MicroSave Briefing Note # 80

Does Mobile Banking Require A Card?

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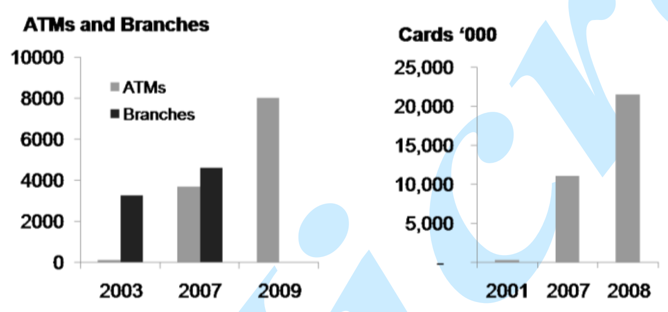
May 2010

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

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

Figure 1: Growth in Card Infrastructure in Nigeria



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

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

If a mobile payments service provider is to meet all their customers' convenience needs and prevent them from having to have both a mobile payment product and a conventional bank account, the best way to achieve this is to give them access to an ATM and or debit card. One of the most interesting innovations in Kenya in the last year was when M-PESA introduced non-card based ATM withdrawals to support its mobile payment service.

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

Smart Money in the Philippines, one of the earliest innovators in the mobile payments environment, now issues a co-branded Maestro debit card when customers sign up for the service. Although this increases the costs and complexity of the business model, the advantages to the customer are significant. They can

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

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

access the circa 8,000 ATMs in operation in the country, as well as the rapidly growing POS network. Despite the progress Smart Money has made in building an agent network, access to this infrastructure brings considerable benefits to the customer.

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

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

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

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

Bottom Line: Implications for MFIs

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

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