

A Study to Assess the Impact of Digital Payment in India

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ABSTRACT

The payment solutions were made easier after the demonetization which led people to use more online payments and even made mobiles an essential part of the payment methods hence the need for technological advancement was met strongly. Social factors such as availability of mobile phones and computers plus government policies such as 'digital India' have enhanced the growth of the economy in regards to the utilization of electronic payment systems. Trust in the official economy is boosted by the increased transparency brought about by the switch to digital payment methods. In recent years, many changes have been made to the system, such as the introduction of new formats like digital wallets and mobile application like UPI and BHIM. Thus, the objective of the proposed research work is to understand how the digitalization of the payment system is beneficial. A survey about the first usage behavior of customers towards some of the new online payment solutions will be the focus of this research. A study of 130 people was conducted, from Haridwar area, of whom 66 were able to provide primary data.

Key words: *online payments, digital payments, demonetization, and e-payments, digital payment.*

INTRODUCTION

India is a country which has recently witnessed a massive transformation with the introduction of digital payments. India is a part of the digital India campaign which promotes the use of digital payment. The government is working towards the establishment of a fully empowered nation. It is worth noting that 'faceless, paperless, cashless' are some of the slogans the project promises. In November 2016, Prime minister Narinder Modi removed legal tender of 500 and 1000 currency notes to make reforms in India. Demonetization has actually played a big role in increasing digital payments, when the government made less cash available, people started using online payments methods more, they started using things like mobile wallets, online wallets and online banking methods.

Digital payment is the electronic transaction made by consumer at (POS (Point of sale) for products and service via mobile banking, online banking, or card payment utilizing a smart phone. Covid -19 pandemic has truly impacted the digital payment. Due to social distancing, increased usage of contactless payment methods to reduce physical contact and it has led to people more doing digital transaction. In the digital payment system, there are following steps 1) registration 2. Invoicing 3. Choosing a payment method 4. payment verification. The payment system sometimes embraces three electronic payment instruments cash, check, debit card, net banking and card on delivery, are increasingly replacing cash on delivery.

The commerce industry is being impacted by demonetization in a way that cash on delivery is continuously being replaced with other payment methods such as debit cards, net banking card on delivery etc. yes, demonetization is going to be a gold mine for the commerce of India as a result it increases the probability of people being cashless.

A digital payment is a financial transaction application that runs on mobile devices, it is the amount of money which is been transferred from the one person to another person using a digital device, these methods do not require payments to

be made in the form of cash, there are different types of payments modes that are accepted in India some of these are;

Banking cards: banking card offers to customer more convenience and security payment method; this security card required a four-digit pin for 2 factor authentication for secure payments from the customer while doing the transaction. There are various types of cards available and these are as credit card, debit card and prepaid offers as well.

UPI: UPI which means unified payments interface, it is an easy and convenience method of doing transaction, it allows your phone to instantly transfer money from your bank account. It is a quick and fasted method of doing payment.

Mobile wallets: mobile wallets are a simulated wallet on your phone its an app that allows you to safely store and manage your money digitally, you can link your bank to your mobile wallet and can do a safely transaction.

Mobile banking: mobile banking is an online transaction service provided by bank that allows the customer to perform banking transaction through your mobile app for convenient and a secure transaction without visiting the bank you can perform various task. You can check your bank balance on your mobile banking app, it saves your time and provide you a speedy transaction from your home.

Internet banking: online banking, net banking are the other names of internet banking and is also one of the facilities provided by bank for online transaction, while doing net banking you must require to registered customer Id and password to login into your account for smooth transaction.

LITERATURE REVIEW

This view, supported by Sanghita Roy and Dr. Indrajit Sinha (2014), though there was a great success with e- Payment's system in India, still the following issue to be addressed to the system: The Indian e-Payments system has undergone significant improvements, however there are still plenty of ways to increase the usage of this system. In other words, in the present world, more than 90 per cent of all such payments are made in cash. Which is used in the given study to explain how acceptance of technology is viewed or perceived by the research. Based on the research, the four core variables that make the system of electronic payments is innovation, incentives, customer comfort and the regulatory framework. E-payment systems are those that can most of all help in easy and secure payments for a person and business in person and business to business. They also act as a link between technological innovation and other countries in relation to global trade and therefore technological advance. AS found out by Sanghita Roy and Dr. Indrajit Sinha in their study in 2014 "though the rise of e-Payment in India is in an emerging state and thus there are still many challenges to be tackled and overcome" the e payment system of India is still to operate fully for all to use the e payment system However, one is expected to look at the future trends which can be seen here as the use of currency remains to be very prominent in everyday banking transactions. Technology Acceptance Model Similarly, it has been embedded in this research work in terms of its acceptance. They concluded that there are four key factors that improve the use of the e payment system and these factors include innovation, incentives, customer convenience and regulatory environment. For instance, individual users and corporations can also be regarded as effective mechanisms that can guarantee security and efficiency for both cash online transactions. They are the first steps for an innovative technological technology. (Sloke & Pello, 2015). Similarly, in M A Wate & Ali S D (2018) titled "Factors Influencing Consumer Adoption of Internet Banking in India", Rakesh H M and Ramya T J (2014) were looking at the aspects that leads the adoption of internet banking in India on the same grounds and identified several of those factors which in turn affected the consumers choice of internet banking. From the analysis, it was identified that five criteria include – utility, reliability, and the simple to use; these are among the factors used to determine the adoption of online banking by the citizens of a country. This can be achieved by making experts concerned about the benefits of internet banking services and spreading the knowledge. The article written by the author named "The End Users Acceptance of Technology Interface" is an area of research and development of the End User of a Transaction Based environment. Karthikeya Bolar (2014) mentioned that, and technology investors require data about customers' opinions concerning the interaction of their technology with the quality dimension based on features and different quality dimensions to make decisions on how to enhance and compete with the quality dimension. Based on Nitsure 2014 it is stated that due to the limited availability of IT in developing

countries including India the developing countries are likely to encounter difficulties while implementing E-banking programs.

The aspects discussed are about the regulation, security and management. This limits their opportunities in accessing the financial services and the internet, which is known as the risk that a lack of connectivity would contribute to the digital divide in India. This could be done by banks if they want to be ready for the second- generation digital

banking; for example, banks should think about the second-generation digital banking where the digital is more and more part of the banking, rather the third, digital banking which is mostly supported and in which the digital is a means to serve as sales channel of the bank. “Banks can implement changes in the organizational processes in customer-centric directions which would be somewhat complex, but it is important for them to keep up with the pace in terms of competition in the field of banks and digital banking”

Objective of the Study:

- To see how the age of respondents influences digital payments.
- To analyzed the impact of consumer education on digital usage
- To understand the role that a customer income status plays in their usage of digital payments

RESEARCH METHODOLOGY

The study explores how digital payment systems are used in India. Place of study in the Haridwar region. The sample size of 130 was used with convenience sampling, response to it being 66. That is, they have responded 66% of the time. this means it is for data collection only, which is done via structured surveys. Respondent response was examined using the basic percentage analysis and chi square test.

DATA ANALYSIS & INTERPRETATION:

Gender of the respondents

gender	N	%
Female	25	38
Male	41	62
total	66	100

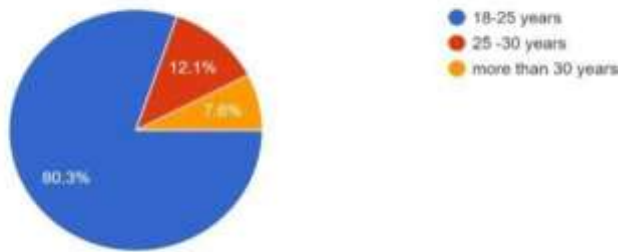
On the basis of gender of the respondents Out Of the total respondents, 62% were men and 38% were women who used digital banking. Prior research indicates that the banking industry does not differentiate between genders when it comes to technology adoption.

Age of the respondents

The Age groups of the respondents (year)	N	%
18-25	53	80.3
25-30	8	12.1
More than 30	5	7.6
Total	66	100

AGE

66 responses



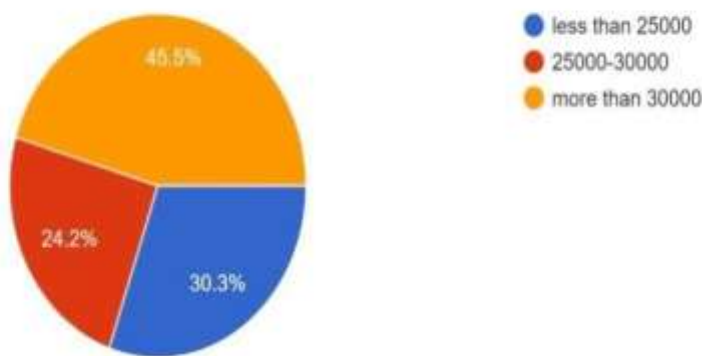
More than 30 years of respondents describes demographics factors relevant to bank customers. It indicates that 80.3% of the respondents are within the age group from 18-25, 12.1% is in the age group from 25-30 and 7.6% are older than 30 years.

On the basis of monthly income of the consumer

Family income	N	%
Less than 25000	20	30.3%
25000-30000	16	24.2%
More than 30000	30	45.5%
Total	66	100

family income

66 responses



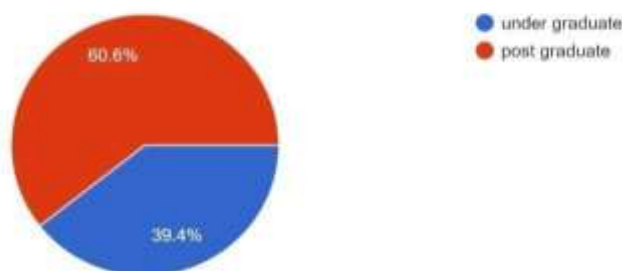
On the basis of monthly income of the consumer 30.3% of respondents have an income less than 25000, 24.2% have a monthly income between 25000 to 30000 and 45.5% have an income more than 30000.

On the basis of education

Education	N	%
Under graduate	26	39.4%
Postgraduate	40	60.6%
Total	66	100

Education

66 responses



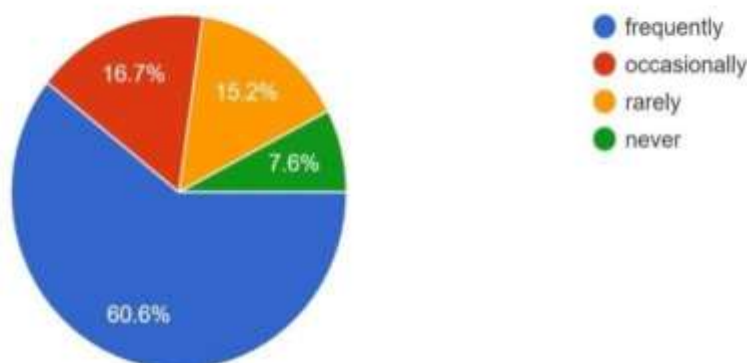
In the above table it shows that 39.4% of the respondents are undergraduate and 60.6 % are postgraduates. This suggests a positive trend in the usage of technology among postgraduate.

On the basis of customer usage

Usage	N	%
Frequently	40	60.6
Occasionally	11	16.7
Rarely	10	15.2
Never	5	7.6
Total	66	100

how often do you use digital payment systems ?

66 responses



On the basis of customer usage 60.6 % respondents uses digital payment frequently,16.7% uses occasionally,15.2% uses rarely and 7.6 % respondents' does not uses. This indicated that most of the people use digital payment transactions frequently.

On the basis of customer preference

Preference	N	%
Credit card / debit card	8	12.1
Mobile wallets	47	71.2
Online banking	10	15.2
Cryptocurrency	Nil	Nil
Total	66	100

which digital payment methods do you use ?

66 responses



On the basis of customer preferences 71.2% respondent prefer Mobile wallets ,15.2% prefer online banking, and 12.1 % prefer debit card. The remaining respondents did not specify preferences for cryptocurrencies, suggesting a strong preference for mobile wallets.

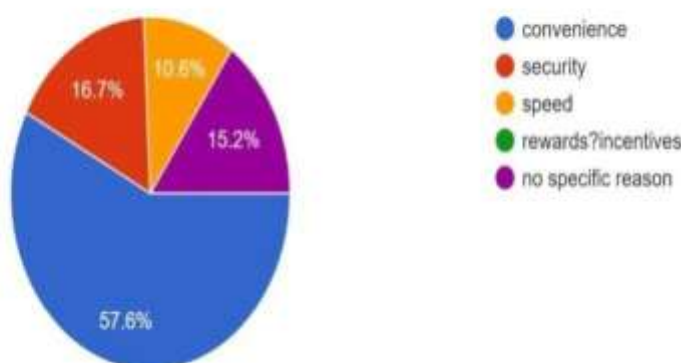
On the basis of primary reasons of using digital payment systems

Reasons	N	%
Convenience	38	57.6
Security	11	16.7
Speed	7	10.6
Reward/ incentives	Nil	Nil
No specific reasons	10	15.2
total	66	100

On the basis of primary reason for using digital payment systems 57.6% respondents found it convenience to use digital payments, 16.7% of the respondents go with the security measures, 10.6% of the respondent prefer to use digital Payment because of the security measures, 15.2% have no specific reason and no response have been received for the reward and incentives.

what is the primary reason for using digital payment systems ?

66 responses



Chi square analysis for hypotheses testing:

H0: Usage of digital payment does not influence the reasons of using digital payments.

H1: All usage of digital payment has a significant impact on the reason of using digital Observed frequency table

	Convenience	Security	Speed	No specific reasons	Total
Frequently	40	8	7	5	60
Occasionally	10	2	3	2	17
Rarely	8	4	0	3	15
Never	0	3	1	4	8
Total	58	17	11	15	66

Expected frequency E_{ij} = row total. $\times$ column total / grand total Grand total $N = 66$

Convenience frequency $E_{11} = 60 \times 58 / 66 = 52.73$

Similarly, calculated for another cell

	Convenience	Security	Speed	No specific reasons
Frequently	52.73	15.45	10	13.64
Occasionally	14.95	4.39	2.84	3.86
Rarely	13.18	3.87	2.50	3.40
Never	6.14	1.80	1.16	1.58

$\chi^2 = \sum (O_{ij} - E_{ij})^2 / E_{ij}$ For cell (1,1)

$(40 - 52.73)^2 / 52.73 = 3.08$

Continue for all cells

	Convenience	Security	Speed	No specific reasons
Frequently	3.08	3.60	0.90	4.71
Occasionally	1.64	1.30	0.03	0.89
Rarely	1.91	0.00	2.50	0.05
Never	6.41	0.80	0.01	5.95

$\chi^2 = 33.41$

Degree of freedom = $(r-1) \times (c-1) = (4-1) \times (4-1) = 3 \times 3 = 9$ p-value $\chi^2 = 16.919$

We reject the null because we see that p-value is less than the calculated value definitely smaller. So, we reject the null hypothesis and accept the alternative hypothesis i.e. there is an association between the frequency of using digital payment systems and reason for using digital payment system.

LIMITATION OF THE STUDY:

Primary data served as the foundation for the investigation. The core data for the study's goals came solely from samples that were located in Haridwar. Haridwar is one of the important cities in Uttarakhand India however the 66 samples that were chosen from the city do not provide a comprehensive picture of the nation's population.

Nonetheless, the purpose of survey was to validate consumers perceptions towards digital payments with regards to the idea of general banking. however, this does not mean that Haridwar city cannot intimate other major banking hubs in the country, this could do little to stand in the way of travelling to the intended goal. For the main data, the non-response error cannot entirely be ruled out.

CONCLUSION:

The study examines the potential effects of digital payment implementation on Indian banking industry customers. When the findings are taken together, they offer a vital policy path that can assist the country in increasing the quantity of cashless transactions. The results demonstrate that the adoption of digital payment technology has improved the functioning of the banking sector and made it possible to achieve the objective of a cashless society. The survey emphasises how many people are aware of the importance of utilizing technology to its maximum capacity. Banks should have put effective plans in place to educate people about security and appropriate technology use.

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