

# DIGITIZATION: AN EMPIRICAL STUDY ON CLIENTS' PERSPECTIVE

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## ABSTRACT

Digitization is a process of increasing the reach and capacity of the financial service providers. It enhances the process of financial inclusion. The Government of Indian and other institutes are making tremendous efforts to increase the reach of financial services, still among the rural population it is very low. The innovations in digital modes of transactions has increased the capacity of the financial service providers manifolds. Hence, the present study was conducted to analyze the impact of digitization in rural parts of Assam. The business correspondents of four banks, their customers, and parameters of digital infrastructure in the location was studied. It was observed that in the selected location financial and digital literacy among the borrowers is low. The reasons cited by the customers for not using digital modes of transactions are related to their low level of awareness about the product and lack of confidence.

**Keywords:** Digitization, Digital Financial Inclusion, Digital India, Digital Payments.

## INTRODUCTION

Over the years, the Indian financial sector has experienced rapid changes to reach out to the financially excluded. The issue of financial inclusion remains in focus in multiple ways. The Reserve Bank of India (RBI) defines Financial Inclusion as the “process of ensuring access to appropriate financial products and services needed by all sections of the society in general and vulnerable groups such as weaker sections and low-income groups in particular, at an affordable cost in a fair and transparent manner by regulated, mainstream institutional players”. Financial Inclusion is especially likely to benefit disadvantaged groups such as women, and rural communities residing especially in unbanked/underbanked areas.

In order to increase the reach of financial services in rural areas, RBI permitted banks to engage Business Correspondents (BCs) / Business Facilitators (2006). Under this framework, banks are permitted to use the services of third-party agents as BCs to provide banking and financial services, such as credit and savings, on their behalf. Since the inception of the BC model, a large number

of organizations have begun working as BCs for banks. This has resulted in cost-effective delivery of services through ICT based solutions. However, these organizations have been experiencing business growth in terms of client outreach and transaction volumes, many are struggling to remain financially viable. In addition, Customer Service Providers (CSPs) or BCs appointed agents who are crucial to the success of the model are also struggling to meet their costs and maintain their business viably. In the recent past, the RBI has provided specialized licenses to banks, such as Payment Banks, and Small Finance Banks, who are mandated to provide services to customers with low-value accounts. In addition, the Micro Finance Companies provide a bulk of the loans to these users, and banking access is available more through a business correspondent agent than a bank branch or an ATM. Pradhan Mantri Jan-Dhan Yojana or PMJDY is one of the most notable government initiative for financial inclusion. PMJDY is responsible for expanding access to banking facilities to over 100 million Indian adults, or 13 percent of the adult population. This change corresponds to a 34 percent increase in financial inclusion. As per the estimates in March 2020, the total number of beneficiaries of the program have been more than 380 million (Ministry of Finance 2020). The introduction of unique identification Aadhaar number has also contributed to the financial inclusion in the country. By significantly changing the concept of individual identity, Aadhaar has not only brought about a secure and easily verifiable system but also easy to obtain as well to help in the financial inclusion process. The

combination of Aadhaar, PMJDY, and a surge in mobile communication has reshaped the way citizens access government services.

Despite the increase in the outreach of financial institutions and financial schemes in rural areas, the use of cashless modes of the transaction (such as the use of Net banking, credit and debit cards and ATMs, technology-driven payments system) have remained limited. This is so because more than one-third of the total population constitutes the rural economy, which accounts for 70 percent of employment and 50 percent of GDP with agriculture being the main driver, followed by services and manufacturing (Sabnavis 2017)

The concept of digital financial inclusion came in focus and gained impetus after the demonetization exercise of the GoI. It was observed that people started depositing their cash at the bank. 'Digital financial inclusion' refers broadly to the use of digital financial services to advance financial inclusion. These include payments, transfers, savings, credit, insurance, securities, financial planning, and account statements.

Although the financial inclusion scenario in India has improved considerably over time, owing to the major banking and economic reforms were undertaken in recent years, there still exists both a great need and the potential to tap into this unbanked population and bring them into the financial net. The present paper analyses the impact of digital modes of the transaction on the behavior of the rural population in Assam. The study also aims to find out how far the traditional manual procedures of availing financial services are converted into electronic ones in Assam, post

demonetization. Besides, the usage of digital financial services by the rural population of Assam, the study also assesses the financial literacy situation in Assam.

## **PROLIFERATION OF DIGITAL PAYMENT FACILITIES FOR RURAL POPULATION**

Developing a cashless economy was one of the aims of the demonetization exercise. The government of India wants to increase the number of transactions across the country and amongst all segments. The program “Digital India” was launched to bring a change in terms of payment facilities available to all stakeholders, especially from the underprivileged sections. KCC, general credit cards (GCC), and mobile banking facilities have been encouraging the poor to participate in the digital ecosystem. With the strengthening of the Unified Payment Interface (UPI) by RBI, digital payments have been made secure, compared to the past. To this end, many payment gateways have come up to further improve digital transfers. As per a World Bank report and RBI Bulletin (June 2020), the total volume of digital transactions in India (including various payment channels and mechanisms, such as net banking, mobile banking, debit cards, credit cards, prepaid instruments, mobile wallets, among others) grew by compound annual growth rate (CAGR) of 30 percent from 1,142 million in April 2015 to 2364 million in April 2020. On the other hand, mobile banking transactions grew more than five times, from 19.75 million in April 2015 to 1127.6 million in April 2020.

As a result, anyone with a valid bank account and mobile phone can make quicker and

easier payments. With the introduction of Unstructured Supplementary Service Data (USSD), the transaction on offline mode in a basic mobile handset is now possible. In addition, the Aadhar-enabled payment system (AEPS) enables an Aadhar enabled bank account (AEBA) to be used at any place and at any time, using micro ATMs. Further, nearly 1200 finTech companies are collaborating with banks to expand digital outreach.

As a result of such proliferation of financial sector touchpoints, the scope for financial inclusion (FI) through digital penetration has increased significantly. Despite these, the use of digital financial services by the rural population is still very low. CDFI (2020) reported that nearly 76 percent of the adult population in India does not understand even basic financial concepts. USAID (2019) reported that, though there is a rapid increase in digital financial services, still human touchpoints are critical in rural areas. The need for trust and understanding of how to use these services will continue to require interaction with a human being at the last mile is felt important by the customers. However, little knowledge of the problems faced by the customers to operate digital transactions is available in the public domain. The study also emphasized the need for financial literacy amongst users. In addition, there are other issues related to infrastructure which include poor internet connectivity, meager availability of digital payment modes in the locality, etc. Thus, to understand the scenario of digital transaction in selected districts of Assam, business correspondents of four banks, their customers, and parameters of digital infrastructure in the location was studied.

## ABOUT THE STUDY

The scope of financial inclusion has expanded to accommodate digital financial inclusion, encouraging providers to work toward the digitalization of financial services. Thus, the study analyses the use of digital services by the rural banked population of Assam. The government and regulators with the support of banks and FinTech companies are aimed at making financial transactions faster, cheaper, and convenient, for the rural population. Though the target customers belong to the low-income segment, they face problems which include access and usage of mobile phones, and digital literacy and awareness. Against this backdrop, the study stresses on two imperatives of digital services- access and awareness.

## METHODOLOGY AND SAMPLING DESIGN

At the outset, four major banks in Assam were approached to collect the list of authorized Business Correspondent (BC). From the given list, BCs operational in four selected districts of Assam i.e Barpeta, Kamrup (R), Sonitpur, and Tinsukia were selected for interview (Table 1). The sample districts for the purpose of the interview were selected on the basis of the number of rural branch offices operating in the districts and then from each district, we have decided to randomly select CSPs/BCs from the given list. Clients, however, were not selected randomly due to time constraints and practicability issues. Instead, clients coming to the agents' location for transaction purposes and clients staying in the agents' vicinity were approached for the survey. The

Snowball sampling method was used to select the retailers' shop for the study. The field survey was conducted from November 2018 to April 2019. In addition to this, the clients of microfinance institutions were also interviewed during the process.

From the customers and retail shops following information was collected:

1. Access to banking accounts by financial institutions
2. Access to banking products and services such as Credit Cards, overdraft facility, loan/credit from banks, Fixed Deposit, Recurring Deposit, Insurance, Mutual funds, etc.
3. Usage of various payment modes for paying to the suppliers - cash and cashless modes such as Credit Card, Debit Card, Prepaid Cards, Internet Banking, Mobile
4. Perception about cards, mobile wallets, cash, etc. in terms of usefulness, ease of use, efficiency, learning to use, intent to use, etc. and associated fears
5. Mobile phone penetration and usage for various purposes including mobile payments
6. Digital payments acceptance infrastructure at these locations
7. Various modes of payments offered by the neighboring retail shop owners were also collected.

**Table 1: List of selected districts for study**

Sl.No.	Districts	Number of BCs	Number of customers	Number of retail shops
1	Kamrup	5	50	8
2	Cachar	1	50	10
3	Sonitpur	5	50	10
4	Dibrugarh	2	50	6
	Total	13	200	34

## FINDINGS

### Profile of the respondents

The data for the study was collected from 203 individuals from four selected districts of Assam, comprises 51 percent male and 49 percent female. The majority of the respondents are in the age group of 31-40 years (30 percent), followed by respondents in the group of 18-25 years (27 percent). 18 percent of the respondents are having no education, among them the majority (71 percent) of them are women in the age group of 31-40 years and above 60 years. Whereas, only 15 percent of the respondents are graduate or pursuing graduation. 40 percent of the respondents are owing to their own business. It is interesting to note that in rural areas women are also taking initiatives to start their own business such as tailoring and small Kirana shops. With multiple earning members the income of the households has also increased. Data on the income level of the respondents was also collected. It is expected that different income levels would lead to a differentiated need for digital financial services. About 30 percent of the respondents reported monthly income ranges between Rs 15,000 to Rs 25,000 (Table 1 in Annexure).

In the selected districts of Assam, it was found that the respondents are associated with multiple financial institutions to meet their financial needs. 85 percent of the total respondents are linked with more than one financial institution. This reflects the level of awareness regarding the presence of various financial institutions in rural areas. The dependence on informal financial sources is diminishing. Though we have observed that about seven percent of the respondents took a loan from xanchoys. The field officers of the MFIs and the BCs or CSPs are making relentless efforts to aware the villagers about the financial products offered by their respective banks.

To understand the level of awareness about various services offered by banks, the respondents were asked about the financial services offered by their banks. It was found that respondents were familiar with services like deposit collection, loan products, pension payments, insurance products, and ATM services (level of awareness is above 90 percent in both male and female respondents). However, the level of awareness about online

payment services, locker facility, investment advice, credit card, and mobile banking services was low (level of awareness ranges between 50 to 66 percent). This is due to the fact that the BCs are allowed to extend only basic banking services to their customers. The services offered by the BCs of the banks are limited to account opening, transactions of an amount stipulated by the banks, the opening of pension, and insurance account. However, they are burdened to implement government schemes at the grass-root level. For instance, the recent initiative of Government announced on March 26 to make an ex-gratia payment of Rs 500 to be credited to women Jan Dhan account holders for the next three months starting from April. Due to which the information about online or mobile services and investment advice takes a back seat.

The usage of various financial services also varies widely. 96 percent of the respondents often (thrice in a month) use deposit and withdrawal services of the banks, followed by the respondents who use remittance services (70 percent), and repayment of the loan amount. Interestingly, for taking loans 60 percent of the respondents rely on MFIs as the process is simple and easy for them. Thus, the primary purpose of association of the respondents with the banks is savings and withdrawals. The BCs reported that the minimum balance in the basic saving accounts is very low or some of the accounts are in a dormant state. The clients receive direct benefit transfer in their accounts.

### **Enablers of Digital Services**

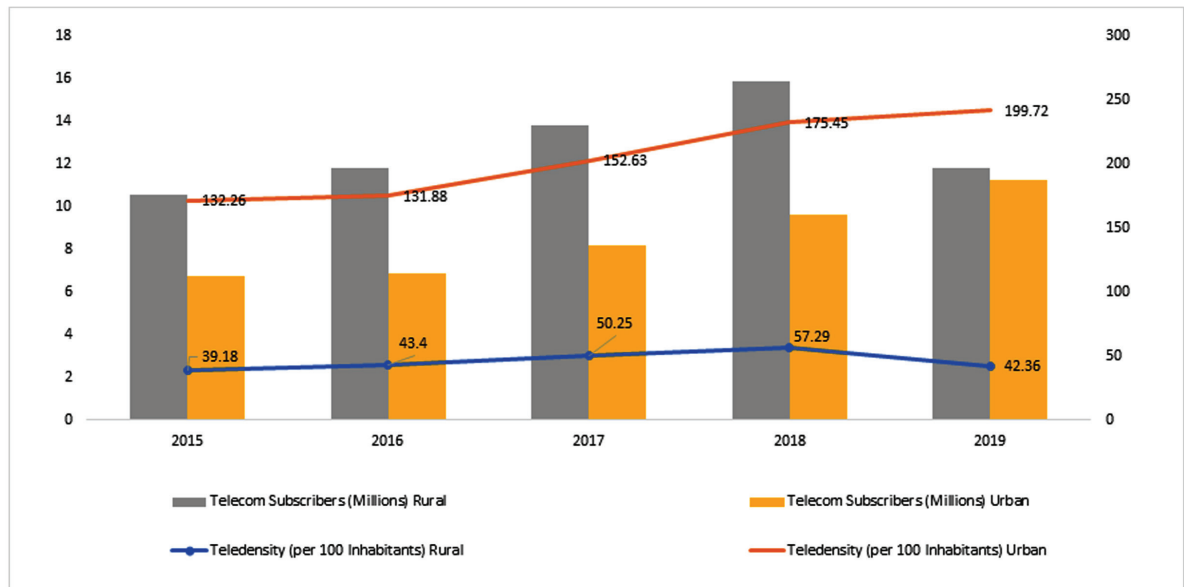
Enablers of digital service are the physical and non-physical infrastructure support required for the smooth functioning of the system.

According to the IFMR Report (2018), the presence (physical or digital) of formal banking and financial institutions as well as access to formal channels for conducting financial transactions, including deposits, credit, and remittance, are prerequisites for digital integration. For extending digital services to the rural location, the presence of banking service, ATM; and mobile connectivity with the internet act as an enabler. The first enabler is the presence of financial institutions. It is found that in all the four districts there are multiple numbers of public sector banks, small finance banks, and microfinance institutions. While interviewing the respondents, it was observed that the majority of the customers especially the women customers have access to microfinance institutions, which extend the loan for various entrepreneurial activities. As of Dec 2019, the number of rural branches, and the number of rural ATMs is given in Table 2. The selected districts have almost half of their total branches in rural areas. Similarly, the presence of ATM is also noteworthy. In addition to ATMs, Point of Sale (PoS) machines are also available with the BCs and field staff of MFIs for financial transactions. In all the four locations few retail shop owners were also interviewed. It was observed that out of the total retail shops interviewed only 40 percent of them have PoS machines for the transaction, but they reported very few transactions took place in a month. The other means like scanning of QR code and PhonePe Apps are also used by a few retail shopkeepers.

**Table 2: Banking outreach in selected districts**

District Name	Rural Branch	Total Branch	Rural ATM	Total ATM
Cachar	89	162	64	208
Dibrugarh	85	182	77	275
Kamrup	112	147	111	161
Sonitpur	63	129	64	198

Further, with financial infrastructure, the presence of robust digital infrastructure is crucial for the maneuvers of digital financial services. This includes access to telephone networks, mobile phones, and PoS machines. The phone penetration in rural Assam increased in the last five years i.e from 2015 to 2019. The number of telecom subscribers and teledensity is increasing from 2015 to 2018 in the rural areas of Assam (districts wise data for Assam is not available). It is interesting to note that the number of telecom subscribers in urban areas is lower than that of rural areas, whereas the teledensity in urban areas is much higher than in rural areas. This reflects that in urban locations people have multiple connections. Figure 1 depicts the rural connectivity in rural and urban Assam. From the primary survey, it is observed that 96 percent of the respondents have mobile phones, among this only 55 percent have smartphones or feature phones.

*Figure 1: Telecommunication in rural and urban Assam*

Internet connectivity is another parameter for extending digital banking services in rural areas. The internet connectivity in Assam is extended by four major telecom players with 3G or 4G connectivity. Internet users in rural Assam increased by 76 percent in the last five years (Figure 2).

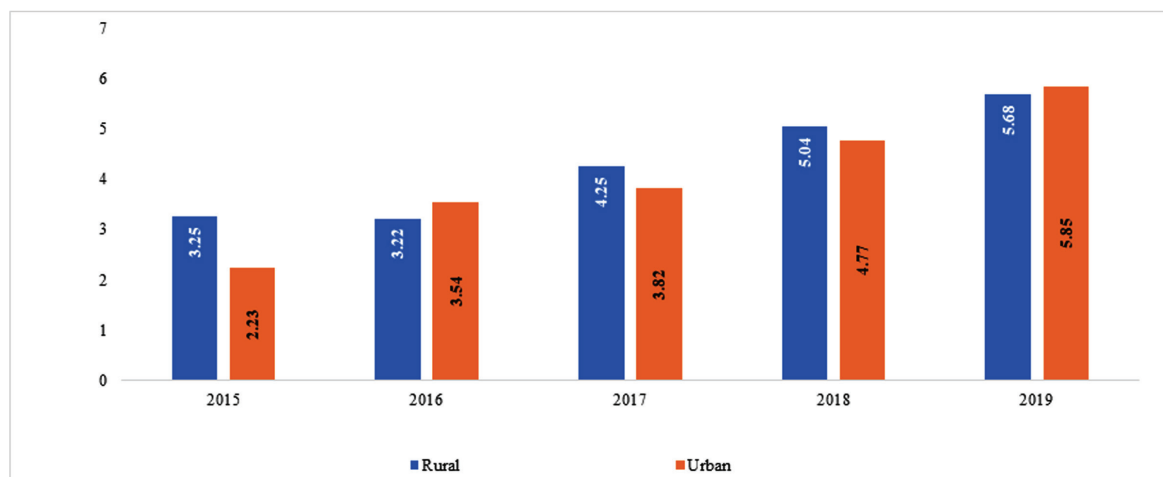


Figure 2: Internet subscribers (millions) in rural and urban Assam in the last five years

In a report by Nielsen and the Internet and Mobile Association of India (IAMAI) has noted that in India, Assam among the Eastern states has higher internet penetration (38 percent) as on March 31, 2019. The national average of internet penetration is 36 percent. Hence, from the above discussion it was observed that in selected rural locations, there is an adequate number of financial institutions and ATMs. The internet connectivity is also remarkable.

### Technology-based services

Among the selected banks, few BCs/CSPs of SBI and UBI is extending internet banking facilities to their customers, whereas AGVB extends only the basic services to the customers. The common services extended by the BCs to their customers are listed in Table 3. However, it was observed that customers can download various online payment apps for transactions.

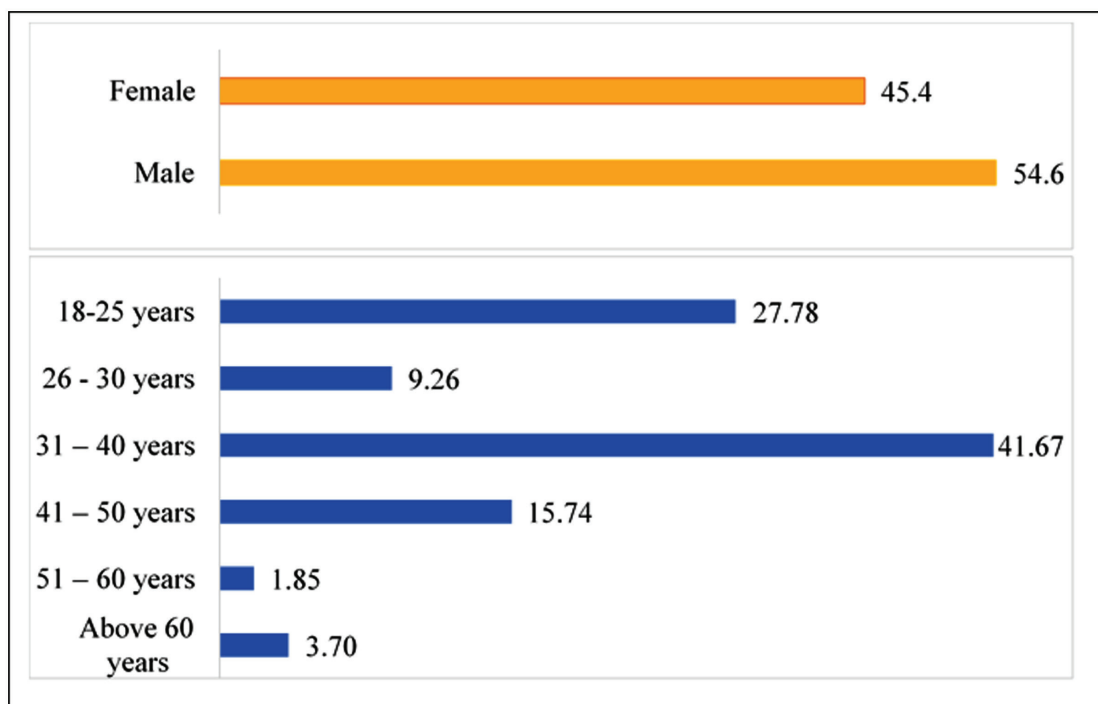
Table 3: Services extended by BCs of selected Banks

Bank	Services
SBI, UBI, and AGVB	1. Opening of 'No-Frill Savings Accounts'
	2. Deposits / Withdrawals of Cash in Savings Accounts
	3. Opening of Term-Deposit/Recurring Deposit/ SHG Accounts
	4. Money Transfer to any Bank account
	5. Aadhar enabled deposits/withdrawals
	6. DBT enabled services to the account holders
	7. Pradhan Mantri Jeevan Jyoti BimaYojna / Suraksha BimaYojna
	8. Atal Pension Yojna
	9. Loan lead generation & repayments
	10. Financial Literacy Camps

The BCs have a point of sale (PoS) machine which is usually used for small withdrawal. It is observed that customers rely on withdrawing money from the PoS machine in place of ATM booths. The support of BC in the PoS machine withdrawal is valuable for the customers. The SBI and UBI BCs are assisting their customers in using technology-based services. However, till their respective banks are not in a position to extend online services through BCs/CSPs to their customers. In case the customer wants to activate his/her online banking facility, the customer needs to shift the account to the nearby branch office.

### **Familiarity of the respondents with online services**

About 30 percent (60 number of respondents out of 203) of the respondents report using internet banking services via mobile phones or through computers. The users use the online application of SBI and UBI to make payments, as other banks have not extended online services through BCs to their customers. 78 percent of those who use online banking platforms report using debit cards, around half report using mobile wallets. However, only seven percent report using the USSD based platform NUIP or \*99#. The users of online services are predominantly male (55 percent) and engaged largely in running their own business (37 percent). In the case of women, 45 percent reported using online services. The online services were mainly used by the women in the age group of 31-40 years for making bill payments. The use of online services by the older age group is negligible (Figure 3).



*Figure 3: Users of Online services according to gender and age group*

The use of online services is highly correlated (73 percent correlation) with the income of the users. About 80 percent of the online service users belong to the category who are earning more than Rs 10,000 monthly. However, 14 percent of the users are not earning such as students and housewives but they are highly active in using online services.

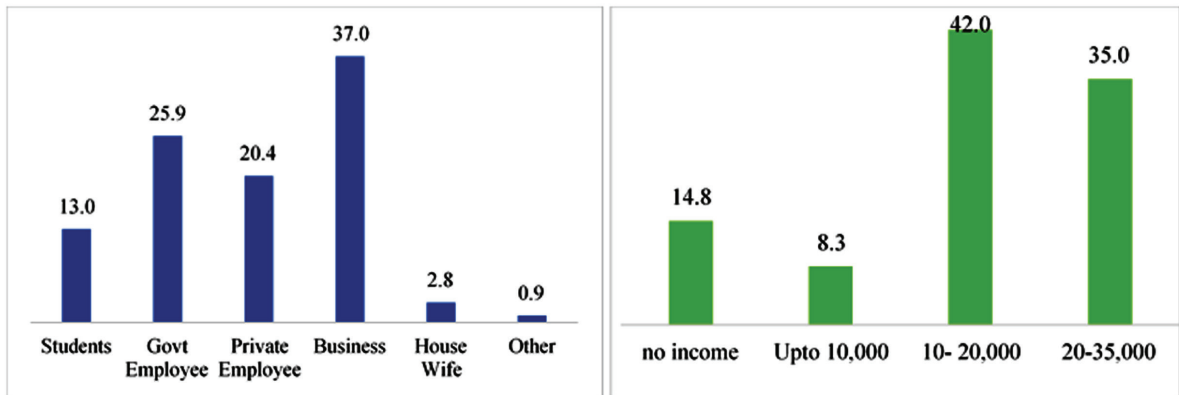


Figure 4: Users of online services according to a different category

Users are likely to be better educated than the average low-income individual, with 93 percent of users have at least completed their high school education. All users can read and write and can perform mathematical functions.

### Purpose of use

Online banking users largely use these services for transferring money to other bank accounts, checking their balance, and changing their passwords. A subgroup of users uses online banking to its fuller capacity – by using it to make online payments while making e-commerce purchases, paying utility, cable, and medical bills, even paying school fees and government taxes.

### Problems while using the digital mode of transaction

It was observed that customers preferred the use of PoS machine in place of ATMs. According to them, in the case of PoS machine, the field office or the BC is there to assist them, whereas

in ATMs they need to do the transaction on their own. Also, the out of order or no cash are the other problems cited by the customers while using ATMs. In the case of internet banking security is found to be the major hindrance. 67 percent of customers said that internet banking can be tampered by others. Similarly, in the case of mobile banking services, the customers found the process is cumbersome. According to them, the process is long they cannot remember the steps and also security is another issue (Annexure Table 2).

### Financial and Digital Literacy

There is a dearth of financial and digital literacy amongst the customers interviewed regarding the usability of digital payment services. Our

study revealed that the majority of the customers are aware of the uses of digital payment services but they are not confident to use the service by themselves. Due to a lack of interest very few customers have downloaded the various online applications for transactions. Therefore, a certain level of financial literacy education amongst clients is essential for the success and spread of digital financial services. Further, the customers are not confident in doing the transaction. The process and other details of the transaction can only be learned by proper training and education.

The BCs in the selected districts organized five camps on an average in a quarter. As informed, the BCs assist the bank officials in organizing the financial literacy camps. However, the BCs are found overburdened. They are expected to perform the duties of — a clerk, cashier, branch manager, financial adviser, and agent for rural digitization. They are also responsible to extend the government schemes to the rural customers. To increase financial literacy, recently, RBI introduced the 'National Strategy for Financial Education '2020-2025' (NSFE), which is a '5-Core Actions' approach for promoting financial education. The five Cs, outlined by the strategy paper, are: Content, Capacity, Community, Communication and Collaboration. The strategy was aimed to increase financial literacy among all, as it supports the pursuit of financial inclusion by empowering the customers to make informed choices leading to their financial well-being.

## CONCLUSION

The empirical results highlight the importance of financial and digital literacy among borrowers.

The various reasons cited by the customers for not using digital modes of transactions are related to their low level of awareness about the product and lack of confidence while doing transactions. Both problems can be resolved by extending proper digital and financial education to the customers. It is expected that the recent initiative of RBI to increase financial literacy is going to benefit all segments of the population.

The study also observed that a sufficient number of financial service providers are present in the selected locations. This diminishes the dependence on informal money lenders to a greater extent. Also, the infrastructure to support digital transactions, which includes the internet and mobile services is quite satisfying.

It was found that the majority of the customers still avail only basic financial services from their banks. It is felt that; the banks should work on new ways and methods to extend more services to the customers.

## ANNEXURE

Table 1: Demographic profile of the respondents

Category	Parameters	Percentage
Gender	Male	51
	Female	49
Age	18-25 years	27.1
	26 - 30 years	11.3
	31 – 40 years	29.6
	41 – 50 years	11.3
	51 – 60 years	4.9
	Above 60 years	15.8
Education	No Education	18.7
	Primary education	28.6
	up to Intermediate	37.4
	up to graduation	15.3
Marital Status	Married	70.4
	Un-married	12.8
	Widowed	16.7
Number of Dependents	Two	51.0
	Three	43.0
	Four	3.0
	N/A	3.0
Profession	Govt Employee	19.2
	Private Employee	18.7
	Business	40.0
	House Wife	8.5
	Other	14
M. Income (in Rs)	N/A	32.0
	Upto 10,000	7.4
	10,000- 15,000	8.9
	15,001-20,000	21.2
	20,001-25,000	19.7
	30,001 – 35,000	10.8

**Table 2: List of problems in various digital modes of financial transactions**

Sl.No.	List of problems in various digital mode of services	Percentage of customers
<b>ATM Problems</b>		
1	Cards get blocked	34
2	Machine out of cash/out of order	95
3	Non-printing of statement	93
4	long waiting time in queues	76
<b>Internet Banking Problems</b>		
5	Not providing information	
6	Not being able to maintain security	76
7	Internet banking can be tampered with by others	67
8	Too many steps in processing transaction	87
<b>Tele Phone Banking Problems</b>		
9	Lack knowledge of customer service representative	No response
10	Absence immediate connection to the service	
11	Lack of prompt service.	
12	Lack of clear guidelines	
13	Lack knowledge of customer service representative	
<b>Mobile Banking Problems</b>		
14	Login / Sign off are not easy.	68
15	Lack of security in transactions.	67

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*The study is supported by ICSSR*