



Evaluating Factors influence Consumers' Satisfaction level towards online shopping in India

Rohini Baghel

Research Scholar, Faculty of Management Studies, Banasthali Vidyapith, Banasthali, Rajasthan, India
rohiniabaghel10@gmail.com

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Abstract

With the growth of the Internet, online shopping is developing speedily in India as a new way of shopping. Consequently, this research paper needs to identify determinates of consumer satisfaction level towards online shopping in India. A total 100 numbers of consumers have participated in this research in India. The finding of our study i.e. website design, security, information quality, pricing, product quality, and product variety these factors are more affecting the consumers' satisfaction level towards online shopping in India.

Keywords: Consumer satisfaction, Security, Product Variety, Product Quality and Pricing, Website Design, Information Quality.

Introduction

Online shopping has become prevalent; exploiting the "net generation" service is highly suitable. Mostly consumers are prefer to online shopping or websites used for online shopping purpose. Technology innovation is very helpful to online shopping but traditional shopping is a very time-consuming shopping. Modern consumers wants to save the time and energy, they have no time to going the market for shopping purpose.

E-Retailers dealing with many products in India, i.e. "Amazon, Flipkart, Myntra, e-bay, Homeshop18, Yebhi.com etc". They are provided many facilities for consumers. Online shopping is the process whereby customers directly buy the goods and services through the internet i.e. clothes, electronics, smartphones, gadgets etc.

The e-commerce industry in India, "which grew by 33% last year and saw goods and services worth \$3.5 billion exchanging hands, is poised for more significant growth and touch new highs; the three most prominent e-commerce players have driven it; Flipkart, Amazon and snap deal. The trio achieved \$ 4 billion in 2014, where Flipkart alone accounted for almost half that amount".

Review of the Literature: Zhang¹ study had shown that most consumers purchase electronics products through Amazon and Flipkart. Three main factors are affecting online shopping behavior'- gender, income and price. The paper findings, males are more interested in purchasing electronics products compare to females. However, mostly people are interested to purchase the electronics products during the discounts period and offers of the products.

Consumer Satisfaction: "Consumer's satisfaction are refers from comparing the expectations and the experience; in other words, the consumers are happy while they meet or deliver the product on time and fulfill the expectations"². Satisfaction and loyalty is the critical element influential the success of the market. Satisfaction factor are an essential aspect of consumer buying because the customers are ready to purchase the product and after used the product and review about the product of consumers. That must be important for every seller. Then they would repeat purchase the product "if the service provider reached or exceeded their expectations"³. According to Guo and Ling⁴ Eight factors are influence the consumers' satisfaction level; web design, security, quality information about the product and services, product range, product quality, payment method, service provider and product variety etc".

Website Design: Website design is the critical role play for online shopping, effective website design to attract consumers to buy the product online. "Effective website designs are included in the websites' navigation capability or visual appeal"⁵. Customer satisfaction in e-commerce is related to the quality of website design⁶. Lee and Lin⁷ study found that website design positively impact on consumers' satisfaction level and perceived service quality. Websites design impact on consumers' minds and creates the visual appeal of the websites. As antecedents to website trust, website satisfaction and e-loyalty in graphic design and information design positively influenced consumer satisfaction".

Security: Another critical factor is affect for online shopping on consumer's mind i.e. security factor. According to Christy and Matthew⁸ this study had found that security is the website ability to protect the consumers' personal information. Consumers are ready to pay online, i.e. online bank transfer,

online transactions from unauthorized disclosure. However, “consumers are concern about the security, liabilities and privacy of online websites⁹. “Security concerns about e-commerce can be divided into user authentication and worry about data and transaction security^{10,11”}.

Elliot and Fowell¹² and Szymanski and Hise¹³ founded that, perception of the consumers related to the e-commerce security risk decrease and satisfied the online store services expected information is increasing. Therefore, the security factor increases the level of customers’ satisfaction. This study was conducted by Christian and France¹⁴. They have identified the critical element of securities, and they are helpful to manipulate the consumers buying and e- satisfaction level of consumers, technology, shopping etc. Christian and France¹⁴ are saying that security and e-satisfaction of the consumers have a positive relationship of the both.

Quality Information: Accuracy of information quality is concerned about the retailers and customers relationship and trustworthiness of the websites or e-retailers. According to Katernttanakual¹⁵ the reliability of the online retailers then customers have to perceived risks, better justification for their decisions and ease in reaching the best judgments. Therefore, there is a positive and negative impact on customers’ satisfaction and interest in purchasing the products online. “This deviation is consistent with the media richness theory that emphasized the importance of the quality, accuracy and reliability of the information exchanged across a medium¹⁶. Information quality significantly impacts customer satisfaction, accuracy, internet shopping, content and format, etc.⁸. A higher level of information quality will improve the customer satisfaction level related the online shopping and the accuracy of the information quality¹⁷.

Product Quality: “Quality is an essential property of a product. Product quality is the expected standard of development or service excellence¹⁸. Product quality is crucial for every consumer because there are positive and negative aspects of the product and services. “The Sproles and Kendall’s Consumers Style Inventory (CSI) model highlighted the influence of high-quality development. Some consumers consider the quality product as their first consider when to shop online”. However, online shopping has some negative aspects, i.e. consumers have no touch and smell the products. They only see the effect on the websites or pictures. Furthermore, they are only read the comments or reviews on the website can be indicating the quality of the product to some extent¹⁴.

Product Variety: E-retailer has offered many products to the customers, and “there will be a higher chance of selling the product¹⁴. Consumers expect online retailers to offer a wide range of product variety because of the reach of the internet and the potential to track down specialty goods and services¹⁸. According to Szymanski and Hise¹³ this study indicated that a wider variety of the product is helpful to attract the customers

and e-satisfaction would have a more positive impact on consumers.

Liu et al.¹⁷ “founded that eight factors impact consumers' buying or consumer satisfaction level (Website design, quality information, payment method, security, privacy, delivery, product quality, product variety). Therefore, the product is a solid factor for influence customer satisfaction in an online shopping environment”.

Pricing: Professional literature is described that pricing is an essential role play to manipulate the consumers buying the product online¹⁹. E-Commerce portals give the chances to compare the price quickly because many e- retailers are offered many types of development and different prices²⁰.

Pricing is directly impact on consumers perception, the delivery cost of the products, transaction cost etc. “Due to better purchase conditions, consumers use the internet to buy the same product at a lower price than in the traditional store²¹. Discounts while purchasing influenced the consumer buying, and ultimate, they affect their immediate customer satisfaction. As online stores are offered many products range in the e-commerce portals, they easily compare the price and quality of the product and services. Therefore, pricing can be a reason to satisfy the customers⁴.

Relationships between different factors are affecting customer satisfaction level towards online shopping in India.

H1: Which factors is more effect on consumer’s satisfaction level towards online shopping in India.

Methodology

Population: We target customers to bring the products through online portals, i.e. Amazon, Flipkart snap deal, etc.

Research Design: This study has been based on the descriptive method or primary data.

Tools for data collection: Collect the data through a questionnaire; it is based on 5 points Likert scale method.

Sample Size: A total number of 100 questionnaires are distributed among the customers in Delhi or NCR.

Data Collection: i. Primary Data: This data was collected through a questionnaire from the customer who buys the products through online portals. ii. Secondary Data: The data was collected from secondary sources, i.e. books, internet sources, journals and research studies etc.

Data Analysis Methodology: The data was collected from the specific cities Delhi and NCR, and then fill the questionnaire who buys the products online.

Table-1: Gender of Respondents.

Characteristics	Category	Frequency	Percentage
Gender	Male	43	43
	Female	57	57
	Total	100	100

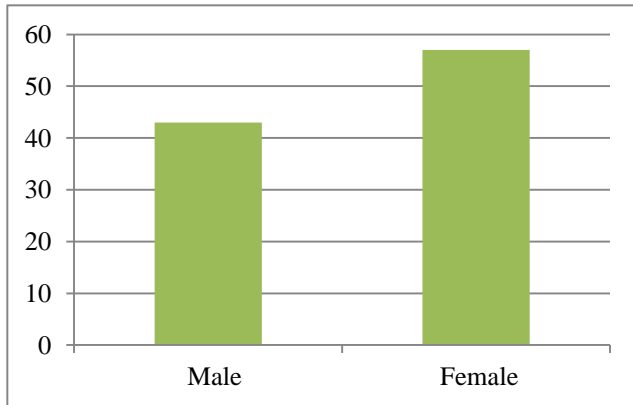


Figure-1: Gender of Respondents.

Gender of the respondents, we are collecting the random sampling of the data. 43 males have preferred the online shopping output of 100 no of sampling, and 57 females prefer online shopping between the 100 no of sampling through the purchase of the product online.

Table-2: Age of Respondents.

Characteristics	Category	Frequency	Percentage
Age	Less than 18 years	13	13
	18-23 years	43	43
	24-29 years	44	44
	Total	100	100

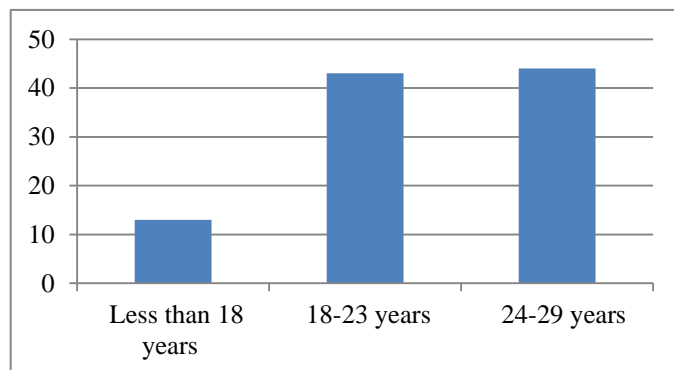


Figure-2: Age of Respondents.

Age-wise respondents, we are collecting the random sampling. Less than 18 years of the respondents are 13 numbers of respondents. 18-23 years of the respondents are 43 numbers respondents. 24-29 years of the respondents are 44 numbers of the respondents.

Table-3: Case Processing Summary.

Case		N	%
	Valid	99	100.0
	Excluded	0	0.0
	Total	99	100.0

a. List wise deletion based on all variables in the procedure.

Table-4: Reliability Statistics.

Cronbach's Alpha	No of items
.882	15

Reliability Statistic: It has show that the Cronbach's Alpha for the analysis tool applied is .882 (Greater than 0.7), hence it is acceptable for current analysis.

Factor Analysis: As discussed, the total number of questionnaires is 15; it is calculated in different aspects of a study on customers' satisfaction level towards online shopping in India. We are analyzing the problems and collect the 17 no of variables. Each variable are closed related to other variables and using the factor analysis techniques. "It is helpful to reduce the number of variables in the research problem to a concise or manageable number by combining selected ones into factors. The principal component analysis method of extraction and the Varimax process of rotation have been used. Before using factor techniques, the appropriateness of the data set the factor model was tested using Kaiser Meyer Olkin (KMO). As a result, the value of KMO statistics .797 was founded, which is greater than the desired value of 0.5".

Table-5: KMO and Bartlett's Test.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.797
Bartlett's Test of Sphericity	Approx. Chi-Square	782.201
	Df	136
	Sig.	.000

Table-6: Total Variance Explained. Extraction Method: Principal Component Analysis.

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.120	36.002	36.002	6.120	36.002	36.002	3.945	23.206	23.206
2	1.960	11.531	47.533	1.960	11.531	47.533	2.907	17.099	40.305
3	1.420	8.355	55.887	1.420	8.355	55.887	2.237	13.161	53.466
4	1.257	7.393	63.280	1.257	7.393	63.280	1.668	9.814	63.280
5	1.954	5.614	68.894						
6	1.841	5.945	73.839						
7	.816	4.800	78.639						
8	.630	3.707	82.346						
9	.553	3.253	85.599						
10	.496	2.920	88.519						
11	.438	2.578	91.098						
12	.365	2.148	93.246						
13	.330	1.939	95.185						
14	.277	1.631	96.815						
15	.239	1.405	98.221						
16	.153	.902	99.123						
17	.149	.877	100.000						

Table-7: Rotated Component Matrix.

Matrix	1	2	3	4	5	6
S.Q1	.755					
S.Q3	.735					
S.Q4	.788					
S.Q5		.618				
S.Q6		.772				
S.Q7		.717				
P.Q5			.618			
P.Q7			.772			
P.Q9			.717			
P.Q10				8.16		
S.Q2				6.68		
P.Q4					5.44	
P.Q6					7.70	
P.Q2						5.52
P.Q3						6.52

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

The variables or statements of questionnaire clubbed under factors were under:

Factor 1 (Product Quality): This factor has Total Initial Eigen values of 6.120 and explains 36.002% of total variance. This factor includes three variables or three different dimensions namely: i. Online shopping provides better quality products. ii. When I shop online more positive feedback indicates better quality of products. iii. When shopping on the internet pictures and colors are clear and representative of the products.

Factor 2 (Product Variety): This factor has Total Initial Eigenvalues of 1.960 and explains 11.531% of total variance. This factor includes three variables or three different dimensions namely: i. Internet shopping provides more variety of the products, ii. The service quality of sellers is important, iii. I will consider all comprehensive factors to choose the best products when I shop online.

Factor 3 (Pricing): This factor has Total Initial Eigenvalues of 1.420 and explains 8.335% of total variance. This factor includes three variables or three different dimensions namely: i. The price is important when you shopping online, ii. Online

shopping helps me to saving money, iii. Shopping online permits me to buy an item at a relatively lower price.

Factor 4 (Quality Information): This factor has Total Initial Eigenvalues of 1.257 and explains 7.393% of total variance. This factor includes three variables or three different dimensions namely: i. Concerns over what information retailers are storing about customers, e.g. buying habits, ii. Not being able to physically inspect the goods before purchase.

Factor 5 (Security): This factor has Total Initial Eigenvalues of 1.954 and explains 5.614% of total variance. This factor includes three variables or three different dimensions namely: i. I trust the security of online payment methods such as credit/debits cards etc... ii. Goods getting damaged during transport.

Factor 6 (Website Design): This factor has Total Initial Eigenvalues of 1.841 and explains 5.954% of total variance. This factor includes three variables or three different dimensions namely: i. The website design helps me in searching the products easily, ii. Please indicate which one effects you satisfaction most during your previous shop online experience.

Table-8: Variables Entered/Removed.

Model	Variables Entered	Variables Removed	Method
1	Product Quality, Product Variety, Pricing, Quality Information, Security, Websites	.	Enter

a. Dependent Variable: Consumer Satisfaction, b. All requested variables entered.

Table-9: Model Summary.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df 1	df 2	Sig. F Change
1	0.246 ^a	0.061	0.000	0.902	0.061	0.999	6	93	0.431

a. Predictors: (Constant), Product Quality, Product Variety, Pricing, Quality Information, Security, Websites, b. Dependent Variable: Consumer Satisfaction.

Table-10: ANOVA^s.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.880	6	0.813	0.999	.000 ^b
	Residual	75.680	93	0.814		
	Total	80.560	99			

a. Dependent Variable: Consumer Satisfaction, b. Predictors: (Constant), Websites, Quality Information, Pricing, Product Quality, Security, Product Variety.

Table-11: Coefficients.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	3.676	0.668	5.501	.000
	Product Quality	0.082	0.111	.081	.743
	Product Variety	0.044	0.124	.045	.351
	Pricing	0.018	0.101	.022	.177
	Quality Information	0.128	0.148	.105	.865
	Security	0.205	0.130	.197	1.577
	Websites Design	0.118	0.108	.127	1.098

a. Dependent Variable: Consumer Satisfaction.

Show the Regression table below: Online Shopping, i.e. Product Quality, Product Variety, Pricing, Quality Information, Security, Websites, has a significant relationship between consumer satisfaction levels”. The standard error of estimate measures the dispersion of Consumer Satisfaction factors around their means which is 0.902. This is the “standard deviation of the error term and the square root of the mean square for the Residual” in the ANOVA Table-10.

The ANOVA is given in the Table-10 and “the significant value is 0.000, which is less than the critical value of 0.05” therefore, the consumer satisfaction level has a significantly different mean than Online Shopping factors, i.e. Product Quality, Product Variety, Pricing, Quality Information, Security, and Websites consequently, has a linear relationship. Hence forth, the null hypothesis “Different types of factors are not affecting the customer satisfaction level towards online shopping in India is rejected”. Product Quality, Product Variety, Pricing, Quality Information, Security, and Websites have no significant value is less than 0.005. The Total Variance is divided into the variance, which is possibly explained by Consumer shopping factors, i.e. Product Quality, Product Variety, Pricing, Quality Information, Security, and Websites, i.e. 4.880 and the variance, which is not explained by Consumer Shopping factors, i.e. 75.680.

The t value is statistically significant, being less than 0.05 for Individual different forms of online shopping, i.e. Product Quality, Product Variety, Pricing, Quality Information, Security, and Websites. The coefficient value of the consumer satisfaction level represents the changes in the mean response for one unit of change in online shopping factors. At the same time, the other terms in the model are held constant. The relationship between Product Quality, Product Variety, Pricing, Quality Information, Security, and Websites and consumer satisfaction level can be expressed in the equation forms as:

$$\text{Consumer Satisfaction} = 0.082 \text{ Product Quality} + 0.044 \text{ Product Variety} + 0.018 \text{ Pricing} + 0.128 \text{ Quality Information} + 0.205 \text{ Security} + 0.118 \text{ Websites}$$

The equation (1) is defined when Consumer Satisfaction is measured on five point Likert Scale.

Conclusion

Conclusion of this paper, according to the review of literature below, some factors are more affecting the consumer’s satisfaction level towards online shopping in India.

Product Quality, Product Variety, Pricing, Quality Information, Security, Websites Design Product quality is a more critical factor for every consumer buying; mostly, women search for more products and branded products. Because product quality is crucial for every consumer and there are positive and negative aspects of every product and services. Then e-commerce portals are offered many types of products and services. However, sometimes, branded products are an essential role play for a consumer’s life.

Product Variety: “Consumers expect online retailers to offer a wide range of product variety because of the reach of the internet and the potential to track down speciality goods and services”. The product variety is an essential role play for every consumer because every consumer has different tastes and preferences of the product and services.

Pricing: E-Commerce portals give the chances to compare the price quickly because many e-retailers are offered many types of products for different prices. Pricing is directly impacted on consumers buying, i.e. The delivery cost of the products, extra transaction charges etc., but during festival time, e-retailers are

offered many types of discounts and facilities, i.e. Coupons, free home delivery etc.

Quality Information: Accuracy of information quality is concerned about the retailers and customers relationship and trustworthiness of the websites or e-retailers.

Security: It is concerned that the consumers are not sharing the personnel information for other people or firms. "Security is the website ability to protect the consumers' personal information. Consumers are ready to pay online, i.e. online bank transfer, online transactions from unauthorized disclosure. Consumers are concern about the security, liabilities and privacy of online websites".

Websites Design: Website design is the critical role play for online shopping, effective website design to attract consumers to buy the product online. It is helpful to share accurate information for consumers about any product and service available in the market.

These factors are more impact on the consumer satisfaction level towards online shopping in India.

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