

## **A STUDY OF PREFERRED PAYMENT METHODS OF CONSUMERS SINCE THE OUTBREAK OF COVID-19 PANDEMIC ACROSS THE DEMOGRAPHIC FACTORS IN THANE CITY**

---

Dr. (Ms.) H.A.Chande\*

### **ABSTRACT**

*The banking industry in India has witnessed the technological innovation in products and services decades ago in the form of adoption of digital platform for performing various banking transactions. But never the less, it has encountered the use of digital banking in a massive scale and on the appeal of the government to fight with a dreadful and highly contagious disease named as COVID 19. The present study is conducted with an objective to know the preference of people residing in urban and rural parts of the country, in using the digital mode of payment during the lockdown period of COVID outbreak, before its occurrence and after the normalcy resume.*

**Keywords:** Banking Industry, Technological Innovation, Digital Platform, Digital Banking.

### **Introduction**

After the outbreak of Covid pandemic there is a change in preferred payment methods of consumers. Since the outbreak of Covid pandemic consumers have shifted to non-cash methods of payment. In present paper researcher attempts to find out preferred payment methods of consumers since the outbreak of Covid pandemic in relation to demographic factors such as Gender, Age group, Education, Occupation and Annual family Income of the respondents.

### **Literature Review**

Consumer's preferred payment methods are changing over time and since the outbreak of covid pandemic there is major shift in favour of online payments. (<https://www.paysafe.com/en/blog/how-covid-19-has-permanently-changed-payment-habits/>)

According to a survey conducted in 2020 to analyze the changing consumer sentiments concerning the Covid-19 pandemic in India, 85 percent of the respondents preferred to use contactless modes of payment like online transfers and other online wallets. (<https://www.statista.com/statistics/1177663/india-preferred-mode-of-payment-since-covid-19/>)

Consumer's payment behaviour is affected by demographic, psychological and geographic factors. Demographic factors like age, sex, income and education have major impact. During pandemic purchasing behaviour of consumers has changed due to decline in disposable income and they have become more careful with their expenses. (<https://notesmatic.com/effect-of-demographic-factors-on-consumer-behavior-age-sex-income-and-education/>)

According to Joanna Stavins (2016) Age, education, income, and race are significant factors in explaining payment behaviour of consumers. Consumers with less income and education have found to be adopted limited instruments for payment and majority of them relied on cash as a payment method. Women were found to be using less cash than men for payment Single people were found to be more dependent on cash payments. Regional differences in the payment methods were also found.

### **Research Methodology**

#### **Objective**

To study the preferred payment methods of consumers, since the outbreak of Covid pandemic across the demographic factors.

---

\* Associate Professor and Head, Department of Economics, Sheth N.K.T.T. College of Commerce and Sheth J.T.T. College of Arts, Thane, Maharashtra, India.

### Hypothesis

These are a significant association between the preferred payment methods since the outbreak of Covid pandemic across the demographic factors.

### Data Collection and Analysis

This study is based on primary data collected through a structured questionnaire from 60 residents of Thane city using simple random sampling. The required information was collected using Questionnaire. Data was analyzed using statistical tools. Secondary sources were also referred.

### Findings of a Survey

The primary data relevant to the study consists of demographic factors such as Gender, Age group, Education, Occupation and Annual family Income of the respondents. It is classified and presented in the table as below:

Demographics		Frequency	Percent
Age group	18 to 25 years	42	70.0
	25 to 40 years	3	5.0
	40 to 60 years	15	25.0
Education	10 <sup>th</sup> pass	2	3.3
	12 <sup>th</sup> pass	27	45.0
	Graduate	21	35.0
	Postgraduate	7	11.7
	Technical	1	1.7
	Other	2	3.3
Gender	Male	21	35.0
	Female	39	65.0
Annual family Income	Less than Rs 2 lacs	35	58.3
	Rs 2 lacs to Rs 4 lacs	13	21.7
	Rs 4 lacs to Rs 8 lacs	2	3.3
	Rs 8 lacs to Rs 15 lacs	6	10.0
	More than Rs 15 lacs	4	6.7
Occupation	Service	24	40.0
	Self-employed	18	30.0
	Others	18	30.0

The above table indicates that out of 60 respondents, 42 are aged between 18 to 25 years, 3 are aged between 25 to 40 years and 15 are aged between 40 to 60 years. With regard to education, out of these 60 respondents, 2 are 10<sup>th</sup> pass, 27 are 12<sup>th</sup> pass, 21 are graduates, 7 are postgraduates, 1 respondent is qualified in technical education, and 2 are educated in other degrees. Out of these 60 respondents, 21 are Male 39 are Female. 35 respondents have Less than Rs 2 lac as annual family income, annual family income of 13 respondents was reported between Rs 2 to Rs 4 lacs, 2 respondents have annual family between Rs 4 lacs to Rs 8 lacs, 6 have between Rs 8 lacs to Rs 15 lacs and 4 respondents have more than Rs 15 lacs of annual family income. Furthermore, 24 of these 60 respondents are in Service, 18 are self-employed and 18 have occupation in other fields. To investigate the objective to study the preferred payment method after Covid pandemic across the demographic factors following hypothesis is constructed and tested for statistical significance.

### Null Hypothesis H<sub>01</sub>

These is no significant association between the preferred payment methods of consumers since the outbreak of Covid pandemic across the demographic factors.

### Alternate Hypothesis H<sub>11</sub>

These is a significant association between the preferred payment methods of consumers since the outbreak of Covid pandemic across the demographic factors.

To test the above Null Hypothesis Chi-square test is applied and p value is calculated. Results are shown in the table below:

Demographic Factor	p-value	Result
Age	0.000	Significant
Education	0.001	Significant
Gender	0.053	Insignificant
Annual family Income	0.048	Significant
Occupation	0.396	Insignificant

The above results indicate calculated p-value for each demographic factors. It is less than 0.05 for Age, Education and Annual family income. Therefore, the test is rejected for the same. Hence Null hypothesis is rejected, and Alternate hypothesis is accepted for the demographic factors of Age, Education and Annual family income. Also, it can be noted that the p-value for Gender and Occupation is more than 0.05. Therefore, the test is accepted for the same. Hence null hypothesis is accepted, and Alternate hypothesis is rejected for the same. Therefore, it can be concluded that there is a significant association between the preferred payment methods since the outbreak of Covid pandemic across Age, Education and Annual family income, while there is no significant association between the preferred payment methods since the outbreak of Covid pandemic across Gender and Occupation. Findings indicate that the Mean rank for preferred payment methods since outbreak of Covid pandemic is significantly different across the Age, Education and Annual family income of the respondents. It is higher for online payment mode for all age groups, level of education and level of Annual income. This can be observed in the following table:

Best Preferred Payment Methods since Outbreak of the COVID-19 Crisis	Age			Total
	18 to 25 Years	25 to 40 Years	40 To 60 Years	
Cash/Cash on delivery	14	0	0	14
e-banking/mobile banking	9	0	3	12
Electronic payment cards (Debit, Credit, etc)	4	0	2	6
Mobile money	3	0	0	3
Online payments	10	1	10	21
Others	2	2	0	4
Total	42	3	15	60

The above table indicate that out of 60 respondents, 21 prefer online payment mode. Of these 21 respondents, 10 respondents are from age group 18 to 25 years, 1 is from age group 25 to 40 years and remaining 10 are from age group 40 to 60 years.

Best Preferred Payment Methods since Outbreak of the COVID-19 Crisis	Education						Total
	10th pass	12th pass	Graduate	Postgraduate	Technical	Others	
Cash/Cash on delivery	0	9	5	0	0	0	14
e-banking/mobile banking	0	6	3	3	0	0	12
Electronic payment cards (Debit, Credit, etc)	0	4	0	2	0	0	6
Mobile money	0	0	3	0	0	0	3
Online payments	2	6	10	2	1	0	21
Others	0	2	0	0	0	2	4
Total	2	27	21	7	1	2	60

The above table indicates that out of 60 respondents, 21 prefer online payment mode. Of these 21 respondents are 10<sup>th</sup> pass, 6 are 12<sup>th</sup> pass, 10 are graduates, 2 are postgraduates and 1 has technical level of education.

best preferred Payment methods since outbreak of the COVID-19 crisis	Approx. family income (per year)					Total
	Less than Rs 2 lacs	Rs 2 lacs to Rs 4 lacs	Rs 4 lacs to Rs 8 lacs	Rs 8 lacs to Rs 15 lacs	More than Rs 15 lacs	
Cash/Cash on delivery	13	1	0	0	0	14
e-banking/mobile banking	4	5	0	3	0	12
Electronic payment cards (Debit, Credit, etc)	2	2	0	0	2	6
Mobile money	3	0	0	0	0	3
Online payments	9	5	2	3	2	21
Others	4	0	0	0	0	4
Total	35	13	2	6	4	60

The above table indicate that out of 60 respondents, 21 prefer online payment mode. Of these 9 respondents have Annual family income of Less than Rs 2 lacs, 5 have annual family income between Rs 2 lacs to Rs 4 lacs, 2 have between Rs 4 lacs to Rs 8 lacs, 3 have between Rs 8 lacs to Rs 15 lacs and 2 respondents have more than Rs 15 lacs of annual family income. Mean rank for preferred payment methods since outbreak of Covid pandemic is not significantly different across the Gender and Occupation of the respondents. It is higher for online payment mode for all age groups, level of education and level of Annual income. This can be observed in the following table:

Best Preferred Payment Methods since Outbreak of the COVID-19 Crisis	Gender		Total
	Male	Female	
Cash/Cash on delivery	1	13	14
e-banking/mobile banking	3	9	12
Electronic payment cards (Debit, Credit, etc)	4	2	6
Mobile money	1	2	3
Online payments	11	10	21
Others	1	3	4
Total	21	39	60

The above table indicates that even though there are 21 respondents out of 60 for whom preferred mode is online payments, there is no significant difference found between male and female respondents preferring it.

Best Preferred Payment Methods since Outbreak of the COVID-19 Crisis	Occupation			Total
	Service	Self Employed	Other	
Cash/Cash on delivery	6	3	5	14
e-banking/mobile banking	3	4	5	12
Electronic payment cards (Debit, Credit, etc)	4	0	2	6
Mobile money	0	2	1	3
Online payments	10	8	3	21
Others	1	1	2	4
Total	24	18	18	60

The above table indicates that even though there are 21 respondents out of 60 for whom preferred mode is online payments, there is no significant difference in the Occupation of respondents preferring it.

### Conclusion

Since the outbreak of Covid pandemic, there is a significant association found between the preferred payment methods across Age, Education and Annual family income, while there is no significant difference found between male and female respondent's preferences and Occupation of the respondents preferring it.

### References

1. Angrisani, Marco, Kevin Foster, and Marcin Hitczenko. 2014. "The 2011–2012 Survey of Consumer Payment Choice: Technical Appendix." Federal Reserve Bank of Boston Research Data Report 14-2.
2. Joanna Stavins(2016) The Effect of Demographics on Payment Behavior: Panel Data with Sample Selection available at <https://www.bostonfed.org/publications/research-department-working-paper/2016/the-effect-of-demographics-on-payment-behavior-panel-data-with-sample-selection.aspx>
3. Schuh, Scott, and Joanna Stavins. 2010. "Why Are (Some) Consumers (Finally) Writing Fewer Checks? The Role of Payment Characteristics." *Journal of Banking and Finance* 34(8): 1745–1758
4. Schuh, Scott, and Joanna Stavins. 2013. "How Consumers Pay: Adoption and Use of Payments." *Accounting and Finance Research* 2(2).
5. <https://www.paysafe.com/en/blog/how-covid-19-has-permanently-changed-payment-habits/>
6. <https://www.statista.com/statistics/1177663/india-preferred-mode-of-payment-since-covid-19/>
7. <https://notesmatic.com/effect-of-demographic-factors-on-consumer-behavior-age-sex-income-and-education/>.

