

Role of Technology in Banking Sector for Financial Inclusion

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Abstract

Most of the people in India are living in rural areas, role of technology and technology based services are playing a great role in bring rural people under financial umbrella, because of lack of infrastructure in rural areas. Technology is playing great role in deepening the process of financial inclusion. Use of ICT in banking sector provides better product, cost reduction, and ease to people to use financial services. Technology based banking has become an important aspect of education for this digital age. The purpose of paper is to analyse the role of technological innovations in banking sector for achieving financial inclusion. This paper studies about various Alternative Delivery Channels which play are great role in financial inclusion.

Keywords: financial inclusion, technology, alternative delivery channels, mobile banking, mobile wallets, online banking, cash deposit machines.

1. INTRODUCTION

Financial inclusion means delivering of financial services at affordable cost to low income and disadvantaged people of society. India is developing country, for the growth of any country financial inclusion is need of an hour, it plays are great role in development of any country. Government is doing many efforts to make available all the financial services to each and every one in the country at low cost and to bring unbanked and low income group under financial umbrella. Past experiences shows that traditional banks have struggled to reach poor and rural areas with financial services, recognizing this fact many countries in the world it focusing on technology based banking. Technology based banking is growing at very fast pace whole over the world.

Role of Technology in financial Inclusion

Financial inclusion with technology is one of the solutions to reach the masses. The use of ICT provides financial literacy among people and helps them to use kiosks, mobile banking and other IT enabled services of banking operations. the advancement of technology and Alternative Delivery Channels has helped people to do banking transactions from remote areas without entering banks, e- baking is playing a big role in development of technology based banking use of Debit and Credit cards, Mobile baking, Mobile Wallets, Online Banking, UPI Payment has totally changed the present scenario, as now people can avail banking services by one click from their mobile phones without stepping into banks, it as also reduced the cost of banking services and had made cashless economy which is very important for development of any country.

Some of the Major technology based products

1. **Internet banking/online banking:** with the help of this service people can perform banking services with the help of internet by sitting at their homes. With the help of internet banking customer can perform all financial transactions such as money transfer, paying utility bills, balance inquiries, paying school fees,

insurance premiums etc. almost all the important transactions can be done with the help of internet banking. It has also reduced the cost of services.

2. **ATM:** An Automatic Teller Machine is a computerized device which help people to access to financial transactions in a public place without the need of cashier. We can withdraw cash from it any time because it provides its services 24 hrs. It provides many services such as cash withdrawal, balance enquiry, mini statement, cheque deposit etc.
3. **C.D.M:** Cash depositing machine is a machine which enables to deposit cash at any time without the help of cashier, customer himself can deposit cash in any account or transfer cash. This machine also helps in withdrawing cash, mini statement, balance enquiry etc.
4. **Debit and Credit Cards:** debit card help customers to withdraw money which id deposited in their bank account and also help for payments and money transfers. With the help of credit cards customers can borrow money from the issuer bank upto a certain maximum limit for online or offline shopping or to withdraw cash.
5. **Mobile Banking:** with the help of mobile banking any person can perform banking operations with the help of mobile phones. it can be used for paying utility bills online, mobile recharging, online shopping , UPI Payments, one line share trading, this has been achieved with the help of introduction of interbank payment services powered by National Payment Corporation of India.

2. OBJECTIVES OF STUDY

- To examine the role of technology in financial inclusion
- Discuss scope of financial inclusion
- Analyse the Use o
- f alternative delivery channels for banking transactions

3. REVIEW OF LITERATURE

Dhavan, B. & Nath, V. (2017), analysed that financial inclusion help people to grow economically strong and also help country to be economically strong. This paper studies the factors effecting financial inclusion, according to this paper the major factors income, financial education, required documents, convenience and trust in local money lenders over banks are few reasons for not being part of banking system.

Jency, S. (2018) has studied about role of technology in financial inclusion, she has studied various factors related to technology and analysed that many technological products like e-KYC, IMPD, AEPS, Mobile Banking etc. have the potential to be the game changer in terms of cost, speed, convenience and reach. She also discussed about PMJDY and RuPay debit card.

Singh, A. (2017) in his article has suggested that now days because of use of technology in financial inclusion there are many challenges like, adoption of technology, lack of connectivity, knowledge of technology, etc. These all barriers are constraint in successful implementation of technology in financial inclusion.

Chafey (2003) stated the way in which mobile phones are being used nowadays, customers are using wireless devices as an alternative optional means for accessing their bank accounts. Mobile banking is has been growing at a high speed, because it offers many services such as online payments, ticket booking, money transfers, utility bill payments etc. Communication Act has brought many reforms in telecommunication according to Communication Authority of Kenya. Mobile telephony has become basis for successful mobile banking.

Anand, A. & Saxena, D. (2012) this paper studied that because of technology cost of banking transactions has been reduced both for customers as well as banks, this paper discussed all initiatives taken by Banks in terms of distribution channels, technology, financial literacy and discussed about the benefits of these initiatives to banks and general public. This paper concluded that people are cautious and conservative about using electronic channels and there is anxiety among people about using technology based banking services, so people must be educated through seminars, meetings, demonstrations, and other methods so that confidence can be build in people for using the new delivery channels.

Datta, A. (2018) state in his paper that because of implementation of financial sector reforms digitization process in banking sector has changed the structure of urban and metropolitan economy. The current need is to create a proper environment for application of mobile banking in rural areas so as to remove rural-urban gap and integrate rural economy with global economy. People in rural areas who are poor should be inclined towards mobile phones to access financial services because of lack of financial infrastructure in rural areas.

Kumar Venkateshwara, K.S. (2011) studied about innovations in modern banking and innovative financial inclusion, in his paper he analysed that there are many difficulties and challenges but because of all such challenges financial innovations will play a great role in promoting financial inclusion and global growth especially in developing economies. For inclusive growth banking services must reach to many more people than today, this can be possible by technology and mobile banking and the vision of total financial inclusion can be achieved with the help of technology in banking system.

Bansal, S. (2014) has attempted to study the contribution of ICT in financial inclusion and analysed different applications of ICT which are used by banks. Mobile Banking and ATM are the main options for financial inclusion, this paper analysed that technology is adding new avenues to provide financial inclusion to people who are unbanked, but still technology is not being utilized to its fullest potential mainly in rural areas. This paper studies that ICT had helped to bring cost of production down and had also provided competitive medium.

Singh, S. & Bhatia, S. (2015) has studied in her paper that India is at moderate level of financial inclusion the polices should be implanted more effectively and efficiently so that target of banking facilities by all can be achieved. Only framing of policies will not help in achieving the target but successful supervision and implementation mechanism is needed to achieve the set goals.

4. RESEARCH METHODOLOGY

The research is about role of technology in financial inclusion and various technology based services used by people to avail financial services and the factors that attract people to use technology.

Research Design: the paper is based on Descriptive research

Sampling design: convenient sampling is used in this paper

Universe of Study: The target population is from people of Muktsar region (Punjab).

Sample Size: 150 people were chosen and the data was collected with the help of structured questionnaire.

The data is analyzed with the help of tables and percentage analysis has been done in this research paper.

5. LIMITATIONS OF STUDY

- Due to shortage of time the sample size was small, so it cannot truly represent the whole universe.
- Many of the respondents were not able to answer the questions because of their personal reasons.
- The study is done only in one district, so many other important samples has not been studied.
- Many of the respondents have not given correct answers due to their conservative nature

6. DATA

Degree of Usage	Using	Aware but not Using	Not aware
ATM (%)	70	30	0
Internet Banking (%)	50	37	13
Mobile Banking (%)	45	30	25
Debit Card (%)	70	25	5
Credit Card (%)	30	57	13
UPI Payments (%)	35	25	40
CDM (%)	50	35	15

ANALYSIS AND INTREPRETATION

USAGE AND KNOWLEDGE OF ALTERNATIVE DELEIVERY CHANNELS IN BANKING

Table: 1

Table1 shows that:

ATM: 100 percent Respondents are aware of ATM and 70 percent people are using it for transactions

Internet Banking: 50 percent people are using Internet Banking 37 percent are aware but not using and 13 percent are not aware about internet banking.

Mobile Banking: In case of Mobile Banking 45 percent people are using mobile banking, 30 percent are aware but not use mobile banking and 25 percent people are unaware of Mobile Banking.

Debit and Credit Cards: 70 percent people are using Debit Cards and 30 percent using Credit Card 25 percent are aware about debit card but not using it and incase of Credit card 57 percent people are aware about it but are not using Credit Cards. 5 percent people are not using Cebit Cards and incase of credit cards 13 percent people are not aware of Credit Cards.

UPI Payments: When asked about UPI Payments 35 percent people are using UPI payments, 25 percent people are aware but not using it and 40 percent people are not aware about UPI payments.

CDM: Incase of Cash Depositing Machines (CDM) 50 percent people are using CDM, 35 percent people are aware about CDM but are not using it and 15 percent people are not aware about CDM.

FREQUENCY OF USING ALTERNATIVE DELEIVERY CHANNELS

Table: 2

Usage Frequency Per Month	Up to 5 times	5 to 10 times	10 to 15 times	15 and above	Not Using
ATM (%)	50	20	12	13	5
Internet Banking (%)	70	15	7	5	3
Debit Card (%)	50	25	15	5	5
Mobile Wallets (%)	40	10	8	8	34
UPI Payments (%)	30	20	10	3	37

Table 2 shows that:

ATM: About 50 percent people are using ATM up to 5 times in a month and 5 percent people are not using it.

Internet Banking: 70 percent people are using Internet Banking up to 5 times are 3 percent people are not using Internet Banking.

Debit Card: 50 percent people are Debit Cards up to 5 times in a month, 25 percent are using it 5 to ten times in a month and 5 percent people are not using Debit Cards.

Mobile Wallets: 40 percent people are using Mobile Wallets up to 5 times, 10 percent 10 to 15 times and 34 percent people are not using Mobile Wallets.

UPI Payments: 30 percent people are using UPI Payments up to 5 times, 20 are using 10 to 15 times 10 are using 10 to 15 times in month and 37 percent people are not using UPI Payment

PURPOSE OF USING ALTERNATIVE DELIVERY CHANNELS OF BANKING TRANSACTIONS

Table 3:

Purpose of using	Utility Bills	Ticket Booking	Online Trading	Online Shopping	Shopping From Market	Not Using
Internet Banking (%)	30	5	2	25	0	38
UPI Payments (%)	35	4	0	35	20	6
Debit Card (%)	30	10	0	25	25	10
Credit Card (%)	20	10	0	20	20	30
Mobile Wallets (%)	25	4	0	35	5	31

Table 3 shows that:

Internet Banking: 30 percent people use Internet Banking for Paying their utility bills 5 percent for ticket bookings 2 percent for online shopping and 38 percent people are not using Internet Banking.

UPI Payments: 35 percent people use Internet Banking for paying their utility bills no one is using it for online trading and 38 percent people use it for online shopping, 20 percent for shopping from market and 6 percent are not using UPI Payments.

Debit and Credit Cards: 30 percent people are using Debit Cards for paying utility bills and 20 percent people use Credit Cards 10 percent people use Debit and Credit Cards for ticketing booking 10 Percent people are not using Debit Cards and 30 percent are not using Credit Cards.

Mobile Wallets: 25 percent people are using Mobile Wallet for paying utility bills, 4 percent for ticket booking, no one is using it for online trading, 35 percent use it for online shopping, 5 percent for shopping from market and 31 percent people are not using Mobile Wallets.

7. FINDINGS

The paper has analysed the role of technology in financial inclusion and discussed about the various alternative delivery tools with which transactions are done and which help in financial inclusion. The main findings are summarized below:

- Total of 150 people participated in survey including male and females.
- 100 percent people are aware about ATM, out of which 70 percent are using.
- 50 percent of people use Internet Banking and 13 percent are not using it.
- 70 percent people are using debit cards and only 5 percent people are not aware of debit cards
- 40 percent people are not aware of UPI Payments.
- Most of the people are not using UPI payments because of lack of knowledge about it.
- Secondly most of the people are not using mobile wallets also.
- Only 5 percent people do not use debit cards.
- Online trading is least done with the help of ADC's.
- Debit card is mostly used for paying utility bills and shopping from market.
- Mobile wallets and UPI payments are mainly used for online shopping

8. CHALLENGES:

Use of technology and ICT plays a major role in achieving financial inclusion at a faster rate because of cost effectiveness and its reach to masses. RBI and Government has introduced many technology based models which has helped to overcome the constraints of successful financial inclusion, but still there are many challenges like faulty devices distributed to BCs, awareness and acceptability is the major problem for successful implementation of technology based banking, standardization of ATMs is also another problem, ATMs do not work properly because of connectivity issues, insecurity and lack of accountability is another challenge faced by people for accepting technology based banking.

9. RECOMMENDATIONS

Financial literacy programs should be arranged for people for use of technology based banking. It is suggested that banking institutions to do marketing campaigns for low income group and unbanked people to improve their financial awareness. As number of people with access to mobile phones is increasing, the financial institutions and mobile phone operators should continuously focus on adoption on mobile banking and its operations. Knowledge should be imparted to people regarding benefits of using technology based banking and confidence should be build among them about the security and safety of technology based banking transactions.

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