# <u>A STUDY ON IMPACT OF DEMOGRAPHIC FACTORS</u> <u>ON ONLINE SHOPPING BEHAVIOR</u>

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## ABSTRACT

Internet is changing the way consumers shop and buy goods and services, and has rapidly evolved into a global phenomenon. Customers use the Internet not only to buy the product online, but also to compare prices, product features and after sale service facilities that will be received if they purchase the product from a particular store. This research will help us to find what are the perceptions and apprehensions of consumers on online stores and this research helps us in analyzing the influence of demographic factors on various service factors. The study reveals that demographic factor gender is weakly correlated with various service dimensions like quality, price, promotion, mode of payment, navigation of website, delivery and location. The findings of this study would provide some insight to online retailers on the effect of demographic profile on online shopping. This assists firms involved in online trading in targeting specific group of consumers and formulating marketing strategies to attract them.

Keywords: Consumers, Goods, Internet, Online Shopping, Services.

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# I .Introduction

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Internet is changing the way consumers shop and buy goods and services, and has rapidly evolved into a global phenomenon. Many companies have started using the Internet with the aim of cutting marketing costs, thereby reducing the price of their products and services in order to stay ahead in highly competitive markets. Companies also use the Internet to convey communicates and disseminate information, to sell the product, to take feedback and also to conduct satisfaction surveys with customers.

#### 1.1 Market size & growth rate:

India's e-commerce market was worth about \$3.8 billion in 2009, it went up to \$12.6 billion in 2013. In 2013, the e-retail segment was worth US\$2.3 billion. About 70% of India's e-commerce market is travel related. According to Google India, there were 35 million online shoppers in India in 2014 Q1 and is expected to cross 100 million mark by end of year 2016.CAGR vis-à-vis a global growth rate of 8–10%. Electronics and Apparel are the biggest categories in terms of sales.

#### 1.2 Infrastructure:

There are many hosting companies working in India but most of them are not suitable for ecommerce hosting purpose, because they are providing much less secure and threat protected shared hosting. ecommerce demand highly secure, stable and protected hosting. Cyber security issues of e-commerce business in India would be required to be managed by Indian e-commerce stakeholders in the near future. In fact, Indian government is planning to introduce cyber security breach disclosure norms in India very soon. Recently Target corporation suffered a cyber-attack that has put it under litigation threat in multiple jurisdictions. Trends are changing with some of ecommerce companies starting to offer SaaS for hosting web stores with minimal one-time costs. Innovation is helping e-commerce companies break the inertia for online shopping by offering benefits to customers not traditionally available in a brick and mortar store. Business models include no question asked return policies ranging from 7 days to 30 days, free product deliveries and the industry dynamics changing "cash on delivery" model. The last innovation has really

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# **II** .Literature Review

Michelle A. Morganosky, Brenda J. Cude (1990)studied a paper on preliminary assessment of consumer response to and demand for online food retail channels. Data were collected from 243 US consumers who currently buy their groceries online. Over 70 percent reported convenience and saving time as their primary reasons for buying groceries online but 15 percent cited physical or constraint issues that made it difficult for them to shop at grocery stores. Of the respondents, 19 percent bought all of their groceries online. Also reports demographic and online shopping variables that are significantly related to the primary reason for shopping online, willingness to buy all grocery items online, perception of time spent shopping online vs in the store, and experience with online grocery shopping.

Mohammed Rafig, Heather Fulford (2007) presented a paper to examine the effectiveness of UK supermarkets in transferring loyalty online store to loyalty. His design/methodology/approach involves an online survey of university staff is used to test both the brand equity proposition that loyal customers are more likely to adopt brand extensions, and the double jeopardy model's prediction that market leaders benefit disproportionately from loyalty transference. He finds that the study provides support for the brand equity and double jeopardy propositions.

**Mark Freeman, Alison Freeman**(2011) presented a paper on design/methodology/approach involving normative task model that was developed in this paper was created through an expert review of 14 online grocery stores, using a reverse engineering technique to model the features of the stores' ordering process. The findings present a model that can be used to further understand the processes of customers as they engage in an online grocery shopping visit. The normative task model presented is expected to help in the future design of online grocery stores by identifying the possible errors that users can encounter, and methods to reduce the occurrence

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of these errors. Errors are one area that traditional task-modeling processes ignore, due to their focus on successful processes.

# **III .Research Methodology**

#### **3.1 Statement of Problem:**

In this age of digitization when organized e-retailing is growing in leaps & bounds and the consumer behavior has changed drastically. This research will help us to find what are the perceptions and apprehensions of consumers on online stores and this research helps us in analyzing the influence of demographic factors on various service factors.

#### **3.2Research Objectives:**

- 1. To analyze customer shopping behavior.
- 2. To study the customer perceptions on online stores.
- 3. To analyze the impact of various service factors on age, gender, occupation and income.
- 4. To analyze significant relationship between dimensions of service such as quality, pricing, promotions, delivery, location and payment modes on demographic factors

#### **3.3 Hypothesis:**

H0: There is no significant relationship between dimensions of service such as quality, pricing, promotions, delivery, location and payment modes on demographic factors such as age, gender, occupation, annual income.

HA: There is no significant relationship between dimensions of service such as quality, pricing, promotions, delivery, location and payment modes on demographic factors such as age, gender, occupation, annual income.

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#### **3.4Primary Data:**

Primary data has been collected using a structured and focused questionnaire; which covered various dimensions of the research questions. Convenient sampling technique was used to collect data for the research. The sample size consisted of 100 respondents who are mainly online shoppers.

#### 3.5 Secondary Data:

Secondary data has been collected from books, internet, literature and other relevant documents. Magazines, Journals, Fact sheets and Web resources, online libraries and websites are other sources.

#### **3.6 Statistical Techniques used**

#### Chi square test:

The application of chi square test in this study was to determine whether their exists relationship between the expected frequencies and the observed frequencies in one or more categories.. The test was also used to find out whether the various dimensions of service such as quality, pricing, promotions, delivery, location and payment modes on demographic factors such as age, gender, occupation, annual incomeare dependent or independent of each other.

#### Anova:

The application of ANOVA test in this study was to determine whether there is a significant difference between the expected frequencies and the observed frequencies in one or more categories. The test was also used to find out whether their exist significant difference between dimensions of service such as quality, pricing, promotions, delivery, location and payment modes on demographic factors such as age, gender, occupation, annual income.

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# **IV** .Data Analysis

#### 4.1 Testing of hypothesis:

Table 1:Showing the Testing of Hypothesis for various dimension of services.

Hypothesis	Level Of	F- Value	P- Value	Accepted/Rejected
	Significance			
Pricing of the	5%	9.457	.149	Null hypothesis is
service &				accepted.
income of				
respondents are				
independent of				
each other.	Sugar State	1.000		
Promotional	5%	18.620	.005	Alternative
aspect & age of	1-1-1-1		. S.	hypothesis <mark>is</mark>
respondents are		Contract of the local division of the local		accepted.
independent of			× 12	
each other.			~	27
Promotional	5%	8.185	.042	Alternative
aspect & gender			100	hypothesis is
of respondents	I Come in			accepted.
are independent		A	1 × 1	
of each other.	I N	10.1	K /	
Promotional	5%	24.478	.004	Alternative
aspect &	· · ·			hypothesis is
income of				accepted.
respondents are				
independent of				
each other.				
Web navigation	5%	14.690	.023	Alternative
& age of				hypothesis is
respondents are				accepted.

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independent of				
each other.				
There is no	5%	4.058	.020	Alternative
significant				hypothesis is
difference				accepted.
between ease of				
use and the age				
the respondents				
There is no	5%	6.926	.000	Alternative
significant	100 C			hypothesis is
difference	1			accepted.
between				
delivery of	1.	and a second		
service and	1 2 4	100 m	- <b>*</b>	
annual income		Party and		
of respondents				
There is no	5%	3.928	.023	Alternative
There is no significant	5%	3.928	.023	Alternative hypothesis is
There is no significant difference	5%	3.928	.023	Alternative hypothesis is accepted.
There is nosignificantdifferencebetween quality	5%	3.928	.023	Alternative hypothesis is accepted.
There is no significant difference between quality of service and	5%	3.928	.023	Alternative hypothesis is accepted.
There is nosignificantdifferencebetween qualityof service andthe age of the	5%	3.928	.023	Alternative hypothesis is accepted.
There is no significant difference between quality of service and the age of the respondents	5%	3.928	.023	Alternative hypothesis is accepted.
There is nosignificantdifferencebetween qualityof service andthe age of therespondentsThere is no	5%	3.928	.023	Alternative hypothesis is accepted.
There is nosignificantdifferencebetween qualityof service andthe age of therespondentsThere is nosignificant	5%	3.928	.023	Alternative hypothesis is accepted.
ThereisnosignificantdifferencebetweenqualityofserviceandtheageoftheageofrespondentsThereisnosignificantdifference	5%	3.928	.023	Alternative hypothesis is accepted.
Thereisnosignificantdifferencebetweenqualityofserviceandtheageoftheageoftheageoftheageoftheageoftheageofsignificantdifferencebetweenprice	5%	3.928	.023	Alternative hypothesis is accepted. Null hypothesis is accepted.
There is nosignificantdifferencebetween qualityof service andthe age of therespondentsThere is nosignificantdifferencebetween priceof service and	5%	3.928	.023	Alternative hypothesis is accepted. Null hypothesis is accepted.
There is no significant difference between quality of service and the age of the respondents There is no significant difference between price of service and the age of the	5%	3.928	.023	Alternative hypothesis is accepted. Null hypothesis is accepted.

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There is no5%significantdifferencebetween qualityof service andgender ofrespondents	1.814	.181	Null hypothesis is accepted.

#### **4.2 Interpretation:**

1. H0: Pricing of the service & income of respondents are independent of each other. HA: Pricing of the service & income of respondents are dependent of each other. Inference:

Since the p-value is greater than 5% level of significance, the null hypothesis is accepted and alternative is rejected. In other words, we can conclude that prices & income groups are independent of each other.

2. H0: Promotional aspect & age of respondents are independent of each other. HA: Promotional aspect & age of respondents are dependent of each other. Inference:

Since the p-value is greater than 5% level of significance, the null hypothesis is rejected and alternative is accepted. In other words, we can conclude that promotions & age are dependent of each other.

3. H0: Promotional aspect & gender of respondents are independent of each other. HA: promotional aspect & gender of respondents are dependent of each other. Inference:

Since the p-value is less than 5% level of significance, the null hypothesis is rejected and alternative is accepted. In other words, we can conclude that promotions & gender are dependent of each other.

4. H0: promotional aspect & occupation of respondents are independent of each other.

HA: promotional aspect & occupation of respondents are dependent of each other. Inference:

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Since the p-value is less than 5% level of significance, the null hypothesis is rejected and alternative is accepted. In other words, we can conclude that promotions & occupation are dependent of each other.

 H0: web navigation & age of respondents are independent of each other. HA: web navigation & age of respondents are dependent of each other. Inference:

Since the p-value is less than 5% level of significance, the null hypothesis is rejected and alternative is accepted. In other words, we can conclude that web navigation & age are dependent of each other.

6. H0: There is no significant difference between ease of use and the age the respondents

HA: There is significant difference between ease of use and the age the respondents

Inference:

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Since the p-value is less than 5% level of significance, the null hypothesis is rejected and alternative is accepted. In other words, we can conclude that website navigation & age are having significance difference.

7. H0: There is no significant difference between delivery of service and annual income of respondents

HA: There is significant difference between delivery of service and annual income of respondents

Inference:

Since the p-value is less than 5% level of significance, the null hypothesis is rejected and alternative is accepted. In other words, we can conclude that delivery & annual income are having significance difference.

8. H0: There is no significant difference between quality of service and the age of the respondents

HA: There is significant difference between quality of service and the age of the respondents

Inference:

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Since the p-value is less than 5% level of significance, the null hypothesis is rejected and alternative is accepted. In other words, we can conclude that quality & age have significance difference.

9. H0: There is no significant difference between price of service and the age of the respondents.

HA: There is significant difference between price of service and the age of the respondents.

Inference:

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Since the p-value is greater than 5% level of significance, the null hypothesis is accepted and alternative is rejected. In other words, we can conclude that prices & age no significance difference.

10. H0: There is no significant difference between quality of service and gender of respondents

HA: There is significant difference between quality of service and gender of respondents

Inference:

Since the p-value is greater than 5% level of significance, the null hypothesis is accepted and alternative is rejected. In other words, we can conclude that quality & age have no significance difference.

## **V**.Findings

- The study reveals that pricing and demographic factors like age, gender, occupation, income groups are independent of each other.
- The age and quality are significantly related and is shown by the ANOVA test which suggests that the respondents above 28 years are in better position to gauge quality as compared to respondents of 20-23 age groups and there is a strong correlation between age of the respondent and the quality of service.
- Study shows that people above 28 years respondents are in better position to gauge delivery, web navigation, location, Mode of payment factors as compared to respondents

of 20-23 age groups.

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• Study reveals that people with income above 4 lakh are in better position to gauge quality as compared to respondents with less than 1.5lakh income group.

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- The study shows that there is a relationship between the demographic factors like age, occupation and income with the quality of the service.
- The study shows that there is a strong correlation between the various service dimensions like quality, pricing, promotion, location, delivery, mode of payment, navigation (ease of use) with occupation of the demographic factor.
- The study also reveals that demographic factor gender is weakly correlated with various service dimensions like quality, price, promotion, mode of payment, navigation of website(ease of use) delivery and location .

# **VI**.Suggestions

The study shows that there is a strong correlation between the various service dimensions like quality, pricing, promotion, location, delivery, mode of payment, navigation (ease of use) with occupation of the respondents. The study reveals that people in their late twenties are equipped to understand various service dimensions better than people in their early twenties so the e-commerce establishments should try woo people who are employed. They should try to gain their confidence and support in order to sustain the tough competition. The study shows a way for online shopping websites should mainly focus on the quality as it has major impact on the demographic factors. The gender has least effect on the various dimensions of service but occupation is major impact on service dimension. So companies should devise the policies and strategies to magnetize more number of people in this segment in future also. The results of the study can be utilized by practitioners in relooking or revamping their strategies for online shopping. This study finds agreement amongst variety by including people of different age, income, occupation gender segments. The study shows people with income 2-3lakh are in better position to gauge promotions and prices as compared to respondents with above 4 lakh income group and with less than 1.5lakh income group respectively, so e-tailers should have their

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promotional strategies targeting on the consumers within income group 2-3lakhs as they are there major customers.

# **VII**.Conclusion

This study examines whether consumers' demographic profile could influence online shopping behavior. Four variables relate to demographic profile were chosen such as gender, age, income and education of respondents. The results show that most of the variables do affect the consumers' online shopping behavior. Such findings support Fishbein's theory that implicate demographic profile as an important variable that influence tendency of consumers to shop online. Finally the result of the study reveals that there is no influence of gender of respondents on online shopping behavior while age, income and education of respondents influence online shopping behavior of consumers. The findings of this study would provide some insight to online retailers on the effect of demographic profile on online shopping. This assists firms involved in online trading in targeting specific group of consumers and formulating marketing strategies to attract them.

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