

# A STUDY ON THE IMPACT OF PRODUCT REVIEW UPON CONSUMER'S PERCEPTION TOWARDS E-COMMERCE ADOPTION

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## **ABSTRACT**

*Electronic technology has become the cutting edge for business today and it is phenomenally used in E-Commerce throughout the world today. Many people are discovering the virtual community of internet these days as its use is increasing exponentially in the world of communication. Customer reviews are a form of customer feedback in online shopping sites. There are also dedicated review sites, some of which use customer reviews instead of professional reviews. The reviews may themselves be graded for usefulness or accuracy by other users. Attracted by the quality calculated from the reviews, those consumers would buy the product, use it, and publish the product rating based on the actual quality of the product. Whenever consumer purchase online product reviews are one of the resources shoppers trust most when they're researching new products and services. If customers have helpful things to say about the products, even if its constructive criticism or advice, that becomes product reviews feature. The present paper focuses on the importance of product reviews given by other customers upon the attitude of the respondents with respect to their demographic variables using various statistical tools.*

**Keywords:** *Product reviews, Electronic technology, E-Commerce,*

## **I Introduction**

Electronic technology has become the cutting edge for business today and it is phenomenally used in E-Commerce throughout the world today. The use of internet these days is increasing exponentially in the world of communication. It has linked the average person to cyberspace with the growth of commercial online service. Internet functions as an information source, an entertainment source, a communication channel, a transaction channel, and even a distribution channel. One can use it as a shopping mall, a television set, a newspaper, a library or a phone. We have opportunity to sell and shop online through human talent and innovative way of doing business through E-Commerce. The backbone of this E-Commerce is Internet. It primarily refers to the digital enablement of transactions and processes within the firm. It does not include commercial transactions involving an exchange of values across organizational boundaries. Chaffey D. (2009) emphasizes that E-Commerce is the term which is used when people do trading (buying and selling) via the Internet. It is changing the life of everyone around us and now all the businesses are connected through internet. Internet is not only about the technology but also about the information, decision making and communication.. Exchange of value occurs in E-Commerce without it, it won't exist. E-commerce can enhance

business activities, and better and profitable access to markets. Brown and Goolsbee (2002) have studied how e-commerce has affected prices and price dispersion but much less work has looked at the influence of diffusion of the Internet has on the number or type of producers that operate in an industry.

The development of e-commerce has led to companies moving much of their business efforts to online environments. Uptill 1994, e-commerce did not exist. Although the terms Internet and World Wide Web are often used interchangeably, they are actually two very different things.

In the present study, importance of product reviews on the e-commerce website is focused. The matter to be studied is that unlike all the sellers, online sellers also know what they are offering to their customers but consumers remain uninformed about the quality of the product. What they actually know about the product is its price and the offers associated with them which compel them to purchase the product. Generally the information given by these websites does not fulfill the information needs of the customers. This is known as information asymmetry. So these websites ask their existing customers to rate the product or give their opinions about the product. This is called as product review which ultimately helps the consumers to know about the features of the product which is displayed online. On the basis of these reviews new customers also make their purchase at least for first time and if they like the product then they purchase it more frequently.

## II LITERATURE REVIEW

Anderson and Renault (2000) said that the consumers have heterogeneous tastes, where only some consumers know their taste matches with a firm's product while all consumers are uninformed about prices. Consumer information asymmetry in online product reviews suggests that the firm is better off in the market with no asymmetry in consumer information about distribution of price sensitivities and tastes for quality in the population (Yulia Nevskaya, 2012). Sun (2009) studies how the variance of consumer Internet reviews affects demand for a product. It is exactly consumer taste heterogeneity that gives rise to the variance in consumer ratings in her model. According to the author the consumers' taste is unidimensional and consumers are distributed uniformly according to their tastes.

## III RESEARCH METHODOLOGY

Descriptive and analytical research methods are used to conduct this study. This study was conducted in Bhopal. Questionnaires were the source of data collection, which contained some open ended and some multiple choice questions. Secondary data was collected through books, magazines, newspapers and journals. Respondents were categorized on the basis of age, gender Occupation and income. Total 100 respondents were to be surveyed out of which only 86 respondents completed the questionnaires in all respect. All filled questionnaires were coded and data was then tabulated and analyzed using various statistical tools.

## IV OBJECTIVES

1. To analyze the attitude of the respondents towards product reviews w.r.t. Gender .
2. To analyze the attitude of the respondents towards product reviews w.r.t. age.

3. To analyze the attitude of the respondents towards product reviews w.r.t. Income.
4. To analyze the attitude of the respondents towards product reviews w.r.t. occupation.

## V HYPOTHESIS

1. There is no significant difference in the attitude of the respondents towards product reviews w.r.t. gender.
2. There is no significant difference in the attitude of the respondents towards product reviews w.r.t. age.
3. There is no significant difference in the attitude of the respondents towards product reviews w.r.t. Income.
4. There is no significant difference in the attitude of the respondents towards product reviews w.r.t. occupation.

## VI DEMOGRAPHIC PROFILE OF THE RESPONDENTS

Table no.1 shows the demographic profile of the respondents. It can be seen that respondents have been categorized on the basis of age in four categories. First category is 18-23 years, second is 23 -28 years, 28-33 years is the third category and last category is that of 33 -38 years and above. Gender wise people could be categorized in two categories, i.e., male and female. Occupationwise also people were categorized in two categories, viz, Businessmen and service class. Income wise people were categorized in 4 categories; those having the income upto Rs. 10000 per month, from 10000-20000 per month, from 20000-30000 per month and above 30000 per month.

**Table no.1: Demographic Profile of the Respondents**

Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-23 years	15	15.8	15.8	15.8
	23-28 years	21	22.1	22.1	37.9
	28-33 years	15	15.8	15.8	53.7
	33-38 years and above	44	46.3	46.3	100
	Total	95	100	100	
Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	49	51.6	51.6	51.6
	Female	46	48.4	48.4	100
	Total	95	100	100	
Income					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Upto Rs. 10000 per month	33	34.7	34.7	34.7
	From 10000-20000 per month	33	34.7	34.7	69.5
	From 20000-30000 per month	15	15.8	15.8	85.3
	Above 30000 per month	14	14.7	14.7	100
	Total	95	100	100	
Occupation					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Businessmen	47	49.5	49.5	49.5
	Service class	48	50.5	50.5	100
	Total	95	100	100	

In table no. 2 is given the statistics regarding various data which were obtained through analyzing their means.

**Table no. : 2**

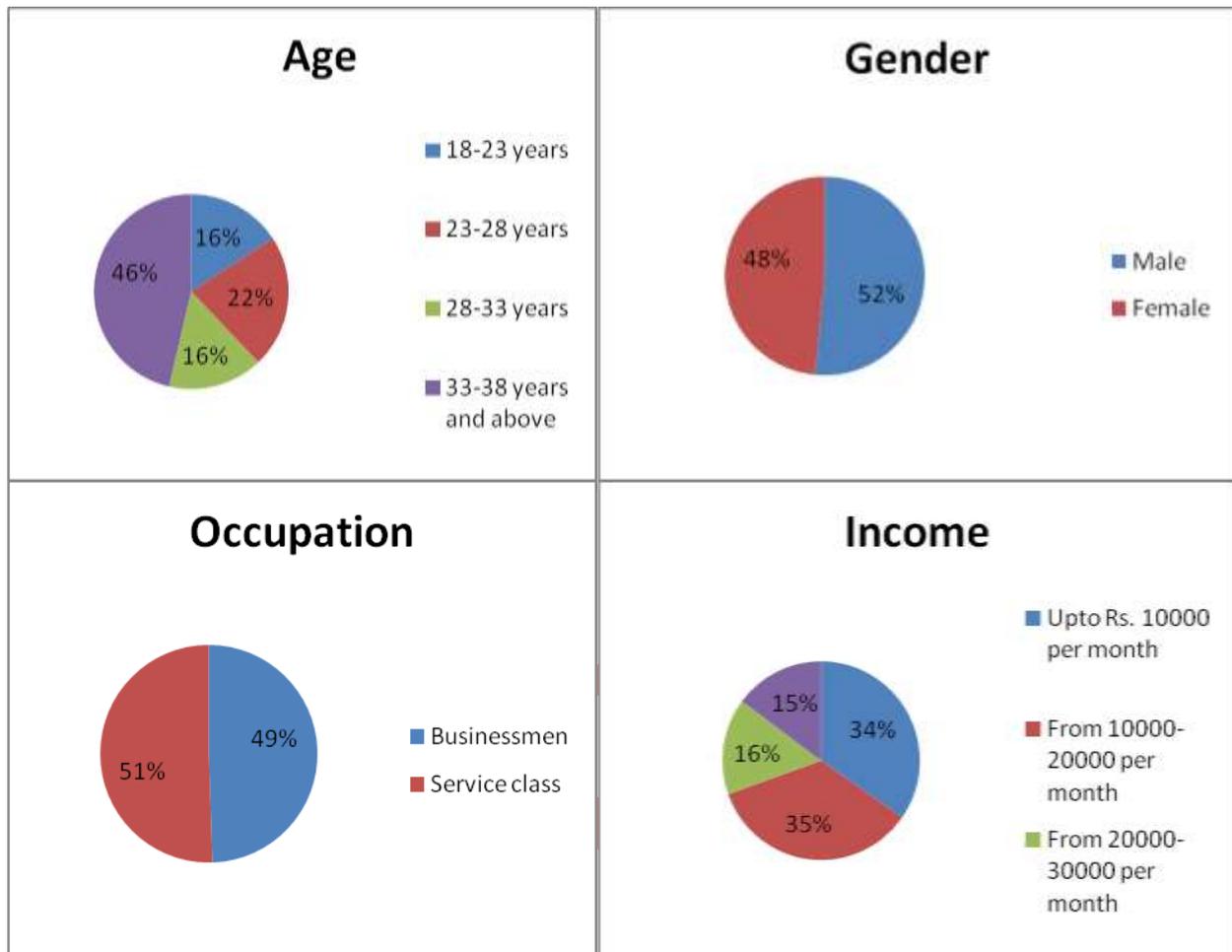
Statistics						
		Product Reviews	Age	Gender	Income	Occupation
N	Valid	95	95	95	95	95
Mean		2.3158	2.9263	1.4842	2.1053	1.5053
Minimum		1.00	1.00	1.00	1.00	1.00
Maximum		5.00	4.00	2.00	4.00	2.00
Sum		220.00	278.00	141.00	200.00	143.00

## VII FREQUENCY TABLE

From the following frequency table it is seen that 39 respondents were saying that their purchase decision are not affected by the product reviews given on the particular website. 20 respondents were disagreeing with the statement. 10 respondents were unable to form any opinion. 19 respondents were agreeing that their purchase decision are affected by the product reviews given on the particular website, 7 respondents showed their strong agreement with the statement.

**Table no.3**

Product Reviews					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	39	41.1	41.1	41.1
	Disagree	20	21.1	21.1	62.1
	No Opinion	10	10.5	10.5	72.6
	Agree	19	20.0	20.0	92.6
	Strongly Agree	7	7.4	7.4	100.0
	Total	95	100.0	100.0	



**H0<sub>1</sub>: There is no significant difference in the attitude of the respondents towards product reviews w.r.t. Gender .**  
 For analyzing this hypothesis T test was applied. From the table it can be observed that there were 49 males and 46 female respondents who have attempted this question with their mean values 2.0000 and 2.6522 respectively.

**Table no.4.1**

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
Product Reviews	Male	49	2.0000	1.30703	.18672
	Female	46	2.6522	1.38592	.20434

The here the P-value comes out to be 2.361 which is greater the significant value 0.5 which means the null hypothesis is accepted that on the basis of gender the attitude of the respondents does not vary.

Table no. 4.2

		Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
										Lower	Upper
Product Reviews	Equal variances assumed	2.881	.093	-2.361	93	.020	-.65217	.27629	-1.20082	-.10352	
	Equal variances not assumed			-2.356	91.630	.021	-.65217	.27680	-1.20196	-.10239	

**H<sub>0</sub><sub>2</sub>: There is no significant difference in the attitude of the respondents towards product reviews w.r.t. age.** By looking at the following descriptive table, there were 15 respondents in the category of 18-23 age group (Mean=3.9333). 21 were there in the next age group that is, 23-28 years of age (Mean= 2.6190). 15 respondents were there in the third category from 28-33 years (Mean=1.5333). Fourth category was of 33- 38 years of age (Mean=1.8864) and also above that. Highest number of respondents was 44.

Table no.5.1

Descriptives								
Product Reviews								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
18-23 years	15	3.9333	.25820	.06667	3.7903	4.0763	3.00	4.00
23-28 years	21	2.6190	1.93588	.42244	1.7378	3.5002	1.00	5.00
28-33 years	15	1.5333	.51640	.13333	1.2474	1.8193	1.00	2.00
33-38 years and above	44	1.8864	.96968	.14618	1.5916	2.1812	1.00	4.00
Total	95	2.3158	1.37812	.14139	2.0351	2.5965	1.00	5.00

From the following table P-value comes out to be .000 which is lower than the significant value 0.05 which means that the null hypothesis is rejected and alternative hypothesis is accepted that **significant difference exists in the attitude of the respondents towards product reviews w.r.t. age.**

**Table no.5.2**

ANOVA					
Product Reviews					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	58.475	3	19.492	14.775	.000
Within Groups	120.051	91	1.319		
Total	178.526	94			

**H<sub>03</sub>: There is no significant difference in the attitude of the respondents towards product reviews w.r.t. Income.**

**Table no. 6.1**

Descriptives								
Product Reviews								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Upto Rs. 10000 per month	33	2.8182	1.28585	.22384	2.3622	3.2741	1.00	5.00
From 10000-20000 per month	33	2.2727	1.44206	.25103	1.7614	2.7841	1.00	5.00
From 20000-30000 per month	15	2.5333	1.35576	.35006	1.7825	3.2841	1.00	4.00
Above 30000 per month	14	1.0000	.00000	.00000	1.0000	1.0000	1.00	1.00
Total	95	2.3158	1.37812	.14139	2.0351	2.5965	1.00	5.00

From the following table P-value comes out to be .000 which is lower than the significant value 0.05 which means that the null hypothesis is rejected and alternative hypothesis is accepted that **significant difference exists in the attitude of the respondents towards product reviews w.r.t. Income.**

**Table no. 6.2**

ANOVA					
Product Reviews					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	33.338	3	11.113	6.965	.000
Within Groups	145.188	91	1.595		
Total	178.526	94			

**H0<sub>4</sub>: There is no significant difference in the attitude of the respondents towards product reviews w.r.t. occupation.**

Following group statistics shows that there are two categories of respondents based on occupation. One is businessmen and the other is Service class people. Businessmen were 47 (Mean=2.3617) in number and service class people were 48 (Mean=2.2708) in number.

**Table no. 7.1**

Group Statistics					
	Occupation	N	Mean	Std. Deviation	Std. Error Mean
Product Reviews	Businessmen	47	2.3617	1.34205	.19576
	Service class	48	2.2708	1.42530	.20572

From the table the significant value .684 is greater than 0.05 which means that the null hypothesis is accepted that **there is no significant difference in the attitude of the respondents towards product reviews w.r.t. occupation and it can be said that differences exist just because of chance.**

**Table no. 7.2**

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper	
Product Reviews	Equal variances assumed	.167	.684	.320	93	.750	.09087	.28416	-.47342	.65515
	Equal variances not assumed			.320	92.860	.750	.09087	.28398	-.47307	.65481

## VIII FINDINGS AND CONCLUSION

It was found that purchase decision of majority of the respondents was not affected by the product reviews given on the particular website. It was also found that whether it be male or female, there was not too much difference in the attitude of the respondents towards product reviews. Hence it can be said that on the basis of gender the attitude of the respondents does not differ. People from different age group had difference of opinion regarding these reviews. So it can't be said that all of them behave equally to these kinds of reviews. On the basis of income respondents did not show

any difference in their attitude towards these reviews. Same was the case when the impact of product review was tested against occupation. Hence it can be said that these parameters are not the significant factors to explain the difference.

Whenever consumer purchase online product reviews are one of the resources shoppers trust most when they're researching new products and services. If customers have helpful things to say about the products, even if its constructive criticism or advice, that may prove to be helpful for the new users as well as customers. Findings of this study will eventually help the online consumers in identifying the value of these review in every aspect that is , positive or negative and also deeper understanding of the concept. Online sellers will also be benefitted by getting to know the existing as well as customer's desired value. There fore it is vital that the sellers as well as buyers understand the importance of the reviews given by others.

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