# ORIGINAL RESEARCH PAPER

## Economics

## MOBILE BANKING FOR FINANCIAL INCLUSION: AN ANALYSIS OF ATTITUDE TOWARDS MOBILE BANKING.

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**ABSTRACT**

Inclusive sustainable growth requires a strong financial system. Financial inclusion enables inclusive sustainable economic and social development of the Country. Financial inclusion stands for delivery of appropriate financial services at an affordable cost on timely basis to vulnerable group who lack access to most basic banking service. Technology is key to financial inclusion. It can take banking to masses. Among all technology led banking practices mobile banking has emerged as a most suitable technology for financial inclusion in a country like India where there is penetration of mobile. The use of mobile banking for financial inclusion depends upon its acceptability by common people which in turn depends upon the attitude of the people towards mobile banking services. Against this backdrop the present study is being proposed to know the attitude of the rural population towards mobile banking. Here the study area is Jorhat district of Assam and the target group is rural population. Multi stage random sampling method is used to draw sample respondent and Likert scaling technique is applied to measure attitude.

## INTRODUCTION:
With the growth of the Indian Economy, focus has been on the achievement of inclusive sustainable growth. With this objective attempt is being made to include maximum number of people from all the sections of the society in the process of economic growth. Finance has become an essential part of an economy for economic and social development. A strong financial system is required in a developing economy like India for inclusive sustainable growth. Financial inclusion enables inclusive sustainable economic and social development of the country.

Financial inclusion stands for delivery of appropriate financial services at an affordable cost on timely basis to vulnerable groups who lack access to even most basic banking service.  Financial inclusion takes into account the participation of vulnerable groups such as weaker sections of the society, low income groups and women in the financial system of the country so that they have access to various financial services such as saving and payment account, credit, insurance, pension etc.

Technology led banking practices are the key to financial inclusion. It can reduce cost of achieving financial inclusion significantly and can take banking to masses. Technology led banking practices is a generic term encompassing internet banking, telephone banking, mobile banking etc. In other words, it is a process of developing banking services and products through electronic channel such as telephone, internet, mobile phone etc.

Now a days mobile phone has emerged as the most popular, promising and well suited technology for financial inclusion. The use of mobile phone is very suitable for financial inclusion in those countries where there is deep penetration of the mobile phone. Mobile banking is the provision of banking services to customers on their mobile devices. In other words mobile banking refers to provision and usage of banking and financial services with the help of mobile telecommunication devices. Mobile banking has emerged as new alternative way of banking which is more convenient and user friendly than traditional form of banking. It is covering the concept of anytime, anywhere banking into reality (Kaur, Madan. 2013). Mobile banking is a revolution that is driven by the world's one of the faster growing sectors mobile communication technology.

## LITERATURE REVIEW
Medhi et al. (2009) studied the mobile banking adaptation and usage by low-literate and low income users. Due to the increasing penetration of mobile phones even in poor communities, mobile-phone-enabled banking (m-banking) services are increasingly targeting the 'unbanked' to bring formal financial services to the poor. However, more research is required to understand the issues that prevent low-income, low-literate populations from meaningfully adopting and using existing m-banking services in order to scale up financial inclusion through technology.

According to Vinayagamoorthy and Sankar, (2012) Mobile Banking, also known as M-Banking, can perform various functions like mini statement, checking of account history, SMS alerts, access to card statement, balance check, mobile recharge etc. via mobile phones. Banks are constantly updating their technology and want to increase their customer base by reaching to each and every customer. There are many advantages of using mobile banking, such as people in the rural or remote areas can also get an easy access to mobile banking whenever required. Vinayagamoorthy and Sankar, (2012) have discussed about the mobile banking and according to them it is a term that is used for performing various banking transactions like fund transfer, balance check, payments etc. via mobile phones.

Manav Aggrawal (2014) states that banking is the backbone of every industry and technology plays an important role in every industry. Mobile Banking is a big mobile telecommunication platform of new technology which promotes the banking functions in India. Mobile banking helps the banks to increase their customer base. Today everyone has a mobile phone in hands. The number of mobile users in India got second position in the world. The increasing frequency of mobile internet users gives the boost energy to the mobile banking.

According to Laforat & Li (2005) Research on consumer attitude and adoption of mobile banking showed there are several factors pre-determining the consumer's attitude towards online banking such as person's demography, motivation and behaviour towards different banking technologies and individual acceptance of new technology. It has been found that consumer's attitudes toward online banking are influenced by prior experience of computer and new technology.

Roger's (2003) innovation diffusion model's attributes: complexity, compatibility, relative advantage and trialability and found that Relative advantage, compatibility, ease of use (opposite of complexity) has a significant effect on attitude to adopt mobile banking services. He also suggested that complexity must be reduced in order to increase the number of adopters in internet banking and compatibility has a positive relation with the adoption of internet banking

## STATEMENT OF THE PROBLEM:
 Widening of financial inclusion by using technology like mobile

banking depends upon the attitude of the people towards such technology. Attitude further depends upon various socio-economic factors such as age, level of education, occupation etc. These problems arise while using technology like mobile banking for financial inclusion which needs to be studied. The present study entitled "Mobile banking for financial inclusion : An analysis of attitude towards mobile banking" will address this problem. In this study the target group is rural population of Jorhat district of Assam. The study will reflect the attitude of rural people towards mobile banking.

## OBJECTIVE OF THE STUDY:

The study has been designed with the objective to examine the attitude of rural population towards mobile banking for financial inclusion.

## PROFILE OF THE STUDY AREA:

The study was carried out in Jorhat district in the state of Assam. Jorhat district is one of the twenty nine districts of Assam state in North Eastern India. Jorhat town is the district headquarter. The total population of the district is 1,091,295 (as per 2011 census) out of which male population is 557,944 and female population is 533,351. The average literacy rate of the district is 83.42%. The Jorhat district consists of 867 villages and two towns, Jorhat and Mariani. Prior to the formation of Majuli district Jorhat district consists of 3 sub-divisions, namely Jorhat, Majuli and Titabor and 8 development blocks. According to Lead Bank report total operative account in Jorhat District as on 31st December, 2017 was 12,25,897. Out of which total mobile seeding account was 9,76,926 which was around 80 percent of the total account. Again according to lead bank report total account opened under Pradhan Mantri Jan Dhan Yojana (PMJDY) in the period 28/8/2014 to 31/12/2017 was 3,46,631 in all the 32 banks of the district.

## METHODOLOGY:

In the present study the population or universe comprises the rural population of Jorhat district. Multi stage purposive cum random sampling method was used for the present study to collect data. Jorhat district being the native district of the scholar was purposively chosen for the present study. At the next level out of 6 development blocks of Jorhat district 2 blocks were selected randomly. In the later stage 3 revenue villages from each of the selected blocks were randomly selected. As a result total number of villages under study were 6. In the next stage 20 households from each village were randomly selected, as a result total number of sample households were 120. To collect information the most representative member of each household was selected as respondent. An interview schedule was constructed for the collection of relevant data for the study. The schedule was divided into three parts consisting of structured and unstructured question and five point scaling technique for collection of information on different aspects of the study. The first part of the schedule was related to the general information of the respondents, the second part was related to the personal socio-economic profile of the respondents and the third part of the schedule was related to the attitude of the people towards mobile banking. To know people's attitude towards mobile banking five point Likert scale was taken. The respondents were asked to evaluate the statement relating to various attributes measuring attitude based on five point scale.

## FINDING AND ANALYSIS:

The findings of the study are presented under following heads:
1. Socio-economic profile of the respondents: A total of three variables were selected for analyzing the socio economic profile of the respondents. The variables were age, level of education and occupation.

**Age:** Most of the respondents (56.67 percent) are young aged (35 years and below) followed by 33.33 percent middle aged (35-55 years) and 10.00 percent are old aged (55 years and above). The young aged people are quite familiar with the use and operation of smart phones. Hence, most of the households were represented by young members.

**Table:1 Frequency and Percentage distribution of respondent according to their age**

N=120

| Category | Score Range | Frequency | Percentage |
|---|---|---|---|
| Young Aged | 35 years and below | 68 | 56.67 |
| Middle Aged | 35-55 | 40 | 33.33 |
| Old Aged | 55 and above | 12 | 10.00 |

*(Source: field study)*

**Level of Education:** Majority of the respondents belongs to the category of graduate and above (54.16 percent) followed by 25.83 percent with higher secondary pass. There were 15.83 percent respondents who were high school pass, whereas 4.17 percent were school dropout. No illiterate persons were found as respondents. Most of the sample households of the study are represented by the most educated member of the family as respondent. It is true that some amount of education and knowledge is required to speak about topic like mobile banking.

**Table:2 Frequency and Percentage distribution of respondent according to the level of education**

N=120

| Category | Frequency | Percentage |
|---|---|---|
| Illiterate | 0 | 0.00 |
| School Dropout | 5 | 4.17 |
| High School | 19 | 15.83 |
| Higher Secondary | 31 | 25.83 |
| Graduate and Above | 65 | 54.16 |

*(Source: field study)*

**Occupation:** Occupational status of the respondents are categorized as daily wage earner, cultivator, self-employed, student and service holder. Most of the respondents occupation is service (28.33 percent) which includes teachers, other govt. services and services in private sector. 25.00 percent of the respondents were students who mainly represent their family as respondent to speak about mobile banking. There were 23.33 percent respondents who were self-employed. The self-employed persons mainly include shop-keepers, small tea growers, rice miller, black smithy, petty contractors etc. They are basically educated people and some of them are engaged as self employed due to lack of employment in organized sector. About 21.67 percent of the respondents were cultivator. Only 2 respondents are daily wage earner.

**Table:3 Frequency and Percentage distribution of respondent according to their occupational status**

N=120

| Category | Frequency | Percentage |
|---|---|---|
| Daily wage earner | 2 | 1.67 |
| Cultivator | 26 | 21.67 |
| Self employed | 28 | 23.33 |
| Student | 30 | 25.00 |
| Service | 34 | 28.33 |

(Source: field study)

## 2. Attitude towards mobile banking:

Attitude towards mobile banking is defined as an individual's overall effective reaction to using the mobile for his or her banking activities. The five parameters set for evaluating the attitude of the people were value towards banking needs, complexities, compatibility, trialability and convenience. Five statements were developed corresponding to five parameters to ascertain individual's attitude. Responses were taken from those respondents who were using mobile banking services. Out of 120 respondents 91 respondents were using mobile banking. Each statement corresponds to five point scale (Likert) option for expressing opinion. The score of the response by any respondent may fall at any point between 5 (5x1) (very negative) and 25 (5x5) (very positive).The responses received against the parameters are

tabulated below:

**Table 4 : Status of samples response against the parameters of measurement of attitude**

N=91

| Parameter | Very Positive | Positive | Neutral | Negative | Very Negative | Weighted score |
|-----------|---------------|----------|---------|----------|---------------|----------------|
| Value towards banking needs | 1 | 6 | 8 | 2 | 1 | 3.22 |
| Complexities | 2 | 3 | 6 | 4 | 1 | 3.06 |
| Compatibility | 3 | 6 | 3 | 5 | 2 | 3.16 |
| Trialability | 9 | 5 | 4 | 2 | 1 | 3.80 |
| Convenience | 2 | 7 | 5 | 2 | 1 | 3.41 |

**(Source: Field Study)**

Value for need is the goodwill of a product in a customer's mind. Here the product is mobile banking. The weighted score of this parameter is 3.22. Complexity is the degree to which an innovation is perceived as relatively difficult to understood and use. The weighted score of this parameter 3.06. The state of being compatible in which two or more things are able to exist or work together in combination without problem or conflict. The weighted score of this parameter is 3.16. Trialability is the degree to which an innovation may be experimented within a limited basis. For this parameter the weighted score is 3.80. Convenience is a critical factor in determining how customer's make decisions about what to buy what services to use, where to go and with whom to engage. Infact convenience is a factor of time and effort. Again for this parameter the weighted score is found to be 3.41. The table reveals that the trialability parameter has the highest weighted score and that of complexity parameter has the lowest weighted score.

**Attitudes towards Mobile Banking on the basis of age profile:** The response of the respondents reflects that younger people have more positive attitude towards mobile banking than the elder counterparts. It was observed in the study that weighted score is highest for respondents of young age group (35 years and below) and it gradually decreased as the age of respondents increases.

**Table 5: Attitude towards mobile banking on the basis on the age profile:**

| Category | Score range | Total respondents | No. of respondents using mobile service | Responses | | | | | |
|----------|-------------|-------------------|------------------------------------------|-----------|----------|---------|----------|---------------|----------------|
| | | | | Very positive | Positive | Neutral | Negative | Very negative | Weighted score |
| Young aged | 35 years and above | 68 | 62 | 13 | 19 | 16 | 10 | 4 | 3.44 |
| Middle aged | 35-55 | 40 | 24 | 4 | 7 | 7 | 4 | 2 | 3.29 |
| Old aged | 55 and above | 12 | 5 | 0 | 1 | 3 | 1 | 0 | 3.00 |
| Total | | | 120 | 91 | 17 | 27 | 26 | 15 | 6 |

Mean weighted score: 3.24                    *(Source: Field Study)*

Attitude towards mobile banking on the basis of education profile **of the respondents :** The school dropout and high school pass respondents had lower weighted score than mean weighted score. On the other hand the higher secondary pass and graduate and above respondents weighted score is above the mean. It is observed that respondents with higher educational background have more positive attitude towards mobile banking and are more likely to accept mobile banking services.

**Table6: Attitude towards mobile banking on the basis of educational profile of the respondents:**

| Category | Total respondents | No. of respondents using mobile banking | Responses | | | | | Weighted score |
|----------|-------------------|------------------------------------------|-----------|----------|---------|----------|---------------|----------------|
| | | | Very positive | Positive | Neutral | Negative | Very negative | |
| Illiterate | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| School drop out | 5 | 1 | 0 | 0 | 1 | 0 | 0 | 3.00 |
| High school | 19 | 6 | 0 | 2 | 3 | 1 | 0 | 3.16 |
| Higher secondary | 31 | 22 | 4 | 6 | 7 | 3 | 2 | 3.31 |
| Graduate and above | 65 | 62 | 13 | 19 | 15 | 11 | 4 | 3.41 |
| Total | 120 | 91 | 17 | 27 | 26 | 15 | 6 | |

Mean weighted score: 3.22        *(Source: Field Study)*

Attitude towards mobile banking on the basis of occupational profile of the respondents: The finding of study reveals that the cultivator and the self employed scored lower and the student and the service holders scored higher than mean weighted score. , It means that students and the service holders were more keen to accept mobile banking services.

**Table 7: Responses on attitude on the basis of occupation profile of respondents.**

| Category | Total respondents | No. of respondents using mobile banking services | Responses | | | | | Weighted score |
|----------|-------------------|---------------------------------------------------|-----------|----------|---------|----------|---------------|----------------|
| | | | Very positive | Positive | Neutral | Negative | Very negative | |
| Daily wage earner | 2 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Cultivator | 26 | 14 | 0 | 3 | 7 | 3 | 1 | 2.86 |
| Self employed | 28 | 21 | 2 | 5 | 6 | 5 | 3 | 2.90 |
| Student | 30 | 25 | 7 | 10 | 5 | 3 | 0 | 3.84 |
| Services | 34 | 31 | 8 | 9 | 8 | 4 | 2 | 3.54 |
| Total | 120 | 91 | 17 | 27 | 26 | 15 | 6 | |

Mean weighted score: 3.29        (Source: Field Study)

**Table -8 Overall attitude of rural population of Jorhat district towards mobile banking:**

| Response | Frequency | Percentage |
|----------|-----------|------------|
| Highly positive | 17 | 18.68 |
| Positive | 27 | 29.67 |
| Neutral | 26 | 28.57 |
| Negative | 15 | 16.48 |
| Highly negative | 6 | 6.59 |
| Total | 91 | 100.00 |

*(Source: Field Study)*

It appears from the study that the attitude of the rural population towards mobile banking in Jorhat district is not positive as more than 50.00 percent responses on different parameters of attitude are either negative or neutral. However, it slightly varies with the socio-economic profile of the respondents.

**CONCLUSION:**

The study reveals that the rural populations of Jorhat district are aware of mobile banking, but it appears that their attitude towards mobile banking is not positive. Again it appears that their response on effectiveness of mobile banking is not favourable. Presently mobile banking services are mostly confined to SMS alert on withdrawal and deposit, account balance check, mini account statement, online purchases and mobile recharge among the rural population. An attitudinal change of the rural population is the need of the time to make mobile banking and effective technology for financial inclusion.

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