

A Study on Customer Satisfaction and Awareness on Digital Payment Systems at Kottayam District

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1. Introduction

Nowadays we can see that the tremendous growth in use of internet banking and mobile phone in India. Digital payment is a way of payment which is made through digital modes. In digital payments, payer and payee both use digital modes to send and receive money. India is moving forward on the way of the most significant digital revolution and digital payment system will be an important landmark in the regime of cashless economy in the coming years. Digital payment system is an electronic medium that allows consumers to make electronic commerce transactions for their purchase and also financial transactions. The development of the digital payment in India is anticipated to be driven by digital payment service providers, effective banking regulatory mechanism and experience of consumers and these are also growth enhancing factors for digital payment in India.

Digital payment system has remarkable momentum particularly after demonetization in India. The government of India is taking various steps for efficient utilization of digital payment platforms to wipe out corruption and black money from the Indian economic system. Presently, around 60 per cent of the transactions in India are taken place through digital platforms. Though digital payment is generally accepted by the public, there are few criticisms about processing of digital payment system. To popularize and speed up of adoption of digital payment, there are many number of digital payment systems are launched in India. It has been said that the announcement of demonetization by Prime Minister Mr. Narendra Modi is divisive move to root out corruption from the society. The move will not only have transforming effect on the economy but will also pave the way for a more honest, digital and modern India.

Indian government and private sector companies such as paytm, freecharge, Vodafone's mpesa, Airtel's Airtel money and mobiwik has been aggressively pushing several digital payment applications, including Aadhar Payment app and the national payments corporation of India (NPCI) developed the Bharath Interface for money app (BHIM) app.

There are number of facilitators which are leading to the growth of digital payment and transition from cashless economy to less cash economy. These facilitators include penetration of internet connectivity on smart phones, non-banking financial institution facilitating digital payment, one touch payment, rise of financial technology sector and push by government either by giving incentives or tax breaks. These all factors are creating positive atmosphere for growth of digital payments. With this backdrop, it is imperative to study the Customer satisfaction and awareness on digital payment system in Kottayam district.

2. Statement Of The Problem

In today world mobile users can nowadays use their smart phones to make money transactions or payment by using applications installed in the phones. The last decade has been seen tremendous growth in use of internet and mobile phones in India. Electronic consumer transaction made at point of sale (POS) for services and products through internet banking or mobile banking using Smartphone or card payments are called as digital payment. Hence the topic of the study is stated as "A study on customer satisfaction and awareness on digital payment systems at Kottayam district".

3. Objectives Of The Study

- To find out whether the customers are satisfied with the digital payment systems.
- To analyze the awareness level of customers about digital payment systems.
- To evaluate the priority of the customers about digital payment systems.
- To check whether the customers face any problem in dealing with DPS and to makesuggestions

4. Scope Of The Study

The study is conducted at Kottayam district. The scope of the study covers the people who use digital payment system. Maximum efforts have been made to ensure that the sample selected represent different categories of people in all respects. So sample selected for the study include respondents from different walks of life and area. The study focuses on understanding customer satisfaction and awareness of DPS.

5. Research Methodology

Collection of Data

Both primary and secondary data are used for conducting the study

Primary data

Primary data is collected from students, farmers, businessman etc...by issuing questionnaire specifically designed for the study.

Secondary Data

Secondary data were collected from various published and unpublished sources, magazines, journals and internet etc.

Sampling design

The required data for the study has been collected from a sample of 100 customers at Kottayam district by using a structured questionnaire specifically designed for the study.

Sample size

A sample size of 100 respondents was selected for this research study.

Tools used for the study

The data collected were analyzed by using appropriate statistical and mathematical techniques. Test of ANOVA, Percentage, pie diagram, bar charts, graph etc were used to present the data in simple manner.

Questionnaire

This study includes both open-ended and close-ended questions

Hypothesis

The study is based on the following hypothesis:

- a. There is no significant difference between age and awareness of customer in DPS
- b. There is no significant difference between occupation and degree of satisfaction of the respondents in DPS

6. Digital Payment Sytem

The Government of India has been taking several measures to promote and encourage digital payments in the country. As part of the 'Digital India' campaign, the government aims to create a 'digitally empowered' economy that is 'Faceless, Paperless, and Cashless'. There are various types and modes of digital payments. Some of these include the use of debit/credit cards, internet banking, mobile wallets, digital payment apps, Unified Payments Interface (UPI) service, Unstructured Supplementary Service Data (USSD), Bank prepaid cards, mobile banking, etc. The last decade has seen tremendous growth in use of internet and mobile phone in India. Increasing use of internet, mobile penetration and government initiative such as Digital India are acting as catalyst which leads to exponential growth in use of digital payment.

India is heading on the path of a major digital revolution. The future economy will be driven by

cashless transaction which will be possible only through digitalization of payment mechanism at different location such as smart phone, internet banking, card transaction etc.

7. Digital Vs Electronic Payments

Neither term has a standard definition; but both are generally used to mean the same thing—transfers of value which are initiated and/or received using electronic devices and channels to transmit the instructions. Hence in this manual they are interchangeable. Note that digitizing is often applied to processes other than payments: hence a government could digitize its accounting system, but still make payments by paper (check or cash)

Types of Digital Payment Methods in India

1. Banking cards
2. USSD
3. Aadhar Enabled Payment System (AEPS)
4. UPI
5. Mobile Wallets
6. Bank pre-paid cards
7. Point of Sale (PoS)
8. Mobile Banking
9. Internet banking
10. Bharat Interface for Money (BHIM) app
11. Digital payment apps

What is a Digital Payment

To put it in simple words, a digital payment occurs when goods or services are purchased through the use of various electronic mediums. There is no use of cash or cheques in this type of payment method.

What is a Cashless Economy

In a cashless economy, all transactions are carried out using different types of payment methods and this does not involve the physical use of money for the purchase of various goods and services.

1. Banking cards:

Cards are among the most widely used payment methods and come with various features and benefits such as security of payments, convenience, etc. The main advantage of debit/credit or prepaid banking cards is that they can be used to make other types of digital payments. For example, customers can store card information in digital payment apps or mobile wallets to make a cashless payment. Some of the most reputed and well-known card payment systems are Visa, RuPay and MasterCard, among others. Banking cards can be used for online purchases, in digital payment apps, PoS machines, online transactions, etc.

How to get banking cards?

1. Apply with your respective bank and provide Know Your Customer (KYC) details
2. The card will get activated within a week and you will be allotted a 4-digit pin, which can be used for all transactions

2. USSD:

Another type of digital payment method, *99#, can be used to carry out mobile transactions without downloading any app. These types of payments can also be made with no mobile data facility. This facility is backed by the USSD along with the National Payments Corporation of India (NPCI). The main aim of this type of digital payment service is to create an environment of inclusion among the underserved sections of society and integrate them into mainstream banking. This service can be used to initiate fund transfers, get a look at bank statements and make balance queries. Another advantage of this type of payment system is that it is also available in Hindi.

How to Use *99#?

- a. This service can be used by dialing *99#, after which the customer can interact with an interactive voice menu through their mobile screen.

- b. To use the service the mobile number of the customer should be the same as the one linked to the bank account
- c. The next step is to register for USSD, MMID (Mobile Number Identifier) and MPIN

3. AEPS:

Expanded as Aadhaar Enabled Payment System, AEPS can be used for all banking transactions such as balance enquiry, cash withdrawal, cash deposit, payment transactions, Aadhaar to Aadhaar fund transfers, etc. All transactions are carried out through a banking correspondent based on Aadhaar verification. There is no need to physically visit a branch, provide debit or credit cards, or even make a signature on a document. This service can only be availed if your Aadhaar number is registered with the bank where you hold an account. This is another initiative taken by the NPCI to promote digital payments in the country.

How to use AEPS?

- a. It is very simple to use AEPs, all you need to do is to provide the accurate Aadhaar number and the payment will be successfully made to the concerned merchant

4. UPI:

UPI is a type of interoperable payment system through which any customer holding any bank account can send and receive money through a UPI-based app. The service allows a user to link more than one bank account on a UPI app on their Smartphone to seamlessly initiate fund transfers and make collect requests on a 24/7 basis and on all 365 days a year. The main advantage of UPI is that it enables users to transfer money without a bank account or IFSC code. All you need is a Virtual Payment Address (VPA). There are many UPI apps in the market and it is available on both Android and iOS platforms. To use the service one should have a valid bank account and a registered mobile number, which is linked to the same bank account. There are no transaction charges for using UPI. Through this, a customer can send and receive money and make balance enquiries.

How to use UPI?

- a. Download the app on Android or iOS platform
- b. Register for the service by providing bank account details
- c. Create a VPA, get an MPIN

5. Mobile Wallets:

A mobile wallet is a type of virtual wallet service that can be used by downloading an app. The digital or mobile wallet stores bank account or debit/credit card information or bank account information in an encoded format to allow secure payments. One can also add money to a mobile wallet and use the same to make payments and purchase goods and services. This eliminated the need to use credit/debit cards or remember the CVV or 4-digit pin. Many banks in the country have launched e-wallet services and apart from banks, there are also many private players. Some of the mobile wallet apps in the market are Pay tm, Mobikwik, Free charge, etc. The various services offered by mobile wallets include sending and receiving money, making payments to merchants, online purchases, etc. Some mobile wallets may charge a certain transaction fee for the services offered.

How to use a mobile wallet?

- a. Download the app
- b. Register for the service by following instructions and providing all details
- c. Load money

6. Bank pre-paid cards:

A prepaid card is a type of payment instrument on to which you load money to make purchases. The type of card may not be linked to the bank account of the customer. However, a debit card issued by the bank is linked with the bank account of the customer.

How to Use a Prepaid Card?

- a. Apply for the card
- b. Get pin
- c. Load money from your bank account/debit card

7. PoS terminals:

Traditionally, PoS terminals referred to those that were installed at all stores where purchases were

made by customers using credit/debit cards. It is usually a hand held device that reads banking cards. However, with digitization the scope of PoS is expanding and this service is also available on mobile platforms and through internet browsers. There are different types of PoS terminals such as Physical PoS, Mobile PoS and Virtual PoS. Physical PoS terminals are the ones that are kept at shops and stores. On the other hand, mobile PoS terminals work through a tablet or Smartphone. This is advantageous for small time business owners as they do not have to invest in expensive electronic registers. Virtual PoS systems use web-based applications to process payments.

8. Internet Banking:

Internet banking refers to the process of carrying out banking transactions online. These may include many services such as transferring funds, opening a new fixed or recurring deposit, closing an account, etc. Internet banking is also referred to as e-banking or virtual banking. Internet banking is usually used to make online fund transfers via NEFT, RTGS or IMPS. Banks offer customers all types of banking services through their website and a customer can log into his/her account by using a username and password. Unlike visiting a physical bank, there are no time restrictions for internet banking services and they can be availed at any time and on all 365 days in a year. There is a wide scope for internet banking services.

9. Mobile Banking:

Mobile banking is referred to the process of carrying out financial transactions/banking transactions through a Smartphone. The scope of mobile banking is only expanding with the introduction of many mobile wallets, digital payment apps and other services like the UPI. Many banks have their own apps and customers can download the same to carry out banking transactions at the click of a button. Mobile banking is a wide term used for the extensive range or umbrella of services that can be availed under this.

10. Bharat Interface for Money (BHIM) app:

The BHIM app allows users to make payments using the UPI application. This also works in collaboration with UPI and transactions can be carried out using a VPA. One can link his/her bank account with the BHIM interface easily. It is also possible to link multiple bank accounts. The BHIM app can be used by anyone who has a mobile number, debit card and a valid bank account. Money can be sent to different bank accounts, virtual addresses or to an Aadhaar number. There are also many banks that have collaborated with the NPCI and BHIM to allow customers to use this interface.

How to Use BHIM App?

- a. Download and install the BHIM app
- b. Choose a language

11. Digital Payment Apps

A. Google Pay

Google Pay launched in 2018 after Android Pay and Google Wallet merged. Google Pay can be used to make payments online, in store and to other people. The new Google Pay Send app will be up and running for UK and US users soon. Along with its rebrand from Pay with Google to Google Pay in January 2018, the payment system merged its Android Pay and Google Wallet services and was launched a month later. The update to Android Pay resulted in new functionalities being introduced that ensured that processes were ubiquitous at point-of-sale systems and online. Google also redesigned Google Wallet and it is now called Google Pay Send.

B. Pay tm

Pay tm (Meaning Pay through mobile and pronounced similar to ATM) is an Indian e-commerce payment system and financial technology company, based in Noida, India.

Pay tm is currently available in 11 Indian languages and offers online use-cases like mobile recharges, utility bill payments, travel, movies, and events bookings as well as in-store payments at grocery stores, fruits and vegetable shops, restaurants, parking, tolls, pharmacies and educational institutions with the Pay tm QR code. California-based PayPal filed a case against Pay tm in the Indian trademark office for using a logo with a similar color combination to its own on 18 November 2016. As of January 2018, Pay tm is valued at \$10 billion. It is planning to launch its initial public offering (IPO) in 2022.

As per the company, over 7 million merchants across India use this QR code to accept payments directly into their bank account. The company also uses advertisements and paid promotional content to generate revenue.

8. Analysis And Presentation Of Data

For the purpose of analysis, data is collected through primary and secondary sources. Analysis of data means critical examination of the data group for the purpose of studying the characteristics of data under study and for determining the patterns of relationship among the variables relating to it. Interpretation refers to the technique of drawing inferences after analytical and experimental study.

Awareness Level Of Digital Payment System

The awareness level is different among customers. The following table shows distribution of respondents on the awareness in digital payment system:-

Awareness Level Of Digital Payment System		
Awareness	No. of Respondents	Percentage
Highly aware	13	13
Aware	47	47
Unaware	33	33
Highly unaware	7	7
Total	100	100

Source: Primary Data

The above analysis shows the awareness level of digital payment system. Out of the 100 respondents 13% were highly aware, 47% were aware, 33% were unaware and 7% were highly unaware of digital payment system. It can be concluded that most of the respondents were aware of digital payment system.

Preference About Various Digital Payment Systems

The following table shows the preference of respondents about various digital payment systems like Banking cards, Unstructured supplementary service data (USSD), Aadhaar Enabled Payment system (AEPS), Unified payment interface (UPI), mobile wallets, bank pre-paid cards, Point of sale (PoS), Internet banking, Mobile banking, Digital payment systems, and Bharath interface for money app (BHIM).

Preference About Various Digital Payment Systems

Digital payment systems	Excellent	Very good	Good	Poor	Total
Banking cards	43	40	10	7	100
Unstructured supplementary services	-	-	56	44	100
Aadhar enabled payment system	-	-	-	100	100
Unified payment interface	37	22	32	9	100
Mobile wallets	25	32	36	7	100
Bank prepaid cards	17	15	26	42	100
Point of Sale	-	-	-	100	100
Internet banking	34	48	15	3	100
Mobile banking	43	36	21	-	100
Digital payment apps	56	40	4	-	100
Bharath interface for money app	-	-	-	100	100

Source: Primary Data

The following are the conclusions drawn from above analysis

- The respondent's opinion regarding Banking cards: 43% of the respondent's opinion is excellent, 40% of the respondents is very good, 10% of the respondents opinion is good and 7% of the respondents has poor opinion.
- The respondent's opinion regarding unstructured supplementary service data: 56% of the respondents opinion is good, 44% of the respondents has poor opinion.
- The respondent's opinion regarding aadhaar enabled payment system: 100% of the respondents have poor opinion.
- The respondent's opinion regarding Unified payment interface: 37% of the respondent's opinion is excellent, 22% of the respondent's opinion is very good, 32% of respondent's opinion is good and 9% of respondents has poor opinion.
- The respondent's opinion regarding Mobile wallets: 25% of respondent's opinion is Excellent, 32% of respondent's opinion is very good, 36 % of respondent's opinion is good and 7% of respondents have poor opinion.
- The respondents opinion regarding Bank prepaid cards:17% of the respondents opinion is Excellent,15%of respondents opinion is very good,26% of respondents is good and 42% respondents has poor opinion.
- The respondent's opinion regarding point of sale: 100% of respondents have poor opinion.
- The respondent's opinion regarding Internet banking: 34% of the respondent's opinion is Excellent, 48% of the respondents is very good, 15% of respondents opinion is good and 3% of respondents has poor opinion.
- The respondent's opinion regarding mobile banking: 43% of respondent's opinion is excellent, 36% of the respondent's opinion is very good, 21% of respondent's opinion is good.
- The respondent's opinion regarding digital payment apps: 56% of the respondent's opinion is Excellent, 40% of respondent's opinion is very good and 4% of respondents have good opinion.
- The respondent's opinion regarding Bharath interface for money app: 100% of respondents has poor opinion.

Difficulties In Dealing With Digital Payment System

This following table shows the respondents feel any difficulties in dealing with digitalpayment system.

Difficulties In Dealing With Digital Payment Sytem

Any discomfort	No . of respondents	Percentage
Yes	17	17
No	83	83
Total	100	100

Source: Primary Data

The above analysis shows that 17% of respondents feel difficulties in dealing with digital payment system and majority of respondents i.e. 83% do not felt any difficulties in dealing with digital payment system.

Satisfaction Level Of Digital Payment Systems

This table shows the satisfaction level of digital payment systems.

Satisfaction Level Of Digital Payment Systems

Satisfaction level	No .of respondents	percentage
Highly satisfied	28	28
Satisfied	45	45
Dissatisfied	22	22
Highly dissatisfied	5	5
Total	100	100

Source: Primary Data

The above table shows that satisfaction level of digital payment system among respondents. Out of the 100 respondents 28% are highly satisfied, 45% are satisfied, 22% are dissatisfied and 5% are highly dissatisfied. Therefore it can be concluded from the tablethat most of the respondents are satisfied.

9. Testing Of Hypothesis

Age And Awareness Level Of Digital Payment System

The following table shows the relationship between age and awareness level ofdigital payment system. For this, respondents are classified according to their age groups.

Table 3.17

Age And Awareness Level Of Digital Payment System

Awareness of DPS	Age	Below 20	20-30	30-40	40-50	Above 50	Total
Highly aware		5	10	18	4	1	38
Aware		3	23	22	5	2	55
Unaware		-	2	-	3	3	7
Highly unaware		-	-	-	-	-	-
Total		8	35	40	12	5	100

Source: Primary Data

One way analysis of variance is used to test the significance of age in the awarenesslevel of digital payment system.

Null Hypothesis: There is no significant difference between age of respondents andawareness level of digital payment system.

Alternative Hypothesis: There is significant difference between age of respondents andawareness level of digital payment systems.

Table 3.18
ANOVA TABLE 1

Source of variation	Sum of square	Degree of freedom	Mean square	F-ratio
Between samples	621.66	4	621.66/4=155.4	8.68
Within samples	143.11	8	143.11/8=17.89	
Total	764.77	12		

F-Value=155.4/17.89=8.68

F Value at 5 percent significance (from the table)=3.84

The calculated value of F (=8.68) is more than the table value at 5 percent level of significance. Therefore Alternative hypothesis is accepted and it is concluded that **there is significant difference between age of respondents and awareness level of digitalpayment systems.**

Occupation And Degree Of Satisfaction Of Digital Payment System

The following table shows the relationship between occupation and degree of satisfaction of digital payment system .For this, the respondents are classified according to their occupational status.

Table 3.19
Occupation Wise Analysis Of Degree Of Satisfaction

Degree of satisfaction	Occupation	Student	Home maker	Business	Professionals	Others	Total
Highly satisfied		10	-	12	14	1	37
Satisfied		9	3	15	20	-	47
Dissatisfied		2	-	3	3	2	10
Highly Dissatisfied		-	-	2	4	-	6
Total		21	3	32	41	3	100

Source: Primary data

One way analysis of variance is used to test the significance of occupation in thedegree of satisfaction of digital payment system.

Null Hypothesis: There is no significant difference between occupation of respondents anddegree of satisfaction.

Alternative Hypothesis: There is significant difference between occupation of respondents and degree of satisfaction.

Table 3.20
ANOVA TABLE 2

Source of variation	Sum of square	Degree of freedom	Mean square	F-ratio
Between samples	186.75	4	186.75/4=46.68	1.39
Within samples	300.95	9	300.95/9=33.44	
Total	487.7	13		

F Value=46.68/33.44=1.39

F Value at 5 percent significance (from the table) =3.63

The calculated value of F i.e. 1.39 is less than the table value at 5 percent level of significance. Therefore Null Hypothesis is accepted and it is concluded that **there is no significant difference between occupation of respondents and degree of satisfaction of digital payment system.**

10. Findings, Suggestions & Conclusion

The data collected from DPS customers through the questionnaire were analyzed and the hypotheses set were tested. The study is mainly aimed at measuring the awareness and satisfaction of customers about DPS and to evaluate their opinion regarding DPS. This study provides more importance to the helpfulness of DPS among the customers.

Major Findings of the Study

Out of the 100 respondents 28% are highly satisfied, 45% are satisfied, 22% are dissatisfied and 5% are highly dissatisfied. Therefore it can be concluded that the respondents are satisfied

Out of the 100 respondents 13% were highly aware, 47% were aware, 33% were unaware and 7% were highly unaware of digital payment system. It can be concluded that most of the respondents were aware of digital payment system.

The following are the conclusions drawn from above analysis:

- The respondent's opinion regarding Banking cards: 43% of the respondent's opinion is excellent, 40% of the respondents is very good, 10% of the respondents opinion is good and 7% of the respondents has poor opinion.
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- The respondent's opinion regarding Bharath interface for money app: 100% of respondents has poor opinion.

Suggestions

- To achieve the desired results, a massive awareness generation campaign should be launched.
- To make the DPS more useful the educationally backward group, training programme should be conducted.
- Officials associated with the DPS should be more accountable
- Massive advertisement should be provided to the customers for the easy use of DPS.
- Steps shall be taken to provide better information to the customers for DPS.

The DPS is quicker, active and the system functions well. From the study, it is evident that 41 Percent of the respondents are professionals and they are much aware of Digital payment systems. Further the respondents are of the opinion that the DPS is highly useful for reducing the cost of transactions. However respondents are on the view that the awareness level of DPS is comparatively low. So it needs an improvement to popularize the DPS.