

Harnessing M-Banking Potential By Banks In Rural India

Learning From International Experiences

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Rural India has 18% of bank penetration to serve 74% population and a share of 30% deposit accounts out of 428 million in the country. Over 30% of the new mobile subscriptions every month are registered in villages, yet about 200 million mobile phone users are without bank accounts. Banks & customers have to incur relatively very high costs for accessing financial services in rural areas. While banks have been endeavoring their best to optimally utilize the rural banking infrastructure already created since July 1969 for serving the rural population and accelerating process of agricultural & rural development, the Government's policy on financial inclusion & country's inclusive growth, *inter alia*, has been to ensure flow of monetary benefits under a plethora of Union & State Government schemes to reach the intended beneficiaries through bank accounts with ease, on time, without any leakages and intervention of middlemen.

A mobile phone can be used to enter, display, process, store and transmit information as is done by computers, ATMs, and Point-Of-Sales [POS] devices, which are the electronic network end-points that banks use today to service customers in urban & metropolitan centers. A branchless banking channel using mobile phones can greatly relieve rural customers from inconvenient traveling to & waiting in a queue at distant branches and save precious time & money. Early evidence suggests that mobile banking in rural areas of developing countries facilitates low-income people to access financial services [savings mobilization & withdrawals, loan disbursements & repayments, remittances, bill payments etc] without a branch infrastructure and manage high volumes of low value transactions with the aid of mobile phones and non-bank retail agents. Learning from international experiences Indian Banks need to develop strategic action plan to harness m-banking potential to enhance customer convenience and satisfaction, facilitate unbanked, underprivileged and hard-to-reach customers to access financial services at reduced costs.

Enabling Measures: The Government of India and RBI having been committed to evolve a policy framework for optimum utilization of low-cost mobile technology to accelerate the access of the poor households to banking & financial services have initiated, *inter alia*, following measures to encourage banks to adopt m-banking technology.

[1] In January 2006, the RBI permitted banks to utilize the services of NGOs, MFIs set-up under Societies /Trust Act, Cooperative Societies Act and Section 25 Companies, registered NBFCs not accepting public deposits and post offices to act as Business Correspondents to provide banking services to clients on behalf of a bank, which include collection of small value deposits, disbursement of and recovery of loans of small value of principal and interest, receive and send small value remittances; cross-sell third party products such as micro-insurance, mutual funds and pension products, and engage in bill payments for services.

[2] RBI issued guidelines on m-banking transactions in October 2008 and has given approval to 32 banks to provide m-banking facility in the country, of which 21 have started providing these services.

[3] Established the Financial Inclusion Technology Fund with an overall corpus of Rs.5000 million to enhance investment in Information Communication Technology aimed at promoting financial inclusion, stimulating the transfer of research and technology in financial inclusion, increase the technological absorption capacity of financial service providers/users and encourage an environment of innovation and cooperation among stakeholders. The eligible activities, among others, cover [i] encouraging user friendly technology solutions [ii] providing financial support to technological solutions aimed at providing affordable financial services to the disadvantaged sections of the society [iii] creating a common technology infrastructure with comprehensive credit information [iv] funding support to technologies facilitating the documentation for processing of loans [v] providing viability gap/pilot project funding for unproven but potential technological interventions [vi] conduct of studies, consultancies, research, evaluation studies relating to technological interventions for financial inclusion [vii] promoting seminars, conferences and other mechanisms for discussions, dissemination relating to financial inclusion technological interventions [viii] publication of financial inclusion technology literature and publicity material [ix] Capacity building of persons of banks, post offices, State Government departments, MFIs, NGOs, Voluntary Associations and other stakeholders.

[4] Established the Financial Inclusion Fund with an overall corpus of Rs.5000 million to support developmental and promotional activities with a view to securing greater financial inclusion, particularly among weaker sections, low-income groups and in backward regions/hitherto unbanked areas. The eligible activities, among others, cover [i] funding support for capacity building inputs to Business Facilitators and Business Correspondents

[5] Established the Institute of Development Banking Research and Technology, Hyderabad, which has worked on several of technologies with a view to providing information to the banking and financial system. The institute has issued advisories to banks on types of software solutions that are required and also the issues relating to secure connectivity between the point of transactions and the base branch.

[6]The RBI Committee on Electronic Benefits Transfers suggested to provide to each client Unique ID to prevent fraud.

Banks' Initiative: Acknowledging the importance and responding to the initiatives of RBI on m-banking facility banks have begun to adopt Solutions such as biometric smart cards, mobile technology, point of sale & mobile bank to reach hundreds of the last-mile villages.

[1]Corporation Bank initiated pilot projects on branchless banking in Karnataka, Andhra Pradesh, Tamil Nadu and Goa, surveying villages, assisting rural households to open bank accounts and issuing *smart cards*. It operationalised branchless banking units in 1200 villages during 2009-10 and mobilized deposits of Rs25.97 crore by opening "no-frill" accounts of about 5.47 lakh customers who were issued *smart card* keeping in view RBI's requirements of KYC/AML.

[2] Indian Bank, Andhra Bank, SBI, State Bank of Hyderabad, Union Bank, Axis Bank, HDFC and Canara Bank are other banks using smart card-based technology solutions.

[3] SBI conducted pilot projects in Mizoram, Meghalaya, Andhra Pradesh and Uttarakhand and developed a mobile banking kit called "*bank in a box*" that comprises a cell phone acting as a Point-Of-Sale [POS] machine, a finger print reader and a tiny printer. This is used for opening "no-frills" accounts that are on smart cards issued to clients..

[4] HDFC Bank's "*Anywhere Bank Terminal*" at locations of Business Correspondents, besides "*Bank on Wheels*" launched in 13 States [including Bihar, M.P., Rajasthan and U.P] exclusively for the rural market facilitates low-income unbanked & underprivileged households to access financial services at affordable cost at their doorsteps using biometric ATMs. Bank reached more than six lakh customers beyond 200 km from its branches using the technological platform.

[5] Grameen Financial Services piloted m-banking in Bangalore with 100 borrowers in partnership with mChek [Bangalore-based technology provider]. After two years, it served more than 3,30,000 rural clients and planned to reach over two million by 2012. GFS incorporated technology, using Mifos an open source software developed by Aditi Technologies specifically for MFIs..

[6] Integra offers iMFAST [Integra Mobile Financial Applications Secure Terminal], a portable teller machine that performs simple banking functions in rural areas. Operated by BCs in villages, the iMFAST solution, a hand-held terminal handling transactions concerning deposit, RD, withdrawal, loans, insurance, bill payments and booking train/bus tickets in rural areas, is currently used in over 500 locations by 15 banks [including Bank of Baroda, Canara Bank, Central Bank of India, Indian Bank and Vijaya Bank]. Integra has issued ATM cards to three lakh customers in Karnataka, Madhya Pradesh, Tamil Nadu, Kerala, Andhra Pradesh, Maharashtra, Uttar Pradesh, Sikkim and Jharkhand

[7] Union Bank of India added thousands of customers in remote villages through its BCs, such as Infrastructure Leasing and Financial Services, Drishti and Basix. ..

[8] Under NREGS, banks in Andhra Pradesh conducted pilot projects to test "*leakage proof*" routing payments electronically to beneficiaries' accounts and transfer payments to the laborers through smart cards-based savings accounts. .

[9] Zero-M.A.S.S Foundation in Karnataka launched a new generation biometric fingerprint authentication-based solution, which has reached five million customers including beneficiaries of social security, pension scheme, NREGS, and SHG members in 18 States. . The product suite, "ZERO" is an end-to-end payment system to serves customers with small-value transactions including cash-in/cash-out, cashless transactions and remittances leveraging the security and connectivity of new generation mobile phones

[10] Mchek, provides services mostly to women, which include bank deposits, withdrawals, loan repayments, account balance and kirana shop payments. MCheck has a vision to bring together the entire eco-system of partners across the banking sector, banking service providers, as well as telecom operators to serve the base of users

[11] In 2009, MYRADA with the support of NABARD developed NABYUKTI, a software to generate simplified MIS for promoting and linking SHGs.

[12] Ekgaon technologies offer software for accounting and MIS in case of SHG-based financial intermediation.

[13] BASIX, in collaboration with banks, has set up physical infrastructure in the form of kiosks, which provide financial services and help local population to secure essentials and maintain contact with external world through Internet connectivity.

International Experiences: Vodafone, Airtel and Tata Telecom, driven by international experience as described briefly below, in Latin America, Africa and the Philippines, have already explored the feasibility of offering financial services.

ABSA Bank in South Africa: ABSA was one of the first banks in South Africa to introduce m-banking in 2002. Its customers use the mobile phone as a complementary channel that significantly increases usage volumes during holiday seasons when customers on vacation choose to do banking transactions via mobile phones since they can't access the internet or ATMs. The bank sought to integrate the Mobile and Internet channels and has introduced SMS mechanism to alert customers as a security precaution.

Equity Bank in Kenya: Equity Bank in Kenya, to exploit business opportunities in selected potential business conglomerates created, in addition to a regular branch, two new channels [i] through ATM & mobile van, a closed-loop POS network where customers can do basic banking transactions, [ii] a mobile phone channel, where customers can check balances, remit funds, and do other transactions. Customers at their conveniences cash-in or cash-out at agents, branches, ATMs or mobile vans as well as use both the mobile phone and card-linked facilities for financial transactions. Migrants use mobile phones frequently to send small amounts of money home.

XacBank in Mongolia: Mongolia with a population of 2.7 million people [majority being semi-nomadic] spread over 1.5 million sq. km presented challenges to XacBank in reaching more customers easily and quickly. Therefore, XacBank in May 2007 launched m-banking services, funded by CGAP Technology Program, to add new customers and conveniently serve its 62,000 active borrowers, 140,000 depositors and 80,000 cardholders. XacBank, however, observed that majority of the 35,000 customers using m-banking were from existing customers and service was predominantly used for person-to-person remittances and to link bank's customer's current account with his mobile account. The bank had a plan to use m-banking for loan repayments in June 2010 as customers must understand the benefits of flexibility in making loan repayments through m-banking, shortening the duration of group meetings and minimizing incidences of theft or fraud.

Tameer Micro-finance Bank in Pakistan: Tameer Micro-finance Bank [TMB] having 120,000 customers with loan portfolio of US\$23.6 million and deposits of US\$17 million launched m-banking [called easypaisa], funded by CGAP Technology Program, for reaching scale and within first six months processed over one million transactions. TMB launched its m-banking process on its own without an existing m-banking infrastructure in Pakistan. Since the regulator in Pakistan required Mobile Network Operator [MNO] to develop m-banking in collaboration with a bank, TMB in 2007 negotiated with Telenor, the second largest MNO, which also needed a bank partner. TMB wanted to market its product through Telenor's customer base of 30 million, network of 180,000 resellers, franchisees, its national advertising & marketing reach. A year later, Telenor purchased 51% share in TMB and over the next year the two organizations worked together to create the easypaisa brand for their m-banking service. TMB's vision of serving low-income people with m-banking and scalability of easypaisa depends largely on Telenor. The joint costs to prepare & launch easypaisa including the technical system, call center, branding, etc was around US\$7 million and during post-launch period, Telenor spent more than US\$100,000 a month on advertising. While most banks can't expect an MNO to invest as much as Telenor did in TMB, option for banks in countries without an m-banking is to partner with other smaller banks as a group to start m-banking.

MABS in Philippines: Micro-enterprise Access to Banking Services [MABS] program in the Philippines is a good example of cooperation of Rural Bankers Association in the Philippines [RBAP]. This USAID assisted MABS program organized a group of 60 rural banks, which used their ties with more than a thousand small business customers to serve as resellers for GCash [a mobile payments solution] developed by GXI [a subsidiary of Globe Telecom]. Although GCash already existed, it was not present in rural communities in the Philippines. Rural banks supported GCash resellers [similar to cheque cashing businesses] to develop a network in these communities. Besides, several thousand employees of rural banks and other businesses used these resellers to cash-out their salaries. As on its own, each rural bank was too small to attract GXI, 60 rural banks as a collective association with over 2000 branches and millions of potential customers, they provided a significant business proposition for GXI. While TMB in Pakistan was bought by an MNO and launched easypaisa, the 60 rural banks in the Philippines joined together and helped create the agent network for GCash, a service by an MNO.

Opportunity Bank in Malawi: Opportunity Bank in Malawi upgraded its MIS and developed business plan in 2008. In 2009 it built the technology solution, secured regulatory approvals and did customer research to formulate marketing plan. After pilot testing of m-banking service [called Banki mmnja or “bank in your hand”] involving its staff launched the product in May 2010. Bank expects m-banking profitable by the middle of the second year if at least 10% of existing customers use m-banking by the end of the first year and each customer makes at least two transactions a month. Initial investment was US\$200,000. While the bank was developing its m-banking, the MNO Zain [which was already in other African countries] announced to launch its m-banking called Zap with larger agent network than the Opportunity Bank network. Opportunity Bank may eventually link into this system to gain access to more agents and remain competitive.

BancoSol MFBank in Bolivia: BancoSol, a leading Micro-finance Bank in Bolivia, concentrated on its mobile phone strategy focusing basic SMS information services for its 400,00 customers, who used their mobile phones to check account balances, receive date and amount of next loan repayment and transfer funds from one account to another. This approach helped to lower costs through automatic text messages that notified customers about upcoming loan repayments or warn of late repayment notices and this easy to implement service saved loan officers time and reduced phone bills. Before embarking upon more complex m-banking services technology BancoSol had a series of interactions with its customers about the use of new technology and sought their cooperation.

M-PESA in Kenya: M-PESA actually started as a pilot project to facilitate microfinance loan repayments with the MFI Faulu Kenya. Originally, the MNO Safaricom wanted to combine its connectivity, brand, and distribution network of airtime resellers with MFI Faulu’s low-income customer base to enable customers to receive loan disbursements and make loan repayments using mobile phones. The two organizations initiated a pilot project for six months in 2005. During this period MFI Faulu’s customers used the service to repay loans. While the intent of the pilot project was loan repayment, curious and enlightened customers used the service for all purposes that interested Safaricom. Customers even used the service to pay for goods and services among them and to convert the e-money to airtime that could be sent to relatives in other parts of country. Innovative response of participants of this pilot project encouraged Safaricom to alter its strategy and develop the key marketing message of M-PESA, “*Send Money Home*”, and launched one of the most successful m-payments service projects in the developing world. In view of strong impact of group meetings on loan repayments MFI Faulu faced with some technological challenges and was not ready for the M-PESA service to be used for loan repayments. Its customers, however, found M-PESA so easy and convenient that they did not need group meetings just for loan repayments. Regular attendance to group meetings was a core component of MFI Faulu’s methodology, and there was apprehension/concern among loan officers and management that repayment discipline would breakdown in absence of group meetings. As a result of this, Faulu did not participate in the post-pilot project under a mutual agreement between MFI Faulu and Safaricom. In May 2009, Faulu became the first deposit-taking MFI in Kenya. Faulu considered little risk enrolling its new deposit customers to mobilize deposits via M-PESA. MFI Faulu in December 2009 launched a service to link M-PESA with Faulu’s savings accounts. This new service facilitated M-PESA clients to move their money from M-PESA into MFI Faulu’s accounts, which offered customers the added benefit to earn interest on one hand and develop a good savings record that can lead to eligibility for loans on the other. Four months after the launch, about US\$60,000 were transferred between the two institutions each week and 30,000 customers were using the service. Deposit mobilization via M-PESA was low risk for customers and MFIs. Using external technical assistance for developing “Small and Micro Enterprise Program [SMEP]” in Kenya, Faulu was the first MFI to link into the M-PESA platform for group loan repayments. Following a pilot project with 200 group loan customers in 2008, the service was rolled out to all 51,000 customers of SMEP in 2009, allowing them to make loan repayments and deposit savings through M-PESA.. SMEP borrowers repaid loans through M-PESA before the scheduled dates of group meetings, which loan officers verified at the meetings. The Faulu’s experience revealed no risk in loan repayment via M-PESA.

KWFT in Kenya: With more than 300,000 active borrowers and a loan portfolio of nearly US\$ 140 million Kenya Women’s Finance Trust [KWFT] is probably the largest MFI using M-PESA for loan repayments today. Similar to SMEP, the KWFT has all members of a group repaying the loan via M-PESA [using M-PESA’s bill pay functionality] at least two days before each group meeting. Attendance at group meetings is still compulsory, and loan officers arrive with a printout indicating the actual loan repayments already made by each member. Group meetings earlier used to be dominated by cash collection, now devote more time to discuss business problems and receive financial education. As some MFIs are still

worried about group cohesion they use m-banking for repayments for individual loans only. In this case, now m-banking provided loan officers more time to monitor business performance, evaluate the impact of the loan and widen & deepen outreach.

Tujijenge MFI in Tanzania: As of March 2010 Tujijenge MFI in Tanzania had 12,000 customers. Most of them were in the Dar es Salaam area. Tujijenge launched a pilot in 2009 with 30 individual loan customers who used M-PESA to make loan repayments. Customers were able to repay any amount from anywhere at any time before due date in Tanzania instead of waiting for the specific repayment date. The pilot was successful and Tujijenge now makes all repayments via M-PESA compulsory for individual loans below US \$ 1800.

Equity Bank in Kenya: In May 2010, M-PESA and Equity Bank in Kenya announced the most integrated product offering so far, a low-cost, low-entry micro-savings account called M-Kesho. With this account, Equity Bank hopes to convert the majority of M-PESA's 9.4 million users into Equity Bank account holders and plans to offer micro-insurance and micro-loans in addition to savings accounts. Very few institutions have the negotiating power, that Equity Bank possesses to achieve this. This joint venture has the potential to extend access to formal financial services to millions of currently unbanked individuals. As M-PESA and its services become more wide spread, groups are creatively using service to facilitate savings and loans both with and without formal MFI linkages. For example, Village Savings and Loans Associations [VSLAs], trained by CARE International, in Tanzania would be using M-PESA to store excess group liquidity as well as save for specific purposes like bulk purchases of fertilizer. There is currently no formal link with a financial institution, or special price with M-PESA, but the benefits of storing money in a secure location [versus in a locked box in member's homes] are so strong that CARE believes VSLAs would be willing to pay the normal price. When people who never had access to a bank account before, experience a nearly ubiquitous m-banking service like M-PESA, they figure out ways through trial and error to use it to meet their money management needs. MFIs should observe customer behavior and work closely with customers during this time to continue to figure out the best way to make loan payments and deposits via m-banking services safe and convenient for customers and MFIs.

VisionFund in Cambodia: VisionFund Cambodia has been operating in Cambodia for more than a decade. By the end of 2009, it had 98,000 customers with loan portfolio of over US\$21 million. WING Cambodia, sponsored by ANZ Bank, with over 100,000 customers launched in January 2009 is a new m-banking service. WING faced several challenges while seeking to develop an agent network where customers could conduct cash transactions. Cambodia does not have a national retail network, like post offices or convenience stores to act as agents. WING, therefore partnered with MFIs to provide m-banking. WING thought m-banking could be used for loan repayments and disbursements, but realized that this would delay the entry into the market. The MFI customer base was used to the high touch and community re-enforcement that is inherent to loan repayment methods. Instead, WING used VisionFund's outlets as WING CashX-press points for cash-in/cash-out. WING's partnership with VisionFund differentiated itself from other MFIs in the market and customers found it innovative. VisionFund was not licensed to take deposits, but it could offer customers the opportunity to store value using the WING m-banking. VisionFund received income from transaction commissions and had an opportunity to cross-sell products. While this increased its revenue there was also a cost too. VisionFund initially invested in 10 additional staff to help WING register new customers and it trained new and existing staff on cash-in/cash-out procedure. Each trained staff was expected to open 100 new WING accounts a month to breakeven, which could not happen even after six months. VisionFund, with mutual understanding, transferred the costs of 10 staff to WING directly but continued them in its branches. VisionFund still directly provides the WING CashX-press points for cash-in/cash-out.. Through better planning VisionFund and WING Cambodia hope to use m-banking for loan repayments and disbursements for MFI customers. The current arrangement is appropriate for VisionFund to take advantage of m-banking, while providing WING Cambodia with cash points for customers in rural areas. This highlights that even serving as an agent for m-banking involves costs that MFIs must consider while expecting extra revenue

BRAC in Bangladesh: BRAC, one of the largest MFIs and industry leader in Bangladesh, is considering the role of an agent for an established m-banking. As Bangladesh has low mobile penetration and amongst group customers is even lower than the national average of around 30% BRAC is considering m-banking for 300,000 individual loan customers, out of 6.3 million active borrowers, with an average loan size above a certain amount. BRAC is more interested to use branches as agent locations for other branchless banking initiatives. Till this is done 2,500 BRAC branches could serve as agents that manage a whole network of smaller agents [most likely their customers] in the area.. BRAC is motivated to serve as agent to obtain a

cheaper source of funds that can help BRAC manage liquidity and use excess cash for lending. This can earn additional revenue on the spread and benefit from a cheaper cost of capital.

Tameer MF Bank: Tameer Microfinance Bank [TMB] provides an example of successful new customer acquisition through m-banking. However, its business case is different from that of most MFIs. The easypaisa service allows people to transfer money, send remittances and pay bills through Telenor's agent network. Within six months following the payment product launch in October 2009, TMB processed over one million transactions on behalf of 500,000 customers. Since launching mobile account in February 2010, new 29,000 accounts were opened, who carried out all transactions and not by its existing customers. The TMB is not yet using its m-banking for loan related transactions for existing customers. With more experiments for m-banking some MFIs may reach new customers and grow into large institutions. MFIs should focus m-banking to serve existing customers better and continue their growth strategy and endeavor to integrate with m-banking service.

SKS in India: SKS India with over five million active borrowers is the largest MFI in India. SKS, instead of using m-banking for customer transactions, would serve as agent for a bank so as to access a new revenue stream. With its high number of customers, SKS expects the significant amount of commissions. In fact, SKS expects that the new revenue generation by acting as an agent for a bank will be worth 10 times any potential cost savings. The end result could be reduced interest rates for customers.

Better Customer Service: The significant benefit from m-banking for banks/MFIs is improved customer service to existing customers. This has been the experience of SMEP in Kenya once it linked with the M-PESA platform for repayment services for its customers. Before M-PESA was used, a SMEP customer had a lengthy repayment process. A woman-borrower would carry her cash to the group meeting location. Meetings would be long as loan officer would count and record each customer's cash. As a group treasurer, she would then take cash of all members of the group to bank, wait in queue and finally deposit the money. As a small business entrepreneur, she would spend much of time away from her business. Besides, she incurred substantial security risk walking and taking the bus with large amounts of cash. Now with M-PESA, the process is simple, convenient and safer. At any time during the repayment period, when the customer has the cash to make her repayment [or even a portion of the repayment], she can walk to a near by M-PESA agent, deposit money into her account, and remit the electronic value to the SMEP account directly. Group meetings with the loan officer now involve quick verification of the repayment transaction and customer return to her business faster. SMEP reported that while m-banking has not yet brought new customers, m-banking has increased satisfaction and convenience of existing customers. Customers' willingness to pay a fee for repaying via M-PESA reflects the value of the service. M-PESA treats loan repayments as bill payments. Customers pay \$ 0.25 per transaction, and MFIs pay from zero to \$1.25 depending on the value of the transfer. Cash collection method used previously influences customer willingness to pay the fee. As the cash transport responsibility lies with customers in case of SMEP, customers are willing to pay a small fee to have heightened security and save hours every week.

Faulu MFI in Kenya also confirmed that the cost did not deter customers. Faulu MFI educated its customers to consider the total cost of making a transaction [including bus fare and the opportunity cost of the time spent traveling and waiting in queues] versus running their business. Customers realize that walking a little to deposit quickly at an M-PESA agent, the fee of \$0.25 is cheaper than taking a bus to the nearest Faulu branch. In this case, the primary benefit to MFIs is customer satisfaction and their convenience. As against this, in other countries MFI's loan officers collect cash at group meetings and travel with cash to an MFI branch office. MFIs in these cases benefit significantly from m-banking through minimizing security and fraud risk. However, customers who are used to "free" cash collection at their doorsteps are less likely to take responsibility for their own loan repayments through m-banking and feel \$0.25 fee to transfer funds to the MFI high.. MFIs in some countries consider subsidizing the cost for customers [since a cost savings by MFI out of associated risks and costs of cash-carrying by loan officers would be significant] and gradually educating customers on the benefits of m-banking that can help them save time and money, experience security and manage their cash flows with more flexibility.. M-banking can reduce operational costs for MFIs, which can be shared customers in the form of lower interest rates. Similarly, m-banking would help customers save considerable time and money for depositing savings & withdrawals and remittances as they need not to visit branch.

Reaching new customer segment: While KWFT in Kenya did not expect its link with M-PESA to help it to expand its loan customer base significantly it did expect to mobilize new deposits easily and cheaply. Like most MFIs, KWFT's loan methodology is based on interaction between customers and loan officers. Loan officers have reputation in communities in which they operate, and frequent meetings facilitate better

understanding of clients on which the methodology is based. Even if client makes loan repayments far from a KWFT branch [via agents] the loan officer still needs to be close to both a branch and his clients. With m-banking, geographic expansion has increased dramatically but loan methodology has not changed. However, deposits being different products. Do not require appraisals, group meetings, or strict repayment schedules. It is a flexible product, and customers can deposit any amount from anywhere at anytime. As KWFT has now received a license to accept deposits, KWFT will use M-PESA to accept deposits from customers anywhere in the country that will help it to reach new customer segments. .

Cost reduction: Frequent direct contact with people in hard-to-reach locations makes micro-credit expensive. Costs can be reduced if MFI and customer use m-banking for loan disbursement, repayment and monitoring via the mobile phone which a customer is already having. Evidence suggests that m-banking can reduce operational costs and several MFIs have already reduced or have plans to reduce interest rates as a result of m-banking. However, the size of cost reduction varies for each MFI depending upon attributes, such as scale and methodology. MABS has used m-banking to reduce costs for rural banks in the Philippines. The Philippines has been a leading country in the area of branchless banking with both GCash and SMART Money established several years ago by the two leading mobile operators. MABS has helped 60 rural banks with over 885 branches to identify customers that have businesses suitable to serve as GCash resellers. Rural bank customers use these small resellers for loan repayments and deposits. When cost of traveling to the bank [ranging from \$0.20 to \$2.40] exceeds the cost of converting cash to GCash [\$0.20 or 1% whichever is higher] bank customers are willing to pay the GCash conversion fee. One rural bank [Green Bank] has motivated customers to make loan repayments via Text-A-Payment using GCash, which is cheaper than incurring costs for sending collectors to collect the payments. Green Bank calculated that it was possible and necessary to pass on the benefit directly to the customers to help them via GCash by reducing the costs of field-based collection. Accordingly, it reduced interest rates from a flat monthly rate of 2.50% to 2.00% and reduced its service charges from 3.00% to 2.5%. Considering the cost of GCash fee and SMS costs, this resulted into a total savings of \$5.30 to the customer, based on an average loan size of \$400. These calculations were based on an average loan size of 17,755 PHP [US\$400] with a 124-day loan term for all borrowers within or outside a three km radius. The rural banks also use an SMS gateway platform to remind customers about upcoming loan repayments. This saves bank's money by not having to call customers to remind them about repayments and has proven effective as when a text message is sent before the repayment date, repayment rates improved significantly with late repayments dropping by almost 30%. Using SMS to remind customers to meet contractual savings goals has also proven effective. The example of SMEP in Kenya shows that there are ways MFIs can save money through m-banking. Credit officers spend less time in meetings, allowing them to reach more customers quicker and increase their productivity. Triple Jump Advisory Services estimates that there is a significant reduction in travel time and costs for loan officers resulting in increasing their capacity by 100% as more and more customers use m-banking..

Strategy:

- Since April 1989 under the service area approach RBI has allotted all villages among rural, semi-urban and urban branches of public sector and regional rural banks for providing banking and financial services to rural households. These branches have since then already provided banking & financial services to a good number of rural households. As demonstrated in other countries with m-banking facility these banks can now provide better services at reduced cost to existing customers for mobilizing savings & withdrawals, loan disbursements & repayments, remittances & bill payments. Besides, branches of these banks, as demonstrated by Corporation Bank, can visit the allotted villages to assist new customers to open bank accounts keeping in view KYC/AML norms of the RBI and let BCs facilitate them to access savings & withdrawal services.
- Bank staff & BFs can survey villages jointly, identify eligible borrowers for receiving loans, guide them about the procedure & documents required for approving loans, let BFs follow them to facilitate loan appraisal & approval faster. After getting loan documents executed, borrowers can avail loan & make repayments through m-banking.
- All existing SHGs linked with banks can also be educated to repay their loan installments through m-banking, which would greatly help members of SHGs as demonstrated in other countries.
- All branches should formulate Banking & Credit plan for each of their allotted villages for providing banking & financial services focusing to cover all households in five years. The performance of the plan should be monitored quarterly by the sub-committee of the DLCC.

- Banks have to complete the process of appointing BFs and BCs and training them by concerned bank' Training Institute in a year.
- Private banks, both old & new stand extremely better chances now to achieve their mandated targets for lending to agriculture & weaker sections as without requiring a rural branch they can now facilitate a reasonably good number of rural households to access all types of banking & financial services through establishing m-banking services, appointing & training BFs & BCs and effectively coordinating with existing public sector banks, RRBs & Cooperatives.
- MFIs operating in commercial bank's area of operation can also act as BCs on behalf of the correspondent banks and collect deposits for correspondent banks [till they are permitted to mobilize deposits for them], and mutually agree to share loan business.
- Banks that have yet not started m-banking facility can either on their own or few of them as a group can start establishing m-banking facility as demonstrated by a group of 60 rural banks in the Philippines.
- Banks need to develop new financial products [including redemption of moneylender's debt] tailored to meet customers' requirements and market them systematically. .
- Government & NABARD may need to endeavor to develop SHGs as Credit Unions on lines of World Council of Credit Unions.

Conclusion: *With the implementation of financial sector reforms the process of computerization in banking industry significantly changed the structure and texture of urban and metropolitan economy. Now the need is for concern and commitment to create enabling environment for application of m-banking technology in rural India to erase the rural-urban divide and integrate rural economy with global economy.*

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