

MicroSave Briefing Note # 93

Innovation and Adaptation on the M-PESA Rails

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M-PESA is undoubtedly the biggest success story in the realm of mobile payments. Since its operations started in March 2007, it has grown from strength to strength. As of April 2011, it has 14 million customers serviced by a 28,000 strong agent network spread throughout Kenya¹. It is estimated that 75% of M-PESA users save at least some money in their M-PESA account for reasons of ease (45%) and safety (26%) as the major factors². This note³ examines some of the savings and related services offered to the low income market segment using M-PESA 'rails', and highlights the challenges they face. The institutions using M-PESA are working in different areas of financial services, offering savings, loans, health and life insurance, pension and investment products.

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

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

Innovations: New Products

M-KESHO

M-KESHO, launched as a joint product by Equity Bank and Safaricom, is probably the best known innovation in the list of savings products available on M-PESA rails. This product, aimed at all income levels, is available through the M-PESA platform and

customers can register at select Safaricom outlets or at Equity Bank branches. Benefits to customers are:

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

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

This international pre-paid VISA card is aimed at a higher-income target market. The card can be pre loaded in Kenya Shillings through M-PESA only, and can be used at over 1.7 million Visa ATMs and 28 million VISA merchant outlets worldwide. The I&M pre-activated card costs KSh.250 (\$2.90) and each top-up costs KSh.125 (\$1.47). Withdrawal from I&M and Kentswitch ATMs costs KSh.30 (\$0.35) and Ksh.100 (\$1.18) from Pesa Point ATMs. Withdrawal from Visa ATMs outside Kenya costs KSh.250 per transaction. There is an annual fee of KSh.250. The customer can surrender the card any time and get a refund of the remaining balance, after deduction of administrative charges, from any I&M Bank branch.

Innovations: New Business Models

Musoni MFI

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

¹ www.safaricom.co.ke/fileadmin/M-PESA/Documents/statistics/M-PESA_Statistics_-_2.pdf

² Jack William and Tavneet Suri, "The Economics of M-PESA", MIT, August 2010.

³ Developed on the basis of the larger paper Sadana, M et al. "Analysis of Financial Institutions Riding on M-PESA Rails", *MicroSave*, 2011

⁴ A distinction first used by Jake Kendall of the Bill & Melinda Gates Foundation

⁵ <http://www.safaricom.co.ke/index.php?id=269>

⁶ <http://www.safaricom.co.ke/index.php?id=270>

withdrawal from an M-PESA agent. The total cost of a “round trip” cash in/out costs the client \$0.70 and Musoni \$0.47.

Changamka Pre-paid Health Cards

Changamka is appointing agents to sell its health cards. These agents are small outlets, a chain of supermarkets and other individual NGOs and business places. These health cards can be used to pay for services at designated health service providers. A customer can top up the card by transferring money using M-PESA. User pays Ksh20 to Safaricom for each top up. This charge is irrespective of the amount transferred by user from his M-Pesa account to his Changamka account. Changamka does not charge the user for top up, rather pays Ksh.10 for each transfer to Safaricom, because Ksh.30 is what Safaricom charges to the M-Pesa account holder.

and SMEP have entered into agreements with Safaricom. Their clients can repay loans and deposit into their savings account using the “pay bill” option of M-PESA. Faulu has launched withdrawal service as well via M-PESA, while SMEP is in the pilot test stage.

Customer Economics and Satisfaction

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

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

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

Adaptations

All of the other financial institutions interviewed are offering their existing products through the M-PESA channel, trying to harness Safaricom’s wide agent network. While transacting over the M-PESA platform, the customer is bound by the limits of amount that can be transacted on M-PESA channel – the minimum being Ksh.50 (\$0.59) and maximum being Ksh.70,000 (\$823.53). For example, if a customer of CIC M-Bima Jijenge savings plan saves Ksh.20 (\$0.24) per day for deposit into M-Bima, since he/she is using M-PESA for money transfer to CIC, the transfer is allowed weekly and is for Ksh140 (\$1.65).⁸ CIC does not charge its customers for transfer into M-Bima account, and even bears the Safaricom charges of Ksh.30 for each transfer.

A large number of financial institutions have opted for Safaricom’s “pay bill” option to allow their customers primarily to deposit into their savings/ insurance/ pension/ investment accounts. Some of the more popular ones appear to be: PesaPap (from Family Bank); Pata Cash (from Kenya Post Office Savings Bank) and KCB Connect (from Kenya Commercial Bank). Deposit-taking microfinance institutions Faulu

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

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

⁷ For withdrawal of loans disbursed

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

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