

# Do location and gender matter in deciding payment method in online shopping?

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## ABSTRACT

Since last decade, retail has evolved from 'brick and mortar' to online mode; and the rationale behind the same are changing life style, increase in the purchasing power, dynamism in the searching and selecting pattern of individual, working partners, ease of use and many more. Hence, this work aims to find influences of location and gender of online shoppers on the choice of payment method used in buying. For this a structured questionnaire is framed and a sample of two hundred and six respondents covering all the major demographics is taken. In the study, Chi-square test is mainly applied to test the hypotheses. Finally, the study concludes that neither location nor gender has any impact over the choice of payment mode in online shopping.

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## 1. Introduction

People invest their quality time and resources for buying their necessities from the market. The five R's of retail merchandising- right product, right people, right time, right way and right time, are the foundation for justifying the merchandising for the consumers. In India, retail industry is being observed the fastest growing industry with a size of total 672 billion accounts for nearly ten percent to the GDP and eight percent to the employment of the country. The mammoth size of retail industry in India is having a potential of accommodating eight percent of the employment which is a quite large share. Over the last two decades with rapid change in technology and changing business models, this industry went through a radical transformation. As per the report by IBEF (2017), India has a potential to grow with a CAGR of 16.7 % over 2015-20 which accounts for US\$ 1.3 trillion by 2020 and similarly the growth potential of online retail is 31.2 percent (CAGR) over five years which accounts for US\$ 64 billion by 2021 ( ASSOCHAM-Forrester). In 2016, cross border shoppers which was 13.8 million spent on an average Rs 42,400/- per annum, which comprised of 54% clothing, footwear and accessories, 42% cosmetics and beauty products and 43% consumer electronics (Maction Consulting Private Limited, 2017). The competitive advantage for India, being an important site for e- retailing is because of growing demand, increasing investment, attractive opportunity and policy support (IBEF, 2017).

With increase in the acceptability of different strata for online buying, it becomes essential to assess the various dimensions of consumers' behaviour for online purchase at regular intervals.

## 2. Literature Review

The area of online retailing is considered by marketing people as one of the most upcoming areas in India and across the world as well. Numerous work has been carried out at international and national level since last couple of years. The overview of those few studies is as under:

Marriott and William (2018) explored the theoretical framework between trust and perceived risk among consumers with regard to mobile shopping. In analysis, they found various risk perceptions and trust and they were having varying effects on consumer's mobile shopping intentions. However, the result has varied explanation on the study of various age and gender but proposed that customer usually want to be sure about the safety and security of the gateway and platform before initiating any payment process.

Chinho and Watcharee (2013) investigated the effects of online repurchase intentions in which PLS technique was used to analyze the measurement and create a model. The responses were taken from Taiwan shoppers, who have already experienced online shopping. The two hundred and forty respondents revealed that experience of online shopping was the main driving factor for the satisfaction of the online shoppers. Further, the satisfaction to shoppers was the main prominent factor of repurchase intention online and adjusted expectations.

Matthew et al. (2012) conducted a study to analyze influence of perceived risk, benefits and trust on the buying behavior of consumers in China. For the data collection the researcher has undertaken a structured online survey with five hundred and seventy eight valid samples collected. Multiple regression method was used for analysis of the data. The outcome of the study shows that as benefit, perceived recreational benefits, price & convenience in online shopping shows positive influence on the attitude of online shoppers and as trust, perceived website trustworthiness, reputation and structural assurance also shows the same trends.

Enrico et al. (2012) identified the main success factor in "click & trick" model in grocery which was created by French Groceries and works towards finding the basis for their competitive advantage. The key success factor found for achieving the competitive advantage was customer reception quality. This is the most important and most valued factor by consumers and managers both.

Enrique et al (2009) examined the effect of product, brand and vendor trust belief collectively on consumers' intention to buying online along with the willingness to share personal information online. Usable sample of four hundred and twenty two students were taken to analyze from the available sample of Four hundred and thirty three students. For analyzing the responses linear regression, MNOVA and SOBEL tests were used. It was concluded that there was a relation between trust belief and online intentions which acts as important factors in online sales increment. The brand trust is an important factor which effects the relation between trust belief and online buying intention.

Chiu, Lin and Tang (2005) in their research tried to propose a model for explaining online purchase intentions. A sample of 376 customers out of 1000 questionnaires which were mailed was taken from Taiwan and structural equation modelling was applied for examining the model. There was no gender impact regarding impact of personal innovativeness and perceived usefulness on attitude and purchase intention. Influences of awareness about security on these were strong in case of male respondents while that of perceived ease of purchasing on the same i.e. attitudes and online purchase intentions were found strong for female customers.

**3. Objectives of the study**

The prime purpose is to identify whether location and gender make a significant impact on the choice of various payment modes of online shopping.

**4. Methodology**

To achieve the objective and give scientific direction to the analysis following hypothesis are developed:

- H<sub>01</sub>: There is no significant difference in the choice of payment mode as per the location of respondents
- H<sub>02</sub>: There is no significant difference in the choice of payment mode as per gender of respondents

**Research Design**

An exploratory research design is adopted to figure out the impact of location and gender of respondents on the choice of payment modes in online buying for the respondents of Haryana. For this, survey method was adopted.

**Sampling Design**

A total of two hundred eighty respondents were approached. Out of which only 82 % reported i.e. two hundred and thirty respondents and out of these twenty four responses had to be left due to missing values on one or more items/statements. Finally a sample of two hundred and six respondents in the form of cross sectional sample in terms of age, gender, marital status, income groups, location, occupation and educational qualification was taken for analysis. Snow ball sampling technique is used to collect the sample for the respondents who were approached through e-mails i.e. 60 % of all and for remaining 40% respondents the convenience sampling method is used.

**Demographic Profile of Respondents**

Under this section demographic distribution of respondents has been shown on the basis of Gender and Location.

**Table 1: Frequency distribution of Respondents**

Demographic Variable		Number of Respondents	Percentage
Gender	Male	117	56.8
	Female	89	43.2
Location	Urban	109	52.9
	Rural	97	47.1

Source: Primary Survey

Table 1 shows that among two hundred and six respondents, around 57 % are male respondents and remaining are female respondents. Respondents are also classified on the basis of their location (from where they belong) and it is found that 109 respondents ( 53%) belong to urban and only 97 respondents which makes 47% belong to rural location.

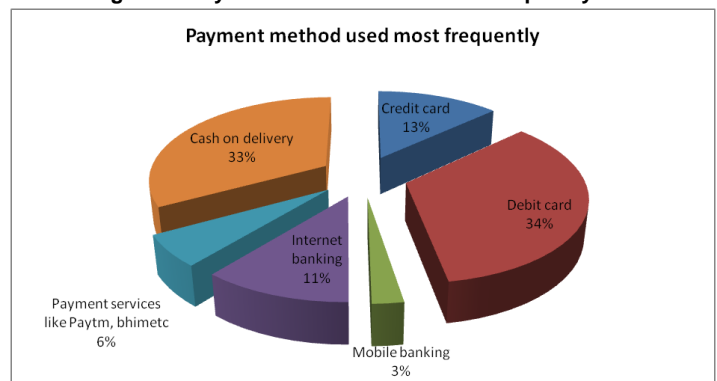
**Scale construction and Statistical tools used**

For the primary survey, the questionnaire is prepared with the required demographics along with the choice of payment method adopted. In order to analyse the collected data, Chi-square test is applied through SPSS version 21.0, so as to find the impact of location and gender on the choice of various payment methods.

**5. Analysis & Results**

This section deals with central concern of the present work. Responses given by the selected respondents on the choice of payment mode are analyzed by applying the required statistical techniques. In this regard Chi square ( $\chi^2$ ) is applied, this test is used for comparing the variance. This test is generally applied to check dependency of categorical data or systematic association exists between two variables. In the present study, this statistical test with cross tabulation has been applied for checking the association of demographical parameter gender and location with the selection of modes of payment ( like debit card, credit card, mobile banking, Paytm or Bhim, internet banking and cash on delivery) for online shopping.

**Figure 1: Payment methods used most frequently**



Source: Primary Survey

The given figure shows the distribution of sample with respect to payment methods adopted in online buying. A large group of respondents that is 34 % of whole sample has opted debit card payment method most frequently, that shows the

inclination towards newer mode of payment method but on the same time a another large group comprises of 33% i.e. 138 respondents have opted for cash on delivery mode of payment

during online shopping. Payment through mobile banking and through Paytm, bhim like apps are found very less in this present sample, they are only 3% and 6% respectively.

**Table 2: Chi square-test result on Gender association with Payment methods**

	gender of respondent		Total	Chi-Square Value	df	p value (2-sided)
	male	female				
credit card	17	10	27	4.82	5	0.438
debit card	38	31	69			
mobile banking	4	1	5			
internet banking	12	9	21			
payment services like Paytm bhim etc	10	3	13			
cash on delivery	36	35	71			
Total	117	89	206			

Source: Primary Survey

Table 2 explains that substantial portion of respondents both male and female are more inclined towards cash on delivery mode of payment as compare to credit card payment method which is choose by only 17 male and 10 female respondents. Further debit card payment method is another most preferred mode of payment which is being taken by 38 male and 31 female respondents. Very few respondents choose mobile banking for the payment in online shopping.

The table 2 also clearly highlights that gender of respondents with Chi square results ( $\chi^2 = 4.82$ , Sig = 0.438) have shown non-significant association with the selection of mode of payment. Thus null hypothesis Ho1 is hereby accepted which indicates that there is a no significant relationship between gender and selection of payment mode. Means choice of payment method adopted in online shopping do not depend on the gender of respondents.

**Table 3: Chi square-test result on location association with Payment methods**

	location of respondents		Total	Chi-Square Value	df	p value (2-sided)
	rural	urban				
credit card	8	19	27	7.443	5	0.19
debit card	32	37	69			
mobile banking	4	1	5			
internet banking	12	9	21			
payment services like Paytm bhim etc	8	5	13			
cash on delivery	33	38	71			
Total	97	109	206			

Source: Primary Survey

Table 3 exhibits that a major part of consumers (Seventy one) are more inclined towards cash on delivery mode of payment as compared to credit card payment method which is chosen by only 8 rural and 19 urban respondents. Further, debit card payment method is found another most preferred mode of payment which is being used by 32 rural and 37 urban respondents. Very few only 4 rural and 1 urban respondents choose mobile banking for the payment in online shopping.

The same table also highlights that location of respondents with Chi square results ( $\chi^2 = 7.443$ , Sig = 0.19) have shown non-significant association with the selection of mode of payment. Thus null hypothesis Ho2 is hereby accepted i.e. there is a no significant relationship between location and selection of mode of payment. Means choice of payment method adopted in online shopping do not depend on the location of respondents.

**6. Conclusion**

Changing life style, changing discretionary income pattern and growth in the technology front have led people to adopt online shopping as an viable alternative mode of shopping. These are some prominent factors which bring change in the shopping pattern and style of consumers and shifted them towards online mode of shopping. Apart from all the other advantages and issues with online shopping, the added advantage under online shopping is the mode of payment. Alternative modes of payment such as plastic money, various apps, Internet banking, mobile banking and cash on delivery are used.

This study explores the association between demographics factors such as location and gender with various modes of payments with regard to online shopping. It is found that on the basis of the gender of respondents there is no significant variation in the adoption of a particular payment method and the same result is also observed in the case of

location as key demographic factor. As result, the study clears that the selection of any specific payment method in online shopping does not get influenced by buyer's gender and place of living. Further, debit card and cash on delivery are found

more preferable modes of payment in online shopping and that may be due to the non availability of remaining facility such as credit card and Internet banking etc.

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