# Impact of e-commerce on spending habits



Chirag, Dhruv Dalal, Saurabh Singh March 17,2022

### Contents

1	Abstract	3
2	Introduction  2.1 Background of the study 2.2 Statement of problems 2.3 Purpose of study 2.4 Research Objectives 2.5 Research Questions 2.6 Significance of the study	3 3 4 4 4 4
3	Literature Review  3.1 Internet shopping	5 5 5 5
4	Research Methodology  4.1 Introduction  4.2 Research Design  4.3 Target Population  4.4 Sample Size and Sampling techniques  4.4.1 Sample Size  4.4.2 Sampling techniques  4.5 Data collection instruments  4.6 Data collection procedures  4.7 Data analysis techniques  4.8 Ethical considerations	8 8 8 8 8 8 8 9 9 9
5	Research Findings  5.1 Introduction	10 10 10 11 12

Co	nclusions	25
	shopping?	24
5.10	over the years has led more people to go for online	
5 16	perience online?	23
5.15	Have the respondents ever had a bad shopping ex-	02
F 1 F	need when big sales are announced on these websites?	22
5.14	Do respondents end up buying things they do not	22
	buying online?	21
5.13	Has respondents' spending increased since they started	
	started buying online?	
5.12	Have respondents' trips to market reduced since they	
	pare online vs offline prices before buying	19
5.11	Distribution of respondents by whether they com-	
0.20	ing online	18
5.10	Distribution of respondents by their average spend-	± ·
0.5	ferring buying online	17
5.9	Distribution of respondents by their reason for pre-	10
5.0	while making online payments	16
5.8	Distribution of respondents by their perceived safety	15
5.7	Distribution of respondents by whether they keep a track of their transactions online	15
E 7	of payment	14
5.6	Distribution of respondents by their preferred mode	1.4
	in the last month	13
5.5	(Distribution of respondents by no of orders placed	

#### 1 Abstract

#### 2 Introduction

#### 2.1 Background of the study

Electronic commerce, commonly written as E-Commerce, is the trading in products or services using computer networks, such as internet. Ecommerce became possible in 1991 when the Internet was opened to commercial use. Over the past few decades, the Internet has developed into a vast global market place for the exchange of goods and services. Business-to-consumer (B2C) electronic commerce has allowed consumers to directly buy goods and services from online retailers over the Internet. E-commerce was mainly developed to increase buyers' productivity by enabling them to carry out fast, convenient, and price transparent e-commerce transactions with many national and international sellers. It also help companies expand their marketplace by enabling them rapidly, easily, and cost-efficiently to locate not only more customers but also the best suppliers and the most suitable business partners both nationally and internationally. Considering the above-mentioned benefits of e-commerce, it is no surprise to see a steady increase in the global volume of e-commerce sales which is predicted to reach to US dollar 5.45 trillion worldwide by the end of 2022. This number is expected to continue growing over the next few years, proving that ecommerce is becoming an increasingly lucrative option for businesses. By 2025, its estimated that world retail ecommerce sales will exceed dollar 7.3 trillion and the overall ecommerce share of retail sales will hit 24.5 percent. Some of the popular ecommerce sites are as follows-: Amazon, Walmart, eBay, Alibaba, Myntra, Shopify etc.

#### 2.2 Statement of problems

Retail services for long was associated with offline stores , with long ques on billing counter, traffic jams , unavailability of all products , inefficient and time consuming as seen in many regions of world especially in India. This operation resulted to wastage of resources and high cost due to all these problems consumer were unsatisfied. Any new upgradation in the field would affect consumer spending decision, and this new upgradation was e-commerce which distrupted the market . Now consumer could avail any product from any place in the world with in fractions , and this affected the consumer

spending decision immersely. Therefore our study answer the question; what was the impact of ecommerce on spending habbits of consumer?

#### 2.3 Purpose of study

The purpose of the study is to establish the impact of E-COMMERCE on spending habbits of consumer

#### 2.4 Research Objectives

To determine the change in spending habbits of consumer after e-commerce. To analyse main behavioral characteristics of consumer in term of online shopping.

#### 2.5 Research Questions

What were the major changes in spending habbits of consumer that occur due to online shopping? What are various segments in online consumer population and specify their main behavioral characteristics?

### 2.6 Significance of the study

This study will help in analyzing consumer behaviour and consumer attitude towards online shopping.

#### 3 Literature Review

#### 3.1 Internet shopping

Internet shopping and traditional shopping are sharing many similarities, at the same time, it still exists some differences between them, such as the Internet shopping could provide convenience and interactive services (Jarvanpaa and Todd, 1997) and the traditional shopping could gives customers more comfortable shopping environment and good quality of products (Lee and Chung, 2000). Both aspect of shopping malls are trying to improving their services by learn commutatively from each other, such as traditional shopping malls provide more parking spaces, more counters, and closer to residential area in order to improve services in convenience; Internet shopping malls adopt virtual reality (Lee, 2001) and 3D techniques (Miller, 2000) to improve the presentation of products.

#### 3.2 Convenience

Internet provides a big convenience for shopper as the main reason for the shopping online has been agreed by most of researcher and customers (Wolhandler, 1999). Compare with the traditional shopping, there is no waiting line for shoppers on the Internet, and some shoppers reported that they feel pressure from the sales people sometimes, but Internet offers them more enjoyable while shopping online (Wolhandler, 1999; GVU's WWW 9th User Surveys, 1998). Technology The convenience based on Internet is mainly according to the technology development, and which plays a key role during the development of Internet shopping. In the last decade, organizations have realized that the new technology could impact on Internet shopping deeply, and thus there are many important technologies like virtual reality and 3D techniques have adopted to gain big competitive advantages (Clark, 1989). According to the BMRB International (2004) and GVU's WWW 9th User Surveys (1998), the number of Internet users in Great Britain has increased to 22.7 million among 48.4

### 3.3 Consumer trust in internet Shopping

Mayer, Davis, and Schoorman (1995) defined trust as, "the willingness of a party to be vulnerable to the actions of another party based on the expecta-

tion that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" online trust is lower level than the face-to-face interactions in the physical store (Cassell and Bickmore, 2000), and the result from Cheung and Lee (2006) shows that trustworthiness of Internet merchant (perceived integrity, perceived competence, and perceived security control) and external environment (third-party recognition and legal framework) have considerable impact on consumer trust in Internet shopping. The trustworthiness of E-commerce web site is very relying on the how much privacy security can be provided. For example, a highly technical competence can be a factor to influence the trustworthiness (Singh and Sirdeshmukh, 2000). The E-commerce web site can provide the information about their customer services, location of the office, contact telephone number, and a help button on the web site, customers could also increase their trustiness as they can feel that the online retailers is truly exist (Lohse and Spiller, 1998).

### 3.4 Determinants of consumer behavior in an e-commerce environment

According to Li and Zhang's (2002) taxonomy that developed based on their analysis, there are ten impacts of relevant factors on online consumer behaviours. These ten factors c o u l d be categorized into five independent variables (external environment, demographics, personal characteristics, vendor/service/product characteristics, and web site quality) and five dependent variables (attitude toward online shopping, intention to shop online, decision making, online purchasing, and consumer satisfaction). The five independent variables are identified as antecedents, which directly determine attitudes towards online shopping. In the antecedents, the vendor/service/product characteristics and website quality are directly impact on consumer satisfaction.

Virtual consumers are very conscious about providing their personal or

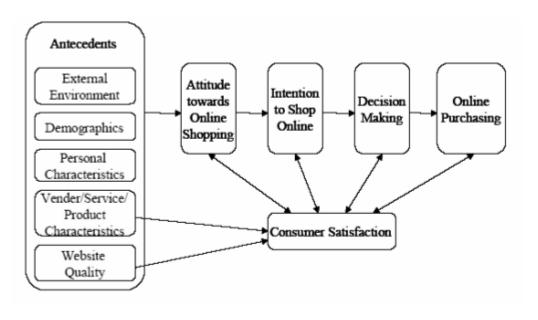


Figure: Research Model of Consumers' Online Shopping Attitudes and Behaviours

financial detail to the online dealer (Salisbury, 2001). Chang and Chen (2008) explained that a web page is not an authentic place for secure purchasing. Virtual stores should ensure security by their online stores and protect consumer. They also mentioned that WebPages are main target of attackers Furnell (2004) explained that if online store shows policy statement and third party seals on websites are effective factors iin consumer's point of view. Tsai and Yeh (2010) analyzed the security as a main factor that directly affects the purchasing decision. They concluded that design of web page ,quality of product, behavior of seller, information provided and, delivery of products are factors that relates to perceived risk of information security and purchase intention. [1] [2] [3]

Table 3: Antecedents of security perception

_			
	No	Factors	References
	1	Policy statement	Frunell, 2005
	2	Third party seals	Sharma and Yurcik ,2004; Frunell, 2005
	3	Service quality	Tsai and Yeh, 2010
Г	4	Security features	Sharma and yurcik,2004
Г	5	Webpage features	Sharma and yurcik,2004;Tsai and yeh,2010
Г	6	Product quality	Tsai and Yeh, 2010
П	7	Attitude	Sharma and Yurcik ,2004

#### 4 Research Methodology

#### 4.1 Introduction

This chapter explains the methodology that was used in carrying out the research work. Crucial issues that were discussed in this chapter includes, research design, target population, sample size, data collection and techniques, questionnaires, data analysis techniques and ethical considerations.

#### 4.2 Research Design

Research design refers to the plan, and the structure of investigation employed to obtain relevant answers to research questions. This study aims to obtain an overall picture of the effect of e-commerce on spending habits of people in the Delhi-ncr region. As such, cross sectional study design was used.

#### 4.3 Target Population

The target poulation was Delhi-Ncr because of following reasons:

- 1-It is the capital city of the country.
- 2-Internet and ecommerce penetration is significantly high.
- 3-Ecommerce services are more developed.
- 4-Diverse population.
- 5-Limited time and resources.

#### 4.4 Sample Size and Sampling techniques

#### 4.4.1 Sample Size

The sample consisted of 229 respondents in Delhi-Ncr.Primary data was used which was collected from 229 respondents.

#### 4.4.2 Sampling techniques

The Random sampling method was adopted with a survey using google form sent out to the respondents.

#### 4.5 Data collection instruments

Survey sent out using google form.

#### 4.6 Data collection procedures

The study involved creation of a survey. Then we proceeded to send out the survey to the respondents. During data collection, respondents were assured of the confidentiality. Our questions aimed at knowing spending patterns of the consumers as well as reasons for using e-commerce websites. Other questions aimed at finding whether consumers felt safe while making payments online.

#### 4.7 Data analysis techniques

Frequency counts of responses were obtained. This involved use of pie charts, percentages, bar graphs, to help summarise the data. The responses were organised, coded and analysed.

#### 4.8 Ethical considerations

During this research process, the researcher upheld integrity and high moral standards. The researcher sought permission from the agents before distributing the questionnaires. The researcher kept time, respected the respondents feedback and decision and treated the information given by the respondents with confidentiality.

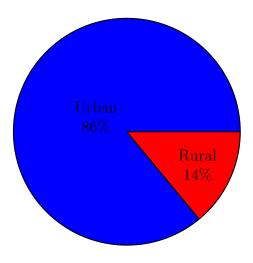
### 5 Research Findings

#### 5.1 Introduction

This chapter includes data analysis presentation and interpretation.

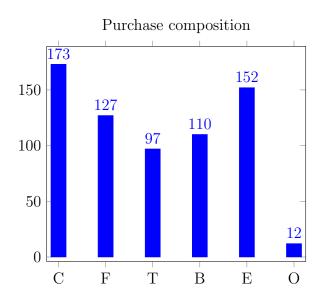
#### 5.2 Distribution of Respondents by residence

As per the survey,197(86 per cent) of the respondents were urban residents and 32 (14 per cent) of the respondents were rural residents.



### 5.3 Distribution of respondents by their purchase composition online

As per the survey, clothes-173 (75.5 per cent) food/grocery-127(55.5 per cent) transport/cab services-97(43.4 per cent) books-110(48 per cent) Electronics/wearables-152(66.4 per cent) any other-12(4.8 per cent)



C-clothes, F-Food/Grocery

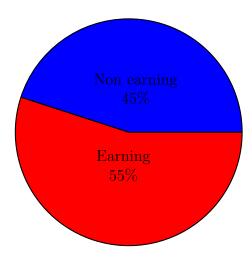
T-Transport/Cab Service, B-Books

E-Electronics/Wearables, O-Other

The analysis showed that clothes and electronics/wearables were the most bought items closely followed by food and groceries. Books also comprised a significant portion of items bought.

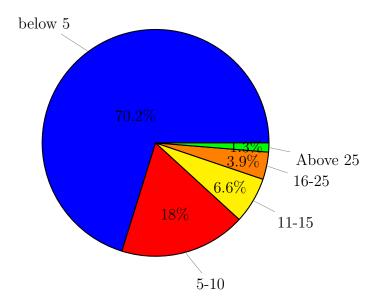
#### 5.4 Distribution of respondents by earning/non-earning

As per the survey,103 (45 per cent) of the respondents belonged to the non-earning group and 126(55 per cent) belonged to the earning group.



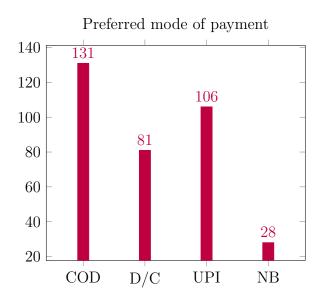
### 5.5 (Distribution of respondents by no of orders placed in the last month

160(70.2 per cent) respondents told that their orders per month were less than 5.41(18 per cent)said that their orders were between 5-10.0Only 3(1.3 per cent) said that their orders were above 25 per month



### 5.6 Distribution of respondents by their preferred mode of payment

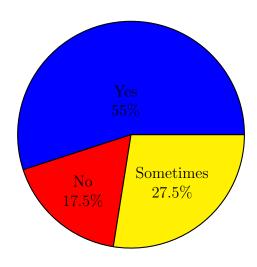
Cash on delivery was the most preferred mode of payment (131-57.2 per cent) followed closely by UPI (106-46.3 per cent), Debit/credit card (81-35.4 per cent). Netbanking was the least preferred option with only 28 (12.2 per cent) choosing it as their preferred mode of payment.



COD-Cash on delivery, D/C-Debit/Credit Card UPI-Unified Payments Interface, NB-Net Banking

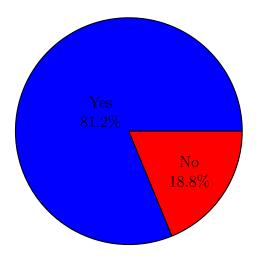
### 5.7 Distribution of respondents by whether they keep a track of their transactions online

126(55 per cent) of the respondents said that they kept track of their transactions online, 40(17.5 per cent) of the respondents said that they do not keep track of their transactions online, while 63(27.5 per cent) said that they keep track sometimes.



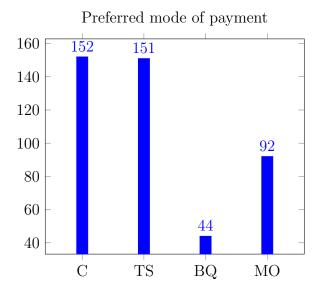
# 5.8 Distribution of respondents by their perceived safety while making online payments

A whopping 81 per cent of the respondents claimed that they felt safe while making online transactions while the rest did not.



### 5.9 Distribution of respondents by their reason for preferring buying online

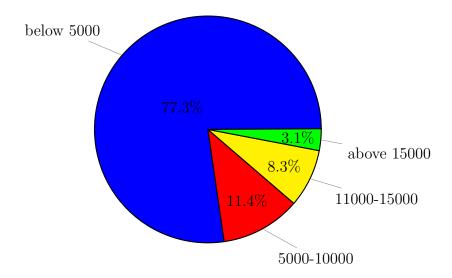
Convenience and time saving were primary reasons for consumers opting for e-commerce, availability of options and better quality being secondary.



C-Convenience, TS-Time Saving BQ-Better quality/Service, MO-more options available

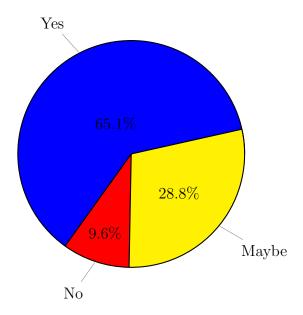
# 5.10 Distribution of respondents by their average spending online

 $177(77.3~{\rm per~cent})$  respondents claimed that they spend below Rs 5000 in a month online,26(11.4 per cent) between Rs 5000 and Rs 10000,19(8.3 per cent) between Rs 10000 and Rs 15000 and 7(3.1 per cent) above Rs 15000



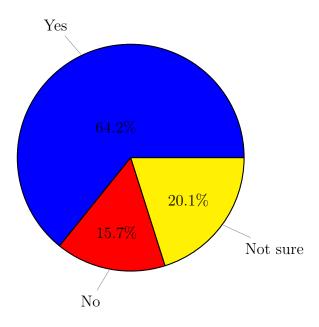
# 5.11 Distribution of respondents by whether they compare online vs offline prices before buying

149(65.1 per cent) of the respondents said that they compare online vs offline prices before buying,22(9.6 per cent) said that they don't while 66(28.8 per cent) said that they do sometimes.



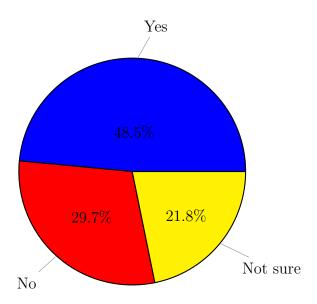
# 5.12 Have respondents' trips to market reduced since they started buying online?

147(64.2 per cent) respondents said that their trips to market reduced after they started buying online, 36(15.7 per cent) said that their trips reduced, while 46(20.1 per cent) were not sure.



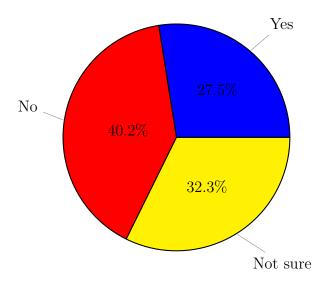
# 5.13 Has respondents' spending increased since they started buying online?

111(48.5 per cent) of the respondents said that their trips to market reduce dafter they dtarted buying online,68(29.7 per cent)felt that their trips did not reduce, while 50(21.8 per cent) said that they were not sure.



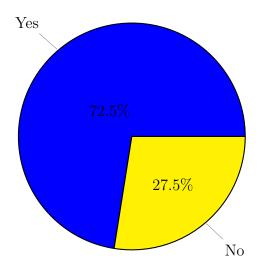
# 5.14 Do respondents end up buying things they do not need when big sales are announced on these websites?

63(27.5 per cent) of the respondents felt that they end up buying things they do not need ehen big sales are announced on these websites, 92(40.2 per cent) disagreed while 74(32.3 per cent) said that they did sometimes.



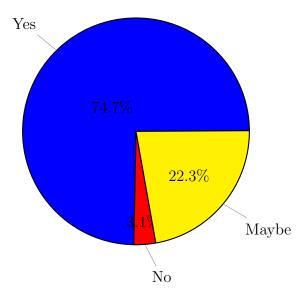
# 5.15 Have the respondents ever had a bad shopping experience online?

166(72.5 per cent) of the respondents said that they had had a bad shopping experience online while 63(27.5 per cent) said that they had not.



# 5.16 Do the respondents feel that better customer service over the years has led more people to go for online shopping?

171(74.7 per cent) of the respondents feel that better customer service over the years has led more people to go for online shopping, 7(3.1 per cent) disagreed while 51(22.3 per cent) felt that maybe it did.



#### 6 Conclusions

- 1-The above analysis shows that people prefer buying online after comparing prices across platforms owing to convenience, reduced time and travel cost (market trips have reduced) along with better customer service.
- 2-Responses recieved point to the fact that respondents feel their expenditures have increased due to e-commerce but a majority spend below 5000 per month and place less than 5 orders a month.
- 3-Safety during online transactions is still an issue of concern in 1/5th of respondents and this is also highlighted by the fact that Cash on delivery remains the most preferred mode of payment.
- 4-E-commerce is not devoid of its faults and 72.5 per cent of the respondents have had a bad online shopping experience . 27.5 per cent of respondents agreed to have bought things they didn't need during discount sales while 40 per cent said a firm no. The analysis also conveys that people do keep track of their spending even if it is online.

### References

- [1] A. Mittal, E-commerce: It's impact on consumer behavior, Global Journal of Management and Business Studies 3 (2) (2013) 131–138.
- [2] S. Fatonah, A. Yulandari, F. W. Wibowo, A review of e-payment system in e-commerce, in: Journal of Physics: Conference Series, Vol. 1140, IOP Publishing, 2018, p. 012033.
- [3] J. L. Joines, C. W. Scherer, D. A. Scheufele, Exploring motivations for consumer web use and their implications for e-commerce, Journal of consumer marketing (2003).