

# The Role of Mobiles in Banking

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## ABSTRACT

*It is estimated that about 90 per cent of the people living in developing countries do not have access to financial services. Also, in some developing countries some people live below the international poverty line. Some of the issues related to this phenomenon include; difficulty in accessing banking services owing to geographic distance, bureaucratic nature of banking services and misconception regarding the inability of the poor to repay their loans. This article argues that if the traditional financial setting does not allow the poor to access to the financial services like banking, the poor could be offered banking services through mobile technologies. This article therefore proposes a Mobile Banking Model that conceptualizes key ways by which mobile phone technology can be used to increase pathways to banking access for poor people. Future research will focus on empirically testing this model.*

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## I. INTRODUCTION

About 90 per cent of the people in developing countries lack access to financial services from institutions, either for credit or savings, which further fuels the 'vicious cycle of poverty'. According to the Human Development Report (2005), the ratio of the income of the richest 20 per cent of the population to the poorest 20 per cent exceeded 17 in 21 countries, but was less than 5 in 27 others. In some countries, essentially nobody lives on less than US \$1 per day, but in 22 countries more than one-third of the people live below this commonly used poverty line.

Studies on poverty and finance have been conducted mostly in developing economy contexts, especially in Asia and Latin America with most of these studies focusing on the link between microfinance and poverty. In developing countries very few studies have been conducted on the correlation between poverty and finance. Most people in developing economies like do not have access to a bank, credit union or similar financial services. Innovations in the financial services sector in India have compelled financial institutions to diversify their portfolio of products and services; and the target population they serve. Most financial institutions have broken new grounds and started reaching out to the marginalized in society by making products and services available to them through a number of technological platforms like ATMs, mobile phones and the Internet.

Studies relating to providing financial services and the role of such services to the poor have been

conducted in India. The focus on particular in relation to providing financial services to the poor is almost non-existent. Studies available have examined such issues as motivations for bank patronage; poverty profile and the correlates of poverty; and the Internet and banking. We attempt in this article to extend work. Notes that some of the key impediments to the patronage of banking services to the poor include:

1. Difficulty in accessing banking services because of the geographical distances between the poor and commercial banks. We notes that in respect of poor (farmers and wood carvers), 'these individuals could not get loans from commercial banks because the banks are located in towns that are far from where they live'.
2. Bureaucratic bank services were also an impediment to bank access and as we notes 'some of the interviewees complained about bureaucratic hurdles that they are subjected to at the banks'.
3. The inability of the poor to post the required collateral for loans being confused with their inability to meet their financial obligations. We notes that the data shows a loan recovery rate of 98.5 per cent, which seems to suggest that the poor can be counted on to meet their financial obligations.

Difficulty of access, bureaucratic delays and the general unattractiveness of the poor as a desired bank segment are but a few of the challenges poor people face in their bid to access banking services in developing economy contexts. Although we focused on the

impediments facing the poor in the bid to access financial services, research on mobile phones in developing economy contexts have also blossomed with contributions spanning the use of mobiles by fishermen and farmers in India, and mobile phone ownership, highlighted the need for more studies exploring the impact of mobile phones on poor people in their micro-trading activities like farmers and wood carvers, and therefore this current study again responds to these calls..

Therefore, the specific objective of this article is to conceptualize a model of mobile-based banking services for poor people in developing economy contexts in order to build new pathways for banking the poor.

## **II. MOBILE PHONES AND POVERTY REDUCTION**

Mobile phones usage in Asia as a whole has witnessed a significant increase in recent times. A Report indicates that at the end of 2011, India's mobile penetration rate was almost 83 per cent. Mobile phones serve as a communication tool that is used to make and receive calls; send and receive text messages; listen to music; surf the Internet and even to play mobile games. The reach of the mobile phone by far outnumbers any other communication device. In 2009, there were about 4 billion mobile subscribers.

The International Telecommunication Union (ITU) estimated that by the end of 2008, mobile phone penetration would have reached 61 per cent compared with 12 per cent in 2000. As at May 2008, there were 600 million users of mobile phones in Asia accounting for about 20 per cent of the total number of mobile phones in use across the globe. The rapid adoption of mobile phone use in India, in both urban and rural areas, is a source of renewed hope for attainment of economic growth and development.

## **III. CHALLENGES FACING THE POOR IN THE BID TO PATRONIZE BANKING SERVICES**

Financial institutions and poor clients face high transactions costs owing to asymmetric information problems that naturally appear in financial transactions. Information asymmetry describes costs related to identifying and screening the loan applicant, processing the loan application, completing the documentation, disbursing the loan, collecting repayments and following up on non-payment. Traditionally, most formal financial institutions are structured to handle much larger individual transactions or loans than those required by the poor. Lending to the poor who normally demand small amount of loans is regarded expensive because of high overhead costs.

Empirical studies have shown that a substantial number of households, especially the most poor, appear ill-equipped to handle even small scale, localized risks. In view of the virtually complete absence of formal insurance and social security systems accessible by the poor, they use a multitude of measures to reduce the likelihood or impact of risks either through ex-ante or post measures for smoothing income, consumption or both. Households enter into coinsurance contracts with their neighbors, relatives and market partners who reciprocate help in difficult times.

Demand for financial services from poor households' calls for short-and long-term credit lines for financing inputs and investments in both physical and human capital, and for provision of savings opportunities with different rewards and maturities. Financing the poor entails some measures of up-front investment to nurture human capacity and build local institutions as a bridge to reduce gaps created by poverty, illiteracy, gender and remoteness.

Financial institutions play the role of intermediaries between surplus units that consume less than what they earn, and those individuals and firms that need money to generate output. According to Koveos and Randhawa, in a world of rational agents where information is costly and imperfect, information asymmetry between loan applicants and the lenders, primarily banks, leads to strategic self-maximizing behavior.

In the absence of information from borrowers that would reveal their true creditworthiness, banks charge higher interest fees to offset the risks caused by this information asymmetry. The poor traditionally do not have the collateral needed by most commercial banks so that credit can be extended to them. It is a common knowledge that conventional banking traditionally provides opportunities to those people who are able to show their ability to pay back the loan, that is, able to provide some form of collateral to access banking services. Most traditional formal lenders like commercial banks regard low-income households as too poor to save, thus accentuating the risk of supplying credit to them. Collateral will be a barrier in financing as it will deter the lower income class to take credit as they simply do not have enough collateral, or are afraid to pledge their collateral as they are unsure of their ability to repay.

## **IV. MOBILE-BASED BANKING SERVICES**

Following the discussions made on the conceptual model above, the mobile-based banking services is the platform through which financial services could be offered to poor people. The mobile banking platform combines payments, banking and real-time, two-way data transmission for on-the-move, ubiquitous access to

financial information and services. This concept of providing financial access to the poor through mobile-banking services.

There are a number of benefits both to the poor and to the banks as well in providing financial services via the mobile phone platform. These are discussed next.

#### ***Benefits for Poor Consumers***

The benefits of the mobile phone as a means of providing financial services to the poor include voice recognition technology to overcome illiteracy issue. It is estimated that about 48 per cent of Indians do not have formal education; and this number could be said to be constituted by the poor people in the rural areas. As such, these groups of people do not have the ability to read or write, and this poses a challenge in assessing financial services. The provision of financial services to poor consumers through mobile phones, therefore, makes it easier for the poor consumers to understand and manage their financial issues, as the mobile phones have functions like an in-built voice recognition tool that could aid in their understanding of messages received in any dialect of their choice. This makes banking very easy for the poor uneducated consumer.

In addition to the above benefit, poor consumers are also likely to improve their economic well-being via the use of mobile phones.

Finally, poor consumers also benefit from decreased information asymmetry. Poor consumers face high transactions costs because of asymmetric information problems, which naturally appear in financial transactions. These are costs related to identifying and screening the loan applicant, processing the loan application, completing the documentation, disbursing the loan, collecting repayments and following up on non-payment. Also, absence of a transaction history means that the ability to re-pay loans is unknown to banks, making it risky for banks to serve such a person unless the loan is fully collateralized. Few individuals in the informal sector have access to collateral.

#### ***Benefits for Banks***

Banks also benefit from the use of mobile phones to provide financial services to the poor. Among these benefits include reduced transaction cost from branch banking. This is true as it costs the bank in their bid to serve customers through branch banking. Banks need additional staff in a situation where the bank has to put up a new branch to serve a new customer segment or market. In addition, banks have to bear additional operational costs as well as other miscellaneous costs in their bid to serve bank branch customers that could be

avoided or reduced, where the bank only has to serve customers through the mobile interface.

Another benefit that the bank derives is the facilitation of group-based lending. It is estimated that about 8–10 million households are being served by microfinance programs globally.

However, due to the risk of default banks fear granting loans to individual consumers. Banks as a result have developed risk minimization methods for microfinancing to the informal sector. One of such methods is the concept of group-based lending. Features of group-based lending include:

(i) the use of groups in creating 'joint liability', so that social pressure, collateral substitutes and other group dynamics motivate repayment; (ii) the adoption of mechanisms such as progressive lending, frequent repayment schedules and compulsory savings to create incentives for repayment; and (iii) the levy of relatively high interest rates to cover operational costs. Like informal lenders, the joint liability lending institutions utilize the local information and 'social capital' for peer selection and peer monitoring.

They are seen as particularly effective in dealing with strategic default. Thus, the use of group lending may reduce the risk of lending to poor borrowers, and hence the cost of default risk.

Furthermore, with the use of mobile phones to provide financial services to the poor banks also gain access to a wider customer segment.

Finally, banks also have the opportunity of undertaking their social obligations by enhancing social intermediation. The concept of Corporate Social Responsibility is important to all firms in this era of increased competition among firms in order to remain competitive. A bank has a corporate social obligation to satisfy its stakeholders including customers, shareholders, employees and the government. It undertakes to maximize profit for shareholders who contributed funds to set it up. It must maintain optimal liquidity to meet depositors demand. The bank must also comply with regulators' requirements to continue in business. It is also obliged to satisfy the legitimate deficit sector demand for credits.

Similarly, for the bank to be seen as a good corporate citizen, it has to contribute to the maximum development of the economy as well as satisfy its immediate community. As such, banks have the ethical responsibility of ensuring that economic conditions of their poor customers are improved, and this would lead to increase patronage of banks in the long run.

## V. CONCLUSION

This article has outlined some of the issues inhibiting the provision of financial services to the poor. Three issues have been identified as key factors that inhibit the patronage of financial services by the poor. One of the principal factors is the issue of accessibility or geographic reach.

Some people in the rural areas are far removed from major cities and towns where these banks are located and so are not able to gain access to banking services. Second, the bureaucratic nature of banking services has been noted as one of the factors impeding the patronage of banking services by the poor. These bureaucracies associated with bank transactions (for example, withdrawals, savings and collateral in case of loans) discourage most people from saving with banks. Also, there seem to be a misconception by banks about the creditworthiness of borrowers especially poor rural folks. The banks more or less misconstrue the inability of the poor to provide collateral for loans as being unable to meet their financial obligations.

## VI. REFERENCES

- [1] Beck, H.T.L., A. Demirgüç-Kunt and R. Levine (2007), "Finance, Inequality and the Poor", *Journal of Economic Growth*, 12, pp. 27–49.
- [2] Ghana Telecommunication Report Q2 (2010), "Ghana's Mobile Phone Penetration Reaches 63% in 2009" <http://www.ghanaweb.com/GhanaHomePage/NewsArchive/artikel.php?ID=17956>, accessed 7th November 2011.
- [3] Goswami, D. and S. Raghavendran (2009), "Mobilebanking: Can Elephants and Hippos Tango?" *Journal of Business Strategy*, 30(1), pp14–20.
- [4] Kumar, A.T.S. and J.K.Newport (2005), "Role of Microfinance in Disaster Mitigation", *Disaster Prevention and Management* 14 (2), pp. 176–182.
- [5] Robinson, M.S. (2001), *The Microfinance Revolution: Sustainable Finance for the Poor*, 1st edition, Washington, DC, The World Bank.
- [6] Samuel, J., N. Shah and W. Hadingham (2005), "Mobile Communication in South Africa, Tanzania and Egypt: Results from Community and Business Surveys", The Impact of Mobile Phones, Vodafon Policy Report Series No. 2.

