The M-PESA Model: Lessons For India?

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This is the third of five policy briefs to study the intricacies of expanding financial inclusion

- As the RBI engages non-banks in the quest for universal financial inclusion, the right synergy of partners should be mapped out for optimal results.
- The M-PESA experience has significant value in taking forward an appropriate relevant model for India, particularly when it comes to service design and execution plan.

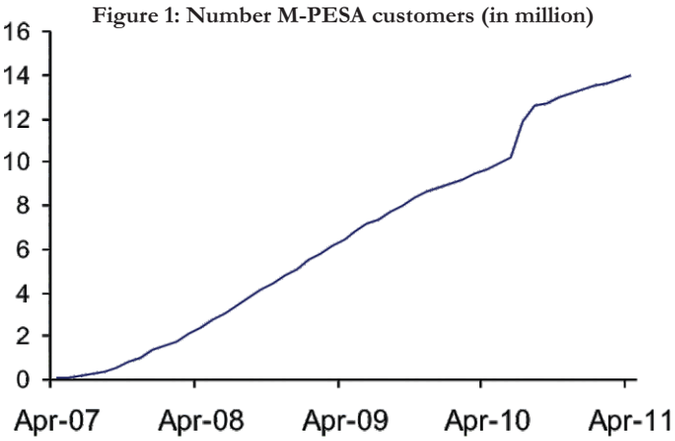
Executive Summary

M-PESA, a mobile based system of transfer of money between customers, facilitated by a network of retail agents, has been operational in Kenya for the last four years. The M-PESA experience has many lessons for India, where the business correspondents model has been expanded to include for-profit corporates. Indian telcos and banks can gain insights from M-PESA's strengths - a service design that helped foster trust in the new system, the value of inter-operability in networks, aggressive up-front investment in promoting the brand and trust, a scalable distribution channel etc. Yet, the M-PESA experience has reaffirmed the need for banks and telcos to work together for liquidity management and to encourage savings. Whether Kenya or India, universal financial inclusion calls for close cooperation between banks, business correspondents and telecom operators.

THE IDEA BEHIND M-PESA

The spread of the mobile phone across all segments of the population paved the way for its use as a tool for financial inclusion. M-PESA was launched in Kenya in 2007, by the country's leading cell mobile network operator, Safaricom, with support from British cellular giant Vodafone. M-PESA allows users to deposit money into an account stored on their cell phones, to send balances by SMS to other users (including sellers of goods and services), and to redeem deposits for regular money . While there is no interest paid on deposits, there is a sliding tariff for withdrawals. The M-PESA customer base grew rapidly from 2 million in 2007-08 to 6.1 million customers in one year, crossing 14 million by 2011 (See Figure 1).

Figure 1: Number M-PESA customers (in million)



The service now reaches 70% of Kenyan households and 50% of all unbanked households. USD 415 million per month is transacted in person-to-person transfers, equal to 17% of Kenya's 2009 GDP on an annualized basis. M-PESA outlets, now 28,000 in number, are more than seven times the total number of postal outlets, PostBank branches, commercial bank branches, and ATMs in the country. Prior to M-PESA, the most common modes of transferring money included transporting money in cash with the help of a relative or friend, sending money via bus companies or using the post office. A safer, cheaper and faster alternative through M-PESA has led to a change in money transfer methods (see Figure 2).

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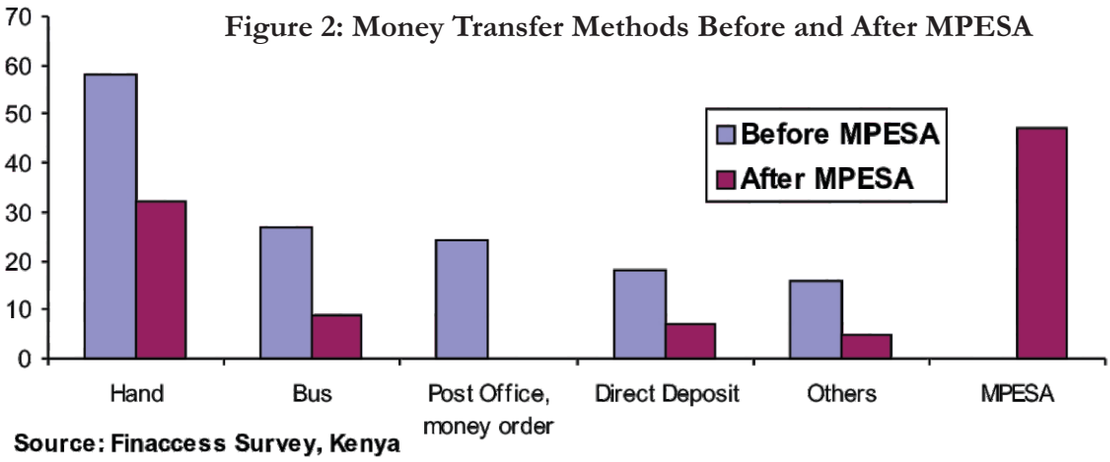
M-PESA has been extremely successful in spreading financial inclusion in Kenya. The share of poor households that are registered M-PESA users has gone from 28 % in 2008 to 51 % in 2009. Similarly, the share of rural households using M-PESA has gone from 29 % to 59 %, and the share of unbanked households using M-PESA has gone from 25 % to 50 %. M-PESA users are increasingly using the platform as a savings device. Between October 2008 and October 2009, the percentage of Kenyan households using M-PESA as their primary savings instrument increased from 7% to 16%, while the percentage of Kenyan households (not just M-PESA users) using M-PESA to save-up in case of emergency increased from 12% to 22% and the percentage of M-PESA users storing funds on the system for more than 24 hours increased from 75% to 81%.

Figure 2: Money Transfer Methods Before and After MPESA



Source: Finaccess Survey, Kenya

INDIA: THE RBI FOCUS ON A BANK-LED MODEL

- RBI has maintained that the M-PESA model, as practiced in Kenya, is not very relevant to India as the operational environment is quite different in the two countries e.g. a national identification number was already in place before M-PESA began, Safaricom is a single dominant telecom operator in Kenya as opposed to multiple telcos in India etc.

- There are concerns relating to regulation and supervision of numerous small deposit-taking units, conflict of interest, co-mingling of funds, misrepresentation and other agency related risks, access to and the use of float funds by non-bank entities in the process of providing payments services etc.

  Thus the RBI's 'preference is to have a bank led system with non bank players as partners and service providers, so that regulatory resources are focused on banks. Banks in turn take responsibility for their partners and agents as part of their risk management processes (Usha Thorat, 2010)[1].' The M-PESA experience is however still very relevant for India as there are significant lessons on what to avoid, adapt and adopt when it comes to service design and business execution strategy in the business correspondents model.

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LESSONS FOR INDIA FROM M-PESA

A: What to adopt

- The importance of designing usage- rather than float-based revenue models for accessing poor customers: Formal financial systems bypass those whose incomes and expenditures are irregular and of low value. By focusing on the transaction, rather than on the quantum of deposit, the usage based revenue model suits both the excluded as well as the service providers.
- Low-cost transactional platform which enables customers to meet a broad range of their payment needs: Connection to an e-payment system opens access to a plethora of financial services that were hitherto unavailable to the poor.
- A large agent network with strong brand recognition and trust in potential customers.
- Large budgets to finance the heavy up-front market investment needed to scale up deployment and overcome the three significant hurdles that are common to any new electronic payment system (See Box)
- The importance of payments as an initiator for agent-based systems: A key advantage of first targeting the transfer functionality of mobile money is that this allows customers to make an electronic transfer and immediately validate that it was processed securely by calling the other party to confirm receipt. Starting with payments allows customers to build trust by completing several basic transfers. This trust can gradually be extended to savings and other inter-temporal products.
- Appropriate service design: simple user interface, removing adoption barriers (simple and quick procedures for registration, no charges for registration or deposit, no minimum balances), ability to send payments to non-M-PESA customers etc.
- Trust building measures: uniformity of experience across all agents, transparency in transaction logs at the retail end, instant SMS confirmation of transaction etc.
- Simple and transparent pricing: uniform fees nationwide, agents collect commissions from Safaricom, charges only on customer-initiated transactions, fees in fixed currency terms and not in %age of value made it easier to compare with alternative payment modes, enabling remote payments in cash were cheapest transaction to ease customer's biggest pain point etc.
- A supportive banking regulator that gave concessions allowing Safaricom to operate as a payment system outside the banking laws, but under strict regulations - interest earned on deposited balances go to a not-for-profit trust and cannot be appropriated by Safaricom or passed on to customers, limits on transaction sizes to address anti-money laundering concerns etc. Regulatory concerns therefore were balanced with operational needs of the service provider.

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Box: Three hurdles to overcome while scaling up deployment of a new payment system

1. Adverse network effects: The value to the customer of a payment system depends on the number of people connected to and actively using it. It is difficult to attract people in the early phase when there are few users on it. Network effects are sometimes referred to as demand-side economies of scale, to emphasize that scale affects the value of the service to each customer
2. Chicken-and-egg trap: A payments system has to attract both customers and stores in tandem. It is hard to sell the proposition to customers while there are few stores to serve them, and equally hard to convince stores to sign up while there are few customers to be had. Thus, the scheme needs to drive both customer and store acquisition aggressively.
3. Trust: Customers have to gain confidence in the reliability of a new system. For instance, accepting a payment system that is operated by a mobile operator, accessing accounts and initiating transactions through mobile phones etc.

B: Where M-PESA needs to evolve further

- For M-PESA, the pricing model needs to be re-looked, it is still not conducive for very small transactions, keeping transactions still expensive for the bottom of the pyramid. Customers who earn on a daily basis should be able to meet their daily transaction needs.

- Liquidity management at the retail end needs innovative strategies: With cash float constraints, requests for large withdrawals cannot be met. It was important to link to banks and ATMs to boost the ability to meet cash needs.

- With a large part of the transactions converting back into cash, the goal of encouraging savings in different forms is not being fulfilled. Here again, linking to banks is crucial to bring people into the formal financial system. Currently M-PESA acts as an electronic checking account, it needs to offer structured products that can help savings.

- M-PESA should be promoted as a mechanism for salary and social welfare payments, enabling payments across supply chains, bill payments etc. to reduce the conversion into cash.

- M-PESA enjoys a special position in the payments laws of Kenya and the Central Bank of Kenya is slowly opening the field to banks and other non-bank service providers. It remains to be seen how Safaricom's business model can cope with this evolving situation.

The Way Ahead for India

With fast evolving technology, understanding the risks involved in new channels and security protocols is itself a task for the regulator, making lessons from other countries invaluable. Tailoring an appropriate model for India is an evolving process as the regulator balances the need for maintaining financial stability and consumer protection with the need to push for universal financial inclusion. It is clear that while the M-PESA experience cannot be replicated in India due to differences in the financial and telecom environment, there are significant regulatory and commercial insights that are of relevance to India.

[1]Financial Regulation and Financial Inclusion – Working Together or at Cross-purposes, Speech by Smt. Usha Thorat, Deputy Governor, Reserve Bank of India at the Tenth Annual International Seminar on Policy Challenges for the Financial Sector, Washington, June 2-4, 2010

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