

# Demographic Segmentation's impact on Consumer Perceptions towards Digital Payments System Post Demonetization

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**Article Info****Volume 82****Page Number: 6377 - 6385****Publication Issue:****January-February 2020****Abstract:**

Digital India has gained importance as the government is promoting cashless payments. During the phase of demonetization there was turmoil in the Indian economy. Cash transaction become limited as new currency notes were introduced and the old ones were scrapped. The option left with the general public was going for digital payments. This paper is and attempts to analyse the consumer perception as to how the demographic parameters have an effect on the various attributes when it comes to digital payment system. There were prevalent digital system payment and how did it cater to the public. Primary data was collected from 182 respondents from Nagpur city and nearby areas of Nagpur city. Hypothesis was framed and these hypotheses were tested using ANOVA and to test the data reliability Cronbach's Alpha was used. Using ANOVA for testing it became very clear that there is a substantial variance seen with respect to the demographic factors except in case of gender no substantial variance is seen by the respondents towards digital payment system.

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**Introduction**

Demonetization was a shock to the Indian economy. It came all of a sudden and there was a panic situation in the country. A democratic country like India took a courageous step where in all the currency units worth 500/- and 1000/- became invalid at the stroke of midnight on 8<sup>th</sup> November, 2016. The Government then was more intent towards cashless economy, online transactions to control the black money which was in circulation

within the country. The move of the government brought the economy to a shuddering halt. Long queues outside the banks, at the ATM counters were seen and moreover the public was finding it difficult to transact at shops and other counters. The choice to demonetize high value currency bills was a significant move to push the Indians towards digital payment. Though the Indian government has been successful in pushing up the digital transaction since demonetization as there is a significant increase in digital payments

raging from 400 to 1000% and this change has opened up the market for different payment modes as many Indians did not have access to debit/credit cards. This segment of population was finding it difficult to transact business as very few options were available to them. Taking the current scenario into consideration the government had to take up steps to come over this issue to digital payments and so India's Central bank (RBI) along with National Payments Corporation of India launched UPI which gave a consumer to have optional accounts which were directly linked to their mobile sets via banks and other financial institutions offering varied services.. Digital India was another step towards cashless economy by the government an initiative to render services to the customers through their mobile handsets with good connectivity and Wi-Fi throughout the nation thus motivating the Indian population to go online and utilise digital payments modes of payments.

As per the report of TRAI 82 out of 100 citizens in India owned a mobile phone as on 30<sup>th</sup> September 2016, and with significant reduction in call and data rates and easy availability of smart phone at affordable prices propelled the shift towards cashless economy.

India witnessed a threefold increase in the downloading of leading mobile wallet app within few days of demonetisation was declared and large proportion of the Indian citizens started using credit and debit cards post demonetisation. There was an increase of about 31% in app usage and more than 50% increase in download of wallets of leading banks. The smart phone was one of the key factors which encourage digital payments for various services which were rendered to the customers.

## ONLINE PAYMENT APP

### Top 5 Mobile Wallets in India for Online Payments

The government of India is taking steps to promote online payments through debit cards, credit cards and electronic wallets to promote digital India campaign and thus giving every Indian an option to go cashless. Various options are available to every Indian citizen of which few are mentioned below.

- **Paytm**

Paytm allows the customers to make immediate payments of their bills let it be mobile recharge, electricity bills or any other transactions even as small as taxi bills, Paytm gave the customers an option to hard cash. The app launched by Paytm is very popular among the customers who would like to go cashless.

#### **OxiGen**

OxiGen is another digital service provider which allows the customers in India to make online transactions such as bill payments recharge money transfer with the help of the banks and its app and is placed at Gurgaon India it is among the first non-bank wallet which is being approved by RBI.

- **FreeCharge**

Another electronic commerce site allows customers to pay bills, recharge and also allows the customers to book their travel tickets and pay for their broadband services.

- **MobiKwik**

MobiKwik is another wallet that allows bill payments and it also allows loading money with the help of credit card or even debiting card

- **BHIM E Wallet**

BHIM app is another e-wallet which gives the customer an advantage of using digital payment mode for their bills to be paid. Named after Dr. Bhimrao Ambedkar, Prime Minister Mode has launched this wallet for all users who are using android phones.

## **SIGNIFICANCE OF THE STUDY**

With the changing banking needs of the people, banks and big corporate houses providing payment options along with the Indian government the Indian customer can now use online payments system for their bill payments. With the promotion of digital India and cashless Bharat the government is emphasising the customer to use e-wallets for all possible transactions they are doing in their daily life. With banks as the service providers and with all legal transactions this will enhance the tax revenue for the government. It would be convenient for all if the cashless transaction is widely accepted. No hassle to carry cash and less risky. The use of mobile app has increased as a result of this. With demographic segmentations playing an important role it will help to know the actual use of e-wallets by all class of people.

## **RATIONALE OF STUDY**

This research studied various responses of different digital payment application users with an aim to analyze the customer satisfaction level. The paper also meant to recognize the challenges faced by the customers while using online payment system. The government of India is working on to push India towards cashless economy with major initiative such as

demonetization was taken to curb corruption and eradicate the ATM charges. This study will try to show the actual level of satisfaction experienced by the customers after using the online payment application such as Paytm, Bhim, OxiGen, Freecharge and MobiKwik. For the companies who are working in this regards will know where they lack and what more a customer is looking for and after working on which the companies may expect more loyal customers and mouth publicity that will bring more new customers.

## **LITERATURE REVIEW**

Shamsher Singh (December 2017) the main highlight was to know the consumer view point towards online payment with respect to the demographic factors such as gender, age, annual income, and profession. Education is the only factor influencing the choices regarding adoption of digital payment. People with minimum education qualification up to HSC are more techno-savvy and hence interested in using online payment mode. Acceptance of online payment is much higher in metropolitan cities. Areas in the city with higher education, increase the likelihood of higher use in digital payment application and the sales figures has also facilitate in adoption of digital payment as more and more customers are using smartphones

Dr. Venkateswararao Podile P. Rajesh (7, July 2017) studied both negative and positive sides taken into consideration. If we talk about the positive side of the cashless economy, it was found that respondents feel that cashless transaction are convenient to use and the offers and benefits are attractive. People found it more feasible to pay using digital applications as carrying cash at all time is not possible. On the negative side, it was found that people are facing many problems like security problems, lack of merchant willingness, poor network

coverage, higher charges and less awareness about technology. So finally if India wants to become a cashless economy government has to take actions so as to solve the problem faced by the customers.

Dhimen J. Jani (10 Jan 2018) found that people in Valsad city use BHIM application more than any other cashless systems like Net banking, Payumoney, Debit card, Freecharge, HDFC chiller, Google wallet, ICICI pocket, Credit card, Paytm, SBI Buddy etc. It was found that around 10 lakhs transactions are done through UPI. A new form of BHIM USSD 2.0 permits 350 million element telephone clients to take focal points of UPI. As per (Economic overview 2016-17 Vol.1)

S. NazimSha Dr. M. Rajeswari in their work stated that due to demonetisation and looking at the current scenario Paytm emerged as a major player among the competitors due to its presence in the system.

Digital Payments in India by Dorothy Sagayarani the focus was on what are the various ways through which cashless economy would be promoted, to do so it is up most significant to have a full proof security against the online fraud that are happening and good internet connectivity. People in rural areas are still unaware about the concept of cashless system. For cashless economy to prevail measures were suggested to the government and Reserve Bank of India for energizing cashless Also, time to time awareness program should be conducted to educate the people about the doles of electronic payments. From the study, it was observed that people are accepting the digital payment system as it reduces corruption, terrorism, money laundering etc.

K. Suma Vally and K. Hema Divya in their study advocates the importance of the rules, regulations and the policies to be

made as an approach that will help the customers to make more use of cashless payment systems which will enable the country to move towards the cashless economy if digital payment system is adopted.

Prasad Rajendra Byakod, Chaya U, Pooja Kulgude, Abhishek Sharma, Priyanka Singh and Chandra Sen Mazumdar comment that to provide increased impetus to the adoption of the DPS the difficulty in usage and security in transactions needs to be addressed which will encourage rural areas to adopt DPS

### CONSUMER PERCEPTION

Dr. R. Gokilavani, Mr. D.Venkatesh Kumar, Dr. M. Durgarani, Dr. R. Mahalakshmi (2018) stated that there is significant differences which exist between perception of consumer towards DPS and their socioeconomic status. Safe and secured mode of payment, efficiency of the payment system, convenient, savings in terms of price, user friendly and safeguard of confidentiality of DPS have an encouraging impact for acceptance of DPS among the customers..

Dr .K. Kamatchieswaran (March 2019) suggested that the demographic factors apart from the educational background of the people does not have much impact on the adoption of DPS which resulted in social changes further enhanced the acceptance of online payments. Taking into consideration the growth prospects of DPS in India investors are rearing to invest with this industry.

Dr. S. Yuvraj, Sheila Eveline. N (July 2018) says that there is increasing use of cashless payments systems against physical cash transactions. The concern of safe and secured systems is also highlighted as to how the consumers and banks and other agencies use and handle the information and other factors such as



privacy, security and convenience influence the consumers towards cashless transactions. Consumers must be able to adapt to the changing dynamics of DPS and move forward.

Akhila Pai H. (2018) comments on the consumer's awareness, perception and willingness to use digital wallets, as the internet connectivity has increased over a period of time smart phones usage has enhanced the digital wallet users. Young generation let it be students or employees are the ones who are using digital wallets regularly for making payments. Security concern and privacy is still an issue that cannot be neglected as users are more concern about their confidential information which can get shared easily on the net.

Dhanya B K (2019) suggests that digital payment mode is just a tool that facilitates transfer of value among the two parties. The physical factors of payment mode explains why transparency and decoupling of payment experience influence the emotional state

### **Perception of customers towards DPS**

**Easy to use:** DPS allows the user to connect their accounts so as to make payments there and then which is hassle free and is done in no time.

**Time saver:** as the transactions are done online the customers are allowed to make digital payments for their transactions which save on time as compared to physically paying off the bills

**Security:** the amount of security these wallets provide is quite high as the payments are made online and all the information pertaining to the transaction is kept safe it gives an option to the user about the virtual wallet to lock their wallets giving them high security.

**Rewards:** discounts, rewards and cash back are offered by most of the players.

### **Objectives of the study**

- To study the idea of digital transaction its impact and importance and ease of transactions with respect to the demographic factors.
- To study the consumer consciousness about digital payment system with respect to the demographic factors.
- To assess the customer trust & confidence in cashless transaction with respect to the demographic factors.
- To study the impact of rewards on consumer transactions with respect to the demographic factors.

### **Hypothesis development**

India is the second most populated country in the world. It is being said the India is a country of youth. In terms of this the demographic factors such as age, gender, education, income, occupation, family size, birth rate and death rate become important. From business point of view the demographic has considerable impact on the businesses in India. Taking these demographics into consideration the following hypothesis has been formulated.

**H01:** There exist no substantial dissimilarity in perception of the defendants DPS on the base of demographic factor such as sexual characteristics of the defendants.

**H02:** There exist no substantial dissimilarity in perception of the defendants DPS on the base of demographic factor such as age of the defendants.

**H03:** There exist no substantial dissimilarity in perception of the defendants DPS on the base of demographic factor such as qualification of the defendants.

**H04:** There exist no substantial dissimilarity in perception of the defendants DPS on the base of demographic factor such as occupation of the defendants.

**H05:** There exist no substantial dissimilarity in perception of the defendants DPS on the base of demographic factor such as financial status of the defendants.

### Research methodology

Primary data collected from 182 defendants from diverse parts of Nagpur district with the help of well-structured questionnaire designed was collected which intended towards the study of customer perception towards digital payment system. Responses were collected using 5 point Likert scale. The entire study is established on primary data.

**Sampling unit:** Customers using digital payment system were chosen as sample unit.

**Sample size:** 182 was the sample size for this research work.

Convenience sampling method was used to collect data. The respondents were asked pre-defined questions as listed in the questionnaire. Any question which needed clarification was explained to the respondents and there was no bias in collection of the responses from the respondents.

### Statistical tools used

Statistical tools used to study are ANOVA and Frequency Analysis. Cronbach's Alpha is used to test whether the data collected via questionnaire is reliable or not. For hypothesis testing ANOVA is used.

Table 1: Demographic Profile of the Respondent

Variable	Individualities	Occurrence	Percentage
<b>Gender</b>	Male	153	84
	Female	29	16
<b>Age Group</b>	18-25	20	11
	26-30	21	11
	31-35	58	32
	Above 35	83	46
<b>Education</b>	SSC	7	4
	HSC	53	29
	Graduate	84	46
	Post Graduate	38	21
<b>Occupation</b>	Student	8	4
	Salaried	109	60
	Self employed	49	27
	Not working	16	9
<b>Yearly Income</b>	Below Rs. 300000	47	26
	Rs. 300000-500000	42	23
	Rs. 500000-800000	65	36
	Above Rs. 800000	28	15

The above table 1 is the sample population who is using digital payment system for

transaction of business. 84% of the respondents are male as compared to

females who are 16%. If we look into the occupation part 87% of the sample population is salaried class is the combination of people working in private sector as well as government class where 46% of them are graduate and 21% are post graduate level sample and 89% of them are above 26 years of age with 59% of the sample is earning more than 300000 to 800000 rupees a year which is an ideal combination of the people who are using digital payments.

### Reliability and Validity

The below table 2 shows the acceptance of the data i.e. reliability of the data for which Cronbach's Alpha is used. The test measures the reliability among the assessment scales. The Cronbach's Alpha score of 1.0 indicates 100 percent reliability. The accepted score is generally 0.7 and the score here is 0.747 for perception of digital payments modes used by the respondents which shows that the

data is reliable and test could be performed.

**Case Processing Summary**

		N	%
Cases	Valid	182	86.3
	Excluded	29	13.7
	Total	211	100.0

a. List wise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.747	14

### Hypothesis Testing and ANNOVA Computation

To test the hypothesis ANNOVA is carried out. The table 3 below shows the testing of hypothesis with respect to gender, age, education, occupation and income for the respondents.

**Table 3: ANOVA Computation**

Particular	Gender		Age		Education		Occupation		Income	
	F	Sig.	F	Sig.	F	Sig.	F	Sig.	F	Sig.
I have used DPSapps for?	0.124	0.725	2.288	0.08	1.638	0.182	0.378	0.769	1.256	0.291
Using cashless payment system is a good idea.	0.03	0.862	0.95	0.418	0.753	0.522	1.903	0.131	5.297	0.002
Using online payment app is useful mode of payment.	1.115	0.293	1.039	0.376	4.447	0.005	3.819	0.011	6.175	0.001
Do you believe your information is kept confidential?	5.571	0.019	2.005	0.115	6.32	0	5.324	0.02	10.423	0
Do you think that using online payment app can save your time in performing banking transaction?	0.358	0.551	4.318	0.006	8.001	0	7.556	0	10.478	0
Digital payment app you feel is user friendly?	3.429	0.066	4.746	0.003	8.761	0	7.287	0	21.646	0
In terms of banking services do they offers wide range of options?	0.48	0.489	4.147	0.007	10.443	0	8.217	0	17.661	0

User interface is more attractive.	6.114	0.014	5.087	0.002	6.332	0	11.498	0	9.553	0
Do you think online payment apps can reduce corruption?	0.014	0.905	0.194	0.9	0.067	0.997	2.795	0.042	0.981	0.403

Hypothesis is tested with respect to the demographic parameters. The result of ANOVA shows that there is no significant difference for the attributes for digital payment system with respect to the gender i.e. for male and females so here we accept the Null hypothesis H01. Similarly the further computation of ANOVA does show a substantial variance with respect to age, education, occupation and income hence here we reject the hypothesis Ho2, Ho3, Ho4 and Ho5 where major parameters show a substantial variance with respect to age, education, occupation and income

To know the overall satisfaction achieved with respect to the perception on DPS a frequency analysis has been conducted on data that was collected through survey of 182 defendants with demographic segmentation as a base.

To support the satisfaction and perception of the respondents who strongly agree and agree are the supporting responses and responses who have strongly disagreed or disagree are least important. Neither the responses who have shown neutral behaviour they neither support nor they oppose the attributes.

### Frequency analysis

**Table 4 Showing Frequency Analysis**

Attributes	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Using DPS is a good idea.	35	96	36	13	2
Using online payment app is useful mode of payment.	29	79	39	25	10
Do you believe your information is kept confidential?	36	44	54	27	21
Do you think that using online payment app can save your time in performing banking transaction?	44	33	49	40	16
Digital payment app you feel is user friendly?	25	31	56	56	14
In terms of banking services do they offers wide range of options?	23	43	46	65	5
User interface is more attractive.	27	26	47	59	23

As seen in the above table majority of the respondents believe that digital payment system is a good idea as a preferred payment mode. Majority respondents still perceive that the payment apps are not user friendly as they at times find it hard to operate.

### Conclusion

Current research work done analysed how demographic parameters have an effect on the various attributes when it comes to digital payment system. Hypotheses were framed and these hypotheses were tested using



ANOVA and it became very clear that there is no substantial variance perceived by the respondents for the parameter of gender. But when it comes to age, occupation, education and income level there is a substantial difference. Hardly in one or two off cases the attributes has shown that there is no substantial variance in perception of the respondents. Demographics segmentation in a major aspect and the companies offering products to the customers can now frame marketing strategies to cater to the customers which will help them to maximise the output.

### **Future Scope of the Study**

Further scope to the research would be in terms of digital literacy that needs to be addressed with more and more digital transactions. Further study can be conducted on the initiatives taken to boost the digital transaction and the transparency maintained for the cash less economy.

### **References**

1. Akhila Pai H. (2018). Study on Consumer Perception towards Digital Wallets. IJRAR- International Journal Of Research And Analytical Reviews, Volume 5, Issue 3 I JULY – SEPT 2018
2. Ashish Baghla (2018). A Study on the Future of Digital Payments in India. IJRAR- International Journal Of Research And Analytical Reviews, Volume 5, Issue 4
3. Dhanya B K (2018). Consumer Perception of Digital Payment Mode International. Journal Of Research And Analytical Reviews (IJRAR), E-ISSN 2348-1269, P- ISSN 2349-5138
4. Dr. Venkateswararao Podile P. Rajesh (2017). Public Perception on Cashless Transaction in India. Asian Journal Or Research In Banking And Finance, Year 2017, Volume 7 Issue 7
5. K.Suma Vally, Dr. K.Hema Divya (2018). A Study on Digital Payments

in India with Perspective of Consumers Adoption. International Journal Of Pure And Applied Mathematics, Volume 118, No. 24