# Financial Education:
## A Bridge between Branchless Banking and Low-Income Clients

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August 29, 2008

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## ACKNOWLEDGMENTS

This paper is based on the field work undertaken by Corrinne Ngurukie of MicroSave Consulting, Candace Nelson, consultant, and one of the paper's authors, Danielle Hopkins of Microfinance Opportunities. We wish to thank the staff and customers of a wide range of financial institutions who generously shared their experience using branchless banking. We would like to thank the readers of the draft version of the paper which include the CGAP technology staff, Graham Wright and David Cracknell of MicroSave, John Owens of Microenterprise Access to Banking Services, Jenny Hoffmann of Riskfrontier Consultants and Paul Rippey, independent consultant. We would also like to express our appreciation of the research assistance provided by Vanessa White, and the editing support provided by the staff of Microfinance Opportunities and Candace Nelson.

Finally, we wish to acknowledge the Omidyar Network for its support of our research.

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# 1. INTRODUCTION

## 1.1. Branchless banking for the "bottom of the pyramid"

*Mobile transactions have "the potential to transform access to finance ... [They bring] closer to reality the aspiration to provide mass access to finance to all countries and income groups."*
*(Williams and Torma 2007)*

The "bottom of the pyramid" is comprised of the 4 billion people in the world living on less than $2 USD per day (Prahalad 2005). With limited resources and few opportunities, it is difficult for this group to attain economic security. While many skillfully manage their scarce capital to pay for basic needs as well as unexpected shocks such as medical expenses, the financial pressures relentlessly test their capacity to increase their income and to build and maintain assets. Many of the poor make decisions more reactively than proactively and face severe repercussions when a loss requires them to deplete assets and/or place claims on future income. In this environment, personal and business financial management is challenging.

Microfinance was developed to provide low-income households a way to build and expand their financial resources. Over the years, microfinance has grown dramatically from an experiment in the delivery of credit by non-governmental organizations (NGOs) to the emergence of a wide range of service providers and the development of new products such as savings and insurance for the poor.

Despite microfinance's growing success in reaching the "unbanked," many low income households continue to lack access to formal or semi-formal financial services. They either live in areas where low population densities make delivery with existing provider business models too costly, or the transactions costs make the products too expensive for the poorer segments of the population who consequently are excluded or choose to self-exclude.

Branchless banking, particularly mobile banking, has been met with much enthusiasm in the microfinance industry because of its potential to deliver financial services to a greater number of people at the bottom of the pyramid.[1] Mobile phones and bank cards have the potential to provide formal financial services at lower cost to both consumers and service providers than traditional brick and mortar banking. The technologies could allow financial services to reach the poor living in even remote areas. Initial levels of uptake among low-income clients have

[1] Branchless banking is the use of technology, such as mobile phones and bank cards, for the conduct of financial transactions electronically and remotely. The use of third party outlets as agents for the financial services provider allows customers to use financial services without going to bank branches. In addition to transactional services, branchless banking provides basic cash deposit and withdrawal. The financial services provider is backed by a government-licensed financial institution (Ivatury and Mas, 2008).

been promising and have fueled the current optimism about bringing the unbanked to the formal financial sector.

Although much effort has been spent on registering new clients, less consideration has been given to how to retain them. It is estimated that by 2010, 90 percent of the world's population will have mobile phone coverage with most of this growth occurring in the developing world (GSM 2007). The expansion in coverage is widely recognized as an opportunity to increase access to formal banking for the poor by linking mobile phone technology to formal financial services. However, at the recent conference "Mobile Money Summit," organized by CGAP, IFC, DFID and GSMA in May 2008, it was pointed out that less than 10 percent of mobile financial services users are low-income. Moreover, these same customers may use mobile financial services intensely for the first one or two months, but then significantly reduce or stop using the services. The question is how to drive more uptake and intense usage among low-income populations.

This paper examines the key preferences and constraints in the uptake and usage of branchless banking among the banked and unbanked.[2] The paper looks at the types of products and services offered to low-income populations and the value proposition of branchless banking. These challenges to consumer uptake and usage are examined from the clients' perspective which until now, has largely been underrepresented in the discourse about branchless banking.

The paper then explores financial education as a key strategy for strengthening the weak levels of knowledge and skills associated with branchless banking among low-income households, banked and unbanked. Although financial education has been mentioned as a strategy at recent industry conferences, little discourse has focused on what financial education actually means and what it would entail. At the conference "Next Generation Access to Finance," organized by CGAP, IFC and Visa in 2007, at least half of the presenters on mobile banking and bank cards stated that education was needed to increase usage among low-income clients. However, beyond the stated need for it, financial education was not explored.

This paper develops and expands the discussion on financial education as a strategy to address low uptake and usage of branchless banking among low-income populations. It explores the components of a financial education strategy, focusing on the intersection between financial services and financial education and building on the success of the Global Financial Education Program (GFEP).[3] Finally, the paper considers whether financial education should be a public or private good.[4]

[2] Uptake is defined as initial adoption by new users of the technology-based services. Usage is defined as clients' regular conduct of financial transactions through these same services. An "active" user may be defined as a client who conducts 1-2 transactions during a 90-day period.

[3] See www.globalfinancialeducation.org.

[4] Financial education is about teaching the knowledge, skills and attitudes required to adopt good money-management practices for saving, spending, borrowing, and investing. A person's facility with financial management is indicative of their financial literacy and can be attained as a result of financial education. Consumer education is broader than the teaching of good financial management practices. It often includes the notion of consumer protection as it relates to financial services.

## 1.2. Research methods

Market research was conducted in four countries: the Dominican Republic, Kenya, the Philippines and South Africa (see Table 1).[5] Researchers visited 18 banks and telephone companies, or "telcos," and interviewed 106 consumers and 68 financial service providers. The fieldwork consisted of three components:

- 51 individual interviews with branchless banking clients;
- 7 focus group discussions with users and non-users of mobile banking and bank cards; and
- 68 interviews with key informants, including bank and telco staff.

**Table 1: Institutions Visited**

| Institutions Visited | Type of Service Provider | No. of Customers |
|---|---|---|
| **Dominican Republic** | | |
| ADOPEM | Microfinance Bank | 59,586 borrowers (Dec. 06)<br>23,268 savers (Dec. 06) |
| **Kenya** | | |
| M-Pesa | Telco | 650,000 registered users (Oct. 07) |
| Co-operative Bank | Bank | 57,000 shareholders (07) |
| Equity Bank | Bank | 239,541 borrowers (Dec. 06)<br>1,014,474 savers (Dec. 06) |
| Family Finance Building Society | Building Society | 350,000 (07) |
| K-Rep Bank | Bank | 114,301 borrowers (Dec. 06)<br>14,951 savers (Dec. 06) |
| PostBank | Bank | 2,500 borrowers (Dec. 06)<br>995,000 savers (Dec. 06) |
| **Philippines** | | |
| Globe (G-Cash) | Telco | 1.3 mil users (May 06) |
| Smart Communications | Telco | 7 mil Smart Money subscribers (Jan. 08) |
| Central Bank (BSP) | Central Bank | N.A. |
| Bank of the Philippines (BPI) | Commercial Bank | N.A. |
| First Valley Bank, Mindanao | Rural Bank | 34,225 borrowers (Dec. 06)<br>63,686 savers (Dec. 06) |
| Green Bank, Mindanao | Rural Bank | 68,167 borrowers (Dec. 06)<br>244,494 savers (Dec. 06) |
| **South Africa** | | |
| Absa | Bank | 8 mil clients (Nov.07)<br>500,000 registered for m-banking |
| Capitec | Bank | 1.5 mil (Nov. 07) |
| MTN Banking | Bank | 400,000 (Nov. 07) |
| Teba Bank | Bank | 450,000 (Nov. 07) |
| WIZZIT | Bank | 100,000 active users (May 07) |

[5] This paper was supported by a grant from the Omidyar Network.

Qualitative research was conducted to gather information on the behaviors, understanding and skills of the users of mobile banking and bank cards. A research protocol was developed to guide all the interviews in the four countries.

An initial challenge in undertaking this research was access to clients. Branchless banking customers, unlike clients of brick and mortar banking, tend to visit branches less frequently and are more difficult to assemble. This was especially true of the clients of WIZZIT, a virtual bank with no physical infrastructure.[6] Senior staff within the financial institutions that were visited saw the research as addressing important issues of concern to them and provided the necessary support to reach the clients.

In focusing on the client's use of mobile banking and bank cards, this research ventured into largely unchartered territory and was exploratory in nature. Its purpose was to identify trends and determine good usage behaviors which could be incorporated into financial education. Another goal was to identify the opportunities where financial education could make a significant difference. At the same time, this research recognizes that there are other barriers to usage that lie outside the scope of financial education, including lack of affordable phones and/or bank services or inappropriate product design and delivery systems.

[6] WIZZIT is unique in that it most closely approximates the ideal notion of a branchless bank. Although it is nominally a division of the Bank of Athens, WIZZIT offers the unbanked a viable alternative to the real and perceived expense and inaccessibility of traditional banks.

# 2. REACHING THE BOTTOM OF THE PYRAMID

As noted earlier, the use of technology such as mobile phones and bank cards combined with automated teller machines (ATMs) and point of sale (POS) devices is viewed as a strategy for lowering costs for providers and users.[7] By lowering the costs for both parties, branchless banking has the potential to reach more low income populations where cost was once a prohibitive factor.

As the examples below indicate, a multitude of products and services are now available on a branchless basis. At the same time, despite the current optimism in the efficacy of technology in expanding financial inclusion, significant challenges exist in uptake and usage of the services.[8]

## 2.1 PRODUCTS AND SERVICES ASSOCIATED WITH MOBILE BANKING AND BANK CARDS

Mobile phones and bank cards are gateways to a variety of financial products and services for low-income clients. Our research examined the current offerings of several financial institutions and service providers and identified the most widely used product features by respondents. We begin with mobile banking products (see Table 2).

Most low-income populations venture into mobile based financial services through the purchase of airtime over the phone. Airtime purchase for one's own phone is the most widely used financial service. Urban households may purchase phones and airtime for their rural families, many of whom are unbanked.[9] Mobile users can also transfer airtime to the phones of others. Some sell airtime for cash.

Money transfer is the next most widely used service available with mobile banking.[10] Primarily intra-family, money transfers can be divided into international remittances and domestic transfers. In Kenya, and Uganda, the bulk of money transfers are domestic, from salaried workers and urban migrants to family members living in other areas. Many of the transfers by M-Pesa clients are urban to rural flows within Kenya. Mobile phone transfers are particularly popular with

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[7] Point of sale devices (POS) installed in local retailers such as grocery stores, pharmacies and gas stations act as agents and expand clients' opportunities to conduct financial transactions.

[8] "Low-touch" banking refers to largely automated service (use of ATMs, mobile phones); there is a low level of personal contact between the bank and its customers. Conversely, "high-touch" banking refers to personal, face-to-face interaction between the bank staff and its customers.

[9] The recent strife in Kenya made airtime difficult to purchase. Those with airtime found a ready market of purchasers willing to pay them a premium in cash for the transfer of airtime (Boyd 2008).

[10] In order to send a mobile money transfer, the sender buys mobile cash by depositing real cash with a registered agent. Once the mobile cash has been purchased, the sender can send the mobile cash to a recipient by entering the recipient's phone number and the sender's PIN. The recipient can then cash in the mobile cash for real cash at a registered agent.

**Table 2: Mobile Phone-Based Financial Products, By Institution**

| Institution | Technology Service | Product Offering | | |
|---|---|---|---|---|
| Co-operative Bank | (SMS based) | Balance inquiry<br>Airtime purchase/transfer | Loan notifications<br>Pay electricity bill | |
| Equity Bank | Eazzy 24/7, launched 07 | Airtime purchase<br>Balance inquiry<br>Statement requests | Loan notifications<br>Utility bill payments<br>Funds transfer | Deposits *<br>Borrow funds*<br>Withdrawals * |
| K-Rep Bank | Sokotele launched July 07 in collaboration with Celtel | Airtime purchase<br>Balance inquiry | | |
| Safaricom | M-Pesa, launched Feb. 07 (menu-based) | Airtime purchase<br>Money transfers**<br>Withdrawals | Deposits<br>Purchases<br>Balance inquiry | Bill payments* |
| Bank of the Philippines | G-Cash (menu-based) | Withdrawals<br>Deposits | | |
| First Valley Bank | G-Cash (menu-based) | Airtime purchases<br>Money transfers<br>Cash-in cash-out | Withdrawals<br>Deposits<br>Purchases | Payroll services<br>Bill payments<br>Loan payments |
| Green Bank | G-Cash (menu-based) | Airtime purchases<br>Money transfers<br>Withdrawals | Deposits<br>Purchases<br>Loan payments | Payroll services<br>Bill payments |
| Globe | G-Cash (SMS-based & menu-based) | Airtime purchase & transfers<br>Money transfers<br>Cash in/cash out | Purchases<br>Electronic payments<br>Remittances | Pay income taxes & small business registration fees |
| Smart Communications | Smart Money (menu-based) | Airtime purchase & transfers<br>Money transfers<br>Cash in/cash out | Purchases<br>Electronic payments<br>Remittances | Debit cards |
| ABSA | (SMS-based) | Airtime purchase<br>Money transfers | Account payments<br>Balance inquiries | View statements |
| MTN Banking | MTN Mobile Money (menu-based) | Airtime purchase<br>Money transfers<br>Bill payments | Pay taxes<br>Prepaid electricity voucher purchase | Send statement to fax<br>De-activate linked debit card |
| WIZZIT | USSD-based | Airtime purchase<br>Money transfers | Account payments<br>Pay electricity bill | Prepaid electricity voucher purchase |

*Currently being pilot tested **Domestic only
Source: Hopkins 2007; Maniego-Eala 2007; Ngurukie, 2007; Owens 2007

low-income people who send money up-country to western Kenya using M-Pesa or Sokotele. In Uganda, 28 percent of the population transfer money, and 86 percent of these transfers are domestic. To date, most are in cash (FinScope 2007). In South Africa, foreign exchange regulations limit money transfers to domestic transfers only (Hoffmann 2008).

In the Philippines, where the overseas foreign workers are a huge market, international money transfer services are already well developed.[11] Overseas Filipino workers can send remittances through any of the telco Globe G-Cash's 400 partner remittance outlets in 15 countries. These transfer services between mobile operators in different countries offer a low cost and reliable option for sending money to a population which is 80 percent unbanked (Maniego-Eala 2007). For example, Filipino workers based in Malaysia can now send money via their "mobile wallets" directly to Globe G-Cash subscribers in the Philippines.[12] The conversion from Ringgit, Malaysian currency, to Pesos, Philippines currency, is done automatically over the air within seconds (Associated Press 2007).

Electronic payments, including salary payments and payment of school fees, are another popular feature of mobile banking. In Kenya, most of these transactions occur at the end of the month when salaried workers are paid or at the opening of school terms (Hopkins 2007). In the Philippines, several banks have partnered with the telco Globe to offer bill payments by phone as well as bank withdrawals and deposits. Customers of First Valley Bank can now pay their electric bills using Globe's G-Cash. Telcos Globe and Smart Communications have actively encouraged consumers to use their mobile phones to make purchases at sari-sari stores or small neighborhood shops.

However, loading mobile wallets to facilitate and expand mobile commerce or "m-commerce" is still a challenge. Agents who currently sell airtime may be reluctant to load mobile wallets because of the significant difference in commission rates between the two products. In the Philippines, airtime sales earn agents a 12 percent commission on each load, but loading mobile wallets generates no more than a 1 to 2 percent fee (Hopkins 2007). New methods are being explored to ensure coverage of cash-in cash-out locations. The "Text-A-Withdrawal" service allows rural bank clients in the Philippines to transfer funds remotely from their accounts into a G-Cash mobile wallet. The clients now find it easier to immediately access G-Cash, and many of them act as informal resellers of G-Cash (Owens 2008).

Mobile banking also offers opportunities for linking to other financial products. Most obvious is the deposit of remittances in interest-bearing savings accounts. All too often the cash from such mobile transfers ends up under the mattress rather than in regulated savings accounts. In rural Kenya, recipients of transfers usually withdraw the cash they are sent as a lump sum (Ngurukie 2007). Recipients in the Philippines often use their remittances to pay school fees (Hopkins 2007).

[11] Remittances in the Philippines totaled more than US$14 billion in 2006 (IFAD 2007).
[12] "Mobile wallet" refers to the use of one's mobile phone and smart card technology to conduct financial transactions, act as personal identification and other applications with functionality similar to a conventional wallet.

For the low-income consumer, all bank cards, except for credit cards, are places to store value or “save up.” These include ATM cards, debit cards, smart cards, and reloadable prepaid cards (see Table 3). In most countries, the law requires that electronic cards be issued by a bank and that the cardholder nominally have a bank account.

### Table 3: Types of Electronic Cards

| Types of Card | Features |
|---|---|
| ATM | A magnetic strip card used to access bank account. Used with an ATM or POS device to deposit, withdraw money or repay a loan. |
| Debit | An ATM bankcard that combines functions of an ATM card and POS card. Can be used at ATMs and at participating retailers. Cash can be withdrawn from bank account at time of transaction. PIN needed for use. |
| Reloadable Prepaid | Stored value card used to access loans or social welfare payments. Cardholder can buy goods and services up to a specific value that has been loaded on the card before it is used. |
| Smart | Card with embedded memory chip which can be updated. Holds account information and other information about cardholder such as fingerprints and photo. Can perform transactions off-line and function as a form of identification if card reader is available. Used with an ATM or POS device. |
| Credit | A bank-issued card that allows consumers to use a line of credit to purchase goods or services. Can be used at ATMs and stores. |

Depending on the card, the cardholder may or may not conduct card-based transactions with the bank. This ranges from ATM card holders who are restricted to using the ATMs of the card-issuing bank to those who receive payments on the cards and get cash back only at agencies that are licensed to take their card. Most involve small transactions. One unique large scale innovation can be found in Brazil where a quantitative study showed that in the northeast, 83 percent of low-income people used their cards at bank *correspondencia*, bank retail agents such as convenience stores (Ramirez 2007).

Among the institutions visited, we found a cross-section of bank cards being offered. The bank cards can be used for deposits, withdrawals, bill payments, store purchases and receipt of loan disbursements and social welfare payments.[13] Table 4 details the financial institutions visited that offer electronic cards, the type of cards and the products offered.

[13] Electronic payments with bank cards require either an ATM or a POS device to conduct a financial transaction.

### Table 4: Card-based financial products, by institution

| Institution | Type of electronic card | Product offering | | |
|---|---|---|---|---|
| ADOPEM | Debit card (for use with Bank network only) | Withdrawals<br>Deposits | Balance inquiry<br>Purchases* | Cash back* |
| Co-operative Bank | Debit card designed (for use with SACCOs) | Withdrawals<br>Balance inquiry | Mini statements<br>Utility payments | |
| Equity Bank | Debit card (VISA electron) | Withdrawals<br>Balance inquiry | Mini statements<br>Purchases | Airtime purchase<br>Money transfers |
| Family Finance Building Society | Smart card (no ATM network – presented to teller) | Withdrawals<br>Deposits | Balance | |
| K-Rep Bank | Debit card | Withdrawals<br>Deposits | Purchases | |
| PostBank | Credit card<br>Debit card | Withdrawals<br>Balance inquiry | Mini statements | |
| Bank of the Philippine Islands | Credit card<br>Debit card | Withdrawals<br>Deposits | Check balances<br>Purchases | |
| ABSA Bank | Credit card<br>Debit card | Withdrawals<br>Deposits<br>Balance inquiries | Mini statements<br>Account transfers<br>Payments | Airtime purchase |
| Capitec | Debit card | Withdrawals<br>Deposits<br>Cash back | Purchases<br>Debit orders<br>Loan disbursements | Family funeral plan |
| Teba Bank | ATM card | Withdrawals<br>Balance inquiry | | |
| WIZZIT | Debit card | Purchases<br>Cash back | Withdrawals | |

*Forthcoming: currently being pilot tested

Our research found that clients primarily use bank cards for cash withdrawals. In the Dominican Republic and Kenya, this use was followed in popularity by depositing money, checking balances, buying goods in a store and receiving cash back. Since most deposits in Kenya are still over-the-counter bank transactions, bank cards cannot yet be considered branchless banking. WIZZIT comes closest to this ideal; its Maestro debit card is linked to a mobile bank account.

Additional features such as utility payments and transfers using bank cards were not widely used by respondents in the Dominican Republic and Kenya. Again, Brazil is an important exception and suggests possible future trends. Ninety-five percent of the *bancarized* or banked population only use their cards at the *correspondencia* (bank retail agents such as convenience stores) to make payments, not for other types of financial services such as checking accounts or savings (Ramirez 2007).

Since 2000, the range of card-based electronic payment systems has proliferated around the world. Major banks, in partnership with the two big card companies, VISA and MasterCard, have begun to explore the use of cards to reach lower income people. For example, VISA is promoting prepaid cards that can store a loan disbursement or a social welfare payment. The card can be cashed out or loaded at a member bank as well as at VISA agents, which are often stores that do not necessarily serve the low-income and unbanked populations.

## 2.2. Value proposition of branchless banking

Mobile banking and bank cards offer a number of attractive features to clients. Cost savings, speed, convenience, security and in some cases, income are among the features attributed to technology-based financial products and services. The Box below presents promotional statements for mobile banking services.

**Promotional Material for Mobile Banking Services**

| Introduction to M-PESA | What is Smart Padala Domestic |
| --- | --- |
| M-PESA provides an affordable, fast, convenient and safe way to transfer money by SMS* anywhere in Kenya.<br>Through M-PESA you can:<br>• Deposit money<br>• Withdraw money<br>• Transfer money (send) to another M-PESA customer<br>• Transfer money (send) to someone who is not an M-PESA customer; in fact they need not even be a Safaricom customer<br><br>*Short message system; used to send data to mobile phones<br>http://wap.safaricom.com/xhtml/details.php?a=10 | Smart Padala Domestic is a money transfer service that allows Filipinos to send remittance to the cell phone of their beneficiaries, anywhere in the Philippines. It is a faster, more affordable, and secured way of sending money.<br><br>http://smart.com.ph/Corporate/Services/Smart Padala/SmartPadalaDomestic.htm |

Many branchless banking clients agree that technology-based financial services can provide cost savings on various products and services. At a cost 50 percent less than any other means of transfer (Moore 2007), M-Pesa is correctly viewed by its customers in Kenya as cheaper than other methods of transferring money, including a *matatu* company.[14] The same benefit was confirmed in the Philippines.

> *Anna, a market stall owner in the Philippines, has a daughter studying at university in a city that is a three-hour ride away. Anna sends her daughter money every week to cover her expenses. Anna used to transmit the money through a local pawnshop which charged 65 PHP (1.56 USD) for every 1,000 PHP (23.92 USD) she sent.[15] Now she has switched to using the Text-A-Remittance service of GM Bank where she pays only 10 PHP (.24 USD) for the same amount. (Owens 2008)*

The facility with which customers can conduct mobile transactions directly with a bank, business or person-to-person (P2P) from any point where there is mobile phone coverage translates into speed and convenience. Networks of non-bank retail agents providing cash-in and cash-out services offer communities greater access to financial services. High adopters enjoy bypassing long lines for teller service at bank branches*: "…there is no time limit… I can check my balance without coming here (to the branch) and standing in a queue… can even check my balance at midnight." ABSA client in South Africa (Nelson and Ngurukie 2007)*

For microentrepreneurs, the convenience of mobile transactions saves valuable time, allowing business owners to spend more time at work. *"…now I do not have to always attend my chama[16] meeting…I send my contribution through M-PESA and can carry on with my business." M-Pesa client in Kenya (Ngurukie 2007)*

For others, mobile transactions open up entirely new opportunities for clients to expand their businesses.

> *Chookie owns a general merchandise store in San Jose City, Nueva Ecija, Philippines. After learning about Text-A-Payment via G-Cash she now accepts mobile payments from her customers. "G-Cash is convenient for me and my clients. They only have to text me their orders and payment, after which they can readily pick up the merchandise once they pass by my store. There is no need for them to wait for me to prepare their order. On my part, I do not have to rush to prepare their orders, which is inevitable when my clients go to the store and pay in cash." (Owens 2008)*

Speed and convenience are also associated with bank cards. Market research in Kenya revealed that before debit and ATM cards, many of the people would write

[14] Mini-van passenger transport
[15] 1 USD = 41.81PHP
[16] Merry-go-round or ROSCA

themselves checks in order to withdraw cash. Now with debit and ATM cards, clients can access money more quickly and avoid lines at the banks.

> "…ATMs are faster than trying to get services from the banking hall due to long queues and where the process is slow…and time wasting." (Equity Bank customer)
>
> "…ATMs have reduced the crowds in the banking hall where pickpockets took advantage." (Equity Bank customer)
>
> "…I hate queuing in the branches. Therefore, I use my ATM at the shopping malls…it just makes life so easy." (ABSA customer)
>
> (Ngurukie 2007)

Security is cited by respondents as another advantage of bank cards and mobile banking as the need to carry cash is reduced. In the Dominican Republic, some ADOPEM cardholders commented on an increased sense of control over their money; by carrying debit cards instead of cash, their chances of getting robbed were reduced. They also knew they had recourse if their cards were stolen; they could report the theft of their debit card to the bank (Hopkins 2007).

Mobile banking accounts also offer security, providing a convenient place to store money temporarily and safely akin to a short-term non-interest bearing savings instrument. In Kenya, many customers indicated that they deposit money throughout the month and then withdraw it to pay bills at the end of the month. While many telcos have ceilings on the amount that can be stored, it would be important to consider how this amount relates to the average amount most poor people are able to put aside. For example, M-Pesa has a $500 ceiling on maximum storage; however, few of the poor reach this level of savings at any one time.

When money in mobile banking is linked to a bank account, interest can be earned. Customers of WIZZIT who are able to maintain balances over R5,000 (USD $750) can benefit from an interest-bearing longer-term savings account (Nelson and Ngurukie 2007). This "bank in your pocket" includes a full transactional bank account linked to a Maestro debit card.

Bank cards as well as mobile phones are perceived by their users as conferring a sense of status upon the owner. Upon receiving a smart card from Opportunity International Bank of Malawi, one woman remarked: "It makes me feel rich. It gives me a sense of greater status in the community. I feel known by the bank" (Cohen 2006).

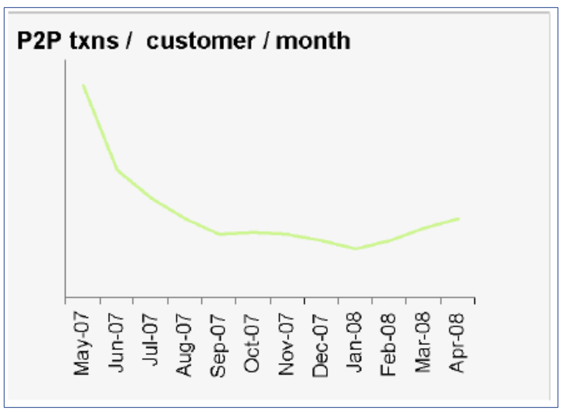
According to a microfinance banker, many of her clients like the privacy afforded by conducting a transaction with a bank card or cell phone. Branchless banking provides an escape from the prying eyes of family members who may scrutinize their savings passbooks and put them under pressure to share their assets (Sinha 2007).

## 2.3. LIMITATIONS IN UPTAKE AND USAGE

To date, rates of uptake for mobile banking and bank cards have seemed high, fueling the excitement over branchless banking. Uptake as measured by numbers of new accounts opened has often shown rapid growth. For example, six months after launching its mobile banking service in February 2007 in Kenya, M-Pesa had 650,000 customers and was registering 7,000-10,000 new users per day (Ngurukie 2007).

Yet such numbers of opened accounts have not always translated into continuous usage. In fact, levels of continuous usage by clients have been mixed. In Peru, MiBanco had issued 20,000 debit cards since 2002, but only 15 percent were in use as of May 2006 (Stack 2006). Level of usage among M-Pesa clients for person-to-person (P2P) transactions declined dramatically after initial uptake (see Figure 1 below) though in recent months this has started to rebound.

**Figure 1: M-Pesa Usage***



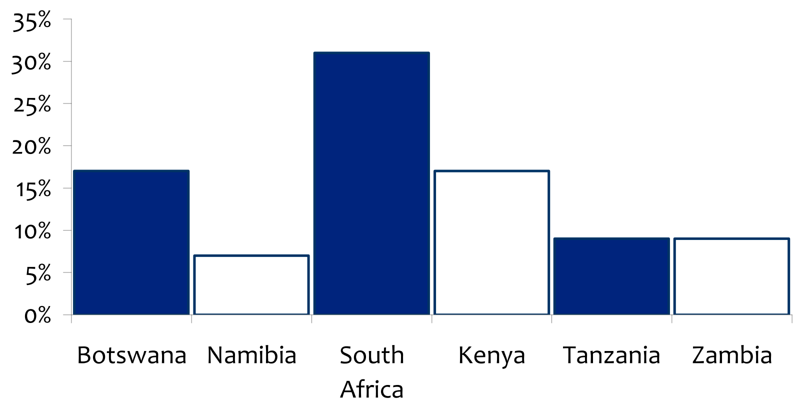

*txns = transactions

Source: Chung. New Solutions: Engaging with Customers and Creating Compelling Products. Vodafone Group. 2008

Despite encouraging numbers in initial uptake, access to technology-based financial services still remains limited to just a small percentage of the bottom of the pyramid. Less than 10 percent of all branchless banking customers are poor and new to banking and are using the branchless services (Ivatury and Mas 2008).

Although inroads have been made in providing access to financial services to low-income clients, an enormous un-served market still remains. According to the Consultative Group to Assist the Poor (CGAP), only 1 billion of the world's 6.5 billion people have bank accounts; however, about 3 billion people have mobile phones. In the Democratic Republic of Congo, an estimated 3 million people subscribe to mobile phone service, yet only 20,000 hold bank accounts (Timewell 2007). Figure 2 offers another snapshot of the significant market potential for mobile banking. The table illustrates the percentage of unbanked adults who own or have access to a cell phone in select countries in sub-Saharan Africa.

**Figure 2: Cell Phone Access among Unbanked in Select African Countries**




Source: Napier. FinScope Africa Comparing Financial Markets Across Africa. 2007

Clearly the declining cost of mobile phones has brought access to a mobile phone within reach for many low income households. As phone ownership expands, the potential market for mobile banking will continue to grow. However, in order to realize the full market potential and reach the unbanked and under-banked, the financial services industry will need to understand the barriers to limited uptake and usage of mobile banking and bank cards among existing users and non-users. This will be the subject of the next chapter.

# 3. REASONS FOR LOW UPTAKE AND USAGE

*"Drawing low-income populations into the joys of e-banking does not promise to be easy. Many think banking too expensive and complicated, and helping new customers become financially literate takes time."*
*(The Economist 2006)*

The client's perspective and experience have often been limited in discussions regarding the potential of branchless banking to bring the unbanked into the world of formal financial services. Our research, however, suggests that challenges to uptake link inextricably with the clients' perspective; one cannot begin to appreciate the former without the latter.

This chapter focuses on three major client-based impediments to branchless banking that emerged in the market research, as follows:

- Lack of understanding of formal financial services;
- Low levels of customer technical knowledge;
- Weak consumer trust in mobile banking and bank cards.

The chapter will close with a consideration of other constraints in cost and infrastructure that derive from the service providers.

## 3.1. Lack of understanding of formal financial services

*"Just because people have bank accounts does not mean they know banking."*

Despite the rhetoric about the simplicity of mobile banking and bank cards, our research clearly showed that these new electronic financial products and services are complicated for both the banked and the unbanked. Discussions with respondents indicated that many low adopters, whose cell phone accounts are linked to bank accounts, were unaware of the full range of financial services at their disposal. They limit their transactions to airtime purchase, bill payments and money transfers. In Kenya, respondents were familiar with only two or three mobile banking features—the same features that first attracted them to register for the service (Ngurukie 2007). Bank card holders also usually limit their transactions to withdrawals and balance inquiries. Cash withdrawals make up 70 percent of the cash transactions at ATMs at one bank in Kenya as most of the marketing messages posted around ATMs promote this feature more than others such as deposits, bill payments or purchase of goods at stores (Ngurukie 2007).

In the Philippines, bank clients did not know how to access other financial services using G-Cash, their bank's mobile banking service. When asked what financial services they desired, the respondents named services that were already available through G-Cash, such as bills payment, deposits, withdrawals and domestic money transfers. One respondent who received loans from the bank was unaware that loan payments could be made using G-Cash (Hopkins, 2007).

Unaware of the full range of available financial products and services, clients are unable to utilize them to meet their financial goals. In the Dominican Republic, respondents who are banked wanted to know more about how to how to save, manage credit, exercise financial discipline, set financial goals and learn about the difference between types of bank cards (Hopkins 2007).

Linked to the lack of clarity on products and services is ongoing confusion about fees associated with a bank card or mobile banking transactions despite the wide availability of information. Questions about fees and interest rates were some of the most frequently asked questions at Capitec Bank in South Africa. In the Dominican Republic, many respondents were unaware of fees for savings accounts or minimum balance requirements (Hopkins 2007).

Among the unbanked there is also the lack of familiarity with financial institutions, their range of services and how these services can be used to meet financial goals. Despite the hype surrounding microfinance services, many low income households are reluctant to use formal financial services even when they have access to them. Recent research in the area where the Opportunity International Bank of Malawi (OIBM) is launching its mobile bank initiative indicated that among those with access to formal financial services, less than 30 percent of low-income households had bank or microfinance institution (MFI) savings accounts, and only 7 percent had loans outstanding (McGuinness 2008).

> In 2006 OIBM and Concern Worldwide began collaborating on a program to deliver cash food aid to vulnerable groups using smart cards and POS devices. Each cash donation is stored on a smart card which is linked to a bank savings account. For most food aid recipients, this was their first foray into the formal financial system. It took three months for a few people to leave cash in their accounts, a vital first step to building a financial asset by a segment of the population who believe they can't save.
> (Voorhies, 2007)

The research also pointed to opportunities to segment the market for financial education. In Kenya we found that older people may have more familiarity with formal financial institutions but tend to require more assistance in using technology. Our earlier research on use of ATMs confirms our findings that in much of Africa, the young tend to be the first adopters of both cards and cell phones (Cohen 2006). In the Dominican Republic, one manager at a financial institution also noted that the younger generation tended to adopt bank cards more easily than the older generation. In Kenya and South Africa, older people made clear they only know how to receive a call on a cell phone, not transfer money. They prefer to depend on their children and grandchildren to conduct ATM transactions for them.[17]

> *"…my daughter usually does my banking and she has no patience to show me how to use the ATM." Absa Bank client (Nelson and Ngurukie 2007)*

Binti Pamoja, an NGO operating in Nairobi, Kenya, showed that financial education for adolescents and young people in their 20s is frequently transferred to parents and relatives (Austrian 2007). This indirect route for changing adult behaviors when it comes to the adoption of mobile banking and banks cards is not without merit but needs further exploration.[18]

## 3.2. WEAK CONSUMER TRUST IN BRANCHLESS BANKING

> *"…For some people, it is difficult to accept new things easily…they are used to the old way of doing things."*
> (M-Pesa client)

Not only is branchless banking new to many poor people, both banked and unbanked, but the technology is also uncharted territory. Linking the two compounds the challenge of usage. The initial enthusiasm of many low income households signing up for bank cards or mobile phone services to send cash suggests a willingness of the poor to innovate when offered an appropriate financial product. Proximity to an agent, the acceptability of small amounts of money per transaction, plus speed of the transactions, have made these basic services appropriate and convenient to the needs of low-income households. Yet many still lack trust in the technologies as vehicles to conduct financial transactions. Many people are reluctant to entrust their hard-earned income to a machine they cannot control and, more importantly, with which they cannot converse. Their unease was reflected in comments made by respondents in Kenya:

[17] The reliance of the older generation on their children to conduct financial transactions on their behalf may make the older clients more susceptible to theft. Some elderly clients reported that after sharing their PINs with their children, their children stole money from their accounts (Nelson and Ngurukie 2007).

[18] Working with young people also brings with it another particular set of hurdles, especially when 18 is the minimum age for opening a bank account. Young people tend to be perceived by formal financial institutions as high-cost clients, associated with many small transactions and high-risk borrowing. Belonging to the informal sector, young people are not necessarily viewed as a long-term market prospect for which short losses are warranted.

"I can't feel the money."

"… how can a phone give me money? I cannot trust a phone to give me money… also how genuine is the message… anyone can read my account details which is private if I leave my phone unattended."

"… I don't want to keep worrying whether the money has been received or not so I would rather go to the teller."

"I can't believe that you can do banking transactions by cell phone."

(Ngurukie 2007)

Even at Equity Bank in Kenya where 70 percent of cash transactions occur at ATMs, very few people use the deposit feature because they fear that their money will not reach their accounts (Ngurukie 2007). One staff member from Equity Bank commented: *"…some customers fear fraud. Therefore, it is not easy for them to trust the machine and would rather come to the banking hall to receive service from staff whom they trust*" (Ngurukie 2007).

Repeatedly customers expressed their preference for high-touch banking and their willingness to incur higher transaction costs for this type of customer service. They like the personal interface with the bank staff who can answer questions when clients have a problem. This preference for face-to-face banking appears common among older customers. For example, when the manager of a bank branch in South Africa moved to a new branch, her customers followed her to the new branch even though it was 10 kilometers from her former branch (Nelson and Ngurukie 2007). Older customers in rural Kenya remarked that they "liked having tea with the bank manager." Many clients in Kenya indicated a preference for coming to the banking hall and a willingness to endure long queues for the teller service (Hopkins 2007).

Contact with the teller brings other less obvious but highly-valued benefits. Seeing the balance in the passbook is more tangible and easier to monitor than a text message or an ATM monitor response to a balance inquiry.

> *"…I am used to the book (passbook)…the book helps me keep track of my account and I can also deposit money using it…I cannot do the same with the ATM …with the book also I can access my account anywhere…ATMs are not everywhere especially in the rural areas where I can go to the post office."*
> *Kenya Post Bank customer (Ngurukie 2007)*

In South Africa, the majority of clients of Teba Bank opted not to apply for ATM cards. Most have been clients of the bank for an average of 15 years. Their loyalty to their passbooks comes from their familiarity and trust of them as well as their ability to see their account status printed on the pages of their passbook. Some clients need to confirm even the numbers in their passbooks. These clients will withdraw their entire salary at the end of the month just to confirm that they have received it in full and then re-deposit it (Nelson and Ngurukie 2007).

The passbook is also viewed by some clients as a more effective tool for saving because it makes access to the money more limited.

> *"…I can see my balance on my savings book and I cannot easily take money out until when I go home…it helps me to save better." Teba Bank customer (Nelson and Ngurukie 2007)*

Trust in paper receipts is still high. In South Africa, most customers—from low to high net worth income groups—expect to receive a receipt for a cash transaction (Nelson and Ngurukie 2007). In the Philippines and Kenya, many participants commented on the absence of paper receipts when using mobile banking services. This was as much an issue for merchants as for consumers who use their phones to pay utility bills. SMS confirmation numbers are still not perceived as equivalent to paper receipts. Our data suggests that building confidence in SMS confirmations will benefit from financial education, time and experience.

Other clients' concerns center on mistakes easily made in the conduct of a transaction. For example, clients may punch in the wrong phone number for a cell phone transfer or their bank cards are swallowed up by the ATM. Loss of a phone or a bank card is also a concern. When technical difficulties arise, clients fear the errors will translate into problems with their accounts.

> *"…it (ATM) takes people's money…the money is inside the machine and it may refuse to come out when I need it and I fear that when I go to the bank to ask for my money they may tell me it has disappeared." Teba Bank customer (Nelson and Ngurukie 2007)*

Furthermore, there is confusion among customers about where to turn when things go wrong. Most of the services surveyed are backed by phone help desks. However, respondents who have tried to use help desks noted that they often found that they are not staffed around the clock or they cannot get through (Hopkins 2007; Ngurukie 2007). When they go to an agency for help, some found that the agents are often too busy to assist customers with technical issues and/or they do not have the capacity to fix system problems. To address these problems, some financial institutions train security guards to be the front line at the ATMs, responding to customer inquiries or resolving problems related to usage of cards.

The research on bank card usage also revealed a common fear among microfinance clients that using bank cards will lead to overindebtedness. In the Dominican Republic, a refrain among clients was that "with cards I will spend too much money." In the Philippines, where bank employees may receive part of their salary through their mobile phones (G-Cash), the temptation to spend can outweigh the need to save. In one town, many of the bank employees admitted to spending all of their mobile money at the local department store.

"…with an ATM it is like the money is sitting in the pocket so very easy to misuse it…" (Teba Bank customer)

"...it is not always good to have easy access to money because it is very easy to overspend and use more than one can afford…it is very tempting." (PostBank Kenya customer)

"…I drink a lot of alcohol and when my money runs out it would be easy for me to run to the ATM to get money and use it to drink some more…that is why I don't have an ATM card…I am scared of misusing money in this way…also when my friends ask me for money I have an excuse to give especially when the branch is closed…it is not easy for me to access money using my passbook" (Teba Bank customer)

(Nelson and Ngurukie 2007; Ngurukie 2007)

## 3.3. Low levels of familiarity with technologies

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*"…where does my money go?"*
*(Absa Bank client asking about mobile banking)*

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In their survey among users of WIZZIT, Ivatury and Pickens (2006) found that the most common reason why customers stopped using this mobile banking service was their lack of understanding of the technology involved. Our research confirmed this finding.

A recurrent area of misunderstanding is the management of PINs by mobile banking clients. The findings from Kenya suggest that this in large part stems from the failure of providers to clearly explain their purpose and how to use them (see Box below).

### Issues with PIN Usage in Kenya

- Many people don't know how to use the start key. (The start key is used to change a PIN; if a PIN isn't changed, the phone will become locked.)
- Customers are supposed to change their PINs, but often agents will do it for them for expediency. The customer lines are long and the time that it takes to explain the process to each customer would be too long.
- Many people have never used a PIN before. They don't understand its importance, so they don't change it and don't remember it.
- Many people don't remember their PINs to unlock their accounts. If they don't use their accounts for one month, their phones become locked.
- Many people become confused with the two PINs that they have: one for their cell phones and one PIN for their mobile banking service.
- When people forget their PINs, they also cannot remember the secret code or word given by the service provider to retrieve their PINs. (Customers can't choose their secret words.)
- If customers forget their PINs and secret words, they must go to a designated retail shop. There are only 9 such shops in Kenya, the majority of which are located in urban areas.

(Hopkins 2007)

PIN selection and use is also an issue for many bank cardholders. In the Dominican Republic, it was noted that some bank card holders selected PINs such as #1234 that could be easily guessed by others. Our research also indicates that many clients do not know how to change their PINs. For example, staff at Vendor Building Society in Kenya mentioned that when using the ATM the first few times, many customers need help entering their PIN on the keypad (Nelson and Ngurukie 2007). In South Africa, common problems for bank card holders were forgetting their PINs, keeping their PINs in their wallets and sharing their PINs with other people (Nelson and Ngurukie 2007).

Another indicator of low technical knowledge is the bank cardholder's lack of understanding of how types of bank cards differ. Our research revealed that clients often mix up debit and credit cards. In the Dominican Republic, where access to credit cards is widespread, many ADOPEM clients have several cards from multiple institutions in addition to an ADOPEM debit card. Interviews with ADOPEM clients indicated that many users fail to differentiate between a debit card, a savings-up mechanism, which a cardholder can draw down, and a credit card which allows the holder to spend first and then pay later.

There is also ambivalence among customers regarding which bank cards are more useful for their particular situations. Credit cards are seen to provide ease of access, but also perceived to increase the risk of falling into debt. For salaried workers, debit cards bring the ease of a direct wage deposit into their bank accounts but little else as the workers do not know about the card's other benefits. In the Dominican Republic, cards can be used in stores to purchase goods and receive cash back, but most respondents are unaware of this feature. Other respondents do not know that they can make deposits using their debit cards; they think that deposits can only be made using their passbooks (Hopkins 2007).

> Maria in the Dominican Republic has a very good loan repayment record with ADOPEM. However, with 3-4 credit cards she found it easy to get into debt. She dislikes the high interest on credit cards. She sees it "as paying for the convenience of using a credit card."
>
> One ADOPEM client was given a debit card by his employer after his salary was deposited directly into his bank account. He did not understand the difference between his debit card and his wife's five credit cards.
> (Hopkins 2007)

ATMs present another challenge for some bank card holders. Confusion with ATM key pads and on-screen instructions was common among respondents. In Kenya, most people only know how to use the "fast cash" option for withdrawals; they do not know that they can request a different amount by pressing "other" (Hopkins 2007). One elderly client from Absa Bank in South Africa who did not use ATMs but wanted to learn, commented "…it is important that all of us know [how to use ATMs]; otherwise, our children rob us when we send them to withdraw money for us at the ATM…when you do it yourself, you feel good… it can be very nice if we all could use it" (Nelson and Ngurukie 2007).

Limited technical knowledge leaves customers (1) unaware of the full range of benefits of technology-based financial services and (2) at a loss as to what to do if a mechanical problem arises. Our research further showed that lack of regular use of the technology meant that many users forget the mechanics and need to be retrained before every new use. Eventually they drop out. In Kenya, one respondent who is a bank customer, observed "…if one uses their ATM frequently, then it becomes easy to use. Otherwise it can be confusing" (Ngurukie, 2007).

As mentioned previously, considerable confusion also exists among customers regarding transaction fees. Our research showed frustration occurs when mobile transactions fail because people do not take into account the charges for different features. For example, because they do not realize that they will be charged for making balance inquiries or transferring money, they fail to send sufficient funds to cover both the transfer and its related charges. At the other end of the transfer process, recipients attempt to withdraw the total amount received but discover that they can only withdraw this amount minus the charge for receiving a transfer (Hopkins 2007). Some customers in Kenya are unsure of the fees incurred when using a debit card to make purchases (Hopkins 2007).

### 3.4. Other Constraints

Additional constraints related to cost and infrastructure derive from the financial service providers. Although these constraints lie outside the scope of financial education, our research has determined they are significant barriers that should be considered by the financial services provider during product design and delivery.

At first glance, the costs of banking transactions may seem affordable to those at the bottom of the pyramid. Table 5 lists mobile banking fees by transaction type. The cost per transaction seems low, particularly when users transfer funds to users in the same mobile phone network. However, when users transfer money to those outside of their network, costs immediately increase. The cost for an M-Pesa user to send money to an unregistered user (more often than not someone in a rural area) is more than double the cost to send to a registered user. When clients conduct multiple transactions, the costs can quickly add up.

In addition to transaction fees, clients are subject to other costs such as account registration and maintenance fees. Some financial institutions require customers to pay for a bank card, especially smart cards, which can be expensive. To ease the impact, Family Finance Building Society allows customers to pay for a smart card in installments. Finally, clients need to consider other common recurrent costs such as transportation to the agency or bank although most banks will aim to have cash-in and cash-out close to their clients.

### Table 5: Mobile Banking Fees by Institution and Transaction

| Institution | Transaction Type | | Charge (USD) as of Nov 2007 |
|---|---|---|---|
| **WIZZIT**<br>No monthly fees | Account activation and card fee | | $5.76 |
| | Balance inquiry | | $0.14 |
| | Money transfer to registered WIZZIT user | | $0.43 |
| | Money transfer to non-registered WIZZIT user | | $0.72 |
| | POS purchase | | $0.29 |
| | Cash back | | $0.29 |
| | ATM withdrawal | | $0.58+ $0.14/$14.40 |
| | ATM balance inquiry | | $0.72 |
| | Bill payment | | $0.14 |
| | Pre-paid electricity | | $0.14 |
| | Deposit | Cash | 1 percent |
| | | Check | $0.72 |
| **M-Pesa**<br>Free registration<br>No monthly fees | Deposit | | $0 |
| | Money transfer to registered M-Pesa user | | $0.48 |
| | Money transfer to non-registered M-Pesa user | | $1.12-6.41 |
| | Withdrawal by registered M-Pesa user | | $0.40-2.72 |
| | Withdrawal by non-registered M-Pesa user | | $0 |
| | Airtime purchase | | $0 |
| | Balance inquiry | | $0.02 |
| | Change of PIN | | $0.02 |
| **Co-operative Bank** | Per transaction | | $0.24 |
| **Sokotele** | Money transfer (up to 5,000) | | $1.92 |
| **Equity Bank** | Cash back | | $0.40 |
| | Withdrawal | | $0.48 |
| **SMART Money**<br>Annual fee $4.78<br>Registration at Smart or Banco de Oro offices | Withdrawal | | $0.08 - $0.28 |
| | Domestic money transfer | | 1 percent for cash-in + 1 percent for cash-out |
| **G-Cash**<br>No monthly fees<br>Free over-the-air registration | Withdrawal | | $0.25 or 1 percent |
| | Domestic money transfer | | Free cash-in +1 percent for cash-out |

1USD=6.944R; 1USD=62.44Kshs; 1USD=41.81P

Another significant cost barrier is the price of a mobile phone. Ownership of a mobile phone by at least one member of the household can determine whether mobile banking is even an option for the bottom of the pyramid. While the cost of mobile phones is continuing to decline over time, the price is still out of reach for many of the poor. In countries where the ratio of total cost of ownership to the

GDP per capita is high, mobile phone penetration is low.[19] In Uganda and Tanzania where the ratio is 50 percent or more, penetration is less than 20 percent. In contrast, in the Philippines and South Africa where the total cost of ownership is less than 10 percent, mobile phone penetration rate is more than 50 percent (Nokia 2008). The correlation between mobile phone ownership and banked clients is also suggested in another example in Uganda. The Uganda National Household Survey (2005-2006) found that no more than 17 percent of households own even one mobile phone. The FinScope Uganda 2007 survey found that 16 percent of its respondents are clients of formal banks. The similarity in percentages suggests that the mobile phone population is also the banked population (Rippey 2008).

Requirements for opening an account can create another set of barriers for the consumer. "Know Your Customer" regulations set minimum identification requirements for potential clients, but some at the bottom of the pyramid do not possess the necessary documents. To open a savings account in Kenya, the prospective customer must present a utility bill, an account statement from another bank and an ID. Such regulations may preclude informal sector microentrepreneurs and the self-employed from entering the formal financial sector (Hopkins 2007). In recognition of the effect of this barrier, banks in South Africa require only proof of identity when opening "low risk" accounts which are defined by a maximum balance and maximum value of monthly transactions (Hoffmann, 2008). For banks offering mobile banking services, such as Equity Bank, one must first have an account. Furthermore, there is often a minimum age for opening a bank account. In Kenya, ID requirements restrict phone ownership to those over 18 years of age.

Infrastructure may also be a barrier to usage. ATMs and POS devices in the countries visited are still primarily urban where population density is higher. Another factor in client access is whether an ATM network is closed or open. ADOPEM's debit card is not part of a larger nationwide network and, therefore, its customers are limited to the six ATMs located at the ADOPEM branches (Hopkins 2007). Similarly, the Kenyan Vendor Building Society's (VBS) White Label ATM card operates on a closed network, permitting deposits and withdrawals from VBS ATMs only (Ngurukie 2007).

[19] Total cost of ownership is defined as lowest cost Nokia-entry level handset + simplified OECD-defined low usage mobile service basket + direct handset and service value added + sales tax and/or specific telecommunications tax + customs or similar fee on handset (Nokia 2008).

# 4. FINANCIAL EDUCATION

## 4.1. Introduction

*"Why did you not educate us long ago? I now understand why my money is better than someone else's money and I must start saving for emergencies. I liked your point to spend wisely, save regularly and invest prudently."*

(Call-In Show, Listener of Financial Education Radio Show in Uganda, 2007)

In the expansion of branchless banking, knowledge constraints are predictable and inevitable. The unbanked have no formal banking experience and usually a limited knowledge base about technologies. Moreover, our research has found that even those who are ostensibly "banked" have limited knowledge of banking. Given that most mobile banking and bank card services to date have largely targeted the banked, financial service providers will need to think carefully about how to pair the dissemination of appropriate knowledge with the spread of branchless banking.

Financial education emerges as a comprehensive strategy for tackling the knowledge constraints faced by both the unbanked and the banked. It can facilitate the use of these new financial products to better manage money; it can also assist the user in becoming a better informed consumer of financial services—a win-win outcome for consumers, telcos and banks. Lastly, financial education can prove useful in training the staff of telcos and banks, and their agents. Our findings show that, like clients, staff knowledge of mobile banking and bank cards is at times restricted to only a few features. As the crucial interface between the customer and the financial service provider, staff and agents need to adequately understand how all the features of the technologies function in order to promote them with confidence and solve customer problems as they arise.[20]

Some financial service providers interpret financial education as marketing and product orientation; others talk about financial literacy. However, distinctions can be drawn between:

- *promotional information* which seeks to increase sales and profits;
- *product orientation* which focuses on managing the financial instruments offered by a specific institution; and
- *financial education* which encourages effective money management.

The discussion below begins with an overview of financial education and our experience to date through the Global Financial Education Program (see following

[20] In the Philippines, the staff at six rural banks receive part of their salaries or allowances via mobile wallets through a new service called "Text-A-Sweldo." As a result, the staff learn first-hand about their institution's mobile banking services and can pass that knowledge onto their clients (Owens, 2007).

Box). It then explores issues of content and delivery of the proposed financial education. Lastly, the question of who should deliver this financial education and how it should be delivered is considered in the context of whether financial education should be a public or private good.

**The Global Financial Education Program**

Microfinance Opportunities and Freedom from Hunger lead the Global Financial Education Program (GFEP), the first worldwide financial education initiative specifically targeting low-income households in developing countries. The GFEP curriculum is currently available in seven languages (English, Spanish, Russian, French, Portuguese, Chinese and Arabic) and comprises modules on nine themes: Budgeting, Debt Management, Savings, Bank Services, Financial Negotiations, Youth, Remittances, Risk Management and Insurance, and Consumer Protection. The modules target populations just above and below the poverty line. They teach low-income people money-management practices regarding earning, spending, saving and borrowing money, and how to better manage the increasing range of financial options available to them. The training materials for each module comprise a Trainers Guide with step-by-step instructions for conducting each training session; a Training of Trainer's Manual to prepare financial education trainers; and a Content Note that provides a basic overview of the topic.

As of December 31, 2007, GFEP has trained 219 trainers from 145 organizations in 25 countries. It has achieved an outreach of 168,157 consumers with classroom training and more than 6.6 million end users through a variety of alternative delivery channels, from print publications, campaigns and music, to dance and drama performances.

## 4.2. WHAT FINANCIAL EDUCATION IS

Among the microfinance community there is growing interest in financial education. Some of the drivers behind this interest are emerging concerns about overindebtedness and consumer protection. In some cases, lower than desired retention rates has also spurred the need for better informed clients. While training for microentrepreneurs has long existed in tandem with microcredit programs, it has usually focused on the transfer of business management skills to the informal sector. What makes financial education new and different is its focus on personal finance management for the poor. Living in a capital scarce environment and one prone to shocks, managing money is an every day challenge. Lacking information on financial options, most people do the best they can.

Financial education addresses the information asymmetries that contribute to the financial exclusion of the poor. Through effective communication of information about good money management practices regarding earning, spending, saving and borrowing money, and managing the increasing range of financial options, financial education is a valuable tool to reach those at the bottom of the pyramid. It offers consumers insights into realigning their financial strategies, better managing their resources, and achieving their financial goals. The Global Financial Education Program has demonstrated that many who receive financial education benefit from:

- the knowledge and skills to wisely manage their money;
- the capacity to more effectively use financial services;
- increased self-esteem and confidence as a result of incremental successes in achieving financial goals; and
- greater ability to demand higher quality products and services from their financial institutions.

Successful financial education is more than simply imparting information about financial products and services, and money management. It develops financial literacy about a broad range of basic financial skills and is therefore relevant to anyone who makes decisions about money. Its success is also linked to its delivery, as much as the content. Effective training is geared to the learning capacity and situation of the participants, many of whom are women and may be functionally illiterate.

Financial education achieves the best results when using adult learning principles and practices (Stack 2006). This "learner-centered approach" connects the learning to what adults already know and increases the likelihood that the learners will enjoy and use the education to change their financial behaviors.[21]

## 4.3. WHAT FINANCIAL EDUCATION ISN'T

Financial education addresses the gap between client understanding and uptake and usage. Unlike marketing and product orientation activities which tend to be product specific, financial education is broader in scope; it provides a basic foundation of knowledge and skills that clients can use to make more informed choices about financial products and services.

As our research highlights, current marketing and product orientation activities tend to be limited in scope and depth. Telcos and banks conduct marketing activities targeted at signing up clients and making sales. Their product orientation activities show users how to employ the different features associated with the technology. However, the information provided is too often limited and inappropriate. Equity Bank customers reported that the only information they received about the bank's new mobile banking service was primarily promotional and was conveyed using a text message sent to their individual phones. Some said they ignored and deleted the text message as they did not understand it (Ngurukie 2007).

ADOPEM broadcasts promotions about their electronic cards in the areas surrounding each branch office, on the radio and, more recently, on television (Hopkins 2007). Equity Bank has launched a multifaceted marketing campaign in supermarkets throughout Kenya, using video advertisements in supermarkets to promote their debit cards and cash back services (Hopkins 2007).

[21] For further information on adult learning principles and practices, go to Freedom from Hunger website http://ffhtechnical.org/.

Other banks market their services with brochures and other print media. Nearly all the institutions visited offered written instructions on how to use the services either in English and/or the local language. Our global financial education work points to the weakness of this promotion strategy: in many countries a greater percentage of microfinance clients are functionally illiterate than is often assumed, thus limiting the value of materials in a written format.

Table 6 below highlights product orientation methods employed for mobile banking. Typically account officers, bank staff or sales agents are responsible for both marketing and product orientation. Many of the activities are one-time offerings, often occurring at the time of registration. Little follow up between the financial service provider and the client takes place after the initial sign up. For example, WIZZIT relies on its fleet of young agents, called WIZZkids, to sign up new customers. A WIZZkid is responsible for selling starter packs and demonstrating features on his own phone when opening a new account. However, once the account is opened, WIZZkids have little contact with the client as there is no financial incentive for follow up.[22]

Other techniques may not rely on agents or staff at all. Some providers offer brochures for both promotion and product orientation.

### Table 6: Product Orientation by Institution

<table>
<tr><th>Institution</th><th>Product Orientation by Type</th></tr>
<tr><td>Co-operative Bank</td><td rowspan="3">Customer service representatives<br>Tellers<br>Seminars</td></tr>
<tr><td>Equity Bank</td></tr>
<tr><td>K-Rep Bank</td></tr>
<tr><td>M-Pesa</td><td>Individual meetings with agents at time of registration</td></tr>
<tr><td>First Valley Bank</td><td rowspan="2">Mobile phone banking specialists<br>Bank staff<br>Account officers</td></tr>
<tr><td>Green Bank</td></tr>
<tr><td>Globe</td><td rowspan="2">Brochures</td></tr>
<tr><td>Smart Communications</td></tr>
<tr><td>Absa</td><td>Marketing company</td></tr>
<tr><td>MTN Mobile Money</td><td>Trained sales agents, multi media promotions, brochures with screen shots</td></tr>
<tr><td>WIZZIT</td><td>WIZZkids</td></tr>
</table>

After product orientation, clients are assumed to have acquired sufficient knowledge and skills to navigate the technology-based financial services. However, research indicates that this is often not true for the bottom of the pyramid. The most common questions posed by clients to help desks involve basic concepts and mechanics of usage (see Box on page 29)---evidence that product orientation falls short on educating clients about what they need to know in order to be successful in using the products and services.

[22] To increase account usage, WIZZIT is in the process of upgrading the WIZZkid profile, enabling them to provide more customer service and technical assistance (Nelson and Ngurukie 2007).

Underlying weak product orientation is a perception by the service providers that information on the mechanics of using the technology is only needed once. M-Pesa customers who use the m-banking service infrequently indicated that between transactions they often forget the steps for operating their accounts. Our findings suggest that to encourage use, the information needs to be repeated after it is provided when a client signs up for a new service.

**Frequently Asked Questions of Equity Bank Call Center**

- How do I use an ATM?
- How can I withdraw cash or make a cash deposit through an ATM?
- How much cash can I get back?
- How do I transfer funds?
- Which accounts can I access (i.e. loan balance)?
- Can I deposit money at Nakomart (large retail chain in Kenya)?
- How do I change my PIN #?
- What are the charges for different services?
- At which other ATM machines can I use my card?
- How long will it take to activate my card?
- How long will it take to get my card?
- What are balance inquiries and how do I check my balance?

(Hopkins 2007)

Even when financial institutions have client training embedded in their operations, our research found that it can be inadequate. Customers of one bank in Kenya commented, "I taught myself how to use the ATM by following the instructions on the poster hung up in the ATM lobby…those who are educated understand"; "…the Bank did not show me how to use the ATM…instead I was given a set of written instructions to read." When product orientation falls short, clients may fall back on trial and error, a slow and often frustrating process.

From the client's perspective, relying on assistance from help desks is often not possible. Help desks are often difficult to reach due to congested phone lines, are unavailable at some financial institutions or are too complicated for clients with limited literacy. Agents or bank staff typically do not have time to answer questions on the mechanics of technology or troubleshoot.

Observations of the clients interviewed suggest that weak product orientation and inappropriate promotional materials are the result of more than just misunderstood messages. They are the result of a lack of recognition by the service providers of the client's knowledge, skills and attitudes about both banking and its related technology.

## 4.4. What financial education can do

The entry point for successful financial education is understanding the financial behavior of low-income households. Experience has shown that the transition from informal to formal financial services for low-income users is not always as easy as often assumed. Even the most adept customers find that they need different money management skills to expand their use of financial products and services such as increasing the number of products they use, moving from a single to multiple microcredit loans, making regular deposits in a savings account or purchasing an insurance policy. Observation also suggests that more than two or three regular financial obligations at one time can overburden many poor households.

Introducing technology-based financial services adds complexity. Customers now have to understand the technologies and master their usage, as well as manage the different and sometimes larger array of financial services. For potential customers who are unbanked, the difficulty increases due to their limited familiarity with formal financial services.

Experience from the Global Financial Education Program demonstrates that financial education can positively influence client financial behavior by demystifying financial concepts and applying them to the real life contexts of the clients. Six months after participating in GFEP training, the percentage of microfinance clients in Sri Lanka who reported keeping a written budget jumped from 31 percent to 88 percent. More clients also reported saving during high-income periods and saving for emergencies.

> One mother observed how the financial education training had positively affected her own life. When her daughter came home and shared her newfound knowledge on budgeting and savings, the two of them sat down together and came up with a budget for the household expenses. The mother, a school cook, has no work when the school is closed for vacation. She said that because of the budget she made with her daughter, for the first time in her life she was able to pay the house rent during a month when she had no work. (Austrian 2007)

Better informed clients lead to improved customer performance, extended outreach to new clients and an expansion of financial services as a result of an improved bottom line. Research with a random selection of borrowers from Genesis Empresarial in Guatemala demonstrated that client education can improve client performance. Training on the function of credit bureaus led to significantly improved repayment rates among solidarity group clients (McIntosh, Sadoulet and de Janvry 2006).

## 4.5. Financial Education: strategy and content

### Financial Education as Behavior Change

Gaining new knowledge and skills about financial services and technology is a first step in increasing access to branchless banking. An effective financial education program is designed to encourage the movement from current money management behaviors to future behaviors. This process may also involve changes in the consumers' attitude toward financial services and technology.

Table 7 presents an illustrative list of the types of behavior change that could address the challenges to adoption and usage. Our financial education prescriptions draw heavily from fieldwork conducted with multiple institutions in the four countries visited. The first column of Table 7 presents the current behaviors that were identified by the market research while the second column lists the parallel desired future behaviors as exhibited by positive deviants.[23] Where relevant, the table distinguishes between new and current users of the branchless banking. The third column lists the indicators of these behavior changes.

### Table 7: Projected Behavior Change and Indicators for Financial Education Modules (Mobile Phones/Cards)

| Current Behavior | Future Behavior | Indicator |
|---|---|---|
| **Use of Financial Services (New/Current Users)** | | |
| Does not perceive technology (mobile phones or bank cards) as instrument to gain access to financial services | Leverages use of technology to access range of financial services and products (i.e. loans, savings, payments, transfers) | Increased use of range of financial services/products<br><br>Increase in number of loans distributed and repaid through technology[24]<br><br>Increase in number of accounts opened |
| Doesn't recognize ATM or debit technology as mechanism to facilitate savings | Uses ATM or debit card to facilitate savings and achieve savings goals | Increase in number of savings accounts opened that are linked to technology |
| **Consumer Trust (New/Current Users)** | | |
| Does not use technology at all or on consistent basis because feels it is insecure (fear of stolen card or theft at ATM) and/or an impersonal way to conduct financial transactions (low touch)<br><br>Prefers conducting financial transactions through branch of financial institution (high touch) where can update passbook<br><br>Desires receipts as record of financial transaction | Trusts technology and sees technology as safe and secure way to conduct financial transactions<br><br>Willingness to move from high to low-touch form of banking<br><br>Confidence to access account outside of branch and at ATM outside of bank hall<br><br>Accepts the validity of confirmation number received through mobile phone and knows how to verify and keep record of transactions. | Increase in number of accounts opened and financial transactions conducted using ATMs/POS or mobile phones<br><br>Decrease in number of financial transactions conducted through branch of financial institutions |
| Does not perceive privacy advantages of using technology to conduct financial transactions as opposed to using passbook which is subject to family scrutiny | Recognizes benefit of technology as instrument to protect account information from others | Increased sense of control by women over their financial assets |

[23] Positive deviants are those whose behaviors result in positive outcomes and differ from the norm, where the norm is represented by undesirable practices. Examining positive deviant behavior has been an important tool to inform the design of financial education.

[24] Though many financial institutions do not yet offer this service through mobile phones, financial service providers are quickly moving in this direction.

**Table 7 Continued:**

| Current Behavior | Future Behavior | Indicator |
|---|---|---|
| **Technical Knowledge Associated with Branchless Banking (New Users)** | | |
| Does not use mobile banking or bank cards on continuous basis because unaware of value of accessing account through technology | Opens bank account and uses technology regularly to access it<br><br>Recognizes benefits of using technology (i.e. lower transaction costs, safety, privacy) | Increased uptake of technology for branchless banking<br><br>Continuous usage of technology over prolonged period |
| **Technical Knowledge Associated with Branchless Banking (Current Users)** | | |
| Discontinues use of technology due to problems with technology, agent or system<br><br>Discontinues use of technology due to problems with PIN # | Overcomes technical challenges and manages institutional relationship associated with use of technology for branchless banking<br><br>Understands importance of PIN and overcomes technical problems with PIN | Continuous usage of technology over prolonged period<br><br>Increased uptake/usage of technology |
| Uses limited number of services available by technology (i.e. BANK CARDS: balance inquiries, withdrawals; MOBILE PHONES: transfers, airtime purchase or communication) due to limited knowledge of financial services available | Uses all features of technology that are appropriate and could benefit end user (i.e. BANK CARDS: withdrawals, deposits, balance inquiries, purchase goods at store, cash back, pay utilities, access bank statements; MOBILE PHONES: withdrawals, deposits, money transfers, purchase airtime, purchase goods at store, bill payments) | Increased use of financial services and more appropriate use to respond to clients' needs |

## Building on the Global Financial Education Curriculum

The need to exercise restraint and self-control are fundamental to good money management practices, such as saving, budgeting and debt management. These are the basics of financial education that are needed if poorer clients are going to adopt electronic banking quickly and use the opportunities that it creates to their advantage.

Several issues to be addressed by financial education for branchless banking build on themes of the existing GFEP curriculum including budgeting, savings, debt management and use of bank services:

- Technology is one component of the Bank Services module. Clients learn how to use bank cards, ATMs and POS devices as well as manage the risks associated with using cards.

- Accustomed to a world of passbooks, paper receipts and high-touch relationships, customers who use branchless banking will need to be vigilant in managing their money and their accounts. The Budgeting, Debt Management and Savings modules provide training in an array of financial management skills.
- The projected increase in the use of mobile phones to transfer funds domestically and internationally highlights the need for effective management of remittance income by fund recipients. The Remittance module trains clients on how to set financial goals, leverage their remittance to access other financial products, and choose the financial products most appropriate to their situation.
- The use of mobile phones and smart cards to pay insurance premiums is another innovation underway.[25] The Risk Management and Insurance module provides training on managing risk and understanding the vital role that insurance can have.

The GFEP curriculum offers other important guidance which can be applied to financial education for branchless banking. The ready adaptation of the curriculum to different country contexts and delivery channels (see next section) has proven useful to financial service providers seeking flexibility in the application of the curriculum across different audiences. The modular design of the GFEP curriculum ensures that individual learning sessions can be used as stand alone units, allowing for further flexibility in the scope and focus of the training. The lesson objectives define the key messages that can be conveyed using a variety of media.

## Themes Unique to Financial Education for Branchless Banking

We anticipate that some of the content of the financial education for branchless banking may vary depending on the topic of bank cards or mobile phones. However, our research to date suggests similarities exist between the two technologies. For example, in order to promote change which will lead to continuous usage of either technology, the learning in both cases should focus on the message that low-touch banking can be cheaper, safer and more convenient than high-touch banking.

The concepts of trust and privacy are important to branchless banking. Clients are asked to trust technologies which may be new to them to conduct financial transactions involving their scarce capital. They are asked to interface with formal financial services in a less tangible way than they are accustomed. For some at the bottom of the pyramid, the technologies themselves are unfamiliar. For others, the technologies may be familiar (mobile phones), but the application of them for managing money may not be.

Privacy is another concept specific to branchless banking; indeed, it is a product benefit that many clients do not yet recognize, largely because they are often

[25] K-REP Bank in Kenya has already proposed using Sokotele, a mobile banking service, for insurance premium payments.

confused about the purpose and usage of PINs. Unlike passbooks in which printed balances can be easily accessed by others who may make demands on the money, the use of electronic bank accounts and their accompanying PINs can safeguard balances against unwelcome eyes.

## 4.6. Financial education: delivery

A major challenge for financial education linked to branchless banking is the dispersed nature of the client population. It may not readily lend itself to classroom-based training that has been the traditional delivery mode of the Global Financial Education Program. This mode of delivery can also be difficult if the goal is high levels of outreach. These challenges prompted our research team to explore alternative delivery channels during each field visit. Table 8 provides a listing of the options identified.

**Table 8: Delivery Channels for Financial Education**

| Type of Delivery of Financial Education | Delivery Channel |
|---|---|
| Print | ▪ Brochures<br>▪ Newspapers<br>▪ Magazines<br>▪ Bank statements<br>▪ Billboards<br>▪ Calendars<br>▪ Instruction manual |
| Media | ▪ Radio<br>▪ TV<br>▪ Pre-recorded messages played through megaphone or over loud speaker<br>▪ Video<br>▪ CDs |
| Classroom Training/Counseling | ▪ Classroom training<br>▪ On-site (ATM or cash-in/cash-out at agent's premises) |
| Group/Community/Peer Training | ▪ Tents and marketing drives<br>▪ Traveling road shows<br>▪ Peer educators<br>▪ Drama groups or local comedians<br>▪ Churches<br>▪ Community leaders<br>▪ Storytellers<br>▪ Town hall<br>▪ Weekly or monthly group meetings |
| Technology | ▪ Text messages though mobile phones<br>▪ Internet |

Source: Hopkins 2007

Our research looked at the strategies that institutions used in lieu of classroom training. It found that Equity Bank in Kenya, in particular, has made significant inroads in training clients to use ATMs, thus moving customers from the banking halls to the ATMs. For six months, 50 temporary workers marketed ATMs to customers waiting in queues at banking halls and gave demonstrations on how to use ATMs. Permanent staff are now stationed in the larger ATM lobbies to assist customers. Security guards, trained on the basic features of the ATMs, can provide answers to simple questions from customers (Ngurukie, 2007).

Some delivery channels are more effective than others for reaching different market segments. Results from four focus group discussions in Kenya revealed that radio is the preferred delivery channel for financial education, particularly when broadcast in the local languages. By contrast, female clients at ADOPEM in the Dominican Republic expressed a preference for classroom training. The internet may be more effective for the younger generation and a more affluent population. Newspapers may be more appropriate for the urban and higher income population while radio may be more suitable for the rural population. Thus, the final selection of delivery channels will depend on the local context, the mission of the institution and its target population.

A mix of delivery channels that can deliver messages with a greater or lesser degree of complexity is likely to be most effective for financial education. The Box on page 36 illustrates how a sample mix of delivery channels can be used with varying complexity according to a scale from “A” to “C.” “A” is very detailed and provides deep content on a message category and “C” provides only “top line” or basic information regarding a message category.

### Sample of Recommended Mix of Delivery Channels

**Strategy:** Key financial education messages will be delivered through a three-month radio buy on a top-rated radio station. Two comedians will deliver a radio skit about why branchless banking is useful and how to use it. The radio skit is in a question-and-answer format, with one character being very unaware of financial options and branchless banking and the other one providing information. The tone is amusing and light-hearted. A jingle prior to the radio skit will alert listeners they are about to get financial education information. Initially the content of the messages will be very basic or top-line *"C"* and then gradually progress to more detail, *"A" and "B."*

**Month 1:** The radio skit is run once a day, Monday through Friday, during the evening news. It runs during a commercial break. *Messages will be "C."*

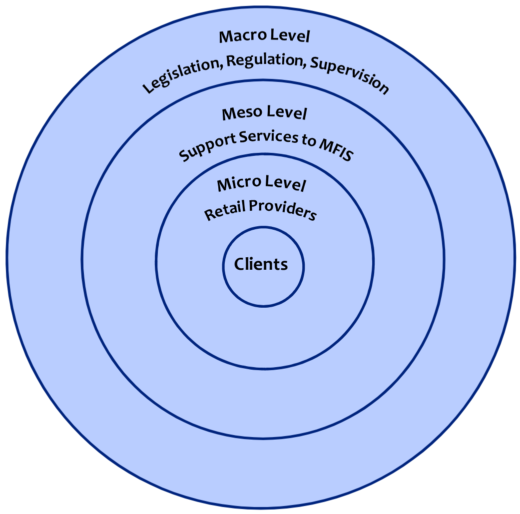
**Month 2:** The radio skit has saturated the audience so begin adding to the mix. Building on the radio skit, messages will now be reinforced through:
Comic strip fliers in central markets – Available for free at kiosks and through food vendors. Comic strip fliers will feature the radio skit characters. *Messages will be "C."*
Radio call-in show – Broadcast a one-hour show during which callers who have questions can get clarifying information about financial management and branchless banking. Use the jingle from the radio skit to introduce the show at the start and after station breaks. Repeat this call-in show in Month 3. *Messages will be "A."*

**Month 3:**
Market comedians – Hire actors to impersonate the radio skit characters and perform live at regional markets. *Messages will be "B."*
Mini-buses - Partner with several mini-bus operators in targeted peri-urban areas to play audio recordings of the radio skits. The recordings will lead into five minutes of more detailed information about how to access branchless banking services. Each bus operator will also hire a youth to ride the bus at peak times to answer questions from passengers after the tape is played. *Messages will be "A."*
Posters and text messages - At the end of the campaign, seek partner permission to post posters featuring the comedians in the banking halls and text push messages from mobile providers. These delivery channels can extend the reach of the campaign for another 2 to 3 months and reinforce the key financial education messages. *Messages will be "C."*

## 4.7. Financial education: a public or private good?

A persistent set of questions revolves around who should be the drivers behind financial education, what their objectives are and who benefits. Figure 3 identifies four main groups.[26]

**Figure 3: Financial Education Stakeholders**




Each level represents a different set of players, each with its own objectives for supporting financial education. At the macro level, government ministries, central banks or regulatory agencies may focus on advancing a national agenda for financial education. However, meso level institutions, such as regional networks or umbrella associations, and micro level organizations, such as retail service providers, financial institutions and telcos, may choose to be involved in the implementation of financial education (see Table 9).

In the four years since the Global Financial Education Program began, the profile of financial education has risen dramatically. Public sector agencies are exploring what role they play in promoting financial education nationally. In South Africa, the government is promoting financial education to counter what is perceived as the unscrupulous behavior of some lenders and high levels of indebtedness among low-income populations.[27] Elsewhere, the impetus for consumer education has come from governments confronting the advent of electronic banking, concerns about its regulation and an interest in increasing financial access for low-income populations. Some are introducing financial education courses in schools. Another driver has been the issue of consumer protection. The politically-charged issue of high interest

[26] Adapted from CGAP. See http://www.cgap.org/p/site/c/pubs/template.rc?gbl-searchKeywords=financial+education+stakeholders&type=Search+Vignette&Submit.x=47&Submit.y=11.

[27] The Financial Service Board requires all financial institutions in South Africa to invest a percentage of their net profits in consumer education.

rates in countries such as India has created an awareness of the need for mechanisms to protect consumers.

### Table 9: Matching Financial Education to Institutional Mission: A Cross-Sector Approach

| FINANCIAL EDUCATION STAKEHOLDER | OBJECTIVES | WHO BENEFITS |
|---|---|---|
| **Macro Level (Legislation, Regulation, Supervision)** | | |
| Governments (Ministry of Finance, Ministry of Education, Ministry of Youth) | To raise standards of financial literacy; to reduce poverty | Public at large |
| Central Bank and Regulators | To promote consumer protection in the financial and telecommunications industries | Public at large |
| **Meso Level (Support Services to MFIs)** | | |
| Microfinance Networks and Financial Sector Membership Organizations | To provide consumer protection and financial education information to members | Membership organizations |
| Training Institutes | To provide training services to specific market segments | Individuals and/or financial institutions willing to purchase training services |
| **Micro Level (Retail Providers)** | | |
| Corporations | Corporate social responsibility | Public at large that may have links to the corporation |
| Banks | To diversify their clients' use of services, lower default rates and promote savings | Bank and their clients |
| MFIs | To attract and retain clients and diversify or increase their use of financial services | MFIs and their clients |
| Community Based Organizations | To provide services to low-income communities | Community residents |
| Telecommunications | To increase use of cell phone banking; Corporate social responsibility | Telcos and their customers |
| Media | Corporate social responsibility | Public at large |

While public institutions are well-positioned to advocate and support, if not implement, financial education for the banked and unbanked, the actual entities that carry it out will vary by country. It could be central banks and regulators whose concern centers on risk and indebtedness, or finance ministries and social welfare ministries charged with distributing welfare checks and monetized food aid. In the Philippines, the Central Bank is launching a new financial literacy initiative in close collaboration with various bankers' associations. They plan to develop a financial literacy program for consumers applicable to the entire financial sector.

More countries are moving towards creating national financial education programs. At a financial education summit in India in December 2007, the Central Banks for both India and Indonesia put forward national financial education policy frameworks. In Kenya, efforts are also underway to develop a national financial education strategy.[28]

Many governments see bank cards as a viable, low cost and safe way to deliver welfare transfers to low-income households. The Kenyan government is exploring this for the very poor living in the northeast of the country. For a number of years, South Africa and Brazil have delivered welfare checks with bank cards. The evidence so far suggests that such initiatives can put low-income people on a path to financial inclusion. However, few recipients, many of whom are first-time bank users, receive any information or training on the benefits of banking and how they might leverage this new access to financial services. The result is that recipients do not take advantage of the full array of financial services offered by the banks.

As we look forward, government interest in advocating for financial education and consumer protection is expected to increase. Governments are well-suited to build trust in formal financial services and help low-income households to use the emerging technologies. Both parallel the objective of greater financial inclusion. How governments do this remains to be seen. Strong on advocacy, government agencies are probably less suited as on-the-ground implementers of such programs. Many will find it more efficient to outsource content development and delivery to others.[29]

Then who should implement financial education? Many financial institutions choose to undertake financial education where it coincides with their business interests or their program of corporate social responsibility. Some may argue that financial education must be viewed and executed as part of product marketing in order to bring adoption of branchless banking to adequate scale.[30] However, some banks remain hesitant, arguing that financial education could end up benefiting their competitors. Competition among financial service providers is potentially a serious limitation to their delivery of effective financial education. Consequently, associations of financial service providers might be a good option as their neutrality can facilitate building trust. Professional associations can target educational themes that represent a convergence of institutional interests and consumer benefits. One such area is the mechanics of using bank cards and mobile banking. Another pertains to consumer protection. Separate research suggests that most MFIs support principles of consumer protection, that clients should understand their rights and responsibilities as consumers of financial services. Nevertheless, if financial networks or professional associations undertake financial education, they must recognize that educating consumers about their rights and how to choose among financial options may not serve their member institutions' self interest.

[28] Microfinance Opportunities and MicroSave recently completed a scoping exercise sponsored by FSD Kenya and involving various stakeholders in the country's financial services industry to research and develop a framework for the national strategy (Nelson and Wambugu 2008).
[29] In the US, the Federal Reserve promotes financial education. The US Treasury's Office of Financial Education acts as the interagency coordinator of government initiatives in this area. However, many government agencies fund and implement their own programs. The "Money Smart" program developed by the FDIC is one of the best known.
[30] "Financial education when mixed with product education can build both a market position as a caring financial institution and allow cross selling of products" (Wright, 2008).

It is unclear what other types of organizations can represent consumer interests, especially as they are highly diverse and unorganized. Consumer education groups in developing countries tend to be weak and focused on consumer safety rather than financial services. An exception is the Micro Finance Regulatory Council in South Africa, for which consumer protection and education are a key component of its mandate.[31] In the absence of a consumer advocacy group, educational institutions, media, training organizations, NGOs servicing the financial sector and community development organizations could all play a role in delivering financial education. Ultimately, the best choice may be a mix of institutions or a cross-sector approach. Each sector can serve a different market as defined by the participants' outreach and the type of education and messages they are best suited to deliver. Coordination of the institutions' efforts may be managed by a council or board consisting of representatives from the institutions.

[31] Mandate of the Micro Finance Regulatory Council: "To promote sustainable growth of the micro-lending industry, to serve the unserved credit needs, while ensuring that consumer rights are protected." http://www.mfrc.co.za/index.php

# 5. CONCLUSION

With an emphasis on getting the delivery systems right, the promoters of branchless banking often lose sight of the consumer. In their eagerness to increase uptake of these new banking services, they have found that registering new customers does not always translate into active or appropriate usage.

This paper addresses two fast-moving targets: the rapid evolution of branchless banking technologies and the development of financial education as a tool for helping low-income households better manage their money. Both issues are new to the microfinance discourse; tying them together at this early stage was viewed as exploratory.

The paper explored the reasons for the lower rates of continuous usage among low-income populations. Explanations for the gap between uptake and usage include the lack of familiarity with banking services, limited trust in the new financial service delivery systems, and lack of understanding and experience using the technologies. At the same time, GFEP research has discovered a willingness on the part of low-income households to cross the digital divide and to conduct their financial transactions through branchless banking.

However, with only limited product orientation as their guide, clients find the services difficult to use, and trial and error generates frustration. Higher rates of usage are clearly possible but will require correcting the information asymmetries that define the world of those at the bottom of the pyramid. Financial education can facilitate this process. Such education can be delivered through a variety of channels, among them radio, print media, and classroom training. Its hallmark feature will be the delivery of messages using a learner-centered approach, connected to what adults already know and providing them with a road map for action.

Given the diversity of current and potential clients, targeted financial education is proposed. Most of the users of branchless banking are already banked and have been engaged in sending and receiving money transfers. At the same time there are many among the banked who have been reticent to take up the new technologies or to replace high-touch banking with a low-touch technology interface. Attracting the unbanked may be more costly and precarious, though potentially more rewarding. If we assume that the unbanked lack the biases of those who already interface with banks, they may be more receptive to branchless banking.

One example from which to draw inspiration is a recent food security project in Malawi. Cash transfers were disbursed via smart cards to beneficiaries, some of whom had never been banked. By the end of the project, the beneficiaries voiced their interest in using their smart cards to access formal banking services, such as savings.[32]

An example like this demonstrates the viability of branchless banking when potential clients are able to develop the proper knowledge of how to use it. Such results will be replicated when financial service providers recognize the low information base with respect to formal financial services generally and branchless banking specifically, and propose appropriate interventions. This paper argues that well-conceived financial education programs will achieve that precise aim.

[32] During monthly "pay-days," days of cash disbursement, the waiting beneficiaries received sensitization messages on how to manage the money (using it for immediate food needs or investing it in farming for future food needs) and how to use and safeguard their smart cards (Devereux et al 2007).

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