systems to serve this market. With an extended network of agents that penetrates deep into the rural villages (typically provided by mobile network operators, retail networks or other business correspondents already contracted to provide basic banking services in the villages) e/m-banking systems can offer convenience to match courier service providers. With couriers offering their services at 3-5% of the amount sent, e/m-banking systems potentially have quite a significant margin to work with, in order to ensure that the agents, the technology provider and the bank behind the system are adequately remunerated.

Furthermore, *MicroSave* research shows that many migrants remit on a monthly basis, so this product would be a regular, relatively high volume business that could begin to exploit e/m-banking systems'

[2] SSee *MicroSave* India Focus Note # 18: "MFIs as Business Correspondents – To Be or Not to Be?" by Anup Singh and Krishna Thacker

potential (and indeed need) to handle large numbers of transactions. Only in this way, can banking correspondent agent network systems hope to begin to be sustainable.[2]

For the banks, not only does leveraging e/m-banking systems provide an opportunity to reduce transaction costs and de-congest banking halls, it also provides an opportunity to restore at least some marginal income. Also, since e/m-banking systems that have already enrolled clients will have completed the necessary 'Know Your Customer' formalities on them, bank staff will not be burdened with this obligation.

Trusted local agents can help recipients manage the technology and user interfaces, although there is growing evidence that even for illiterate villagers, mobile-based interfaces are not as challenging as previously feared. The remittance business will generate increased footfall from recipients anticipating the arrival of money, even when the remittance has not necessarily been received. And of course, since many local agents are also retail outlets, they can reasonably expect that the recipient might choose to spend some of the cash she/he receives in their shops.

But Do Poor People Have Mobile Phones? And Can They Use Them?

Recent *MicroSave* research in UP, Bihar and Karnataka found that most of the respondents had at least one mobile in the household/family and that all the migrants had access to mobile phones. "Sahab yeh mat puchiye ki mobile phone kiske paas hai balki yeh puchiye ki kiske pass nahin hai!" ("Don't ask who has a mobile, but ask who does not have one!") Most of the respondents were using their mobile phone to receive calls and rarely made calls. When they did make calls, most of the women took help from the children/young person in family to dial the numbers for them - in all the respondents' families there was at least one person who was able to dial numbers. However, in the north at least, few of the respondents were using other functions of the mobile like Short Messaging Service (SMS), address book, other applications etc.

The levels of mobile penetration and usage can be judged from the fact that in villages where there is no electricity, people pay Rs.5-10 to get their phone batteries charged for half an hour by retailers with a generator and an extension board. The competition is so fierce in this space that players like Idea and Aircell are offering lifetime connections for as low as just Rs.9. During *MicroSave*'s interviews with the retailers selling telecom connections and recharge coupons, it was found that a typical retail shop in rural Bihar sells about 8-10 new connections every month and does 30 recharges every day. The average amount of recharge was typically between Rs.10-20. And several mobile phone handset producers are working on low cost models that are expected to further increase the current penetration by 2.5 times in the next 5 years. So it is fair to assume most households do already, or will soon have, access to mobile phones.

Conclusion:

There is clearly both the potential and a business case for serving the large market for remittances in India using e/m-banking platforms using the banking correspondent networks currently being developed. This will provide valued services for migrants, important revenue streams for agents and could save banks considerable transaction costs.

Understanding the 'Cost of Cash' for Low Income Clients: Why and How?

Veena Yamini A., Nitin Garg, Suresh K. Krishna and Valerie Rozycki

Introduction[1]

Mobile banking and payments (m-banking) for low-income and under-banked customers in India is at an evolutionary stage, where a number of pilots are being conducted with the objective to discover a sustainable business model. Finding an appropriate technology solution does not appear to be the primary issue, but rather, one of discovering the right customer value proposition (CVP) that facilitates large scale adoption of the service[2]. The identification of the right value proposition can only truly come from understanding client needs and designing products to meet those needs.

mChek[3], the largest mobile payments provider in India, collaborated with *MicroSave* in a joint research project to explore the challenges that un/under-banked customers face with various payment and savings options involving cash and how mobile payments might add value. The research was carried out in urban and rural Karnataka with support from Grameen Koota. This note presents the development and implementation process of a unique research tool designed specifically around understanding the pain involved in cash transactions (with an eye towards presenting an m-banking solution to alleviate the pain) and the challenges faced.

Tool Development Process and Implementation

Over the years, *MicroSave* has developed various Participatory Rapid Appraisal (PRA) tools in its Market Research for MicroFinance (MR4MF) Toolkit[4] to understand customer need and behaviour around financial services. However to understand the challenges of current cash payments and how mobile payments might help, there was no one tool readily available. Hence, a new tool – called the ‘Cost of Cash' tool (COC)[5] was developed and piloted.

This new tool uses the same PRA techniques used by *MicroSave*, but is specifically useful in determining what types of transactions incur the most ‘pain' or ‘stress' for the customers while dealing in cash. The tool is conducted with small working groups of 6-8 individuals, preferably from the same socio-economic stratum, and the facilitator moderates the discussion around the major transactions of households (both expenses and income/inflows). Some examples of the most common transactions are salary/wages, rental/business income, mobile recharge, electricity, savings, travel/ticketing, food, education, etc.

Each major transaction is then written on a separate card. Using anything available such as stones, candy, buttons, etc., participants score the level of financial stress/pain associated with each transaction or payment type. Transactions are scored (on a scale of 1 to 5, 1 being the lowest and 5 being the highest) on pain levels for four categories:

- ***Transaction costs*** are those costs incurred in making the transaction, including commissions paid, information costs, transport costs, late fees, etc., but excluding the actual amount of transaction.
- ***Time spent*** includes waiting, travel and transaction time.
- ***Opportunity cost*** is the value of the next best alternative foregone as the result of making a decision or the cost of ‘time wasted' on a particular activity – this includes both monetary and non monetary activities, such as lost wages, lost sales, time spent with family or for leisure.
- ***Risk of holding cash*** is the potential for having cash lost, stolen, or spent needlessly by him/herself or by family members, etc.

[1] Clara Radhakrishna from mChek, Krishna Thacker and Chris Linder from *MicroSave* and several staff from Grameen Koota all assisted in the development and testing of this new tool as well.
[2] For more information, refer to *MicroSave* India Focus Note # 47 on the CVP for m-banking and See *MicroSave* India Focus Note # 71 on customer adoption.
[3] mChek is the largest player in India in terms of the number of registered customers for the service.
[4] Please refer to *MicroSave*'s “Market Research for MicroFinance” Toolkit.
[5] Please note that the research team used 3-4 additional tools, interacting with over 300 individuals in total to complement the COC tool findings and to help with triangulation and validation.

Example COC Results Table

	Transaction Costs	Time Spent	Opportunity Cost	Risk of holding Cash
Household/food	***	****	***	****
Hospital	***	*****	**	*****
Festivals	**	****	****	*****
Utility bills	**	***	**	**
Insurance	*	*	*	*****
Savings	***	***	**	***
Salary/Wages	*	*		*****

In the example table provided above (excerpted from the initial research results), utility bills, such as electricity and water, were low pain, as bill collectors often went to clients' doorsteps in rural areas (and there were many bill payment options close-by found in urban areas). Two other categories, festivals and hospital expenses, were generally high pain transactions for most respondents (urban and rural), as they often had to carry cash large amounts of cash long distances to make these transactions[6].

Challenges faced during implementation of COC

1. **Proper ranking of transactions**
    - Participants often skipped "inflow" transactions, such as salaries or sales. The facilitators did often have to remind gently the participants about these transactions.
    - While ranking the transactions, participants often tended to rank the transactions which are important to them in general, such as school fees, children's expenses, hospital bills etc. but not necessarily painful for them to transact. Hence, this has to be explained clearly.

2. **Bringing clarity around the concepts**
    - While considering the transaction cost category, the actual amount/cost of the transaction should be excluded. If this is not explained, members might consider the actual transaction amount and give a high rank to transactions with high value.
    - Many times people perceived opportunity cost and time spent as directly proportional to the other. However, this is not always the case. For example, one of the groups in urban Bangalore said that they spent much time in paying hospital bills, but they did not see it as incurring high opportunity cost, as they were investing in their own health. It is important to note such observations, but research teams should also be careful to explain opportunity cost carefully.
    - The opportunity costs also were understood as entailing a 'tangible cost' like loss of wages or income, while there were also intangible costs, such as being away from family, not having time for entertainment, etc. During the facilitation, if this angle is not probed, very valuable insights that may have future implications might be lost.
    - Risk of carrying cash is not just about losing cash or being robbed – other risks like neighbours/friends asking for loans or the person themselves not exhibiting self-discipline can happen as well.

[6] Please note that the overall findings from the initial research will be explained in more detail in the subsequent IFN.

3. **Probe, Probe and Probe!**
   It is often a tendency in the m-banking world that any and all non-cash/mobile transactions will solve all the pain points. However, there may be good reasons for conducting cash transactions even if there is a mobile/electronic choice: not wanting a nosy spouse to track finances, universal acceptance, no need to be mobile literate, etc. It is important to probe and find out which transactions people prefer using cash.

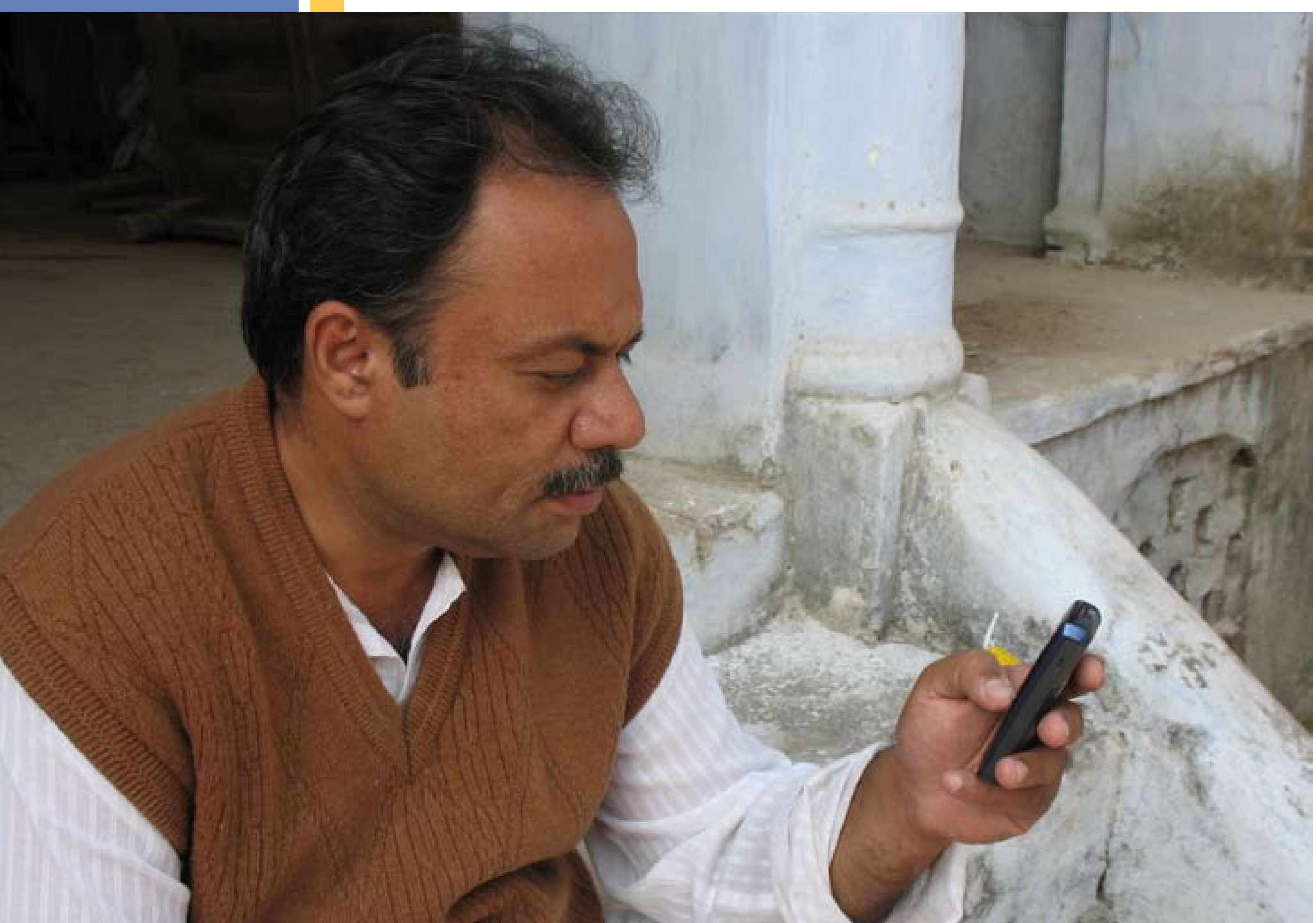
Conclusion

As the tool is in its early stages of implementation, attempts will be made to improve it further. Though not quite perfect, the COC tool is nevertheless a start for listening to clients' needs around the costs of cash and how mobile solutions may reduce those costs. The research team observed that this tool even prompted participants to suggest additional, creative ways that mobile solutions could solve their needs.

This tool can especially be an effective way of discovering which suite of transactions to focus on for e/m-banking solutions. The initial research results helped mChek in particular to refine its overall un/under-banked strategy and in developing new service offerings for its partners and end-clients; all described in more detail in chapter "Removing the Pain from Using Cash: an M-banking Solution?"

Removing the Pain from Using Cash: An M-banking Solution?

Veena Yamini A., Nitin Garg and Valerie Rozycki



While India Focus Note # 51, based on research conducted in partnership with mChek, a mobile payments technology provider, explained why and how to understand the "cost of cash" for low income clients, this note expands on the same theme, but presents the key findings from the research study undertaken and provides insights on how an organisation may apply the tool's findings in an e/m-banking scenario.

Finding 1: Key transactions

When asked about the key financial transactions, the six most frequently mentioned transactions were: 1. utility bills, 2. hospital, 3. food, 4. education, 5. festivals, and 6.travel. In urban areas, the six most frequently mentioned transactions were 1. utility bills, 2. hospital, 3. food, 4. education, 5. loan repayment and 6. travel (with only festivals being more favoured in rural areas and loan repayments in urban).[1]

> **"Hum khaana chhoddenge par hamare bachhonko school bhejenge."**
> **[We will stop eating before we stop sending our children to school.]**

The transactions above can be categorised into the following four categories:

- **Basic transactions:** These are mostly the transactions taking place in informal markets, usually through small vendors. Consumers often visit the same place for recurring items like food, but for big ticket events that involve several, often small purchases, such as marriages, festivals, and weddings, they often visit different shops. Weddings and festivals expenses included both small ticket expenses, such as paying for cleaning, and large ticket expenses, such as jewellery and clothes.
- **Auxiliary:** Auxiliary category transactions are those transactions which are more in the organised/ formal sector, for example utilities, education, hospital and loans. These are routine payments and are mostly planned, except perhaps in the case of hospital payments.
- **Commodity:** Certain transactions such as mobile recharge, petrol, travel, etc. are generally 'no loyalty' or 'pick-up anywhere' services, that the place where the payment is made or where the product is purchased does not matter (in general). These are often very frequent transactions.
- **Inflows:** The inflows form the last category of transactions. Some examples of these include: salaries/wages and small business income. Most of the inflows are not from the same place as the sources (e.g. employers, customers, etc.) are varied and innumerable.

Finding 2: Perceived costs and challenges using cash

Based on the "cost of cash" categories mentioned in the previous chapter (Risk of Carrying Cash, Time Spent, Opportunity Cost, and Transaction Costs/Fees), the study participants ranked each in the following ways:

- Risk of carrying cash was ranked as the most painful/high on cost for all transactions in both urban and rural areas – though for differing reasons. In urban areas, it was the most painful cost due to fear of losing cash and for the fear of someone else (friends or neighbours) asking for money. In rural areas it was because of distances travelled and the temptation for personal use or theft. Time spent and opportunity cost were the next most painful as many respondents were day labourers for whom the opportunity costs of leaving their work to conduct transactions was quite high (e.g.

[1] Please note these rankings by urban and rural individuals in Karnataka would very likely vary with different demographic groups and different geographies.

missing a half day of work often meant losing out on the entire day's wage). Actual transaction cost was ranked the lowest in terms of pain in both rural and urban areas.

> **"Jo paisa bank mein hai who kharch nahin kar sakte, agar hamare paas hoga to kisi na kisi cheez mein kharach ho hi jayega"**
>
> **[If the amount is saved in a bank, we cannot spend it. But if we have cash in hand, we tend to spend it on something or the other.]**

Finding 3: Which of the transactions are most important and most painful?

In rural areas, transactions such as festival expenses agriculture expenses, hospital expenses, food/rations, travel, and insurance were moderate to high pain transactions. The above transactions were painful due to the distances involved to carry out transactions and because of the cumulative amount of cash involved. Other transactions such as utility payments were also among the common expenses listed but were low pain transactions (and usually low value transactions), often because of doorstep collection by bill collectors.

In urban areas, transactions such as travel, hospital expenses, electricity/utilities and savings were mentioned as high pain transactions because of the time involved in carrying out the transactions and the risk of carrying cash. Despite many alternatives available for making utility payments, respondents considered these moderately painful due to long queues (and hence the time required). Most of the above mentioned transactions were found to be low to moderate value transactions. Transactions such as education expenses, food/ration expenses, loan repayment, rent, petrol and insurance were mentioned as moderate pain expenses. These were again found to be low to moderate value transactions with the exception of food expenses, involving larger, cumulative amounts.

How did mChek use the findings?

When trying to deliver any new service, it is essential to fully understand the customer's existing pain points. Knowing where, when and how transactions are done with existing cash-based methods and how that experience would change by moving to an electronic, mobile-based system is critical to understanding the customer value proposition fully and how to develop the ideal user experience.

mChek was thus motivated to embark on the cost of cash research to develop knowledge that would help inform product and business decisions. mChek has used the findings in three primary areas: "go-to-market" strategy, pricing and marketing.

Go-to-Market Strategy

There are many important considerations when determining the exact strategy for rolling out a new set of services to a new customer base. The customer value proposition (based on reducing the costs of cash) is one component. For example, festival shopping is high pain for customers because they must carry large amounts of cash to the market to make many purchases. Reducing this pain by introducing mobile payments seems important, but it is also much more difficult to acquire a large number of small merchants selling festival goods than it is to acquire a larger merchant like a utility biller. mChek has combined its new knowledge of the costs of cash with other strategic and operational considerations to develop a go-to-market strategy for low income customers.

Pricing

The biggest lesson from this study was that there is enough pain in transacting in cash that customers are willing to pay transaction fees for the simplicity and security of mobile payments. This has an important impact on the pricing and business model for a mobile payments company like mChek.

Given the different costs of cash for different transactions, per-transaction pricing may be too generic. Fees may be too high for some transactions and too low for others. Given that the risk of carrying cash was considered the most painful element, a percentage-based pricing model could be considered. Therefore, the pricing is based on the value created (or the reduction in the amount of cash carried).

Marketing and Customer Education

For many low income customers, adopting mobile payments means adopting three new services at once: mobile phone, bank account, and mobile payments. There is a large amount of customer education required for any one of these three alone, and even more for all three together. Additionally, this means that there are many stakeholders involved in acquiring and educating the customer: bank, mobile operator, technology provider, merchants and possibly also an agent network (named Business Correspondents in India). Any marketing and customer education should be clear and convincing for such a complex offering. Understanding the costs of cash can help companies like mChek and other mobile payments stakeholders craft the right messages and customer education campaigns. One approach is to use messaging that reminds customers about the pain of using cash for different transactions. When customers associate with the costs of cash, they will then be more ready to learn about this new complete solution that will reduce those costs of cash.

Conclusion

The key findings of the research indicated that in both rural and urban areas, basic and auxiliary transactions such as food, festivals, marriage expenses, utility bills, education, hospital and loans were moderate-to-high pain transactions, for which if provided an alternative (essentially to cash) could possibly lead to high adoption. Equipped with this insight in addition to its strategic and operations considerations, mChek designed its “go-to-market” strategy for low income customers, pricing, marketing and customer education. Such understanding of the existing alternatives and what value can be created by offering a new, improved one is important for mobile money stakeholders to deliver the right services to the right customers at the right price.

Listening to Clients of Mobile Banking in India

Nitin Garg and Swati Mehta

Background

There is a growing recognition that technology and mobile phone-based banking (m-banking) will play a key role in achieving financial inclusion – not least of all because of its easy implementation and widespread reach. However, there have been only a very few successful implementation of m-banking to date.

Much has been written on the customer value proposition of m-banking and how it can benefit clients[1]. However, there is limited literature based on conversations with clients exploring what actually made them adopt mobile banking, how it has benefited them and what they want in addition to the existing services.

This note aims to provide some answers to these questions and is based on research conducted by *MicroSave* at Eko India, one of the leading m-banking implementations in India. State Bank of India (SBI), the biggest public sector bank of India has appointed Eko as its Business Correspondent (BC) and is currently offering its No-Frills Savings Account (NFSA)[2] through Eko's m-banking platform and a network of retailers referred to as CSP (Customer Service Points).

The research focussed on understanding how Eko's services have impacted its clients' saving practices and their reasons for adopting this service in the first place.

Why They Adopted M-Banking/Eko?

Most of the early adopters of m-banking in urban areas are those who have previously had some banking experience. A majority of them have savings accounts in one or another of the public sector banks, either at their current place of residence or (in case of migrants) in their hometown; and they are also using them regularly. Despite having access to the formal banking sector these early adopters still choose to use their m-banking account over the traditional account for saving purposes. During the numerous interactions with these clients, they cited the following reasons for this preference:

Convenience

A single transaction of deposit or withdrawal at a traditional bank branch entails huge opportunity costs for the clients in terms of the business/wages lost during the time spent at the branch, and money spent on travelling to bank branches. Thus, it makes sense to visit the branch only when the transaction size is expected to be large enough to warrant these costs. In contrast to this, the transaction size of m-banking clients is as low as Rs. 50. This can be attributed to the markedly less time required to travel to, and transact at, an m-banking agent. Hence, the clients save more frequently in their m-banking account than they used to save in their traditional bank account.

Trust in the Nearby Merchant and Bank

Initially, a majority of the clients decided to open the account at the insistence of the merchants that act as the m-banking agents[3]. These merchants are mobile airtime sellers, medical stores, grocery shops, etc. whom the clients visit very frequently and have known for considerable period of time. Thus, the clients tend to trust them to help with their banking transactions. Moreover, association with a big public sector bank like SBI also helps in building confidence among the clients.

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[1]See for example *MicroSave* India Focus Note # 47 "M-Banking: The Customer Value Proposition" and # 66 "POS v. Mobile Phone As A Channel for M-Banking" and *MicroSave* India Focus Note # 4 "Electronic Banking: The Next Revolution in Financial Access?"

[2]NFSA has no minimum balance requirements and has low service charges. SBI does not offer cheque book, ATM, online banking and other such services on this account.

[3]See *MicroSave* India Focus Note #38 "Listening to the Agents of Mobile Banking in India"

Ease of Use

The literacy levels of the targeted un/under banked clients of m-banking are observed to be very low. While most of them can easily identify numbers, not all can read and write properly. To access financial services at a traditional bank they are required to fill in multiple forms, usually with little or no help from the not-so-friendly bank staff. In comparison to this, most of the respondents were observed to be accustomed to using a mobile phone, and were finding the process of making financial transactions using mobile phone fairly simple. In case of technical difficulties they are always able to get support from their trusted m-banking agents.

Relaxed KYC Norms and Easy Documentation

Since a large portion of the targeted low income clients are migrants, they do not have the required documents to open bank accounts. The relaxed KYC norms for opening an m-banking account gives them an opportunity to start saving in a bank, a privilege they did not have earlier.

Has it Impacted the Way Clients Save?

Following table summarises the observations regarding changes in the saving practices of the respondents before and after they had the SBI Mini Savings Account at one of the Eko counters:

	Before Eko	**After Eko**
Place of saving	Intermittent saving at traditional bank branches - located far away from place of residence. Other small savings at work, chit funds, NBFCs etc.	Regular savings in SBI Mini Savings Account at Eko counter. Some also saving in traditional bank account, but less frequently than before.
Time taken to do transaction at bank	At least one and a half hour on an average, including travel time and time spent at the branch.	At most 10 to 15 minutes to make a transaction, including time taken to travel to nearest Eko counter and time spent at the counter.
Cost per transaction at bank	High cost of travelling to the bank branch, which is often located on average 5-7 kilometres away and high opportunity cost in terms of business or wages lost during the time spent at the branch.	Nil or very low cost of travelling to the nearest Eko counter which is typically located within 1 kilometre radius and nil or very low opportunity cost.
Amount of savings in bank	Due to the costs outlined above, the respondents could afford to deposit in their bank account only when they had a considerable amount of cash in hand – usually more than Rs.1,000. Respondents who did not have a bank account were saving very little at home.	Those with bank accounts earlier have started to save smaller amounts in their Eko account as and when they have extra cash (as low as Rs. 50). Those who were saving at home are now saving more frequently and in a more regular manner in their Eko accounts.
Frequency of saving in bank	Clients were visiting traditional bank branches not more than once a month. Thus, most of the times small amounts of extra cash in hand were not converted into savings.	Saving more frequently, as and when there is extra cash in hand. Thus, small amounts of extra cash are now converted into savings in their accounts.

Expectations from Eko/M-banking Service Provider

Presently Eko is in its pilot stage and is offering only the SBI Mini Savings account to its customers. However, Eko plans to offer more than just savings, and has recently started inter-city remittances between Delhi and Bihar. Most of the clients who are actively using the account, when interviewed said that they wanted additional services in addition to normal withdrawal and deposit facility being offered at present like:

Cheque Deposit Facility: The majority of respondents expressed the need to have a cheque deposit facility with their Eko account. Clients who already had another bank account said that they have to visit the bank especially to deposit cheques. Many clients without other bank accounts were receiving cheques for insurance and pension, but had no place to deposit these.

Remittances: It was observed that a large proportion of the low income clients are migrants and need to send money to their family regularly. Presently, they are sending money through informal channels like courier, family and friends, personal delivery[4] etc. Even though Eko has launched its remittance facility, its outreach is currently limited to only two states.

Passbook or Account Statement: Some of the respondents wanted a physical passbook or account statement if needed. These were mostly clients who have used bank accounts before, and felt the need to receive some physical evidence of their Eko accounts.

Name: Anil Kumar
Occupation: Cook
Location: Palam Village, Delhi, India
Eko Client Since: June 2009

Anil is a migrant from a small village near Badrinath in Uttarakhand. He works as a cook in a restaurant in Delhi. He has been living in Delhi for the last nine years, but still could not manage to open a bank account as he does not have the required documents and proof of identity. When he heard about Eko from one of his friends, he instantly opened an account at the nearest Eko counter. Now, every day on his way back from work Anil regularly deposits the amount that he receives as service tips from the restaurant where he works into his Eko/SBI account. Prior to opening this account he did not keep any record of the service tips he earned and they were usually frittered away on wasteful expenses. Now, he manages to save those small amounts and withdraws them to meet travel and other routine expenses.

ATMs: The timings of the CSPs are fixed and the clients said they would like to have an ATM so that they can withdraw at any time in case of any emergency and also at places where there are no m-banking agent outlets.

Conclusion

M-banking services currently offered to the low income market in India do offer value to clients in terms of easy account opening procedures, easy deposit and withdrawal facilities, ability to deposit any amount any time etc. However, there remains significant scope for improving these services to encourage mass uptake and increased usage of the accounts offered. Diversifying the range of services offered would provide an improved value proposition for both customers, who could use m-banking for a wider range of uses, and for agents, who would then see a larger volume of transactions, and thus revenue.

[4]See *MicroSave* India Focus Note #29 "Potential for E/M-Banking Enabled Migrant Remittances"

Listening to Agents of Mobile Banking in India

Nitin Garg and Swati Mehta

Chapter 'Listening to Clients of Mobile Banking in India'[1] examined why customers of mobile banking (m-banking) adopted this service; their experience so far and what more they expect or want to be delivered through this platform. This note furthers this analysis to the other side of the m-banking counters: the agent's side.

This note is based on the findings of the Customer Satisfaction Measurement and Management exercise that *MicroSave* conducts regularly with Eko's agents in order to gauge their expectations from the product and the support provided by Eko.[2]

Who Are Eko/M-Banking Agents?

Eko appoints retailers (often but not always) with the experience of selling mobile airtime as their agents; they call these agents Customer Service Points (CSPs). These retailers might be involved in selling grocery, stationery items, medicines, mobile handsets, mobile repairing/accessories, etc.

The fundamental role of these agents is to act as the front line customer service desks for the bank (SBI in the case of Eko), where the customer can open a bank account and make cash deposits/withdrawals. In addition to this, the agents are also required to conduct personal selling to their existing customers, handling customer enquiries on account balances and troubleshooting in case the customer faces any problems in using his/her account. They are supported in this by a dedicated centre for customer care related issues.

Why Did They Become Eko/M-Banking Agents?

Most of the m-banking agents are introduced to this concept by their channel partners in the telecom distribution channels. Following are the major reasons that they choose to become m-banking agents.

Association with Bank

The biggest lure for the agents is the association with trusted banks such as the SBI, which is the largest public sector bank in India. This gives them the right and privilege to display the bank's logo at their shops and helps them gain the attention of their customers and by-passers. Customers start differentiating their shops from others in the neighbourhood, and the agents anticipate that having a prestigious bank logo on their shop will add to the shop's reputation and this will result in increased footfall.

Increased Footfall and Cross-Selling

Most of the retailers believe that this product will bring some new customers to their shop, and thus there is an opportunity to cross-sell other products to them. This seems to be true. In particular, agents located in busy streets or on main roads have significantly increased their customer base. Agents cross-sell other products to their extended customer base. Some of the agents also accept payments in their Eko account from customers' Eko accounts for the purchase of mobile airtime top-ups or other goods. This also helps them to establish long term relationships with their customers.

Additional Revenue Stream

The majority of these agents have a number of small supplementary businesses like mobile airtime recharge, online ticketing, accepting bill payments, running STD/PCO telephone services, photocopying, printing, etc. They accumulate small revenue streams from all these businesses. Thus, the commission

[1] See *MicroSave* India Focus Note # 37 "Listening to the Clients of Mobile Banking in India"

[2] Eko India Financial Services Private Limited is a Business Correspondent for State Bank of India (SBI).

earned for account opening and transactions from Eko is simply viewed as another revenue stream by most agents.

Insistence of Their Distributors/Existing Channel Partners
Some of the agents also allude to their need to maintain relationships with their existing channel partners/distributors in the telecom business as one of the reasons for entering this line of business. They decided to start offering this product solely at the insistence of these channel partners/distributors.

Interest in the Product/Concept
Some agents also cite their belief in the strong customer value proposition that this product offers for the targeted unbanked and under banked population as one of the prime reasons for adopting Eko. Since the concept is relatively new, the agents know that only few retailers have this service thus making them 'one of a kind', and acting as a point of differentiation in the more or less perfectly competitive markets in which they operate.

Expectations from M-Banking Service Providers

These agents bring in customers and the business and are the street-side face of the bank for the customers. It is therefore extremely important to keep the agents contented, and to constantly gauge their expectations, in order to further refine the product and optimise channel management. Agents' expectations include:

Adequate Commissions
As discussed above, additional commission revenue is one of the motivations for these agents. However, the majority of them complain that the commissions offered at present are not sufficient to cover the cost that they incur on promoting and servicing the product[3].

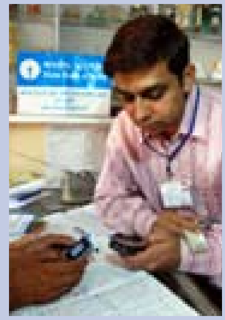
Constant Operational Support
As the concept is new, and retailers acting as agents do not have any previous exposure to m-banking systems, it is important to provide constant operational and technical support – particularly during the initial phase until the concept is well understood in market. The support required includes induction and refresher trainings, a 24 hour call centre to respond to customer enquiries and direct field support for problem-solving.

Marketing and Promotional Support
Since the product is still unknown to most, the agents are required to invest considerable amount of time in personally selling the service to their customers and in gaining their trust. Thus, it is very important to invest in supplementing their marketing and promotional efforts. This is required at two levels. First is by providing marketing support in the form of sufficient brochures, pamphlets and marketing collaterals for the shop such as banners, flanges and flex boards. This is to brand the m-banking counter and to establish the credibility of the services offered.

Second is by providing promotional support by organising account opening camps and setting up kiosks and canopies; as well as awareness campaigns and advertisements in other mass media such as print, radio and television. This would help in creating visibility for the service, push potential customers to take notice of the m-banking counters and to visit them to enquire about the product.

[3] See *MicroSave* India Focus Note # 24 "Making Business Correspondence Work in India" for more on this

CSP Name: Ravi Chandan
Business: Stationery Shop
Location: Uttam Nagar, Delhi, India
Eko CSP Since: March 2009



Ravi Chandan is one of best performing CSPs of Eko and also one of the oldest.

Owing to the nature of his business, Ravi's customer base when he started as Eko CSP was limited to school and college students. Offering Eko has helped him to extend his customer base to more college students, part time students, young working professionals, self employed and housewives who save regularly in Eko account. As a result he has also started offering more products and services at his shop including basic level mobile phone handsets and accessories, online ticketing, accepting utility bill payments, photocopying and printing.

He also accepts payments through Eko account from his customers. Customers do not have to even come to his shop to get airtime recharge; they get it recharged by transferring money to Ravi's account using Eko.

Delivery of Additional Services

At present, most of the m-banking service providers in the low income market offer a restricted bouquet of services that includes the usual cash in, cash out, and money transfers through the 'No Frills' accounts. Some are also used for disbursing payments under government schemes. However, the volume of transactions through, and thus the revenue from, this channel remains limited in comparison to what the agents anticipate.

Agents expect that in addition to the services already offered, a range of other services like utility bill payments, mobile top-ups, merchant payments and financial products like insurance, recurring deposits etc. will be added. This, they believe, will make the business proposition for agents stronger.

Conclusion

Although present mobile banking solutions as currently provided do offer value to agents in terms of increased footfall, some increased revenues, opportunity to cross-sell etc., they still have a long way to go in terms of value offered to make it really attractive business proposition for agents to encourage mass uptake. That would require: 1. scale to bring more customers on to the m-banking platform; and 2. that those customers are transacting regularly. Driving regular transactions would require a strong and wider customer value proposition like remittances, savings products, payment products etc. in addition to the current basic savings account offering deposit and withdrawal facilities[4]. This is the classic "chicken-and-egg trap" outlined by Ignacio Mas and Dan Radcliffe in their recent paper "Mobile Payments Go Viral: M-PESA In Kenya". M-PESA addressed this by charging clients about $0.33 per withdrawal. This type of charge is unlikely to be acceptable in India (to the regulator or to the clients) but the new scope for "reasonable fees" may provide the opportunity to pass on some additional revenue to the front-line of m-banking: the agents.

[4] See *MicroSave* India Focus Note # 37 "Listening to the Clients of Mobile Banking in India"

Managing Agent Networks to Optimise E- and M-Banking Systems-part 1

Graham A.N. Wright and Veena Yamini A.

> **"M-PESA's managers understood from the beginning that the success of the system centered less on the optimal management of mobile network resources than on marshalling retail agents. Customers needed to have a good experience at the cash-in/cash-out points, where the bulk of transactions took place. This meant establishing a sufficient physical retail presence, reminding customers that they were transacting with Safaricom at all times, ensuring that the retail agents had enough cash to meet customers' transaction requests, and, above all, motivating agents to promote the service".[1]**

Background

There is growing recognition that effectively managing agents is key to the success of e-banking and indeed m-banking systems. CGAP Focus Note #38 on "Use Of Agents In Branchless Banking For The Poor: Rewards, Risks, And Regulation", October 2006, provides an excellent overview of different bank-led and non-bank-led agent systems and the risks associated with conducting financial transactions with an often illiterate clientele through agents. There is growing literature on the functioning of agent networks and strategies to get the best out of them. This note examines some of the international experience using the "8Ps of marketing" as a framework.

Product

The design of the products offered by agents is critical, as has already been discussed in *MicroSave*'s Briefing Note # 47 "Mobile Phone-Based E-Banking: The Customer Value Proposition". In India, clients are already expressing disappointment that the basic "No Frills" savings account offered by banks is not linked to their ATM networks, a cheque book, passbooks etc. – thus offering the potential for add-on services that might further add value to the client, and revenue for the bank and its agents.

However, simply rolling out existing products and expecting the low income market to take them is unlikely to be successful. In India, one bank offered what was an account for the urban market through rural outlets with all the account promotion and opening forms, as well as quarterly statements, in English. Few potential clients opened accounts, and those that did, soon besieged the agents with questions on the fees and deductions made by the bank.

In Kenya, for example, M-PESA has linked with PesaPoint to allow clients to withdraw money from ATMs with single-use authorisation codes that are sent to the client's mobile phone. However, in many cases, the costs linked to ATM networks and cheque facilities prevent banks from offering these to customers in remote areas. In addition to the capital investment in the machines, ATMs must be replenished with cash and an agency must be paid for doing this. Cheque book printing and couriering to locations where the bank has no branch (which is why an agent is appointed) are again costly propositions.

Similarly in Cambodia WING also offers diversified services, initially focusing on providing a remittance product for garment workers in Phnom Penh, but soon moving to person-to-person (P2P) payments and airtime top-up for students and others in the urban centres. It then added an integrated

[1] Mas Ignacio and Olga Morawczynski, "Designing Mobile Money Services: Lessons from M-PESA", Innovations, Spring 2009.

web-based payroll management service to attract even more companies to use the platform. WING is also collaborating with VisionFund, an MFI, to develop services for the rural communities. VisionFund branches serve as "Cash X-press" cash-in/cash-out points, and loans are being repaid weekly using the WING platform, so that groups only meet monthly.

> **Diversifying services to drive volumes through the infrastructure will be crucial for client satisfaction and increasing agent remuneration – particularly in India where fee structures are regulated.**

Price

Enrolment Commission: Approaches to agent remuneration also vary significantly across the globe and even within countries. Everywhere, however, there is a fixed premium paid for enrolling customers and completing the necessary KYC/AML requirements. This has caused problems in many countries, with agents not completing the detailed paperwork adequately, or focusing solely on enrolment. Safaricom has responded to this challenge by deferring the payment of half of the commission for enrolment until the customer makes his/her first deposit.

Variable Commission on Transactions/Balances: In India, where much of the focus is on savings, some banks offer 0.3-0.5% of the value of transactions, while others pay around 2% of savings balances held. This income is marginal for most agents since they usually run retail outlets, where they sell other goods and services such as airtime, daily needs goods (e.g. soap, rice, flour etc.) or, in the case of kiosk-based systems like Drishtee, computer education and services. Despite this, the income derived from acting as a Banking Correspondent currently remains very limited and often inadequate to cover costs[2].

Fixed Commission per Transaction: In Brazil, Caixa Economica and Banco do Brasil both pay a fixed commission of around 9 US cents for each transaction, most of which are bill payments. In Kenya, M-PESA offers fixed commissions of around 13 US cents for each deposit, and 20 US cents on each withdrawal transaction. There have been reports of some agents forcing clients to break a large transaction into a series of smaller ones to increase their commission – though part of this may also be explained by the challenges of managing liquidity.

Liquidity Costs: Agent illiquidity can have significant impact on the quality of customer service, and ultimately trust in and adoption of e/m-banking systems. In many countries, particularly (but not exclusively) in rural areas, agents struggle to manage liquidity which often requires frequent trips to the bank. This, together with the security deposit to create e-money required by most schemes, adds significantly to the cost to agents offering m-banking services.

Also in Zambia, Mobile Transactions has a team of District Sales Managers (DSMs) empowered to manage an e-cash float. These DSMs can extend e-cash to agents in their territory instantly, but have full responsibility for collecting the cash. In this sense, DSMs are accountable for the cash-in liquidity of agents in their territory.

Safaricom relies on super agents (most are Safaricom's own airtime resellers, but others include Group 4 Securicor, some larger supermarket chains and branches of a variety of banks including: Equity;

[2] See *MicroSave*'s India Focus Note # 18 "MFIs as Business Correspondents – To Be or Not to Be?" and See *MicroSave* India Focus Note # 24 "Making Business Correspondence Work in India" on www.*MicroSave*.org for a more detailed discussion of this.

Family; K-Rep and PostBank) to facilitate liquidity management. Retail agents are attached to, and managed by, some 300 super agents. Super agents buy and sell M-PESA e-money from and to their retail agents on a day-to-day basis. This is usually done through the banking system as the super agents set up accounts in banks that have presence near their retail agents. Retail agents typically visit the nearest bank branch daily to either deposit or withdraw cash from their account.

Managing Commissions: Agents typically compare the higher commissions they get on sales of mobile phone airtime with their commissions for providing m-banking services – only once "critical mass" of transactions is achieved does the return on the security deposit begin to look attractive by comparison to airtime sales (or indeed investing in stock for the retail outlet)[3].

Above all agents want prompt payment and to know exactly how much they are earning and to have easy access to up-to-date information such as:

- How many accounts they have opened;
- How many transactions they have done;
- What are commissions due;
- How much they have received; etc.

CelPay in Zambia has a web-based system to track this as well as the liquidity of agents, who are notified when their e-cash balance falls below the minimum. Given the importance of making payments to agents as rapidly as possible, and the effect this has on incentives to perform, Zain's Zap-Tanzania's agents to collect commission in cash as the transaction is completed. The commission payable is negotiated with the customer before the transaction occurs. WIZZIT's WIZZkid agents in South Africa receive commission both on accounts opened and based on the transaction level of account holders. This is designed to motivate them to train customers to use their accounts.

Process

A surprising number of systems reviewed and process mapped by *MicroSave* can be re-engineered to improve efficiency and reduce risk of fraud. Card-based Banking Correspondent systems in India, in particular, often entail customers waiting for 2-3 months between application and receiving the card … small wonder so many suffer from wide-spread dormancy. The simplicity and efficiency (or complexity and inefficiency) of the systems affect the amount of time that the agent spends processing enrolments and transactions, and thus the customer experience and the agents' revenue stream.

The controls built into the processes are, of course, key to managing the agency and associated fraud risks. M-PESA's agents are required to manually log transactions, and have the customer sign for each and every transaction thus providing hard copy evidence and discouraging fraud. Even this has not eradicated fraud. "A Safaricom employee and several other people have been arrested in connection with the fraudulent loss of money through the M-PESA money transfer service. Safaricom CEO Michael Joseph … acknowledged that there have been numerous complaints from the public in relation to fraudulent loss of funds through the M-PESA service[4]."

[3] These, and related issues, are discussed in detail in *MicroSave*'s India Focus Note # 69 "Incentivising 3rd Party Agents to Service Bank Customers" by Ben Davis and John Owens

[4] The Nation, Nairobi, October 10th, 2009

One key control is an alert consumer, aware of his or her rights. It is essential that agents (supported by advertising and collaterals) are incentivised, and then assessed on their ability, to explain to customers not to reveal their PINs - even to agents.

> **E/M-Banking still involves substantial amounts of cash and illiterate people handling technology that they often do not fully understand, and is thus particularly vulnerable to fraud.**

Conclusion

Agents are clearly emerging as the key challenge for e/m-banking systems. Whereas this chapter looked at Product, Price and Process, next chapter looks at 5 more Ps of marketing: Place, Physical Evidence, Promotion, Positioning and People.

Managing Agent Networks to Optimise E- and M-Banking Systems-part 2

Graham A.N. Wright and Veena Yamini A.

Chapter Managing Agent Networks to Optimise E- and M-Banking Systems- Part1 analysed the agents of e-banking and m-banking systems in the context of product, price and processes. This note extends the analysis into an additional 5Ps of marketing.

Place

Convenience is usually the unique selling proposition of e/m-banking systems, and so the location where the service is provided is very important. Clients responding to *MicroSave* research often note that the location of agents - usually a close-by local shop - is the main advantage of the product as it provides convenience and safety.

But the convenience of proximity needs to be rationed if the agents' value proposition is to be maintained. Too many agents in one locality will mean inadequate transactions for all. Typically the agents in the bank-led models prevalent in Brazil and South Africa conduct an average of 50-60 transactions per day. By comparison M-PESA agents conduct an average of 80-90 transactions per day, on the basis of an average agent-client ratio of 666 customers per retail outlet.

At the same time, of course, if remittances and other P2P transactions are to be a central part of the business model (and these are what have driven M-PESA's success), then the m-banking system needs a large number of agents. These agents need to be spread across both ends of the remittance transaction – for remitters to deposit and receivers to withdraw. Safaricom has entered into collaborative agreements with a large number of partner banks (including Equity, K-Rep and Family banks as well as PostBank) to act as M-PESA super agents. This provides even more access than the PesaPoint ATM network.

Physical Evidence

The nature of the agents' outlets also plays an important role – both in terms of trust and of customer service. For customers a larger outlet not only makes the agent appear more permanent and reliable, but also offers them confidentiality inside an outlet (as opposed to leaning over a counter facing the street) and the perception of increased security.

However, initially at least, small outlets are more likely to agree to becoming agents for e/m-banking systems as their business volumes are low and they are looking for some extra income. If the e/m-banking systems ask their agents' outlets to standardise appearance, layout and/or size to a minimum prescribed standard, there are cost implications – either for the agent or for the bank ... or for both. Nonetheless, as discussed below under "Position", the appearance of the outlet, the branding etc. is tremendously important for the customers' trust in the system.

The proof of transaction is also essential for building trust and to reduce fraud. Most e/m-banking systems do not provide proof of transaction in physical hard copy. Even when they do, it is usually using thermal paper printouts, the print on which fades rapidly. And, of course, SMS confirmations can be stored on a mobile handset only to the limit of the SIM's memory capacity.

Position

Trust is essential for the provision of financial services, and doubly so for e/m-banking systems. Clients have to believe the agents are operating a reputable system and that the thermal paper print out or SMS confirmation is enough to rely on. This is why remittances are such a powerful entry point for m-banking systems – the receipt of e-money, and its conversion into cash, can be confirmed almost instantaneously. For the same reason, savings-focused systems typically experience that balance enquiries represent over 70% of their transactions at start-up as clients check, re-check, and check again if their balance is still as expected.

Of course, trust is significantly enhanced by large-scale branding of the large corporations associated with the e/m-banking system. So the role of the reputation of Globe, Safaricom, Smart or the State Bank of India cannot be underestimated – indeed agents, recognising this, often demand that additional brand collaterals be deployed in their outlets.

While the bank and e/m-banking system provider, perhaps together with the agent, can attempt to influence the service's "market position", it is the customer that ultimately decides it. What matters is how the clients perceive the service being offered, both in terms of the core product, and in terms of the delivery of that product. Different e/m-banking systems are seen variously in terms of their products: as a money transfer service; as a savings account provider; as a bill payment system; or as something else. At the same time they are assessed by clients in terms of security, trust, accessibility and other key aspects of delivery.

Agents have a key role to play in determining the market position on an e/m-banking system: how they communicate the products; the appearance and layout of their outlet; how they serve the customers; whether they have the liquidity to respond to requests for withdrawals, etc.

Promotion

In addition to branding, agents seek above the line promotions of the e/m-banking products to support their below the line person to person selling of the products. Agents in India demand promotional campaigns like account opening camps and TV/radio spots, as well as brochures and related collaterals to deploy at their outlets in order to support their efforts. However, India is yet to see targeted/contextual promotion campaigns to support e/m-banking primarily because of the regulation-enforced, wafer-thin margins.

M-PESA was backed with a hugely successful multi-media campaign with a very powerful image of a stream of cash flowing between two mobile phones. Furthermore, M-PESA has benefited enormously from collateral advertising since the M-PESA logo, appears in every Safaricom advertisement (even those that have nothing to do with M-PESA and the service it provides). This provides the product with massive promotion at marginal cost.

WIZZIT's "WIZZkids" and WING's "Pilots" are young people who often work in teams as direct sales agents to support the rollout of their systems. WIZZkids are usually young, low-income individuals residing in the areas where they enrol their customers. Their job is to educate potential customers about the service, open accounts and train the customer on how to make transactions on the WIZZIT platform.

Part of promotion is likely to need to focus on security issues – to encourage customers not to reveal their PINs. Much of this may need to be an above the line effort to help (and also reduce reliance on) agents to communicate this important information.

People

Agents are the face of the e/m-banking system – and the front-line interface that can make or break it. Indeed, for all the big brands backing the systems, many clients will only transact with one specific agent that they feel they know and trust. This is why most e/m-banking systems seek reputed agents such as chemists, airtime/mobile phone retailers, MFIs; and super agents such as banks that also conduct larger transactions for which they provide a formal receipt.

Agent selection, training, management and retention remain a focal point for all successful e/m-banking systems. Inappropriate agent selection can lead to widespread client – and ultimately agent – dissatisfaction. Most e/m-banking systems have developed checklists to identify the most suitable agents. These checklists typically assess the prospective agent on the basis of: age, education and personality of the agent; how long they have been in business; their cash handling ability their ability to maintain a float; footfall at the outlet; layout of the outlet; and the community's perception of the agent.

Successful e/m-banking systems pay great attention to the training of their agents, but a wide variety of approaches are used. Safaricom manages the agent development programme itself, but an outsourcing company conducts the training. Drishtee provides on-site, one-on-one training, whereas Eko trains its agents in batches. All successful systems place great emphasis on customer service and maintaining liquidity to meet demand for withdrawals.

In addition to high quality induction training, agents need back-up to help resolve queries and issues that they, and their customers, have. M-PESA agents are backed up by a huge customer support team at the Safaricom customer service centre. While call centres can provide some of this agent support (and represent a significant proportion of the expenses of running an m-banking system), as is being quickly learnt in India, there is no substitute for visits and reviews by staff from the organisation running the e/m-banking system.

Celpay's team managing their agent network conducts regular audits to ensure that agents are adhering to brand guidelines, have a functional POS terminal, and deliver a good customer experience. Safaricom territory managers monitor super agents and retail agents on a monthly basis with on-site visits. M-PESA agents are assessed and rated on the basis of:

1. Visibility of branding, agent number and tariff poster;
2. Quality of record-keeping and processes followed;
3. Availability of cash and M-PESA electronic value to meet customer transactions; and
4. Availability of replacement SIM cards for new customers.

No sanctions are applied on the basis of the assessment: the intention is to allow discussions with the agent and to motivate them to improve the service provided. In India, *MicroSave* conducts regular reviews of agents' service and premises, including mystery shopping. The reports are then used to further enhance support for agents and to identify opportunities for, or challenges to, customer delight.

Many e/m-banking systems use a system of super agents or master agents – derived from, or riding on, telcos' agent networks. These super agents play an extremely important role in managing agents locally since it is difficult to oversee and assist a large network of agents directly from head office. Super agents can assist with customer service; perform quality reviews; provide important internal control functions; help with the management of liquidity challenges; and make larger transactions, where necessary.

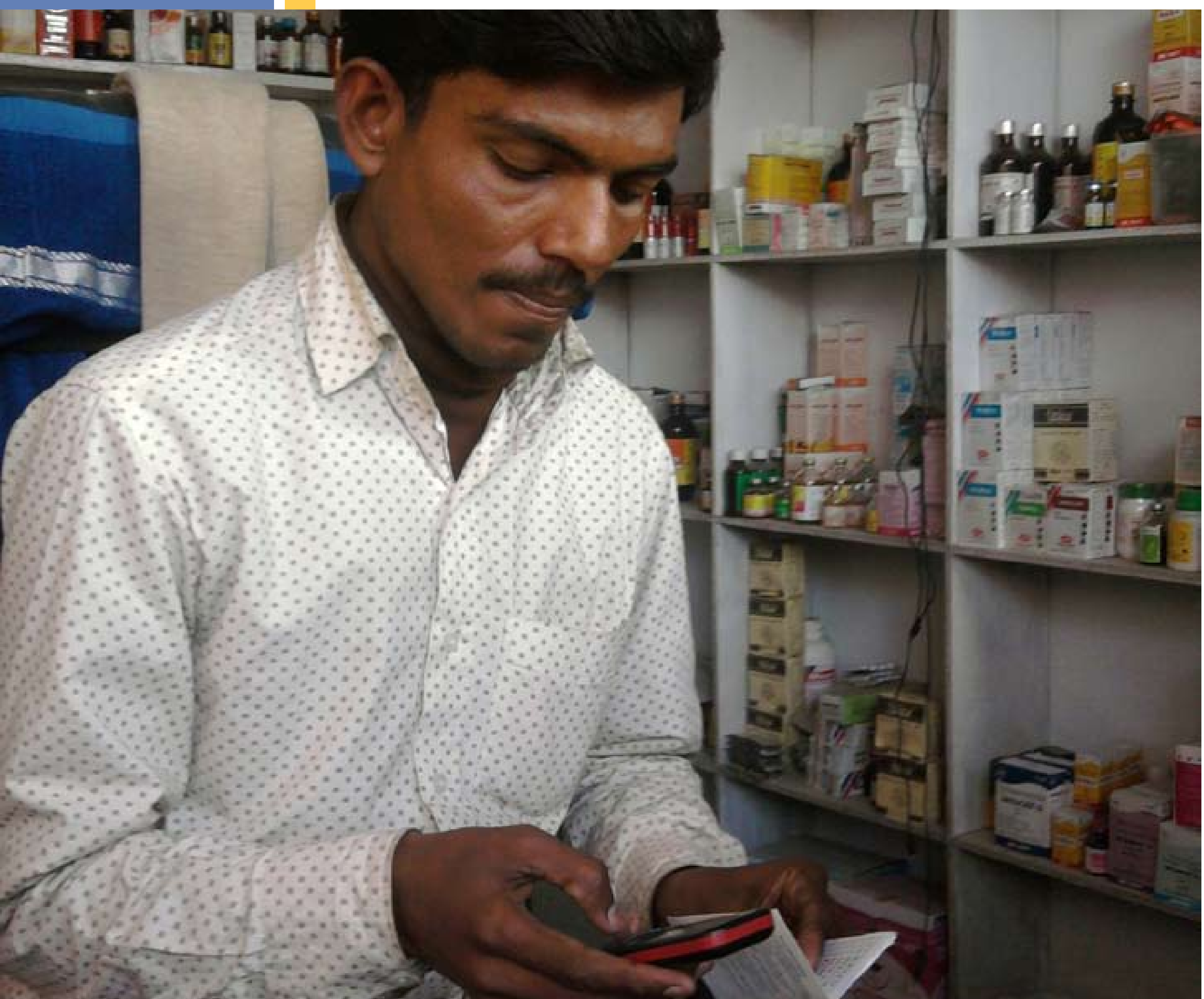
Agent retention is also tremendously important for continuity of service and to maintain trust. But agent retention remains a problem. For example, of Banco Do Brasil's 1,200 correspondents, as many as 20% are inactive and ten leave the network each month.

Conclusion

Agents are emerging as the key challenge for e/m-banking systems: they are the human interface with the clients, and providing support to them, as well as regular assessment of their performance, is essential.

M-Banking Agent Selection

David Cracknell



Mobile phone banking offers significant potential for lowering transaction costs and providing secure banking services to vast numbers of people across the developing world. It provides low cost services, because it operates a technology based platform through mobile phones and through a network of agents, who can provide convenient, secure and fast service.

Selecting the right agents is critical to the success of a mobile banking initiative, especially during the most difficult introductory period as the solution seeks acceptance in its target market.

Selection criteria are situation dependent: The m-banking Dialogue sponsored by *MicroSave* and MABS in Manila in December 2009 was clear that there is no ideal list of selection criteria as criteria are market and solution specific. Finding the right combination of agent selection criteria is a matter of research, and adaption during careful pilot testing. The following factors are particularly important:

- *M-banking environment:* The m-banking environment in a particular country defines the roles the agent can play. Are agents allowed by Central Bank regulations to sign up customers? What are the Know Your Customer requirements? What information are the agents required to keep on their customers? Are there any restrictions on the size or nature of transactions?

  If agents are able sign up customers, then agents with large social and/or business networks can be particularly important.

- *Maturity of the m-banking solution:* A further factor is the maturity of the solution. A new solution must be carefully marketed to potential agents, as it will take time for any solution to generate significant returns. The brand, image and market position of the promoters of the m-banking solution is critical to early adopting agents. On the other hand, a mature solution is often able to interest chains of agents – for example G-CASH operating through networks of rural banks or pawn shops in the Philippines, or M-PESA in Kenya operating through networks of airtime resellers.

- *Rollout strategy:* Agents must be selected carefully in accordance with a clear strategy. EKO for example in India started their m-banking collaboration with State Bank of India using a strategy which attempted to create a large number of agents on launch. However, EKO quickly moved to handpicking agents along with a clear, localised marketing strategy to develop customers for the agents.

- *Resources:* Available resources can significantly influence agent selection. In Kenya Safaricom launched its M-PESA solution with 300 well trained agents in carefully selected locations which were to facilitate local money transfer transactions. Safaricom was able to use its reputation and significant resources as the leading Mobile Network Operator (MNO) in Kenya to underwrite the expansion of its product. As of December 2009 it has 14,000 agents.

So given a particular m-banking environment what are the criteria that can be considered?

1. *Existing relationship with MNO:* For Safaricom in Kenya, the obvious agents were its existing airtime resellers. These resellers already had a strong relationship both with the MNO and with the community in which they serve. For G-CASH in the Philippines, this channel proved more difficult for two inter-related reasons 1. The commissions paid on mobile airtime top-up were high by comparison to those offered for m-banking transactions. (Commissions to the agent value chain are around 16-17%, split between agents and sub agents) and 2. G-CASH enabled mobile airtime top up through the solution, which benefited customers but took market away from existing airtime resellers.

2. *Age and education of the agent:* The potential agent must be capable of maintaining record keeping according to the standards required by the promoters and the Central Bank. An inability to properly complete records may lead to de-selection of the agent.

3. *Experience of the agent:* The agent should be an experienced businessman with several years experience. The agent should be known and respected in the community. The agent themselves must be trusted by the target market, especially during the initial start up period of the solution. The experience of the agent is furthermore critical in developing trust between the promoters and their agents.

4. *Nature of business / Connection to the customer:* Particular businesses can make excellent agents due to specific cultural or economic factors, so for example in South Asia, the pharmacist is often a respected advisor who can positively influence customer adoption of the solution. For Wizzit in South Africa part of their solution was to target early adopters, through individual sales agents who could clearly relate to their target market, so called "Wizz Kids".

5. *Liquidity:* Agents must have liquidity to be able to cash out transactions whenever m-banking customer requires. The size and frequency of expected withdrawals will significantly influence the liquidity requirement and therefore the nature of the ideal agent. Business turnover can be a proxy for liquidity.

6. *Agent location:* Clearly the agent must be physically close to the target market especially if transactions are of small size. Research has shown (perhaps unsurprisingly) that customers are prepared to move much longer distances to receive or deposit large sums of money than to transact small amounts. If the solution is to be primarily used for smaller transactions this dictates close proximity to customers.

7. *Appropriate premises:* M-banking transactions benefit from a safe secure environment, just like any other banking service. This means that customers will need to be able to transact, securely and safely in a pleasant environment that has the security to handle a particular volume of cash. It is not surprising that in the most mature m-banking solutions, banks themselves are important agents.

   Premises must be sufficiently large to accommodate customers to queue and transact in the midst of the agent's existing business. Where space is at a premium for stock, this may be a difficult trade off.

8. *Target clients of the existing business:* The target market for the m-banking solution should match the core market of agent.

9. *Consistent personnel managing business:* There should be consistency in the personnel operating the m-banking solution. Those responsible for handling transactions will need to be well trained, with a good understanding of how the process works. It is therefore important that the person trained, and trusted by clients, is on premises to make transactions at all times possible.

10. *Other agents in the area:* If agents are located too closely, they may cannibalise each others' markets, especially where they need to achieve significant volumes in order to obtain substantial amounts of incentives.

Categories of Agent

Clearly not all agents are created equal. The guidelines above are focused around the basic agent level. However, especially as solutions develop there is often a need for different categories of agents. This is the case for both G-CASH and M-PESA.

Super agents: Such agents can support larger volumes of transactions, greater numbers of clients, can often provide documentary support for the transactions, and can handle larger transactions. Often these agents are dealing with cash as their core business, for example, banks in Kenya and pawn brokers in the Philippines. Super agents usually have multiple premises of their own which make super agents extremely valuable in m-banking solutions.

Resellers or sub-agents: G-CASH uses individuals to provide limited cash in and cash out transactions to customers, particularly in remote areas. Other mobile banking solutions use a range of sub-agents who are coordinated by a lead agent.

Microfinance institutions as agents: Microfinance programmes, in mature m-banking markets are beginning to use m-banking to receive occasional client payments. However, only deposit taking microfinance programmes like banks can be expected to have sufficient cash on site to be able to process significant cash withdrawals using m-banking.

Agent Retention

Clearly the success of an m-banking solution means not only selecting suitable agents, but retaining them. There are emerging lessons in agent retention which must be considered at the time of agent selection:

Agent business case: Agents must be able to make money from offering the solution. There should be a clear business case. This means that commission income from the electronic banking channel itself or improvement in the agent’s core business, must be sufficient for the agent to choose to remain an agent.

Supporting agents: Safaricom built its agent network, through transactions, and also through incentivising agents to sign up new customers. Thereby when transactions were low, agents had an important alternative income stream. As the number of customers built the value of the transaction income stream increased significantly.

M-Banking Liquidity Management

David Cracknell

Managing liquidity is critical to the success of any electronic banking initiative because in most emerging markets payment systems are still evolving and most transactions are still in cash, "cash is king". Customers usually use m-banking to transfer value which needs to be cashed by the recipient, and use m-banking agents to manage "cash in" and "cash out" transactions. Liquidity requirements can be significant: in November 2009 Safaricom's M-PESA transacted $650 million per month in cash deposits and withdrawal transactions; 27 companies used M-PESA for bulk distribution of payments; and 75 companies collect payments from their clients through M-PESA[1].

Liquidity in M-Banking Solutions

Typically m-banking works through the use of float accounts, each agent is required to maintain a balance of electronic money in their agent account. When a customer wishes to send money to a relative, she exchanges cash for e-money through paying cash to an agent - the agent's e-money balance reduces by the amount of the transaction, and the customer's e-money value increases. The customer then transfers their e-money to their intended recipient. Correspondingly, when a customer makes a withdrawal, the agent receives e-money and pays out cash, and the agent's e-money balance increases by the amount of the transaction.

The agent can continue to make transactions until their e-money balance is exhausted. At this moment the agent has effectively exchanged all their e-money for physical cash, and the agent then needs to replenish their e-money account by paying in cash to their e-money account before any further cash deposits can be made by customers.

Ensuring agents have either e-money or cash when customers require it, is the essential challenge of m-banking liquidity management. A situation where agents run out of cash, may be particularly common in rural areas where small agents do not have the physical cash for customers to make significant withdrawals. Conversely during harvest periods, too much cash may be the problem as farmers deposit cash into their e-money accounts.

So How To Design A System To Manage Liquidity?

Fortunately there are a number of emerging lessons:

1. *Select Agents Who Handle Large Amounts of Cash:* Airtime resellers, for example, have cash from selling top-up vouchers and are often initial choices by mobile phone companies. However, this can depend on the nature of the relationship between the m-banking company and airtime resellers. For example if the m-banking facilitates electronic airtime top up the airtime reseller may not wish to take part in the solution. Financial institutions can facilitate larger transactions, for example, G-CASH partners with the rural banks in the Philippines, and M-PESA partners a range of banks in Kenya. Another source can be input suppliers in rural areas.

2. *Select Multiple Agents In A Given Location:* Increasing the number of agents in a location increases the options open for customers to cash their funds. Safaricom's M-PESA product launched with 300 agents, just two years later with over 8.8 million customers, M-PESA has over 16,000 agents. One challenge here is that multiple agents in one location are great for the customer, but can reduce transactions and hence income for an individual agent. For further discussion on this point see Chapters Managing Agent Networks to Optimise E- and M-Banking Systems[2].

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[1] Mas, Ignatio, "Three Keys to M-PESA's Success: Branding, Channel Management and Pricing", Bill and Melinda Gates Foundation, 2010.
[2] Wright, Graham A.N. and Veena Yamini A. See *MicroSave* India Focus Note #73 and # 74 – "Managing Agent Networks to Optimise E- and M-Banking Systems", 2009.

3. *Select Agents With Multiple Outlets:* Agents with multiple outlets can transfer cash or e-money between outlets as required. This obviates the need for the agent to travel to the bank to bank cash in their e-money account during the working day. This is a key strategy in use by M-PESA, which relies upon agent Head Offices to manage the liquidity of their sub-agents. It remains a significant management challenge however, as 60% of M-PESA stores belong to agent Head Offices with less than a dozen stores[1].

4. *Encourage Electronic Payments for Business to Business Transactions (B2B).* If agents experience significant demand for cash from customers, their cash balance goes down and their e-money balance increases. They now have two options to reduce their e-money balance, either they exchange e-money at a bank for cash or they spend the e-money through an electronic purchase. For example paying for supplies using e-money, thereby transferring their surplus e-money to their supplier. Encouraging B2B linkages facilitates this exchange.

5. *Linking to ATM Networks:* M-PESA links to the PesaPoint network, customers can obtain a one-time code which together with their phone number enables them to withdraw funds from their M-PESA account. This is particularly useful for larger transactions, where customers often require printed receipts as confirmation of transactions rather than the normal SMS confirmations.

6. *Continuous Evolution:* Successful mobile money issuers such as Safaricom in Kenya and GXI or Smart in the Philippines carefully manage and continuously evolve their channels; and increasingly link these to the formal banking sector, where large reservoirs of liquidity exist.

Issues in Liquidity Management

1. *Using M-Banking for Microfinance:* Microfinance institutions thinking about adopting m-banking must carefully plan liquidity. This is because the sums involved in managing repayments or disbursements, can be very significant. Weekly payments even in group-based microfinance collectively represent significant sums especially if paid in to agents at the same time. Similarly a single loan disbursement can be many times the average m-banking transaction. For example, an average M-PESA transaction is $33 whilst a typical microfinance loan in Kenya could be $600 or more. In some cases regulators impose a maximum size for a single transaction that could be lower than a typical loan disbursement.

   Managing liquidity means that agents in the area of loan clients must therefore be made aware of the volume and nature of such transactions and must plan accordingly, and where necessary plan for increased security.

2. *Pricing for Liquidity:* In some M-Banking programmes liquidity is priced either explicitly or implicitly. G-CASH in the Philippines allows agents to charge different fees on withdrawals which are advertised on the G-CASH website. Zain's Zap product has a minimum, but not maximum charge. In Kenya some rural M-PESA agents were shown in research to restrict the size of transactions when liquidity was tight, which on a flat transaction fee structure puts up the cost of withdrawing a set sum.

3. *Social Payments:* M-Banking offers huge potential for making social payments, it has a significant advantage in that it is cheap to administer, especially when compared with physical transmission of

[1] Mas, Ignatio, "Three Keys to M-PESA's Success: Branding, Channel Management and Pricing", Bill and Melinda Gates Foundation, 2010.

cash or goods to impoverished areas or refugee camps. However, the challenge remains liquidity. Social payment recipients often live in impoverished areas where there is a limited formalised cash economy.

4. *Liquidity Management During Scale Up:* It can be particularly difficult to manage liquidity during the scaling up of a solution. As customers need to have access to a large number of agents in order to have confidence in the system and for customers to be able to manage their liquidity. However, during scaling up, there are fewer customers to be shared amongst agents. So matching growth in customers with growth in agents is likely to be extremely important.

5. *Competition for Cash – Branchless Banking:* Attention has so far focused on e-money, where virtual money is loaded onto a customer's phone and used for transactions. However, branchless banking regulations are being drafted in many countries around the world. These laws will enable regulated financial institutions to use third parties as their agents to offer a range of basic banking and payment transactions to their customers, directly through customers' bank accounts. This means by extension there will be competition for liquidity from multiple institutions. Already in Kenya, Safaricom's market position may have established a fee structure which is likely to significantly influence the price of cash for different players as branchless banking develops.

Practical Advice to Reach a Tipping Point in M-Banking Solutions

David Cracknell

M-banking is maturing into a global industry, such that it is possible to determine the steps that providers have taken to reach a tipping point. This note seeks to provide pointers and ideas for achieving scale.

Provide Value in Addition to Cash

Any mobile banking solution has to contend and compete with the ubiquity, accessibility and portability of cash. Furthermore, the value users receive must be sufficient for the user or seller to pay a transaction fee. This means that building a winning customer value proposition is the first, and arguably the most essential part of building successful m-banking solutions.

For customers: Why should customers put money in their account for purchases that they can do in cash? In Kenya, M-PESA's success is based not just on the remittance service offered, but also the high price of alternative options for transferring money and poor security of alternative mechanisms for moving cash.

For merchants: Accepting mobile payments can be cumbersome; however, merchants are able to handle transactions that they could not do before. Furthermore, they do not have to leave their premises, and can perform remote transactions for themselves.

Incentivise Customers

The initial challenge, recognised by Wizzit in South Africa, is that users have to have experience an easy to use solution several times to build trust and familiarity. In the Philippines airtime top up provided this incentive. Every time Globe users load airtime they get a rebate, whilst SMART offers additional airtime. Once an active user base is established it is possible to graft on additional payment options.

Six months after launch Safaricom ran a promotion, which paid a small amount of M-PESA money to winning customers: this meant that 60-70,000 people experienced M-PESA. Subsequent promotions meant that Safaricom paid 240,000 people a small amount. These promotions cost broadly the same as other marketing campaigns, but generated huge user experience. For the same reasons, Safaricom also pays shareholders dividends through M-PESA.

Build an Agent Network

Even with customers incentivised to try the solution, they need to have to sufficient access points to enable these transactions to take place.

Incentivise agents: In the Philippines, initially agents wanted to charge very high fees due to existing incentives paid on airtime, this made it more difficult to create the agent network. Conversely, M-PESA paid commissions to its agents to register customers, which encouraged a rapid expansion in signed up customers.

Build staff familiarity with the solution: Staff familiarity with new products is vital. For G-CASH all staff members at one partner bank were paid through the solution, so all staff knew how to use it. This made them much more effective in selling the benefits of the solution.

Determine characteristics of key agents: Research in the Philippines showed that grocery operators, pharmacies and pawn shops had large amounts of cash to manage liquidity. They have to hold larger cash floats than airtime resellers as their average transaction sizes are significantly larger.

Use existing relationships: In the early days in Kenya, when Safaricom recruited agents, they had the advantage of long term relationships with a large number of exclusive dealers. Safaricom was able to add value to its existing offering to its agents.

Build customers and agent networks simultaneously: For almost all m-banking solutions it is vital to develop the agent and customer base at the same time. Unless the mobile network operator occupies a dominant position such as M-PESA, this may mean localised campaigns to build the agent and customer base simultaneously.

Develop sub agents: In the Philippines, anyone with a phone can become a cash-in /cash-out point, within the limits set by the regulator. So in a rural community there can be many informal agents - G-CASH resellers. In some communities large volumes of cash move through these networks.

Build Key Transaction Drivers

The first product on an m-banking delivery channel must build transaction volume. This requires careful research within the target community. The experience of successful m-banking solutions shows that this factor differs from community to community. In Colombia bill payment was the vital area to develop. Research found more than 30 different household transactions related to paying bills. This meant it was possible to build large numbers of transactions quickly around bill payment. In the Philippines, the key driver of transactions was inward remittances, on which the sender pays the fees. In Kenya the key driver for M-PESA is domestic transfers, which built on detailed understanding of Kenyan social and economic dynamics.

Communicate relevance to customer: The M-PESA product showed simplicity and relevance, Safaricom talked of only one thing for two years. The message was simply, "Send money home". The market was not confused with multiple messages, until millions had tried M-PESA, and had it in their hands.

Learn quickly from mistakes: Pilot testing m-banking solutions is difficult due to the investments required in building agent networks. However, it is vital to learn quickly as course corrections can be very expensive. EKO in India did not have money to build agent networks through the network operator. "We started by using "spray and pray" methods of developing our network i.e. putting agents everywhere we could. However, we found that for the agent and super-agent had to see benefits in the first month. For us "spray and pray" costs were very high. Hand picking our agents has been better".

Ensure motivated actors: Those that are likely to benefit from it, make the best sellers of the solution. One mobile network operator planned to provide a payment solution to banks, however, take up rate has been paltry at best. This is partly because banks were to be the sellers of the solution and they did "a terrible job". Conversely when actors are motivated there can be considerable success. In the Philippines, Rural Banks could push in the communities better than the mobile network operators (MNOs). "We looked for agents who know everyone in the community, for example an elderly travelling salesman, got excited by G-CASH, everyone in town looks up to him. He was the perfect example of a maven - he won the micro-entrepreneur of the year from Citibank".

Target early adopters: A key initial target for early sales are those customers who are more likely to adopt innovative products, these are called "early adopters".

Segmentation analysis can be used to identify individuals who are likely to fit this category, and highly targeted sales campaigns can be undertaken.

Add Value to Existing Key Transaction Drivers

Once the solution has launched and the key transaction driver identified, long term profitability is likely to be determined by adding value onto the solution and thus build more transactions and increased income from the existing user base.

There are a range of emerging products well suited for m-banking. In microfinance there are regular disbursements and repayments of loans. However, mechanisms for disbursing microfinance loans must be carefully developed due to the higher relative size of loan disbursements, which create liquidity challenges. In the formal sector there are allowances and salaries, and in the state sector, social payments. Again, with social payments it is critical to design mechanisms for managing liquidity as these payments are often made in rural or difficult to reach areas. Over time, more loans are likely to be issued through mobile phones. However, if the full benefits of automation are to be derived, this may require credit scoring mechanisms to be developed for low income markets. Business to business transactions has significant potential in some markets once value chains are understood.

A service which offers significant potential is recurring deposit products that facilitate small regular saving to build useful lump sums. Susu collectors in West Africa provide a good example of this. However, one challenge is to build trust in the channel among low income customers. Another challenge would be the price per transaction for depositing small amounts of money.

Who Pays and How?

Historically people have not paid to deposit money or use cards: merchants would pay for the transaction in order to generate sales. The mobile payment environment is different. Yet, if the customer to pay for deposits then who is going to pay? Getting the economics right is important so that the chain of transactions can happen, otherwise customers are not going to use e-payments. Similarly if merchants need to be paid, who is paying for this – in principle this should be those businesses which benefit!

Where to Offer Services?

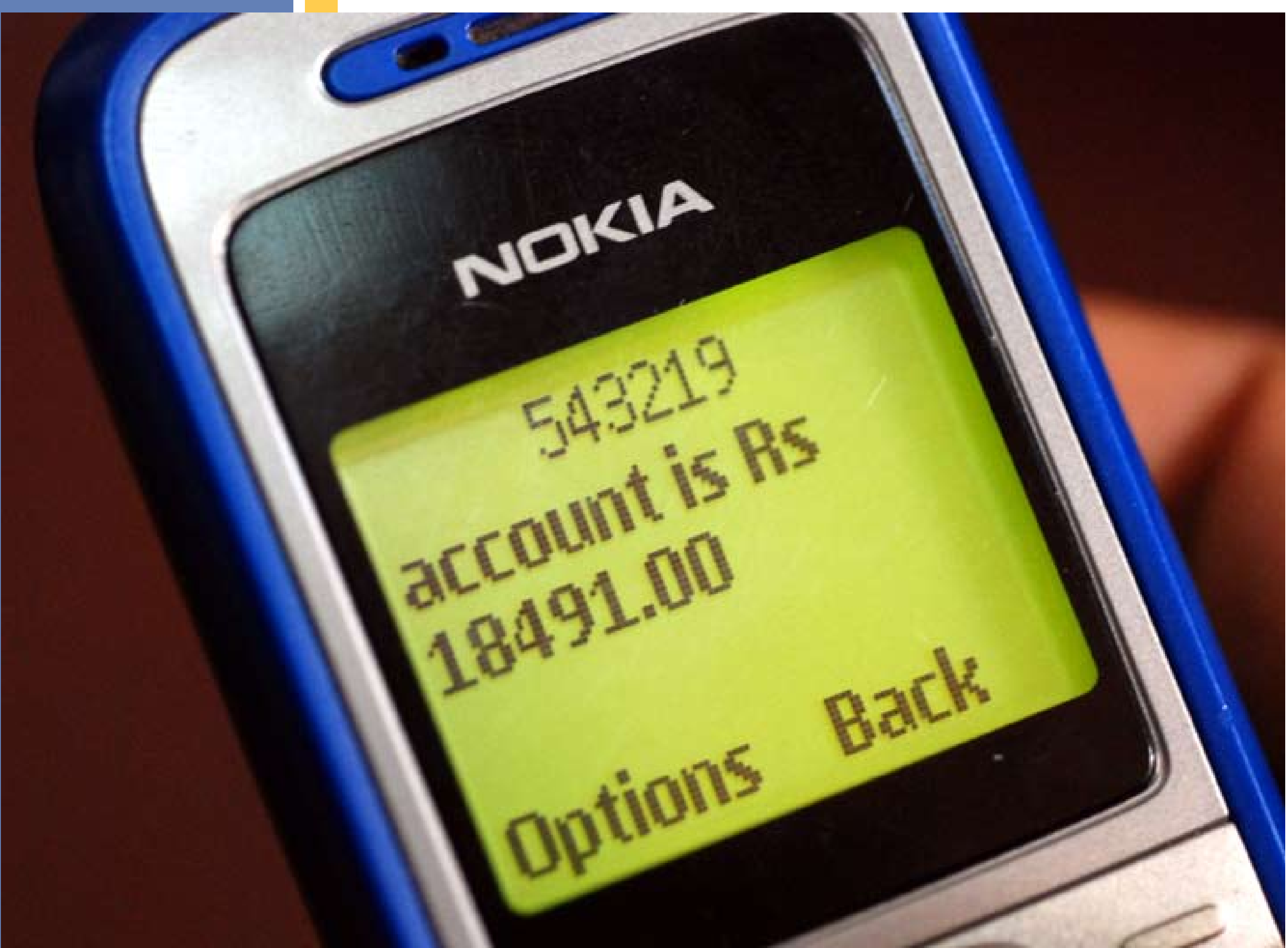
A study conducted in the Philippines shows branchless banking is particularly attractive in isolated areas where payment options are limited. This strongly suggests that it is possible to reach isolated conflict affected areas with m-banking. The challenge is in whether transaction volumes can match the costs required to establish these remote networks, especially before m-banking solutions have reached maturity.

Massive Potential

As a final remark, m-banking is building infrastructure which will be leveraged in many ways in the future. The current success stories of M-PESA, Globe/GXI and SMART give an indication of significant potential, but the picture continues to evolve rapidly.

Mobile Payments: Ten Years On, What Has Changed?

Richard Ketley



Introduction

When in 2004 Globe Telecoms of the Philippines launched its G-CASH product as a competitor to the successful money transfer launched in 2000 by Smart, the other mobile operator in the Philippines, it seemed clear that it was only a matter of time before mobile payments and mobile banking became a major part of the way in which poor people received financial services. The *MicroSave*-Microenterprise Access to Banking Services (MABS) M-Banking Dialogue 2009 held in Manila, prompted some reflection on what has changed in ten years in the m-banking environment. This note considers some of the key developments.

Platform / Protocol

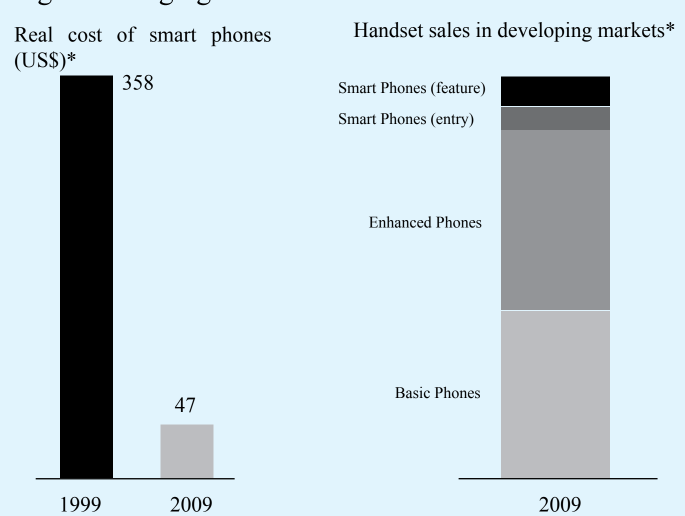
In the early days of mobile payments, two main issues concerned potential providers. Would there be coverage in the areas where the unbanked and potential users will be located? And what applications / communications could the handsets support? It turns out that they should have been more worried about business models, and customer value propositions.

The coverage issue has largely disappeared, at least for global system for mobile communication (GSM) services. Few would-be mobile payment service providers now seem concerned over coverage. In most low income markets general packet radio services (GPRS) services are now available and 3G has been launched or is anticipated. Network reliability may still cause concern, but is probably no greater an obstacle to operations, than other infrastructure constraints routinely faced in remote areas (power cuts, bad roads etc). In fact in many countries the mobile communication networks have proved the most resilient in times of crisis.

The evolution of the handset is more difficult to track, but is certainly changing rapidly. Three trends seem relevant. Figure 1 highlights the extent to which more and more phones are "enhanced" – by which we mean able to handle over the air application downloads using GPRS.

One of the main concerns ten years ago was the hassle factor experienced when customers needed to download an application using subscriber identity module (SIM) Toolkit. In fact most early solutions requiring menu downloads or for customers to remember long "strings of numeric codes" were not commercially successful, and created an asymmetry between the segments targeted and reached. Although targeting the unbanked, it was largely the banked and literate who were able to manage the download process and the unbanked need dedicated assistance and support to manage this process which dramatically increased the costs of launching a service. With more modern handsets, a dramatic fall in the costs of handsets, java applications, GPRS services (and an increasingly technologically-aware market) these issues seem largely to have been resolved for many users.

Fig 1: Changing handsets



*Devices are the RIM 850 which came to market in 1999 with basic browsing and Samsung B100, one of today's cheapest handsets with GPRS and Jave: Source CGAP

*All developing markets data, smart phone defined as entry level : Source CGAP

Of equal concern was the capacity of the SIM cards issued by mobile operators to handle the additional applications. Although little data is available it seems that most networks have successfully migrated most users to 64k SIM cards in the normal course of business, thus removing the constraint and also eliminating the need for customers to complete a potentially confusing SIM swap to avail of a mobile payment service.

The third issue concerns security, with operators needing to make trade-offs between ease of deployment and use and security. These issues remain and continue to be a key feature of debates on the appropriate business model and partnerships required to succeed.

There are now probably three groups of "core solutions" and related business models that are competing in the market, which reflect these trends:

i) ***SIM dependent and integrated solutions –*** The best known example of such a solution is M-PESA from Safaricom, which is now pre-loaded on all new Safaricom SIM cards. Being integrated into the SIM card, the solution can operate, and was designed to operate, on the most basic phone, and has end-to-end encryption. However given the degree of technological integration this type of solution is extremely difficult for a non-mobile network operator (MNO) to offer and thus gives an MNO a huge advantage over other mobile payments providers, and is thus a core feature of MNO lead business models.

ii) ***USSD solutions –*** equally successful are solutions that use unstructured supplementary service data (USSD) and simple menus to provide mobile payment solutions. Bank mobile payment providers in South Africa have seen the greatest success with USSD services. However as the initial leg of the transaction is not encrypted or secure, most of these services have been confined to "closed loop transactions" – where money is passed between accounts or users at a single bank, but not between banks. This is a huge constraint to achieving widespread use of mobile payments as interactions will be confined to either the bank's own customers and out of network payments need to be through cash. As all phones can use USSD, the solution can reach large target segments, and as the USSD service does not require integration with the SIM card, these services can be launched with minimal involvement of a MNO. Although the MNO needs to agree to make the service available and this has been a problem in some markets. In USSD solutions anybody can "play" and banks have tended to be the winners.

iii) ***GPRS/Java solutions –*** involving downloads. As noted above downloading solutions to an "enhanced" phone is considerably easier, and an increasing number of people have higher quality phones, or soon will have them. It is likely that most people who are banked now have phones that can handle such downloads. This business model is perhaps the most contestable as the downloadable application can be from a bank, mobile network operator or any other third party. The drawback remains that the solution is no more secure than accessing the internet, and to compensate the provider for the associated risk transaction fees tend to be higher.

What Might The Future Hold?

The future industry terrain will be governed by issue of customer ownership and platform. Whereas the mobile operators will continue to have the greatest natural market share and brands, their ability to use this to lock customers into products and services they provide will probably diminish. In the current weaker global market conditions, and with even some emerging markets achieving saturation in the mobile phone market, it seems likely that the cost of enhanced phones will continue to fall, and their penetration will continue to rise. Over time, and as happened with the internet, this will give greater advantage to whoever has the best application and marketing campaign to get the application on to the user's phone or to attract them to their mobile enabled web site. In this respect the announcement that Nokia phones will in future come with a pre-loaded Nokia money solution that enables some form of card to card payment (as it is based on a service provided by Obopay, www.obopay.com) signals the start of much greater competition over what application will define the mobile payment space.

What does this mean for mobile operator led strategies? The mobile operators face an interesting dilemma. Their mobile payment services currently leverage three "assets": their ability to provide services from the SIM card (and their control of the SIM card), their ability to determine the prioritisation of messages and an extensive distribution infrastructure (that was originally set up to sell airtime). However some mobile operators have an explicit strategy to use their mobile payment platforms to allow users to purchase airtime with a significant rebate. This entails considerable cost savings for the MNO, as the cost to deposit funds into a mobile account are typically much cheaper than the amount a MNO pays to its reseller network. However it is not in the long term interests of the reseller to sign up customers to a mobile money service, as to the extent to which the customers stop purchasing airtime via the agency network, their business will decline. Resolving the complexity of the role of the reseller in promoting the mobile payment service is thus a key element of the design of the business model. In some instances the MNOs are dependent on the agents to promote mobile payments, although because of the rebate offered to users it represents a long term threat to the agents' business. This contrasts with M-PESA in Kenya where no rebate is offered, precisely to protect and promote the interests of the agents, who play a key role in customer registration and payments. In the Philippines the dilemma is resolved by having separate sales and service channels with the resellers not being responsible for the sale of the service. At the same time it seems that for the customer, instant access to airtime at a discounted rate remains one of the key drivers of the adoption of mobile payments in most markets.

For banks and MFIs, the opportunity is to play catch up. Few have yet been able to reduce their total cost to service low income customers through leveraging mobile as a low cost channel, but at least in South African banks and several rural banks in the Philippines, there is sufficient experience and customer acceptance to start to consider mobile as a core part of the "package". This experience, as well as, new revenues from airtime sales, remittance revenues and bill payments will increasingly feed into estimates of customer profitability and market opportunity. Equally, a larger and larger number of younger customers access and purchase value added services on their mobile phones and need to find a cheaper way to fund such purchases rather than use airtime minutes (or load). The natural extension is thus for more and more users to adopt solutions that link their mobile phone with their bank account, or to download applications that facilitate this linkage.

Bottom-line for MFIs: More Options with Less Investment

Whether mobile payments remain operator led or come to look more like the card industry, does not matter too much to an MFI. Provided that a dominant and interoperable transaction infrastructure emerges, there should be major opportunities for MFIs to re-engineer business process to reduce costs using the capabilities of mobile payment platforms. This is already happening in the Philippines, and in Kenya. However it is equally important that any MFI considering adopting a mobile payments solution carefully examines the value proposition to its customers, and what competitor products/solutions are available.

Does Mobile Banking Require A Card?

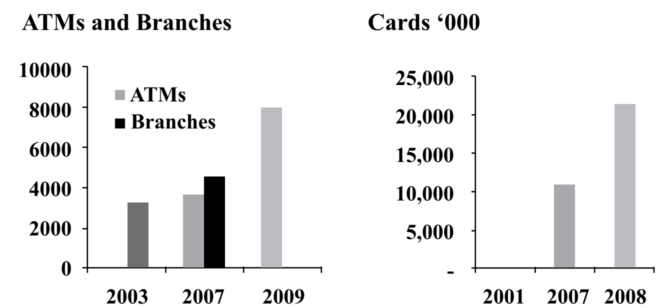
Richard Ketley[1]

[1] Richard Ketley is a partner in Genesis Analytics' banking practice. Richard's areas of specialisation and interest include m-payments, small and medium enterprise (SME) banking, and microfinance.

This may seem a strange question. Mobile banking was always going to be the alternative to cards, a cheaper easier to manage product/channel combination that would sweep away the straight jacket of pricing and rules associated with the card industry. This would allow microfinance institutions to avoid the costs associated with issuing and managing cards and the costly infrastructure on which they can be used. An increasing number of practitioners and providers believe that this is a simplistic view. However it now seems likely that realising the full potential of mobile banking is most likely to come from the integration of mobile and card solutions, products and channels.

So what has changed? The first factor to consider is that in many markets the mobile payments revolution has been "delayed". Ten years after the first mobile payment platforms appeared, in most places, they have not transformed the payment landscape.[2] During this time however the number of conventional cards in issue and places where they can be used has exploded. Figure 1 shows the experience in Nigeria, which is not dissimilar to most markets in Africa and Asia. The number of retail banking customers with access to a basic card product has doubled in most emerging markets in the last five years. This first wave of card adoption is now expected to face another wave with the role out of even lower cost "prepaid" card products, which will reach even lower down the pyramid.

Figure 1: Growth in Card Infrastructure in Nigeria



Source:*Genesis estimates and news articles; Central Bank of Nigeria; Business day articles

Although it is a truism that in most low income markets there are still probably four times the number of mobile subscribers than there are banked customers, an increasing number of these customers will be carrying some form of payments card. Governments are often driving this process – requiring that civil servants receive their salaries into a low cost account, or that employers pay workers into an account of sorts, or making welfare payments directly into bank accounts. Such payments are particularly difficult for agent networks to support, as they often face large end of month demands for cash, before customers have "spent" their cash to enable the merchant to build up a float.

> Prepaid cards, come in a number of formats in different markets, and can be single or multiple use; card association or non-card association branded; and can be reloaded with value. They differ from traditional debit products as they are preloaded with value, typically do not require a bank to open an account (the account and information on the amount on the card are stored on a database normally provided by the card issuing company). They are increasingly used for government welfare payments, and can be issued by banks or retailers. They are typically much cheaper to issue, and host than conventional card products.

If a mobile payments service provider is to meet all their customers' convenience needs and prevent them from having to have both a mobile payment product and a conventional bank account, the best way to achieve this is to give them access to an ATM and or debit card. One of the most interesting

[2] See *MicroSave* India Focus Note #79 on "Mobile Payments: Ten Years On, What Has Changed?"

innovations in Kenya in the last year was when M-PESA introduced non-card based ATM withdrawals to support its mobile payment service.

Similarly, if MFIs seek to release loans through m-banking channels, the borrowers' demands on agents' liquidity are likely to be overwhelming – and thus ATMs are the obvious solution. Clients are likely to be willing to travel further to access larger amount. Indeed they will often necessarily be in the local market town (where ATMs are located) in order to buy the goods or raw materials financed by their loan.

Smart Money in the Philippines, one of the earliest innovators in the mobile payments environment, now issues a co-branded Maestro debit card when customers sign up for the service. Although this increases the costs and complexity of the business model, the advantages to the customer are significant. They can access the circa 8,000 ATMs in operation in the country, as well as the rapidly growing POS network. Despite the progress Smart Money has made in building an agent network, access to this infrastructure brings considerable benefits to the customer.

The second factor to consider is what we now know about how people will use mobile payments. Many early innovators in mobile payments envisaged a world in which there would be a constant and ubiquitous flow of e-payments between individuals for all payments, replacing the need for cash and ATM based withdrawals. This has not happened. Mobile payments have succeeded in environments in which face to face transactions are not possible (domestic long distance remittances), for low volume, large value transactions, and when large "network effects" exist. The success stories in mobile payments have clearly demonstrated that the many low income individuals that support family and friends upcountry, can and will adopt a convenient low cost solution when sufficient cash in and cash out points are available. Completing a single large once a month payment – for rent for instance, may be an appropriate example of a low volume high value payment, but your landlord is unlikely to be delighted if to receive the rent they then have to sign up for a new account. Kenya, where the highly successful M-PESA platform has by some accounts signed up 1 in 3 adults, is beginning to experience a network effect (there is now a 1 in 3 chance that the landlord in our previous example has an M-PESA account!).

The reason why mobile payments have not broken out of these categories is that current mobile payments technologies may simply be too "clunky" for many face to face interactions. Try fiddling with your phone while entering and responding to a stream of confirmation SMSs, and expecting the merchant to do the same, when there are three other people waiting to be served. (This is not the case with near field technology, "tap and go", but this has not been implemented anywhere in low income markets). However, swiping a card and entering a PIN or signing is a great deal less time consuming for all concerned, where POS systems are available.

The third factor is to rethink what a "card" means. More valuable than the piece of plastic, may be the ecosystem of the card industry, typified by the card associations (Visa and Mastercard). The easiest way of achieving a network effect for any player is through opting into an inter-operable environment. Any Visa or Mastercard product issued by any payment service provider or bank, can be "accepted" or used on any infrastructure provided by any other association member, allowing even small niche players, such as MFIs, to leverage much larger players investment in ATM/POS infrastructure, and rapidly to achieve scale in distribution. Being part of the card associate ecosystem also brings other benefits. Mobile payments are particularly subject to challenge or dispute, for example, "I did not mean to push the pay button" or "I did not receive the payment" are common complaints or calls received at the call centre of mobile payments providers. In mobile payments, and unlike an ATM or POS transaction, there is no paper slip to refer to making dispute resolution more difficult.

Payment instruments issued under card association rules have well established policies and procedures for dealing with recharge and fraud, which most financial institutions in a country will have signed up to and that are supported by a huge volume of legal experience and precedent. This makes it a lot cheaper for individuals and institutions to resolve disputes.

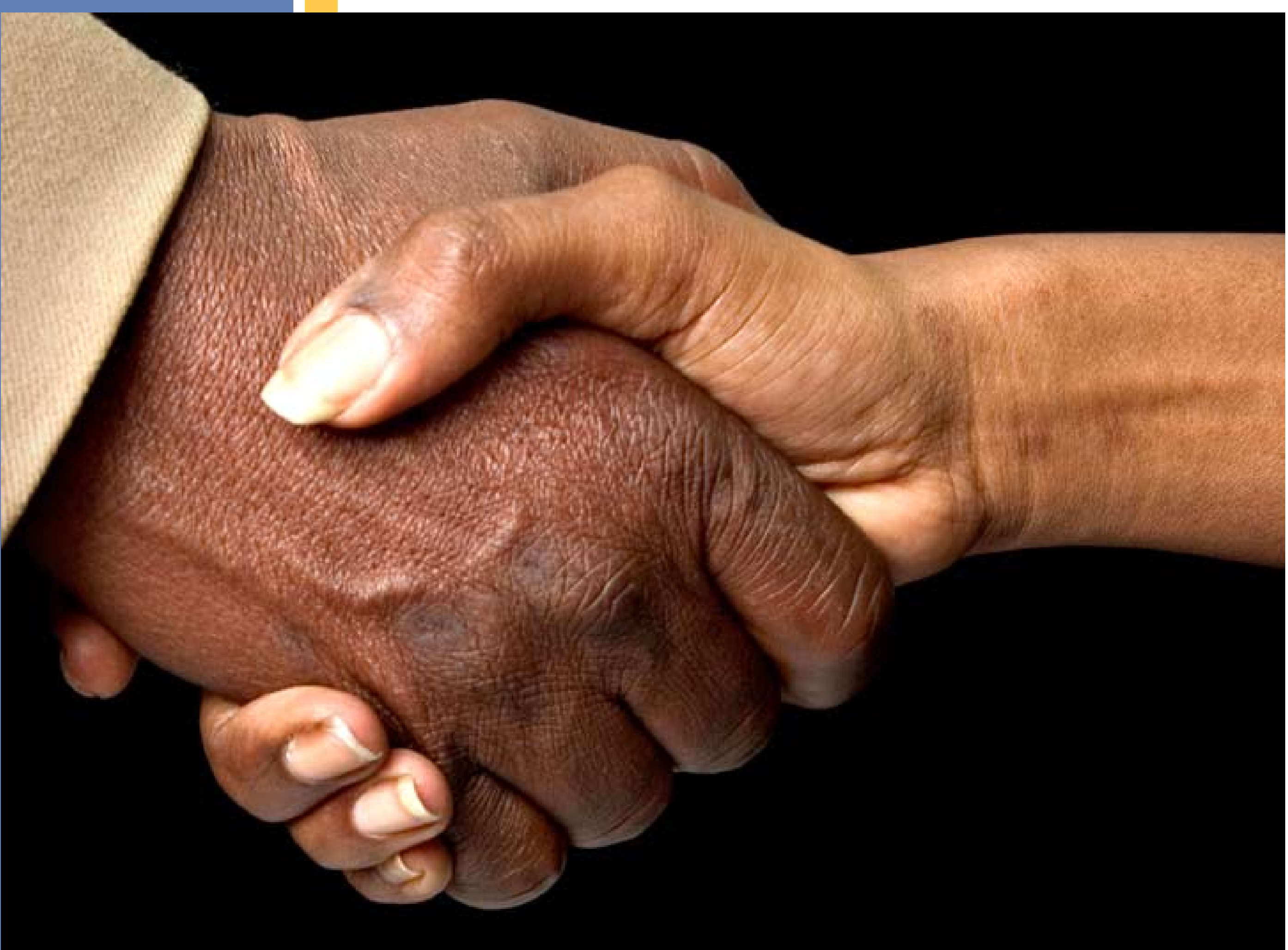
Bottom Line: Implications for MFIs

Combining a card with a mobile solution will undoubtedly increase the complexity of launching a mobile payments solution. But enabling users to benefit from the existing card infrastructure may substantially reduce the customer acceptance risk in mobile payment solutions in all but the most remote locations, as it will remove customers' concerns as to where to en-cash value, and the risk that the local agent lacks sufficient cash to meet their needs. A combined card and mobile solution also faces far fewer risks of becoming irrelevant as more and more banks perfect their mobile payments channels.

Cards may in fact be the way to achieve the last mile in mobile payments – if every person with a mobile phone could receive funds from anybody with a card, this could dramatically expand the demand for mobile payment services from small businesses. Getting a Point of Sale into every body's pocket may be the next milestone. There is no doubt that now that 50% of the world's population has a mobile phone, this will eventually transform payments, but a combined offering may for the next ten years still be required to optimise the customer experience. Although many small businesses resent the discounts they pay to banks for the right to acquire a card transaction, history has shown that they resent the loss of a potential sale even more.

Mobile Payments – Rethinking Partnership Strategies?

Richard Ketley



Almost all mobile payment strategies require a close and complex set of relationships between mobile network operators, banks, reseller agents and payment solution providers. This note explores some of the key issues in defining these partnerships. For MFIs the key opportunity is the emergence, in some markets, of large networks that can be leveraged to transform the operations of a MFI without the need for a "partnership" with the provider.

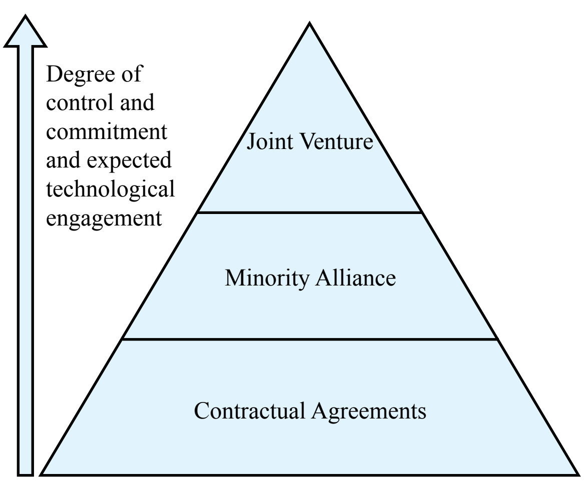
A Partner or Just a Provider?

Most MFIs and financial institutions view partnerships or strategic alliances as an important way of improving the likely success of a mobile payment venture. The alliance can be to access technology, to access a mobile network and the customers SIM card or a customer base. However talk of "partnerships" often clouds the nature of the required relationship, and can cover very different relationships with different degrees of leverage and power between the participants. This note distinguishes between two relationships:

1. A standardised contractual relationship in which one party acquires a service from another, but which does not require any development or modification on the part of the supplier which is little more than a contract to buy/sell a service, and
2. A relationship in which two parties commit to work together to mutual benefit to create a new non-standard solution or proposition.

Figure 1 schematically presents different partnerships models according to the degree of commitment and involvement between the parties.

Fig 1: Hierarchy of Strategic Alliances



Source: Ranganathan, C and Lertpittayapoom, N (2002): Towards a Conceptual Framework for Understanding Strategic Alliances in E-Commerce; Proceedings of the 35th Hawaii International Conference on System Sciences

Considerably time and effort can be saved, if upfront, institutions have a better understanding of the factors that create a successful partnership.

A joint venture normally involves creating a shared economic interest in a distinct entity normally involving profits and losses shared according to shareholding. A good example of this would be the joint venture between Standard Bank and MTN to create Mobile Money. Minority alliances are when larger firms make a strategic investment in smaller firms, which promise to achieve business model breakthroughs. Nokia's investment in Obopay fits this model. Contractual relationships do not create new entities, but involve the purchase of a service from another entity supported by an appropriate service level agreement.

For most MFIs interested in mobile payments the challenge has been to determine the nature of the relationship they require and can sustain. A lot depends on whether the MFI seeks to mobilise liabilities (and to own the underlying bank account), or to leverage carrier services provided by a bank or MNO to support lending activities.

Achieving the right partnership to provide bank account services has proved extremely difficult. Most MFIs lack the technical and managerial depth to negotiate effectively with both technology vendors, and MNOs to support the deployment of mobile payments. For MNOs, few MFIs have a sufficient customer base to create a network effect to sustain a person to person payment model. From a scale perspective, a network effect only comes into play when 1 in 3 people have access to the same platform (for example few people would use a mobile phone if they could reach less than 1 in 3 people). For a network effect to be created the solution needs to be inter-operable with as much of the payment infrastructure as possible. But most MFI's have not been able to achieve this for a number of reasons. At the level of technology, allowing out of network payments creates a entirely different level of fraud risk and this needs to be managed through more secure and difficult to implement solutions. Accessing banking infrastructure normally requires at least associate membership of a card association, a step few MFIs have taken. Most importantly the difference is size between the average MNO and the average MFI makes any joint venture inherently unbalanced. The unhappy outcome is thus that many MFIs have wasted time and money on solutions that have not been widely adopted or created much value for their clients.

Leveraging "carrier" services creates far greater opportunities where such carrier services are available. (The term carrier services is used to describe solutions that allow clients to post payment to a third party using a standard widely available solution that requires no direct investment from the MFI). This is essentially the service provided by a traditional bank account, a standard money transfer service (such as M-PESA), or by a third party fund transfer companies/bill payment companies such as Easypay (www.easypay.co.za). These services do not require anything than a contractual relationship between the MFI and the payment service provider. Both Smart in the Philippines and M-PESA now provide a corporate portal as part of a standard business service. The portal provides any business user with the ability to track payments made into their account, to prepare batch payments and originate bulk SMS alerts. For most smaller MFIs adopting such a platform could significantly reduce costs, and improve operational efficiency. Table 1 considers the range of modifications to a conventional MFI group based model that can be achieved through adopting of standard MFI processes to leverage the presence of a M-PESA like service.

Critical consideration in such a partnership is the scale of distribution provided by the partner and the costs of accessing the distribution network. In South Africa, a mobile payments solution provider Wizzit recognised that its customers would need to be able to use the ATM network, and that by issuing an ATM card they could give customers access to a large network, with very little of their own investment. However as their banking partner lacked its own ATM network, customers needed to transact "off us" making basic transactions much more expensive than more traditional products provided by the larger banks. Smart Communications, working with one of the major banks in the Philippines, had exactly the opposite experience since their partner had one of the larger ATM networks. In most instances MFIs should seek to negotiate bulk discounts from the providers of such services, but should also consider the value of such services following a proper review of cost savings from changes to their core processes.

Bottom Line – Fewer Partnerships

Managing true partnerships is extremely time-consuming and costly to most parties; vendor relationships are probably a lot easier to manage. In developing a mobile payments strategy, participants need to be very clear on:

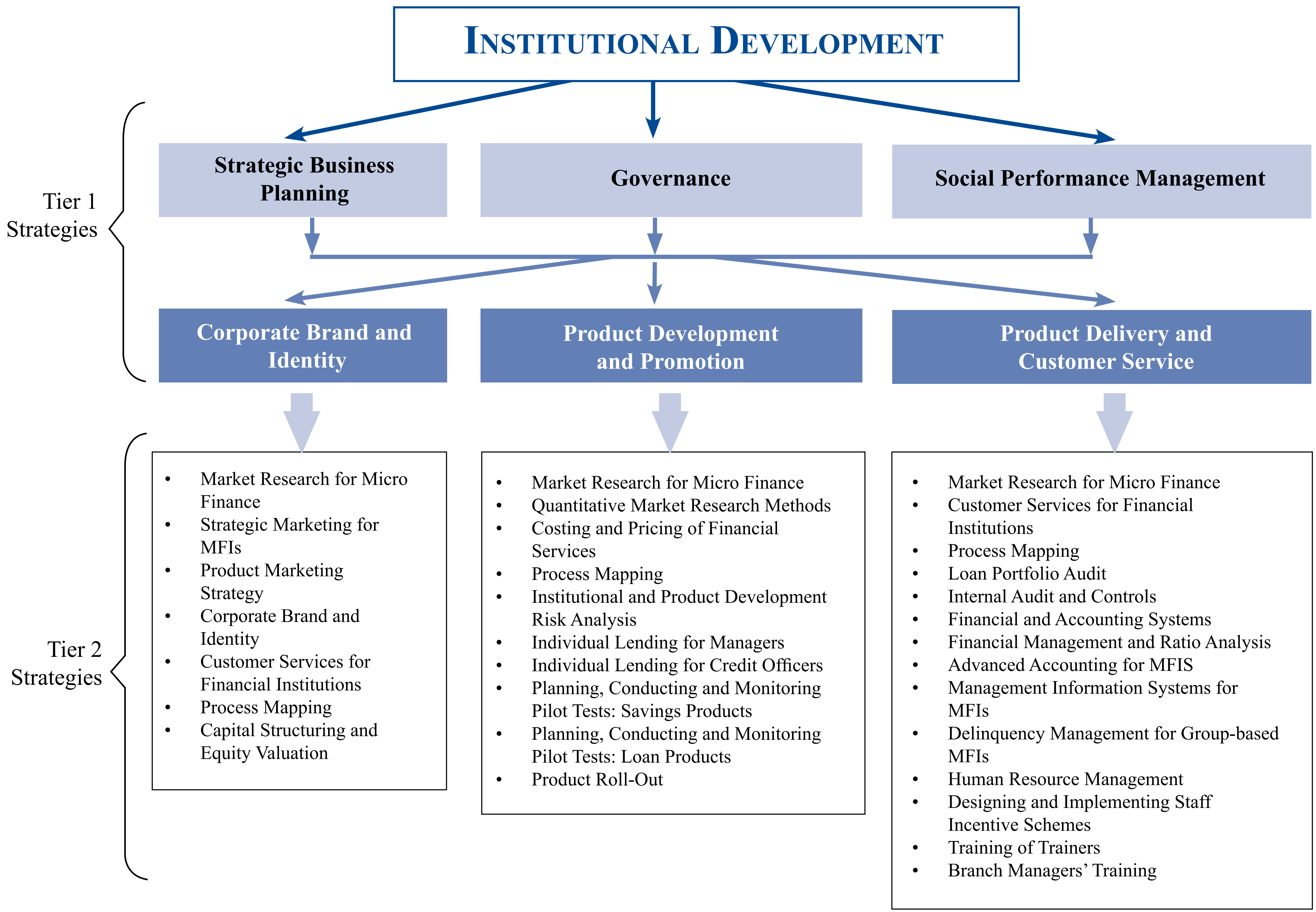
- Who owns the customer (they should probably also own the marketing budget)?
- Whoever owns the customer needs to be able to manage the customer touch points (each additional channel adds considerably organisational complexity).
- Understanding power in defining the "partnership".

- Who has what rights to which revenues?
- Does any of the relationships (contractual or partnerships) compromise the economics of the customer value proposition?

This note highlighted the complexity of partnership options and the important opportunity that is now available to an increasing number of MFIs to engage with "carrier" services such as M-PESA to revolutionise their business model.

MFI's although numerous, have generally not achieved real scale in most countries in Africa and have not been particularly profitable due to their operating model. How does the presence of a ubiquitous mobile payments carrier (e.g.: M-PESA change this?)			
Group based lending involves lengthy group management processes and is highly labour intensive	Group lending processes have been manual and paper based involving lots of costly paper movements and administration	Payment instructions and activities have involved long delays and required members to visit banks	Repayment has been manual and involved further group and loan officer processes
• Mobile/ call centre / SMS can make communicating with the group much faster and cheaper and reduce the number of (length of meetings)	• Falling costs of data input devices (eg: entry level netbooks now cost around $150) makes it increasingly possible to capture data in the field and have it processed instantly. This allows the acceleration of the business model (more loans per year off same infrastructure), fewer meetings, much faster approvals, the elimination of most of the back office and automation of credit approvals	• Payments can be made to and from M-PESA accounts by the MFI, significantly reducing the time and cost to group members and the MFI, and making it a lot easier to reach a POR	• Repayment processes can be supported by mobile/call centre/ SMS • Repayment can be done by the member from their mobile phone.

Table 1: Modifications to Group Lending Model in the presence of a third party mobile payments carrier.



INSTITUTIONAL DEVELOPMENT
Tier 1 Strategies
Strategic Business Planning
Governance
Social Performance Management
Corporate Brand and Identity
Product Development and Promotion
Product Delivery and Customer Service
Tier 2 Strategies
• Market Research for Micro Finance
• Strategic Marketing for MFIs
• Product Marketing Strategy
• Corporate Brand and Identity
• Customer Services for Financial Institutions
• Process Mapping
• Capital Structuring and Equity Valuation
• Market Research for Micro Finance
• Quantitative Market Research Methods
• Costing and Pricing of Financial Services
• Process Mapping
• Institutional and Product Development Risk Analysis
• Individual Lending for Managers
• Individual Lending for Credit Officers
• Planning, Conducting and Monitoring Pilot Tests: Savings Products
• Planning, Conducting and Monitoring Pilot Tests: Loan Products
• Product Roll-Out
• Market Research for Micro Finance
• Customer Services for Financial Institutions
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• Financial and Accounting Systems
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