

A Study On Platforms For Digital Banking With Reference To Upi/Bhim Banking Among Rural Population

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Abstract: In the present scenario, service sector is one among the three sectors in Indian. It is playing crucial role in Economic Development. Service sector consists of three industry like travel industry, media and entertainment industry and Information technology industry. Information Technology collaborated with banking sector made the customer to receive innovative banking instruments. This leads to a Digital banking. “The study on platforms for digital banking with reference to UPI/BHIM banking among rural population has been conducted to determine digital banking platforms available for banking, to study UPI/BHIM banking and its operations in banking activities, to analyse the factors influencing the UPI transactions towards rural population and to know satisfaction level of rural customers. It is qualitative and quantitative research. Data analysis is made with quantitative data. The study is done on 50 rural customers of various banks. The method of data collection used in the study are primary data and secondary data. Primary data is collected from the respondents from sample. The primary information collected from respondents is in the form of Google form and well-structured questionnaire. Secondary data is collected from articles, websites, reference books, journals, etc. The sampling technique used for selection of sample among the population is Convenience sampling method. The classification of data is done by using various statistical tools like tabulations, pie charts, bar diagram, etc. Analysis and interpretation of data is done with statistical measurement like percentage, measures of central tendency, etc. Hypotheses are framed and proved in the study.

Keywords: Digital Banking, UPI/BHIM banking, Information technology, E- banking.

INTRODUCTION:

In present world service sector is playing a crucial role in Economic development. Service sector extended its scope in various activities in India. Service sectors includes services like trade, hotel, transportation, storage, communication, real-estate, business services, financing and insurance. Services sector consists of three industry – travel industry, information technology industry and media and entertainment industry. Information technology industry collaborated with banking sectors made the customers to receive innovative banking services. It leads to a Digital banking in India. Banking sector in India is a nervous system for circulating money among the people in the country. This lead to a growth of Indian Economy. The combination of service sector with banking made a miracle in banking sector.

Digital Banking:

Digital Banking is the automation of traditional banking services. Digital banking enables a bank’s customers to access banking products and services through an electronic/online platform. It perform banking work around the clock, with 24*7 availability of access to banking. Digital banking means to digitize all of the banking operations. It is a substitute of the bank’s physical presence. With smartphones at affordable prices and internet access in remote areas, the rural population can make the most out of digital banking services.(UPI: *Unified Payments Interface - Instant Mobile Payments* | NPCI, n.d.) By promoting a cashless society, digital banking restricts the circulation of black money as the Government can keep a track of fund movements. In the long run, digital banking is expected to lower the minting demands of a currency.(tavaga, 2021) Digital banking allows a user to set up automatic payments for regular utility bills such as electricity, gas, phone, and credit cards.

Digital banking services or platforms:

- a. Card Banking:** Cards are not only used to withdraw cash but also other forms of digital payment. Cards can be used for online transactions and on Point of Sale (PoS) machines. Prepaid cards can also be issued by the banks; such cards are not linked to the bank account but function through the money loaded onto them.
- b. Unstructured Supplementary Service Data (USSD):** By dialing the number *99#, mobile transactions can be carried out without an application and internet connection. The only catch is the mobile number of the caller should be the one linked to the particular bank account.
- c. Aadhar Enabled Payment System (AEPS):** AEPS lets the client initiate banking instructions following the successful verification of the Aadhar number.
- d. Unified Payments Interface (UPI):** UPI is the most trending form of digital banking presently. In UPI virtual payment address (VPA) is generated. So the user can transfer funds without entering bank account details or IFSC. UPI is that the applications which consolidate all your bank accounts in one place.(tavaga, 2021) Funds can be transferred and received around the clock with no time restrictions. UPI-based apps in India are BHIM, Phone pay, Paytm, Amazon pay, Google Pay, Bank apps and other Third party apps. UPI-based payments are free of cost.

f. Mobile Wallets: Mobile wallets store bank account and cards of the customers to easily add funds to the wallet and make payments to other merchants with similar applications. Popular mobile wallets are Paytm, Freecharge, Mobiwik, T-Wallet, etc. Mobile wallets, however, generally have a limit on how much can be deposited in the wallet. A small fee may also be charged on depositing the funds from the mobile wallet back into the bank account.

g. Point on sale (POS) transaction: PoS machines are portable devices that read a card to authorize and complete the payment. Supermarkets and gas stations opt for this method of payment.

h. Internet and Mobile Banking: Commonly known as e-banking, internet banking refers to obtaining certain banking services over the internet, such as fund transfers, and opening and closing accounts. Internet banking is a subset of digital banking because internet banking is only limited to core functions.(tavaga, 2021) Similarly, mobile banking is availing banking services through mobile-based applications.

UPI/ BHIM Banking

National Payments Corporation of India (NPCI) is an umbrella organisation for operating retail payments and settlement systems in India, it is an initiative of Reserve Bank of India (RBI) and Indian Banks' Association (IBA) under the provisions of the Payment and Settlement Systems Act, 2007,(Kolté & Humbe, 2019) for creating a robust Payment and Settlement Infrastructure in India. (UPI: Unified Payments Interface - Instant Mobile Payments / NPCI, n.d.). It has an intention to provide infrastructure to entire banking system in India for physical as well as electronic payment and settlement systems.



Source: (UPI: Unified Payments Interface - Instant Mobile Payments / NPCI, n.d.)

Unified Payments Interface (UPI) and Bharat Interface for Money (BHIM) has been termed as the innovative products in the payment system.

Unified Payments Interface (UPI) is a system that powers multiple bank accounts into a single mobile application (of any participating bank), merging several banking features, seamless fund routing & merchant payments into one hood.(Kolté & Humbe, 2019) It also caters to the “Peer to Peer” collect request which can be scheduled and paid as per requirement and convenience. Each Bank provides its own UPI App for Android, Windows and iOS mobile platform(s).(tavaga, 2021) The advanced cloud computing features provide the youth a flexible and an easy usable platform for resource sharing, information storage and for world-wide interactions. This facility is face lifted by National Payments Corporation of India (NPCI).

Operation of UPI transaction Or Process of UPI transaction:



Source: (UPI: Unified Payments Interface - Instant Mobile Payments / NPCI, n.d.)

Review of Literature:

Article (Kolte & Humbe, 2019): In this article the study shown that students are extensively using the 3rd party UPI/BHIM on mobile phones. For students it is a convenient payment system and can be a very useful tool for online transactions. This will help students for digital payments without need of any complex mechanism our countries economy will boost with transparency.(Kolte & Humbe, 2019) On phone online transaction option for recharge, bill payments, rent, bank balance, etc. are available. Banks and NPCI have to promote native BHIM App as 3rd party apps as it is more popular among the students.

Article: (Yang et al., 2005): In this study Some key issues addressed in the recent literature about the e-banking include; customer acceptance and satisfaction, services rendered, value added for both the banks and consumers, privacy concerns, profitability, operational risks, and competition from non-banking institutions.(Yang et al., 2005). This article describes a case study of three such small local banks and their efforts in developing and operating their e-banking services. Both their successes and struggles discussed in this paper could provide some meaningful insights and serve as comparative examples in evaluating the performance of e-banking operations, especially for those small and local community banks.

He has suggested for future research such as more similar small and local community banks will be selected to further collect the information about their newest trends and development in their e-banking operations - to enhance managerial implications to be learned from this project.

OBJECTIVES:

- a. To determine digital banking platforms available for banking.
- b. To study use of UPI/BHIM banking in banking activities by the customers,
- c. To analyse the factors influencing UPI banking to rural population
- d. To know the satisfaction levels of rural population.

SIGNIFICANCE:

1. The study gives brief information about Digital banking platforms specially UPI banking among rural population.
2. It provides the data regarding the issues facing by rural population in UPI banking.
2. It helps the customers to get information about availability of UPI banking features and activities.
3. It provides information about UPI/BHIM banking and activation aspects related to banking
4. It supports rural financial institutions to improve their services as per the expectations of the customers.

LIMITATION OF THE STUDY:

In this study there are following limitations:

1. The sample size of the study is limited to "50" rural customers of various banks.
2. The study is limited to rural villages in Nanded and Nizamabad districts, Maharashtra and Telangana State respectively.
3. The study focused only on Digital banking specially the "UPI/BHIM banking services".
4. While collecting data from the respondents, personal, officially confidential and other unrelated information about the study is avoided.
5. The data is collected by using Google forms.

RESEARCH METHODOLOGY:

Hypothesis Testing:

A Hypothesis is an assumption that is made based on some evidence. This is initial point of any investigation that translates the research questions into predictions. It includes components like variables, population and the relation between the variables. Hypothesis tests are normally referred to as a. Null hypothesis b. Alternative hypothesis. The following were Research Hypothesis formulated for testing the study:

1. There is no significant effect between use of UPI platforms and types of banking activities.
2. There is no significance difference between age of the respondent and UPI banking platforms.

Methods of Collecting Data:

Primary data:

Primary data refer to a data which is available from the researcher in his research. It is first hand data. It is collected by the researcher by himself for his study.

In this study primary data is collected by creating Google forms and questions are asked, which was filled by the rural population by clicking the link of the form.

Secondary data:

Secondary data is a data which are not originally collected by a researcher but rather obtained from published or unpublished books, journals, articles, organisations websites, etc. It is a data were material is available from pre-existing sources of organisations.

In this study Secondary data is collected from various sources like reference books, textbooks, articles, journals and from official sites

Sampling Methods:

In this study, sample is obtained by using Convenience sampling technique. In this method samples are selected from the population as they are easily available and researcher did not consider selecting a sample that represents the entire population.

In the study the Google form link is sent to the selected group of people who are available to the researcher in rural area.

Sample Size:

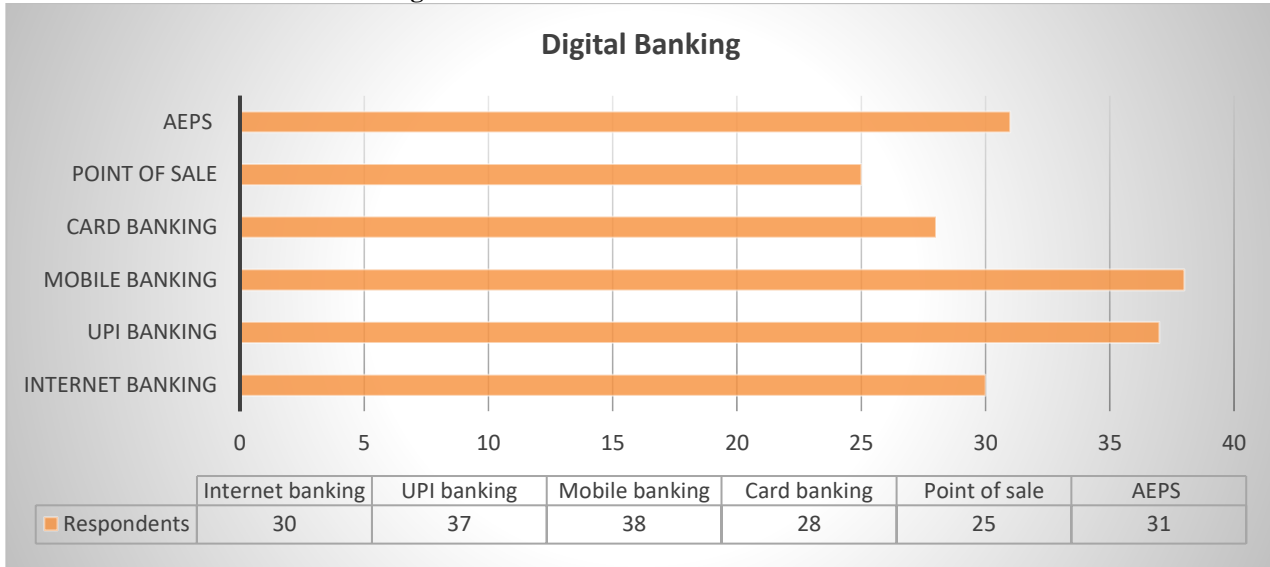
An important decision that has to be taken while selecting the sample and is about the size of the sample. Size of the sample means numbers of sampling units selected from the population for investigation. In this study the sample size is "50" Rural customers of various banks. It is more than "30" respondents and it is considered as large sample.

ANALYSIS OF DATA:

In every study analysis of data is necessary for taking decisions and coming to a conclusion. Analysis of data collected from different sources is an important step. Analysis of data is done by using different statistical tools and mathematical methods. In this study analysis and interpretation is done through Tables, bar charts and Pie charts. The table is used to convert the raw data into a structured form. So, that everyone can easily analyse the data and can draw conclusions. Pie chart is other form of interpretation of the data. It is in chat form. By observing the chart we can interpret the data. Tables and pie charts are time saving techniques to interpret and analyse the study.

1. Types of Digital banking uses

Figure: 1



Interpretation: 30 customers are using Internet banking services, 37 customers are using UPI/BHIM, 38 customers are using Mobile banking services, 28 customers are using Card banking, 25 customers are using Point on sale (POS) banking services, 31 customers are using AEPS banking services like send or receive money, balance inquiry, bill payments, shopping, etc. in the rural banking activities.

2. Issues facing in UPI/BHIM banking?

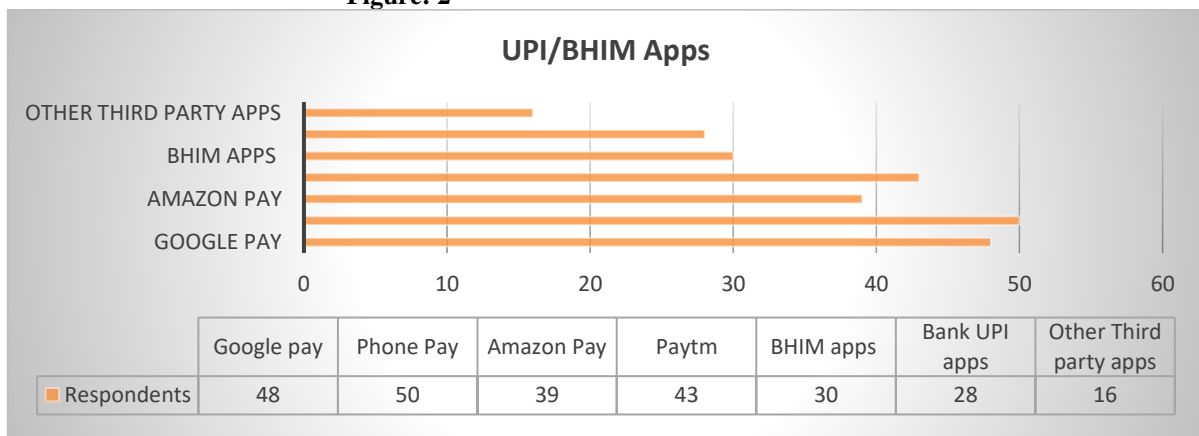
Table: 1

ISSUES	Respondents	Percentage
UPI apps activation	28	56%
Issue while linking bank account	35	70%
Send or receive money	31	62%
Issues during recharge, pay bills, shopping, banking, etc.	21	42%
Scan QR Code, Show QR Code, Manage UPI ids, etc.	38	76%

Interpretation: 28 customers are facing UPI apps activation and operation issues while banking services, 35 customers have technical problems while linking bank account, 31 customers are issues in send or receive money in UPI apps, 21 customers have problem during recharge, pay bills, shopping, banking, etc., 38 customers are not having proper knowledge about Scan QR Code, Show QR Code, Manage UPI ids, etc.

3. Use of UPI/BHIM apps?

Figure: 2



Interpretation: 48 customers are using Google pay apps for banking services, 50 customers are using phone pay apps, 39 customers are using Amazon pay apps for banking services, 43 customers are using Paytm apps for banking, 30 customers are using BHIM UPI apps for banking services, 28 customers are using Bank UPI apps for banking, 16 customers are using Other third party apps for banking services like send or receive money, balance inquiry, bill payments, shopping, etc. in the rural banking activities.

4. RATING FOR UPI/BHIM BANKING SERVICES:

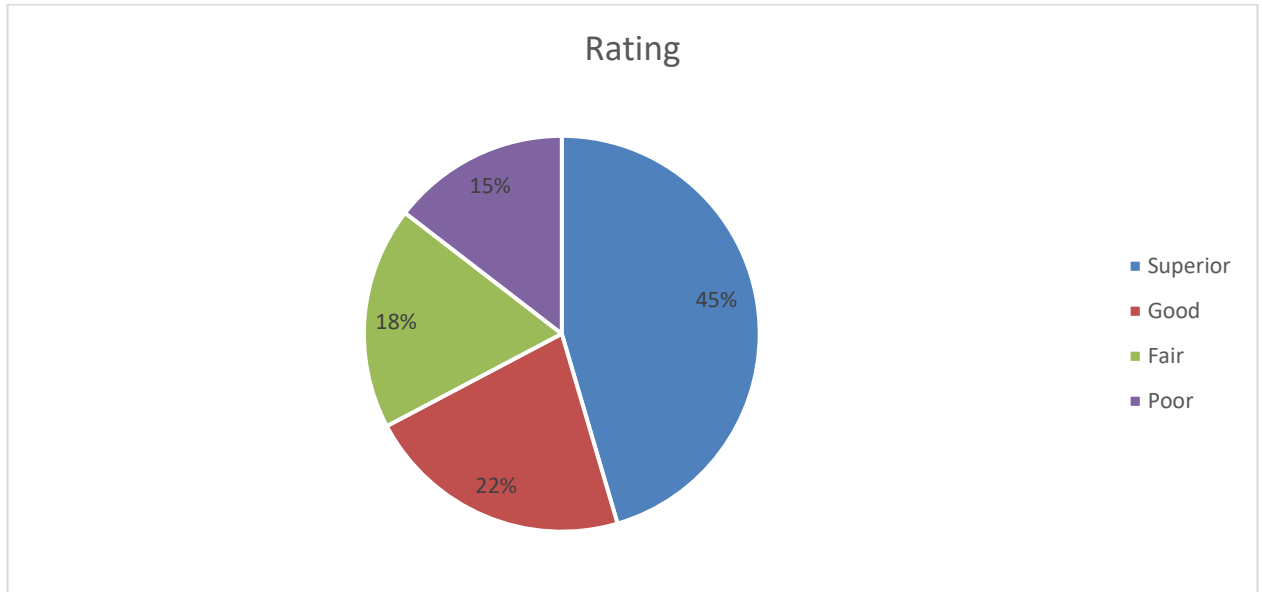


FIGURE: 3

Interpretation: 25(50%) customers are given their opinion as “Superior” for banking services, 12 (24%) customers are given their opinion as “good” for banking services, 10 (20%) customers are given their opinion as “fair” for banking services, 8 (16%) customers are given their opinion as “poor” for banking services. Among them maximum respondents are rated for “Superior” services. I.e.: 50%.

Hypotheses test Analysis: In this study it is found that Maximum Ie: 50 Customers are using Phone Pay UPI Apps as compare to other UPI Apps.

Note: In this study UPI app is chosen as per the preference/ Use of customers for UPI Banking.

1. H₀: There is no significance difference between Age and use of UPI Banking.

Factors (Age)	Phone pay
0-20	15
20-40	22
40-60	8
60-80	5
Total	50

Source: primary data

From the above table it can be observed that the respondents of different age and their preference towards Phone Pay UPI Banking. From this it is proven that 22 customers of age groups of 20-40 are preferring Phone pay and 8 customers of age group of 60-80 are using Phone pay. So H₀ is rejected.

2. H₀: There is no significant effect between use of UPI platforms and types of banking activities.

Factors (Banking services)	Phone pay (50)
Send/Pay Money	32
Receive Money	28
Balance enquiry	35
Transaction limit	29
QR Code Scan	21
Recharge, Paybills, Shopping, etc.	33

Source: primary data

From the above table it can be observed that the banking activities and their preference towards Phone Pay UPI Banking. From this it is proven that 32 customers using Send/pay money, 28 customers using receive money, 35 customers using Balance enquiry, 29 customers are using transaction limit, 21 customers are using QR code scan and 33 customers are using for recharge/Paybills/shopping, Etc. This proves that banking services can change preference of UPI apps. So H_0 is rejected.

Findings:

In the study “A STUDY ON PLATFORMS FOR DIGITAL BANKING WITH REFERNCE TO UPI/BHIM BANKING AMONG RURAL POPULATION” the following are the findings:

- It is found that maximum customers holding saving account and few are holding fixed deposit account. They are doing banking activities in post office, RRB's and in commercial banks.
- It is observed that, the male respondents are 38(76%) and female respondents are 12(24%). Among them male respondents are more than female.
- It is observed that the respondents with 0-1lks income are 10(20%), 1lks-2lks are 16(32%), 2lks-3lks are 12(24%) and 3lks-4lks are 12(24%). In this analysis income group of 1-2lks are more than others income groups.
- Based on the analysis users of various Digital banking platforms are that 30 customers are using Internet banking services, 37 customers are using UPI/BHIM, 38 customers are using Mobile banking services, 28 customers are using Card banking, 25 customers are using Point on sale (POS) banking services, 31 customers are using AEPS banking.
- 28 customers are facing UPI apps activation and operation issues while banking services, 35 customers have technical problems while linking bank account, 31 customers are issues in send or receive money in UPI apps, 21 customers have problem during recharge, pay bills, shopping, banking, etc., 38 customers are not having proper knowledge about Scan QR Code, Show QR Code, Manage UPI ids, etc.
- The observation and analysis found that 48 customers are using Google pay apps, 50 customers are using phone pay apps, 39 customers are using Amazon pay apps, 43 customers are using Paytm apps, 30 customers are using BHIM UPI apps, 28 customers are using Bank UPI apps, 16 customers are using Other third party apps for banking services like send or receive money, balance inquiry, bill payments, shopping, etc. in the rural banking activities.
- 25(50%) customers are given their opinion as “Superior” for banking services, 12 (24%) customers are given their opinion as “good” for banking services, 10 (20%) customers are given their opinion as “fair” for banking services, 8 (16%) customers are given their opinion as “poor” for banking services. Among them maximum respondents are rated for “Superior” services. I.e.: 50%.

Conclusions & Suggestions:

As we know service sector has taken a new era in India. Digital India scheme has taken India to next level in all the aspects. Banking sector made also changed in several dimensions. Based on that the study “A STUDY ON PLATFORMS FOR DIGITAL BANKING WITH REFERNCE TO UPI/BHIM BANKING AMONG RURAL POPULATION” is concluding that digital banking in rural areas has been improved. The awareness about innovative digital banking platforms made the rural customer to do banking services. Different age groups are preferring various types Digital banking and UPI/BHIM apps. Businessmen and students are involved in UPI/BHIM banking for banking services. The youngsters in rural areas are using digital banking and there are spreading awareness among the family, friends and neighbours. Due to the rewards, awards, cashbacks and other promotional tools in UPI/BHIM banking apps attracted the customers and users. UPI/BHIM applications are very convenient and cost less banking tools. The study found that rural customers are facing few issues while doing UPI transaction like linking with bank account, UPI Pin generation, Creating VPI address, etc. These issues should be solved by spreading awareness through advertisement, banks, bank customer service points, etc.

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