



A Study on Awareness and Consumer Perception on Use of Digital Payments System in India with Special Reference to Chennai

Mohammed Zubair Basha N.¹, Shabeena Shah W²

¹II Year MBA, MEASI Institute of Management, India

zubairbasha1999@gmail.com

²Assistant Professor, MEASI Institute of Management, India

shabeena.shah@measimba.ac.in

ABSTRACT

The purpose of this article is to determine the current trend in India toward the use of digital payments. The term "digital payment" refers to making a payment to another person via the internet or an electronic channel rather than paper money. The demonetization of currency resulted in a massive increase in digital payments. Government initiatives such as Digital India, as well as increased mobile and internet usage, are paving the way for exponential development in the use of digital payment. Consumers have a moderate attitude toward digital payments, and there is a substantial correlation between demographic status and attitudes toward digital payments. Consumer perception has a favorable and significant impact on the rate of digital payment acceptance. Simultaneously, the digital payment system should take adequate steps to avoid undue delays in payment processing.

1. INTRODUCTION

The digital revolution is sweeping the globe, and no other sector has seen such transformation as payment and settlement systems, resulting in a plethora of digital possibilities for the average person. When it comes to picking a payment method to complete a transaction, consumers now have a variety of options. They choose a payment method based on the value they place on it in a certain situation, as each payment mechanism has its own function and purpose. Cash is a well-established and commonly utilized payment mechanism in India, as it is in many other countries of the world. It is heartening, however, that non-cash payments, particularly those made through electronic or digital means, are rapidly expanding.

The flagship program of the Indian government is "Digital India," which aims to transform India into a digitally enabled nation. One of Digital India's ostensible functions is to be "faceless, paperless, and cashless." The relevance of digital payment systems has grown in recent years, especially since demonetization. The government is taking initiatives to encourage citizens to use payment gateway systems. It has announced discounts on digital purchases of specific products to promote payment gateways. It has also launched UPI (United Payment Interface), an app-based system that allows users to transact across numerous banks. The government is scheduled to reveal a new upgraded version that enables banking transactions via mobile phones without the use of the internet via a technology known as USSD (Unstructured Supplementary Service Data). These initiatives have given the country's digital payment system a significant boost. Other government initiatives, such as BHIM and UPI, aid in the transition and use of digital payments.

A 'Digital Transaction,' according to the RBI Ombudsman plan for digital transactions, is "a payment transaction in a seamless system performed without the requirement for currency at least in one of the two legs, if not both." This includes digital / electronic transactions in which both the sender and the receiver utilize a digital / electronic medium to send or receive money."

The Digital India program is a flagship effort of the Indian government, according to cashlessindia.gov.in. One of Digital India's stated goals is to be "faceless, paperless, and cashless."

VARIOUS MODES OF DIGITAL PAYMENTS

1. Banking cards: Cards are one of the most extensively used payment methods, offering a variety of features and benefits such as payment security, convenience, and so on. Debit/credit or prepaid banking cards have the advantage of being able to be used for various sorts of digital payments. To make a cashless payment, customers can keep card information in digital payment apps or mobile wallets. Visa, Rupay, and MasterCard, among others,

are some of the most reputable and well-known card payment systems. Banking cards can be used for online shopping, digital payment apps, point-of-sale machines, and internet transactions, among other things.

2. Unstructured Supplementary Service Data (USSD): The revolutionary payment service *99# uses the Unstructured Supplementary Service Data (USSD) channel. This service allows you to conduct mobile banking transactions using a basic feature phone; you don't need a mobile internet connection to use USSD-based mobile banking. Its goal is to provide financial deepening and inclusion of the underbanked in mainstream banking services. The *99# service was developed to bring banking services to the masses across the country. Customers can use this service by dialing *99# on their mobile phone, which is a "Common number across all Telecom Service Providers (TSPs)" and transacting through an interactive menu displayed on the mobile screen.

3. AEPS: Also known as the Aadhaar Enabled Payment System, AEPS can be utilized for a variety of banking operations, including balance inquiries, cash withdrawals, cash deposits, payment transactions, and Aadhaar to Aadhaar fund transfers, among others. Based on Aadhaar verification, all transactions are processed through a banking correspondent. There is no need to go to a branch, produce debit or credit cards, or even sign a paper in person. Only if your Aadhaar number is registered with the bank where you have an account can you use this service. The NPCI has taken another step to promote digital payments in the country.

4. UPI: The Unified Payments Interface (UPI) is an interoperable payment system that allows any consumer with a bank account to send and receive money via a UPI-based app. The service allows a user to link multiple bank accounts to a UPI app on their smartphone, allowing them to seamlessly conduct financial transfers and collect requests 24 hours a day, 365 days a year. UPI's key benefit is that it allows users to send money without a bank account or an IFSC number.

5. Mobile Wallets: A mobile wallet is a form of virtual wallet service that can be accessed through the use of an app that can be downloaded. To allow safe payments, the digital or mobile wallet holds bank account or debit/credit card information or bank account information in an encoded format. A mobile wallet can also be loaded with funds and used to make payments and acquire goods and services. It was no longer necessary to use credit or debit cards or memorize the CVV or 4-digit pin. Many banks have established e-wallet services in the country, and there are also a number of private businesses. Paytm, Mobikwik, Freecharge, Oxigen, Jio Money, SBI Buddy, Google Pay, PhonePe, and other mobile wallet apps are available.

6. Bank prepaid cards: A bank prepaid card is a pre-loaded debit card issued by a bank that can be used once or reloaded several times. It differs from a traditional debit card in that the latter is permanently linked to your bank account and can be used several times. A prepaid bank card may or may not be affected by this. Any customer with a KYC-compliant account can create a prepaid card by visiting the bank's website. The most popular uses of these cards are for corporate gifts, reward cards, or single-use cards for giving.

7. Point-of-Sale (PoS) terminals: Traditionally, point-of-sale (PoS) terminals were those that were installed in all stores where customers used credit or debit cards to make transactions. It's usually a little handheld device that reads credit and debit cards. However, as a result of digitization, the scope of PoS is broadening, and it is now available on mobile devices and through web browsers. Physical PoS terminals, Mobile PoS terminals, and Virtual PoS terminals are the three types of PoS terminals available. Physical PoS terminals are the ones seen in shops and stores. Mobile PoS terminals, on the other hand, function with a tablet or smartphone. This is beneficial to small business owners because they do not need to invest in costly electronic registers. Payments are processed using web-based apps in virtual PoS systems.

8. Internet Banking: Internet banking is the process of conducting financial transactions over the internet. Many services, such as transferring funds, making a new fixed or recurring deposit, cancelling an account, and so on, are available. E-banking or virtual banking are other terms for internet banking. Internet banking is typically used to make NEFT, RTGS, or IMPS online fund transfers. Banks provide consumers with a variety of financial services via their websites, and users can access their accounts using a username and password. Unlike visiting a physical bank, internet banking services have no time constraints and can be used at any time and on any day of the year. Internet banking services have a lot of potential.

9. Mobile Banking: Mobile banking refers to the method of doing financial or banking operations via a smartphone. It's a service given by a bank or other financial institution that allows consumers to make many types of financial transactions remotely using a mobile device like a phone or tablet. It does so by utilizing software, which is commonly referred to as an app, that is offered by banks or financial institutions. Each bank has its own mobile banking application for Android, Windows, and iOS (s).

10. MICRO ATMs: A micro ATM is a gadget that provides basic banking services to a million Business Correspondents (BC). Business Correspondents (who may be a local kirana shop owner and operate as a "micro ATM") will be able to make quick transactions using the platform. The micro platform will be powered by low-cost devices (micro ATMs) that will be linked to banks all around the country. This would allow a person to deposit or withdraw monies instantaneously, regardless of which bank is associated with a certain BC. Deposit, withdrawal, fund transfer, and balance inquiry are the four fundamental transaction types that will be offered by micro ATM.

PROBLEM STATEMENT

The cashless transaction system, which is an extension of the demonetization process, has a substantial impact on consumer behavior. In India, the majority of consumers are heavily reliant on cash transactions; nevertheless, consumers must now transition from cash to cashless electronic transactions. Except for a few, the majority of consumers prefer to pay with cash for goods and services. The government has recently announced that all limits on traditional cash transactions, as well as offers for electronic transfer, are encouraging customers to adopt and use cashless transactions for

their purposes. In light of the foregoing, this study attempts to comprehend the concept, methods, benefits, and drawbacks of digital transactions in India.

OBJECTIVES OF THE STUDY

1. Determine the respondents' level of familiarity with the digital payment method.
2. To determine which apps are most commonly utilized to make digital payments.
3. To determine the effect of respondents' age on benefits and the ease with which they can use digital payments.
4. Determine the respondents' degree of confidence and security when doing digital transactions.

SCOPE OF THE STUDY

The major goal of this study is to look at how respondents' age, gender, and work position affect characteristics like the most often used payment apps, benefits and convenience of use, awareness, trust, and level of security when completing digital transactions. We may learn about the preferences of 120 respondents in the Chennai region when it comes to digital payments, as well as their level of satisfaction and knowledge of digital mechanisms, through this study. This would give us a good indication of which payment system people prefer and why, as well as how to improve digital payments.

2. LITERATURE REVIEW

Vally and Divya (2018) presented "A study on digital payments in India with a customer adoption perspective." The study's goal is to look at how respondents' age affects their use of digital payments, as well as to look at how customers' education affects their use of digital payments. The study took place in the Hyderabad region, and primary data was collected from a sample of 200 people, of whom 183 responded. The combined outcome provides a significant policy direction for the country in terms of increasing cashless payments.

According to Kumari and Khanna (2017), the cashless economy plan will assist developing economies significantly; thus, the cashless system will aid in the battle against corruption and money laundering. One of the most important contributions of the cashless economy is that it is predicted to dramatically minimize the risks associated with carrying cash, such as cash loss, theft, and armed robbery. They've also made the case for a beneficial link between cashless transactions and economic growth.

Karthika and Haresh (2018) conducted a study on, "Cashless economy in India". The main objective of the study is to analyse the growth of Digital Payment System in India, to study the recent developments in Digital Payment Systems in India and to understand the regulatory environment governing the Digital Payment System. The main tool used in this study was the descriptive methodology through collecting secondary data. This study has been concluded that the adoption of mobile payment is most convenient for small payments and purchasing digital content and services. But for mobile payments, there are many disadvantages such as the complicated procedure for registration, need for maintenance of separate financial accounts, increased the cost of the transaction, and high premium pricing and various security risks are frauds, data theft, privacy concerns, and user and device authentication.

3. RESEARCH METHODOLOGY

The present study is carried out in Chennai district and 120 consumers are selected by using simple random sampling method. The percentages are calculated to understand Demographic profile of consumers. The Chi-Square, T-Test, H-Test and ANOVA (Analysis of Variance) test are done to inspect difference between demographic factors of consumers and their perception towards digital payment. The data collected from respondents using google form questionnaire.

Sampling Plan

Sampling unit

Target population has been defined and surveyed. In this research the sampling unit was the customers who have been using the digital payment modes.

Sampling method

The sampling method used in this study is Simple Random Sampling.

Sample size

In this survey the sample size decided was 120.

Sampling procedure

In order to reach the aim a descriptive survey research method was used for this study. Data was collected using structured questionnaire method. Questionnaire was sent to 120 respondents. The respondents were categorized on the basis of gender, age, education, annual income and profession. There had been no personal bias or distortions were allowed while recording the responses.

Research and statistical tools employed

The research and statistical tools employed in this study are CHI-SQUARE, T- TEST, ANOVA, H- TEST in order to get the statistical result from the respondents. SPSS 23 was used to perform statistical analysis. The responses from the respondents were analyzed using the simple percentage analysis, Chi square test, T-test, H-test, ANNOVA.

4. DATA ANALYSIS AND INTERPRETATION

Demographical Profile of the respondents

Factors	Classification	Frequency	Percent
Gender	Male	101	84.20
	Female	19	15.80
	Total	120	100
Age	18-30 years	115	95.80
	31-40 years	3	2.50
	41-50 years	2	1.70
	Total	120	100
Educational Qualification	No schooling completed	2	1.70
	Bachelor's	33	27.50
	Master's	66	55.00
	Professionals	19	15.80
	Total	120	100
Employment Status	Student	92	76.70
	Private sector	20	16.70
	Self-employed/Business	8	6.70
	Total	120	100
Income	up to Rs.20,000	66	55.00
	Rs.20,000- Rs.30,000	21	17.50
	Rs.30,000-Rs.40,000	8	6.70
	Rs.40,000-Rs.50,000	10	8.30
	Rs.50,000 & above	15	12.50
	Total	120	100

INTERPRETATION

It is inferred from the above table that out of 120 respondents taken for the study 84.20% of the respondents are males while 15.80% of the respondents are females. 95.80% of the respondents are in the age group 18-30 years, 2.50% of the respondents are in the age of 31-40 years and 1.70% of the respondents are in the age of 41-50 years. When it comes to Educational Qualification 55.00% of the respondents are Master's followed by Bachelor's 27.50%, professionals 15.80% and 1.70% of the respondents haven't completed schooling. 76.70% of the respondents are students, 16.70% of the respondents are private sector employees and self-employed/Business people 6.70%. 55% of the respondents belong to monthly income group of up to Rs.20,000 followed by Rs.20,000- Rs.30,000 17.50%, Rs.30,000-Rs.40,000 6.70%, Rs.40,000-Rs.50,000 8.30%, and Rs.50,000 & above 12.50%.

CHI-SQUARE TEST

Association between gender of the respondents and most used digital payments apps.

Null Hypothesis (H₀): There is no association between mostly used payment apps and gender of the respondents.

Alternate Hypothesis (H₁): There is an association between mostly used payment apps and gender of the respondents.

MOSTLY USED APPS FOR MAKING PAYMENTS * GENDER Crosstabulation Count

	GENDER		Total
	Female	Male	
MOSTLY USED APPS FOR MAKING PAYMENTS			
Paytm	4	10	14
PhonePe	1	21	22
Google pay	11	64	75
Amazon pay	0	2	2
BHIM	0	2	2
I don't use payment apps for making transaction	3	2	5
Total	19	101	120

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	11.956 ^a	5	.035
Likelihood Ratio	10.705	5	.058
Linear-by-Linear Association	1.245	1	.264
N of Valid Cases	120		

a. 8 cells (66.7%) have expected count less than 5. The minimum expected count is .32.

INTERPRETATION:

Pearson Chi-Square value is 0.035 which is lesser than 0.05, reject Null hypothesis. Hence it is considered that there is an association between mostly used payment apps and gender of the respondents.

ANOVA TEST

Analysis of variance between benefits & ease of using digital payments and age of the respondents.

Null Hypothesis (H₀): There is no significant difference between benefits & ease of using digital payments system and age of the respondents.

Alternate Hypothesis (H₁): There is significant difference between benefits & ease of using digital payments system and age of the respondents.

ANOVA

Benefits & ease of using Digital payments system	Sum of Squares	df	Mean Square	F	Sig.
DIGITAL PAYMENTS SYSTEM SAVES TIME&COST					
Between Groups	1.831	2	.915	1.810	.038
Within Groups	59.161	117	.506		
Total	60.992	119			
BILLING&TRANSACTIONS ARE HANDLED ACUURATELY					
Between Groups	4.526	2	2.263	3.878	.023
Within Groups	68.274	117	.584		
Total	72.800	119			
DIGITAL PAYMENTS IS BETTER THAN TRADITIONAL SYSTEM					
Between Groups	4.144	2	2.072	3.256	.042
Within Groups	74.448	117	.636		
Total	78.592	119			

STRUCTURE & CONTENT OF DIGITAL PAYMENTS IS EASY	Between Groups	5.260	2	2.630	3.494	.034
	Within Groups	88.065	117	.753		
	Total	93.325	119			
INFLUENCE OF USER-FRIENDLY DIGITAL PAYMENT SYSTEM	Between Groups	5.871	2	2.936	2.872	.041
	Within Groups	119.596	117	1.022		
	Total	125.467	119			

INTERPRETATION:

Since p value is lesser than 0.05. Hence reject null hypothesis. There is a significant difference between benefits & ease of using digital payments system and age of the respondents.

Kruskal-Wallis Test

Kruskal-Wallis test between employment status and awareness level of the respondents towards digital payments.

Null Hypothesis (H₀): There is no significant difference between awareness about digital payments system and employment status of the respondents.

Alternate Hypothesis (H₁): There is a significant difference between awareness about digital payments system and employment status of the respondents.

Ranks

	EMPLOYMENT	N	Mean Rank
AWARENESS ABOUT DIGITAL PAYMENTS SYSTEM	Student	92	64.26
	Private Sector	20	49.40
	Self Employed/Business	8	45.00
	Total	120	

Test Statistics^{a,b}

	AWARENESS ABOUT DIGITAL PAYMENTS SYSTEM
Chi-Square	6.078
df	2
Asymp. Sig.	.038

a. Kruskal Wallis Test

b. Grouping Variable: EMPLOYMENT

INTERPRETATION:

Since p value is less than 0.05, reject null hypothesis. There is a significant difference between awareness about digital payments system and employment status of the respondents.

T-Test

Independent T-test between trust & level of security while making digital transactions and gender of the respondents.

Null Hypothesis (H₀): There is no significant difference between trust & level of security while making digital transactions and gender of the respondents.

Alternate Hypothesis (H₁): There is a significant difference between trust & level of security while making digital transactions and gender of the

respondents

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
INFLUENCE OF MATTERS OF SECURITY IN USING DIGITAL PAYMENT SYSTEM	Equal variances assumed	6.474	.012	.835	118	.405	.215	.257	-.294	.724
	Equal variances not assumed			1.032	32.182	.310	.215	.208	-.209	.638
TRUST ON PROTECTING PRIVACY	Equal variances assumed	.488	.436	-.772	118	.442	-.174	.225	-.619	.272
	Equal variances not assumed			-.696	23.295	.493	-.174	.249	-.689	.342
TRUST ON NOT LEADING TO TRANSACTION FRAUD	Equal variances assumed	1.325	.252	-.363	118	.717	-.075	.205	-.481	.332
	Equal variances not assumed			-.415	28.997	.681	-.075	.180	-.442	.293
RISK ASSOCIATED IS LOW	Equal variances assumed	.990	.322	-.547	118	.585	-.130	.238	-.602	.341
	Equal variances not assumed			-.495	23.338	.625	-.130	.263	-.674	.413
CHOOSING TRUSTED & SECURE DIGITAL PAYMENTS SYSTEM	Equal variances assumed	.329	.367	1.139	118	.257	.241	.211	-.178	.659
	Equal variances not assumed			1.215	26.855	.235	.241	.198	-.166	.648

INTERPRETATION:

Since p value is less than 0.05, reject null hypothesis. There is a significant difference between trust & level of security while making digital transactions and gender of the respondents.

5. SUMMARY OF FINDINGS

- About 84.2% of the respondents are male.
- About 95.8% of the respondents belong to 18-30 age category.

- Majority of the respondent's educational qualification is master's with 55%.
- Majority of the respondents are students with 76.7%.
- About 55% of the respondents earn up to Rs.20,000 per month.
- Almost 50% of the respondents are fully aware about digital payments system.

From chi-square test

- There is an association between mostly used payment apps and gender of the respondents.

From ANOVA

- There is a significant difference between benefits & ease of using digital payments system and age of the respondents.

From Kruskal-Wallis test

- There is a significant difference between awareness about digital payments system and employment status of the respondents.

From T-TEST

- There is a significant difference between trust & level of security while making digital transactions and gender of the respondents.

SUGGESTIONS

Following are some suggestions to overcome the problems faced by public after demonetization and government promoting digital payment systems rather than using cash.

- More awareness should be created amongst people regarding various modes of digital payments system.
- Necessary steps should be taken in order to increase the respondent's frequency of making digital transactions.
- Care should be taken in reducing the risk associated with digital payments.
- People should be informed and educated about various digital payment methods and usage of mobile technology to access digital facilities.
- Necessary steps should be taken in making India a cashless economy.
- Care should be taken in reducing the risk associated with digital payments.
- The legal framework should be quick enough to punish the culprits as well as proper IT mechanism should exist to avoid any frauds and to ensure the security.

CONCLUSION

India is gradually transitioning from a cash-centric to digital economy. The future of digital payment is very bright. India is experiencing a remarkable growth in digital payment system. The whole country is undergoing the process of modernization in money transactions, with digital payment services gaining unprecedented momentum. The government has also supporting digital payments a lot. Government of India has also pushed several payment apps for digital payment and encouraging everyone to do transaction with digital payment system.

From the above findings, it is concluded that half of consumers have moderate level of perception towards digital payment. Significant difference exists between perception of consumers towards digital payment and their socioeconomic status. The efficiency, safe and secured, convenient, cost and time savings, user friendly, easiness and protection of privacy of digital payment have positive and significant influence on the rate of adoption of digital payment of consumers. Therefore, digital payment system should be strengthened to improve safety and security of financial transactions of consumers and it must be simplified and make it user friendly. In addition, digital payment system should minimize risk associated with transactions of consumers and it must adopt appropriate measures to overcome undue delay in its processes.

The digital transaction is not only safer than the cash transaction but is less time consuming and not a trouble of carrying and trouble of wear and tear like paper money. It also helps in record of the all the transaction done. There are many difficulties in implementing the idea of digital economy like in India where a large number of people are living in rural area and under misery and poverty, yet a beginning had to be made someday. Today, there is a sea change in the mindset of people with regard to digital means of monetary dealing which are safe, easy, convenient and transparent.

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