

# A Study on the Alternative Modes of Payment in India

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**Abstract-** This article explores the alternative payment mechanism in India and consumers' perception and awareness of the same. The study has been conducted by reaching out to people of all age groups and studying their behaviour towards modes of payment through the use of personal interview and questionnaire. A descriptive research design has been followed to gather information of inter-mode preferences and factors affecting consumer's preferences. The research also focussed on examining causal relationships between variables like age and usage of particular mode of payment, area of stay and choice of mode of payment among others.

**Index Terms-** payment, modes of payment, alternative mode, consumer perception;

## I. INTRODUCTION

Indian payments industry is fast changing with the Reserve Bank of India doing its best to encourage alternative methods of payments which will bring security and efficiency to the payments system and make the whole process easier for banks.

A mode of payment is any medium/mechanism through which goods/services can be purchased/sold and transactions incurred. For years, the country India has been dependent on cash as its primary mode of payment, however, post the demonetization of 2016, there has been emergence of new modes as well as new firms.

The Indian banking sector has been growing successfully, innovating and trying to adopt and implement electronic payments to enhance the banking system. Though the Indian payment systems have always been dominated by paper-based transactions, e-payments are not far behind. Ever since the introduction of e-payments in India, the banking sector has witnessed growth like never before. In the case of India, the RBI has played a pivotal role in facilitating e-payments by making it compulsory for banks to route high value transactions through Real Time Gross Settlement (RTGS) and

also by introducing NEFT (National Electronic Funds Transfer) which has encouraged individuals and businesses to switch.

With the changing scenario and availability of internet across all major areas, many new players pertaining to payment industry have emerged along with emergence of new modes of payment. Debit card swipes at ATMs have slipped 18 per cent to 655 million transactions in May 2017. Simultaneously, point-of sales terminals' debit card usage has jumped 90 per cent to 267.5 million transactions in May 2017 from around 140.4 million in October, a month before high-value notes were scrapped by the government.

According to Global Data, a leading data and analytics company, the company estimates that the e-market will continue to grow at a brisk pace to surpass the INR1tn mark in 2018. While the Indian government is heavily promoting the use of electronic payments, it has also introduced a slew of regulatory guidelines for mobile wallet providers in order to safeguard consumer interests, as well as curb money laundering activities.

## II. LITERATURE REVIEW

Research have been conducted on modes of payment by different scholars. The summarized results of the same are mentioned below.

Jasmin Khan (2013)

This research set out to examine the cognitive and emotional associations that people have with payment modes and to ascertain if and how these associations impact on payment mode choice and how the payment mode selected impacts on purchase behaviour. This thesis suggests that the physical characteristics of the payment mode used, affects consumers' perceptions and behaviours. Given the historic use of cash, it is most likely that people have developed an established set of responses to the cash

token (the stimulus), i.e., a cognitive bias. This set of responses functions as anchor points (reference points) that direct perceptions and behaviour when the 138 token is used, perceptions and behaviours that differ to those that occur when a debit card is used.

Ashish Das and Rakhi Aggarwal

To locate the reasons for the subdued transition to cashless payments, this study carries out a review of the roles performed by various players of the system and then arrives at a structured and implementable roadmap to move towards a cashless retail payment system in India.

Deepak Tandon and Neelam Tandon

The study aims to understand the technological shift in private and public banks from the year 2011 to 2013 and to compare volume of e-transactions done in private and public banks using NEFT and mobile. It aims to study the performance of banks due to the implementation of e-banking products.

Stacey L Shreft

The research has been conducted taking into account what affects consumer's choice of mode of payment including macroeconomic policy factors. Economics finds a legitimate role for government in providing public goods and internalizing externalities. Both of these roles exist regarding the payment system. Ensuring the stability of the payment system, a public good, has long been a goal of public policy. And the network externalities present in the markets for payment instruments create the possibility that the variety and mix of payment instruments available to facilitate the efficient exchange of goods and services might not arise from laissez faire.

#### OBJECTIVES

The purpose of the proposed study is to explore consumer's perception and awareness of alternative modes in India. The purpose of this paper is to contribute to scientific knowledge by achieving following research objectives:

- To study consumer awareness about different alternative modes of payment and their preferences

- To study what influences consumer's choice of mode of payment
- To study how consumers value different characteristic of any typical mode of payment
- To study relation between age of consumers and their usage of different modes of payment

#### RESEARCH METHODOLOGY

For undertaking this study, descriptive research design is used. In its essence, descriptive studies are used to describe various aspects of the phenomenon. Primary data has been collected for the purpose of the study. A sample of 400 consumers from all age groups and from different areas of residence was asked to fill a questionnaire. The consumers who couldn't fill a questionnaire were personally contacted and asked the questions. The questionnaire was circulated through social media platforms as well as through physical copies. The data obtained through the questionnaires will be analysed through use of statistical software SPSS. Chi Square test of independence has been used to examine relationship between different demographic factors and choice of mode of payment.

#### RESULTS

A sample of 400 consumers was asked to fill a questionnaire based on the objectives of the study. The questionnaire included multiple choice questions relating to general awareness and perception of different alternative modes of payment in the country. The target audience of this survey was not restricted. Any person who ever made a purchase/payment could fill in the survey. It was observed from the survey that credit/debit cards are most popular among the sample with almost 90% respondents claiming awareness of the same. Real Time Gross Settlement (RTGS) is observed to be the least popular mode of payment among the respondents for higher amount transactions with only 39% respondents being aware about the same. Government launched Aadhar Enabled Payment Scheme is observed to be better in terms of awareness among respondents with almost 42% respondents being aware of the same. Traditional mode of payment-cheque emerged as the second most popular mode of payment with over 88.6%

respondents claiming knowledge about the same. Newly emerged e-wallets and online banking have gathered attention of about 86% and 86.8% respondents respectively. There was seen a difference in the way consumers choose the mode of payment for various transactions. It is observed that 25% of all respondents depend on cash to pay for their travelling and fuel station expenses. It is also observed that 5% of all respondents use cash to pay for educational/billing expenses while the rest have switched to using alternative modes of payment. It is also observed that consumers (27%) value safety of transaction the most while 22% believe that an ideal payment system should be most convenient to use. 16% of consumers want speed of transaction to be given most importance while 18% believe that for a payment system to be ideal, it should be accepted universally. 17% of the responded have the view that consumer grievance redressal mechanism should be given the most importance in any mode of payment. On studying consumer's attitude towards incentives offered by various modes of payment, a positive relation was found between offering incentives and usage of that particular mode of payment.

Age group	15-20 - 52% 20-30 - 26% 30-40 - 12% 40 and above - 10%
Occupation	Employed – 13% Self-employed – 5% Housemaker - 6% Student - 69% Practising Profession - 2% Other - 5%
Highest Educational Qualification	10 <sup>th</sup> – 1% 12 <sup>th</sup> – 49% Graduate – 10% Postgraduate – 38% Other – 2%
Area of residence	North Delhi – 24% South Delhi – 7% East Delhi – 6% West Delhi – 14% Central Delhi – 4% NCR – 29% Other – 16%

**DISCUSSION**

In this study, the data collected with the help of questionnaire is analysed using different statistical tools like correlation coefficient, Chi square values etc. SPSS is used for this analysis. Percentage figures

are preferred wherever possible for easy comparison and understanding.

Consumers choice of mode of payment while paying for travel/fuel expenses

It is observed that 25% of all respondents depend on cash to pay for their travelling and fuel station expenses even today. This highlights the non-availability of mechanism to accept alternative modes of payment in this particular industry. At fuel stations, consumers are more inclined towards use of cash even when debit/credit cards machines are available. This clearly marks the need to create more awareness to make consumers start using alternative modes in this sector just like their usage of the same in other sectors like mentioned further.

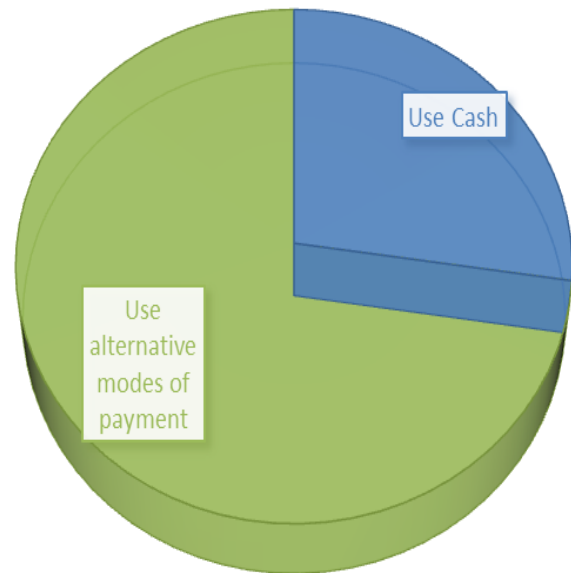


Chart 1: Choice of mode of payment while paying for travel/fuel expenses

Consumer's choice of mode of payment while paying for education/bills

It is observed that 5% of all respondents use cash to pay for educational/billing expenses while the rest have switched to using alternative modes of payment. This result is in sharp contrast with the result where consumer's choice was noting with regard to payment of travel expenses. This indicates that the consumers are well aware of the alternative modes of payment and they use it as a primary mode when it comes to paying for educational/billing expenses however, the same consumer prefers using cash when it comes to payment of travel expenses. This

deviation between the two can be bridged by opening more opportunities/incentives in travel sector.



Chart 2: Choice of mode of payment while paying for education/bills

How much do consumers value different characteristics in any mode of payment

On studying the responses, it is observed that consumers (27%) value safety of transaction the most while 22% believe that an ideal payment system should be most convenient to use. 16% of consumers want speed of transaction to be given most importance while 18% believe that for a payment system to be ideal, it should be accepted universally. 17% of the responded have the view that consumer grievance redressal mechanism should be given the most importance in any mode of payment.

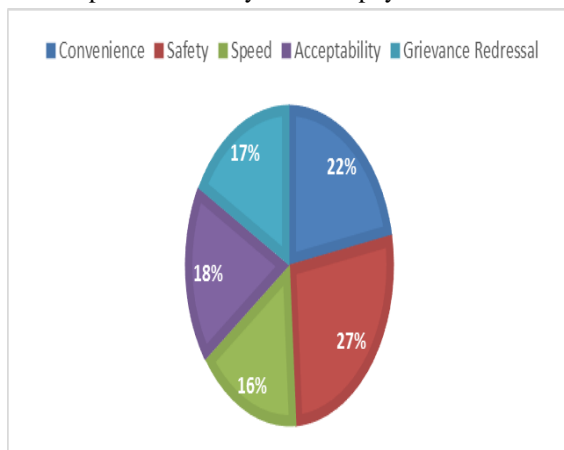


Chart 3: Consumers valuation of characteristics

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Consumer's choice of the ideal mode of payment

When asked to name a mode of payment with regard to a good characteristic of mode of payments, it is observed that consumers prefer debit/credit cards the most with it being good at 5 out of 6 most important characteristics in any mode of payment (convenience, acceptability, speed, security, grievance redressal, transaction history). Consumers find e-wallets as the best mode when it comes to convenience of use but credit/debit cards for all other reasons.

How consumers react to incentives offered

It is observed that consumer's behaviour is strongly linked with incentives. The availability of incentives makes them change the mode of payment they otherwise would have used. In different cases studied, the respondents are ready to switch to modes like e-wallets, debit/credit cards on provision of additional discounts/free delivery.

Dependency between variables and consumer behaviour

On performing chi square tests on the recorded data, interdependence between the variables was established. We observe that for paying fee/bills, the choice of a particular age group is same while another age group has another same choice. This highlights the relation between age group and choice of mode of payment. A moderate relationship has been examined between age group and choice of mode of payment based on security, speed and acceptability. This highlights that emerging firms can design products in a way to suit different age groups. Another direct relation was observed between occupation and choice of mode of payment with regard to convenience. This brings about the fact that different jobs make people prefer different modes of payment and for payment companies to woo consumers, they must target needs of different occupational groups

## CONCLUSION

The results of the survey indicate that among all the modes of payments Credit/Debit Cards is the most widely used for payment followed by E wallets for almost all kinds of transactions. Various discounts and incentives given by merchants or shopkeepers on using a particular mode of payment has an effect on people's mind and they get influenced into using a particular mode of payment. For consumers, safety of transaction occurs to be the most valued characteristic of any mode of payment which is further followed by convenience. There also occurs a relationship between age group and modes of payment used at various places and also a moderate relation between occupation and modes of payment used at various places but no such relationship could be seen with respect to the area of residence of a respondent.

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