



# Inverting The mMoney approach



Pic credit: CGIAR Climate, Flickr

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## Financial Exclusion & the need for mMoney uptake

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Sixty per cent of the population in India does not have a bank account, and more than 50% farmers in the country do not get access to any kind of institutional credit. While the exclusion statistics paint a gloomy picture, the ground reality is much worse as most of the bank accounts opened over the recent years are dormant. The primary reason for financial exclusion is lack of depth in the banking infrastructure - of 600,000 habitations only 30,000 habitations have bank branches.

Setting-up and operating a bank branch is very expensive and challenging. Financial institutions have turned to technology to enable branchless banking. Technology-based branchless banking is promising in theory as transactions costs are less than 10% of that incurred at bank branches. Service providers and financial institutions have experimented with multiple technology platforms, but the platform that seems to have attracted the most attention has been the mobile phone. Mobile phones are ubiquitous and it is the only platform that provides a digital link to almost every household in the country.

Despite their ubiquity, the potential growth of financial inclusion through mobile phones (mobile money) has been very slow and patchy. In branchless banking through mobile, the mobile per se is only a small part of a big puzzle – other pieces being creating compelling products and services, creating an agent network, training agents<sup>1</sup> and managing capital risk of the network. Getting all the technology and operating model pieces to coordinate with each other to enable flawless service delivery is a very challenging task.

In addition to the above, one of the most critical and important element of effective mobile money is choosing the right target market and strategy. Today, branchless banking and the mobile money agenda is led by government programs with Government-to-Person (G2P) transactions and in some parts remittance Person-to-Person (P2P). Not many people seem to ask this question, but has the volume of G2P business compelled service providers and financial institutions to choose the toughest market sub-segments to start with?

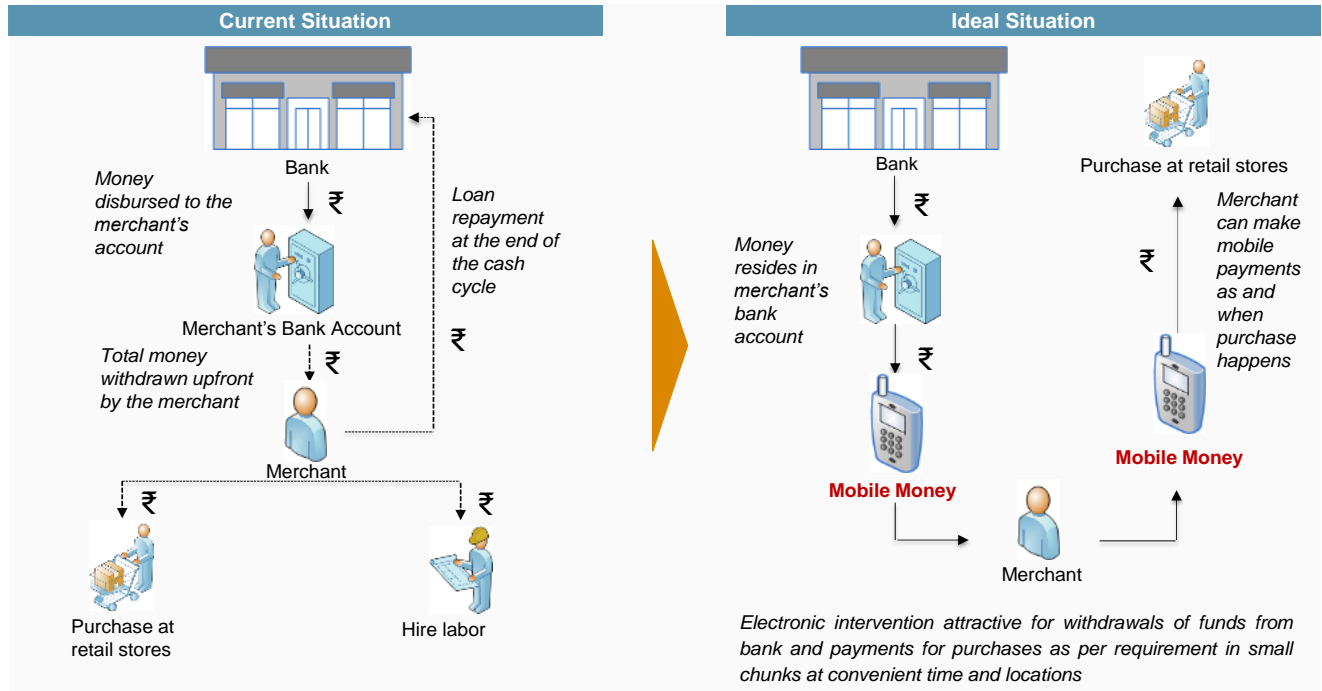
A better approach, particularly in rural areas, would be to invert the existing approach: Target rural business segment develop solutions, gain experience and gradually introduce the service to tougher segments such as households.

In the current paper, we explore some of the key elements of effective mobile money and also present an alternate strategy for financial inclusion through mobile money.

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<sup>1</sup> Agents are consumer interface of branchless banking service and serve a bridge between cash and mobile money

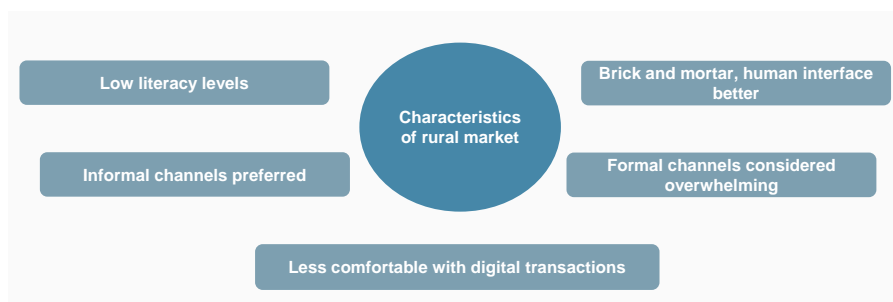
**Figure 1: Comparison between as-is cash transaction process and mobile enabled payment process**



### 1.0 What's holding mMoney back?

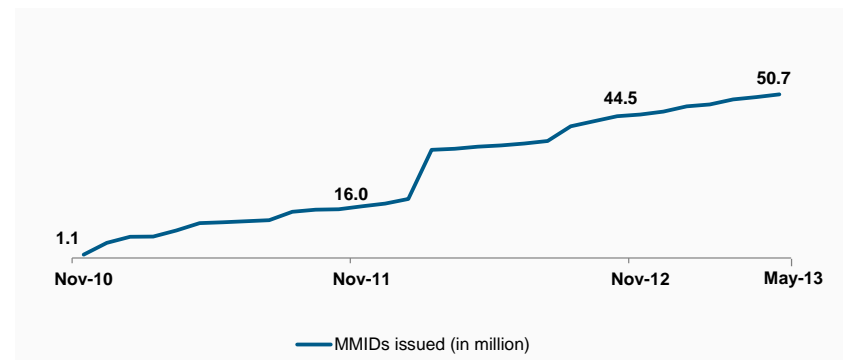
Rural households are smart money managers and use multiple informal channels to mobilize money for business or consumption. The complex system of money management has evolved over many decades due to lack of access to any institutional mechanism. Preference for informal sources stems from the fact that they are “on tap”, do not entail any documentation hassles, and transactions are based on trust between the transacting entities. In the market with behavioral traits as indicated above, conventional banking services may also be met with underwhelming response, let alone mobile money. Monetary transactions are trust-based and users prefer a human interface to a machine, expecting a rural household to leapfrog from informal cash sources to mobile is a tall order.

**Figure 2: Characteristics of rural market in India**



Even in easier to crack urban market, adoption of mobile money has not been as fast as one could have expected. Data from NPCI suggests that India has only 50 million Mobile Money IDs (MMIDs) against more than 300 million bank accounts in urban areas. The service off-take has been encouraging over the last year with increase in transaction volume by 45% (May 2013 over May 2012) and increase in average value of transaction by 44%, but there is long way to go before mobile money becomes a preferred channel of transaction.

**Figure 3: Year wise growth in the number of mobile money IDs issues in urban India**



*Source: National Payments Corporation of India*

Increasingly, technology is becoming cheap and with improved functionality making it easier to transact on the mobile phone, but issues of security and trust prevent wide spread adoption of the service. Rural counterparts are not different.

In sum, the slow uptake of mobile money is combination of supply and demand side challenges– On the supply side, service providers have neither been able to provide a compelling value proposition to the customer nor have they provided a robust infrastructure for flawless transaction. On the demand side, customers prefer to hold cash to crediting it in formal accounts.

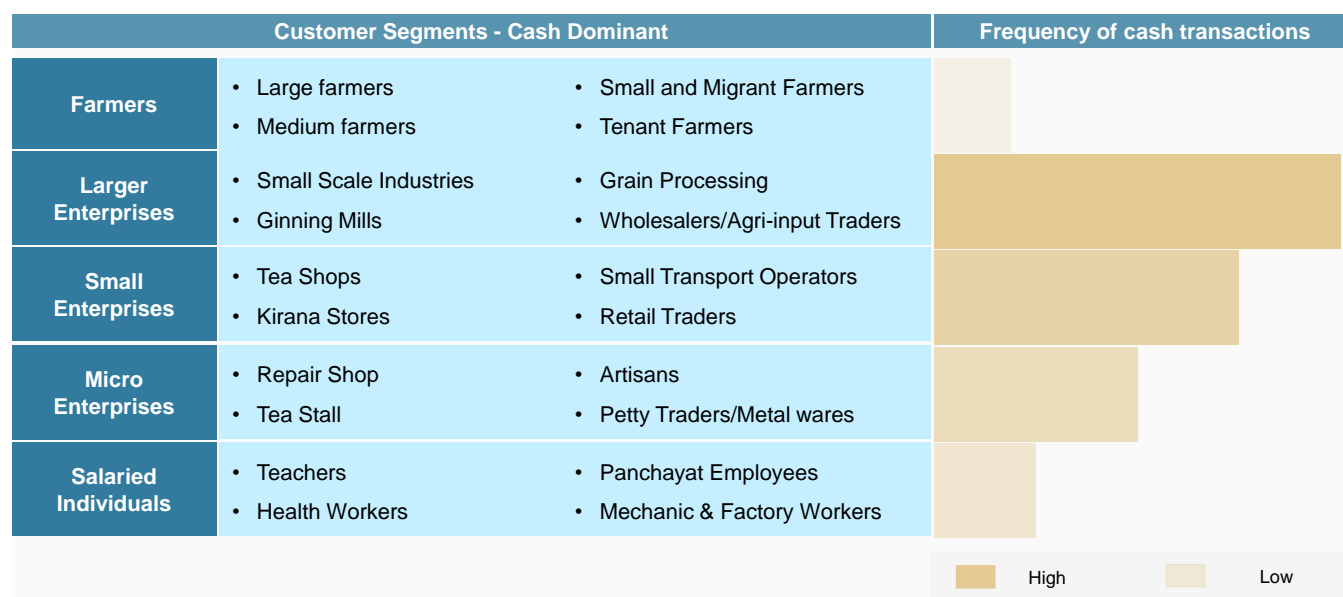
Some factors that are holding mMoney back are discussed in more detail below.

### **1.1 Supply-side challenges in product and service infrastructure**

Technology service providers, telecom companies and banks have been dabbling in the rural mobile money market. The landscape is full of experiments, pilots, and some commercial rollout. However, none of the current implementations have been uniformly successful or replicable across geographies. It is a well-accepted fact that operational deficiencies in the service value chain are among the key reasons for the limited uptake of mobile money, but few questions still remain: Have mobile money operators developed a compelling product/service offering? Do the target customers have enough incentive to adopt mobile money? Have they chosen the market correctly?

The rural landscape is very diverse with many sub-segments, each with varying financial and transaction needs as depicted in Figure 4.

**Figure 4: Rural market landscape with diverse transaction segments**



### **1.1.1: Target markets restricted by a G2P lens**

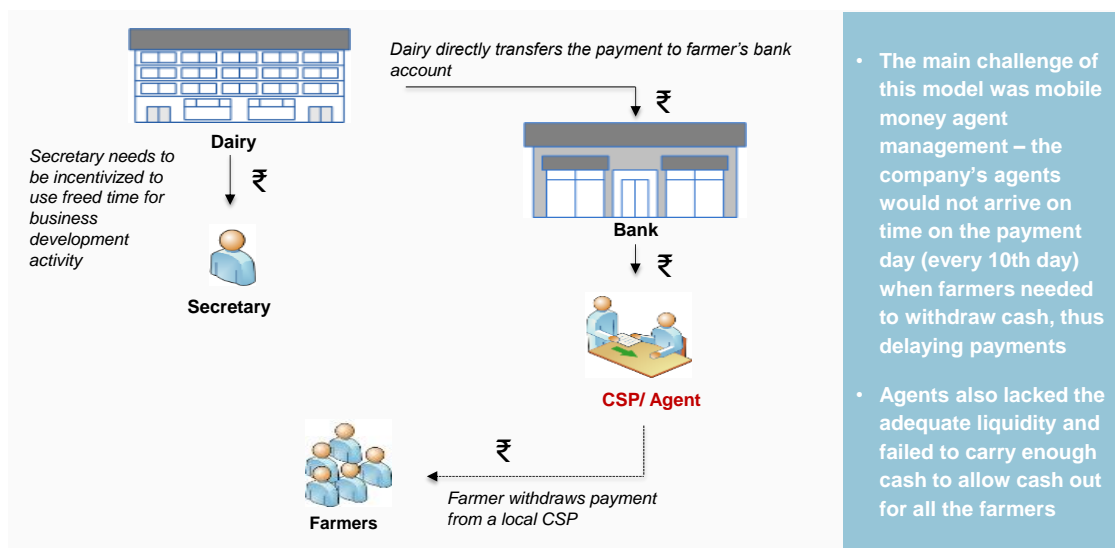
The current approach views the market through the G2P lens, and as a result, the target segment is just households. The products offered to the current customer are mobile-enabled bank accounts and, in some cases, mobile-enabled remittance. With easy access to informal sources, the proposed mobile-enabled products have limited value. Rural market is a diverse customer base (Figure 4), mobile money providers can develop targeted products and services for various other sub-segments as well. Good targets for mobile money are agribusinesses, FMCG retailers and other business segments with strong large enterprise linkages. Rural businesses tend to handle considerable cash every day and are on a look out for secure, cash-lite channels of transaction to decrease their operating overhead.

### **1.1.2: Gaps in existing operating models:**

Indian regulator Reserve Bank of India has enabled only bank-led financial initiatives i.e. technology service providers and telecoms cannot offer mobile money services without banks managing the cash in the backend. At first, the bank-led model may seem limiting, but it does lend a lot of credibility to the transactions and provides bank partnership branding.

As cash is inevitable in the value chain, agent networks (to substitute physical bank branches?) are essential too. This is already in practice, and is in fact a good thing as rural customers can transact with one of their own trusted counter-party. A strong and robust agent network is necessary to enable flawless service delivery. The switching costs for rural consumers are very low; service failure will drive away the customers easily. The critical points to note in designing an agent network are as follows (not exhaustive) (a) adopt tiered agent network with varying transaction capacity – this will help in developing products and service for a range of sub-segments (b) activate adequate number of agents in a geography and design the network for peak capacity – this is to ensure that no customer is turned away owing to lack of float (c) prefer fixed trusted agents e.g. medium to large mom-pop stores, post offices – moving agents do not provide access on tap (d) tie-up with merchants of basic necessities to enable mobile-to-mobile transaction in cases of emergency.

**Figure 5: Agent network management plays a critical role in success or failure of electronic money transaction process**



### 1.1.3: Technology-adoption barriers

The rural customer is not very technology savvy and owns basic handsets, which makes deploying of feature rich application difficult. But the trend is changing gradually and the market is witnessing the entry of cheaper multimedia phones. Moreover, the younger generation of rural customer segment is already consuming a lot of media on the mobile and can be on boarded to mobile money much more easily. Going forward, technology will cease to be one of the problems in mobile money service delivery and the focus will shift towards making the other parts of the value chain robust.

### 2.0 Demand-side challenges: Can mobile substitute many cash transactions?

The demand of this game has some fundamental issues. In its current form, mobile money is not a “pull-product” like mobile recharge i.e. the customer does not walk-in to purchase uninitiated. This is evident from the fact that 80% of no-frills accounts created by agents for G2P transactions lay dormant. This dormancy in accounts renders both the account management by the bank and the agent networks unviable. Users of branchless banking always withdraw the entire money deposited in their account in one go. The question here is - why do people not store money electronically in bank accounts when the mobile enables access to cash anyway? As mentioned earlier, rural households are smart money managers and cash gives them infinite flexibility to do so. Rural household-businesses (including businesses operating in rural areas) currently do not see electronic money / mobile money as a store of value<sup>2</sup> or effective transaction medium. This is so because there are no products in the market that solve some of their cash problems. Almost all services are geared toward G2P transactions. The desired features a mobile wallet/store include (a) ability to control allocation and budgeting (b) easy access on tap (c) ease of transaction and (d) physical acknowledgement of value stored.

<sup>2</sup> <http://www.cgap.org/blog/why-progress-mobile-money-so-gradual-and-patchy>

Taking a cue from the above, service providers can tweak their operating models and develop innovative products and services to enable budgeting and financial management. Examples of innovation could include providing partitioning of savings accounts, providing a colored stub (of varying denomination) as acknowledgement for various allocations, creating ability to withdraw using stubs at multiple outlets, enable stub transfer through mobile etc. Stubs have been used frequently for mobile recharge and users are aware of its usage.

With the right product and service infrastructure, rural businesses may increasingly see store of value in mobile money. This trend must be encouraged as mobile money for business transactions (B2B) will go a long way in building trust among households as well.

What should be done: It follows therefore that mobile money service providers need to segment the rural market and choose a market that best suits their risk appetite. They also need to develop and design products / solutions for that target segment and have in place a very robust agent infrastructure to prevent any service failures. Based on the key elements discussed in the above sections, we propose a strategy that may lead to faster adoption of mobile money services in rural areas.

### **Inverting the market approach for mobile money**

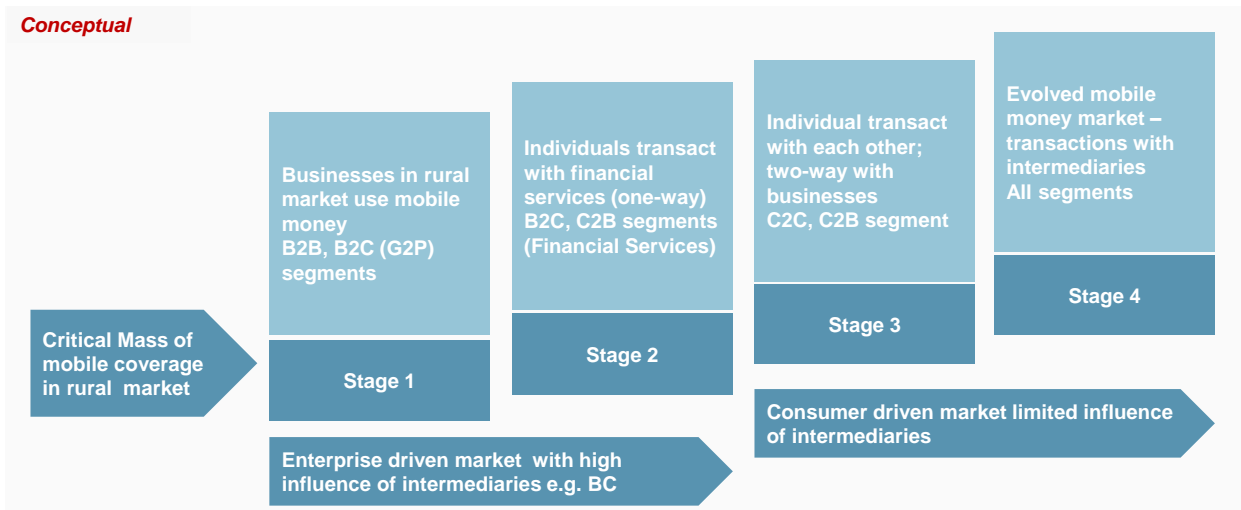
Effective and sustainable mobile money will be possible when it becomes store of value and transaction for its consumers. In addition to making store of value, its service delivery infrastructure must be as robust as possible.

Most mobile money operators endorse the point on store of value, but no one seems to have a systematic strategy to that end. It is very difficult to read any strategy or direction in the current pilots or commercial implementations. What is wrong in the current approach and what can be done differently? The current mobile money implementations focus on rural households, led by multiple G2P programs. While the G2P transaction volume is large, this alone does not generate enough repeat transactions to make the mobile money channel sustainable.

With limited success in the current approach, there is merit in taking a step back and scanning and selecting an addressable market segment. Post market selection, targeted products and services may be developed.

Direct market-building in the toughest rural segment i.e. the household segment may not be a good approach. Strategy must be to build the market through actors in the rural ecosystem. This may require inverting the existing approach and start with the rural business segment first i.e. enable B2B transactions on mobile money platform and then gradually move to P2P household segments. The advantage of this approach is that it provides the households ample time to start trusting the transaction system. It goes without saying the back infrastructure must be tailored for business segments. Schematic below provides brief summary of the phase-wise approach to building market in mobile money

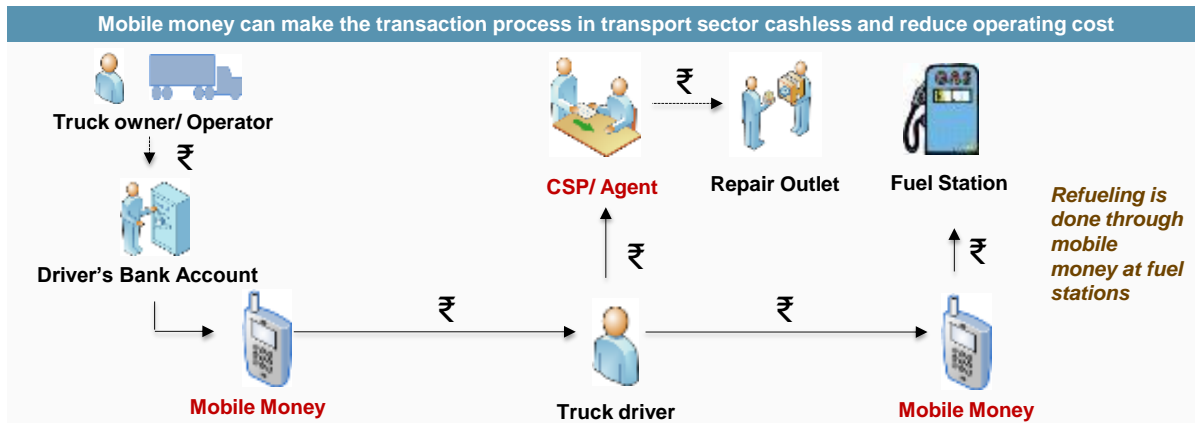
**Figure 6: Phase-wise strategy to roll-out mobile money services in rural market**



**Phase I: Business-to-Business Segment**

A good starting point to take mMoney beyond G2P is by targeting the B2B segment. With the retail boom, many large enterprises and multinational corporations strengthened their supply chains in rural areas. The businesses at the receiving end of the supply chain make for a large and attractive segment for mobile money adoption. Moreover, under new regulation, private companies can function as agents (business correspondent) for branchless banking. Further, in many B2B cases agent networks may not be necessary as some enterprises may have periodic access to physical banks. The advantage of deploying mobile money in rural enterprises is that they act as ambassadors to develop trust with rural households.

**Figure 7: Mobile enabled transaction process in transport supply chain**



**Phase II: Business-to-Consumer Segment**

There is a large scope to introduce targeted mobile solutions in the B2C segment because it cannot lower administrative costs and tackle security concerns that accompany cash handling for businesses. Some of these targeted transaction types could be salary and payment for agricultural produce. With business evangelizing mobile money, beneficiaries may begin to trust system further.



Targeting businesses in Phase I & II will enable service providers to operate in transaction segments which have a high throughput and frequency.

### ***Phase III: Consumer-to-Business Segment***

After generating trust and familiarity, the next step could encourage consumers to settle payments through mobile money. Correct positioning of such services along with a robust cash access and management infrastructure will be essential to ensure proper payment process.

### ***Phase IV: Consumer-to-Consumer Segment***

Finally, we believe mMoney will reach a phase where people will be ready to transact with each other.

The phased approach is advisable as a strategy, and continuous customer education, product innovation, enabling budgeting tools will be essential for market development as well. In addition considerable business model innovation is required in setting-up and managing agent networks, retaining customers with targeted products and service.

The above proposed approach is indicative and developed on the premise that enterprises will lead households in adoption of newer channels. The premise is based on the launch experience of banking services such as Real Time Gross Settlement (RTGS), National Electronic Funds Transfer (NEFT) and other similar services by the Reserve Bank of India. That said, the proposed approach needs to be tested extensively.

## **Conclusion**

With half the global population still un-served by the banking system, proliferating mobile money practices will ultimately replace physical bank transactions. But uptake and sustainable usage of mobile money in the future will be a function of the strategies adopted by mobile money operators and the prevalent regulatory framework. In the current framework of bank-led model, the service delivery network is complex and there have been no commercial success.

For long term success, beneficiaries must use the mobile money platform as a store of value and transaction. To that end, mobile money operators need to put in place a well-designed strategy and target market. Some pointers on a possible approach are listed above, and there needs to be more thinking on other approaches as well. In addition to a well-designed strategy mobile money operators need an effective and efficient “business unit” with dedicated sales team, product development team, research and development team and field activation team. It is critical to staff all the business functions with appropriate skill sets. A well-designed strategy, right market selection and corresponding implementation speed will ensure faster uptake if not exponential.

A complete cashless transaction ecosystem is ideal, but the reality is that cash will still play a key role in the rural landscape. So, mobile money operators need to continue innovating on products, but also focus on overall strategy and solution design.