# A STUDY ON FACTORS AFFECTING ONLINE SHOPPING BEHAVIOR OF CONSUMERS IN CHENNAI

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#### **ABSTRACT**

Online shopping is a form of electronic commerce which allows consumers to directly purchase products or services from seller over the internet using web browser. Growing numbers of consumers shop online to purchase goods and services, gather product information or even browse for enjoyment. Online shopping environments are therefore playing an increasing role in the overall relationship between marketers and their consumers. The exploratory factor analysis shows that convenience, website features, security and time saving are the factors affecting online shopping behavior of consumers. The regression analysis indicates that convenience, security, website features and time saving are positively and significantly influencing the purchasing decision of consumers at one per cent level. Online retailers need to ensure that the online shopping process in their websites is designed to be as easy, simple and convenient as possible for online consumers to shop online. In addition, online retailers also need to ensure that they provide an efficient delivery service to their consumers.

Key Words: Exploratory Factor Analysis, Online Shopping, Purchasing Decision, Regression.

#### INTRODUCTION

Online shopping is a form of electronics commerce which allows consumers to directly purchase products or services from seller over the internet using web browser. Online shopping is a fast growing phenomenon. Growing numbers of consumers shop online to purchase goods and services, gather product information or even browse for enjoyment. Online shopping environments are therefore playing an increasing role in the overall relationship between marketers and their consumers (Koo et al 2008).

Due to exponentially rising business opportunities, there are a number of services being offered on the internet. Online shopping has emerged as one of the most prominent services available through internet. It has enormous advantages for the consumers as well as business houses. Through online shopping, business houses have been able to reach out to more consumers at less cost. They have been able to reach out to consumers living in remote areas. In-fact these are acting as stepping-stones to concept of global village. More over the inventory management overheads also decrease significantly through online shopping (Richa, 2012).

Consumers can shop from any place and need not physically visit the shops / outlets for shopping purposes. Therefore, even if customer is staying in remote area, he / she can easily shop through internet. However, here consumers can visit any number of sites to reach at final choice. Hence, online shopping provides unlimited choices to the consumers in nut shell. The customer can shop any day of the year on any time of the day. This also helps in consumers' time and energy saving. More over due to unlimited choice and less excess time, consumers can easily search for the desired things and can easily compare the products / items. Therefore, the present research

is made to study the factors affecting online shopping behaviour of consumers in Chennai.

#### METHODOLOGY

The Chennai city has been purposively selected for the present study. The 300 consumers of online shopping have been selected for the present study by adopting random sampling technique and the data and information pertain to the year 2014-2015. In order to examine the socio-economic status of consumers of online shopping, the frequency and percentage analysis have been worked out. In order to study the factors affecting online shopping behaviour of consumers, the exploratory factor analysis has been employed. In order to examine the influence of factors affecting online shopping behaviour on purchasing decision of consumers, the multiple linear regressions has been applied.

# RESULTS AND DISCUSSION

**Socio-Economic Status of Consumers of Online Shopping:** The socio-economic status of consumers of online shopping was analyzed and the results are presented in Table 1. The results show that about 64.33 per cent of consumers of online shopping are males, while, the rest of 35.67 per cent of consumers of online shopping are females. It is observed that about 39.67 per cent of consumers of online shopping belong to the age group of 31 - 40 years followed by 21 - 30 years (32.00 per cent), 41 - 50 years (17.00 per cent) and 51 - 60 years (11.33 per cent).

The results indicate that 38.00 per cent of consumers of online shopping are educated up to graduation followed by post graduation (27.33), diploma (16.00 per cent), higher secondary (11.00 per cent) and secondary education (7.67 per cent). It is clear that about 32.67 per cent of consumers of online shopping belong to the annual income group of Rs.4,01,000 – Rs.5,00,000 followed by mre than

Rs.5,00,000 (28.00 per cent), Rs.3,01,000 — Rs.4,00,000 (17.00 per cent), Rs.2,01,000 — Rs.3,00,000 (14.33 per cent) and less than Rs.2,00,000 (8.00 per cent).

Table 1: Socio-Economic Status of Consumers of Online Shopping

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Socio-Economic Status	Frequency	Percentage						
Gender								
Male	193	64.33						
Female	107	35.67						
Age Group								
21 – 30 years	96	32.00						
31 – 40 years	119	39.67						
41 – 50 years	51	17.00						
51 – 60 years	34	11.33						
<b>Educational Qualification</b>								
Secondary	23	7.67						
Higher Secondary	33	11.00						
Diploma	48	16.00						
Graduation	114	38.00						
Post Graduation	82	27.33						
Annual Income								
Less than Rs.2,00,000	24	8.00						
Rs.2,01,000 - Rs.3,00,000	43	14.33						
Rs.3,01,000 - Rs.4,00,000	51	17.00						
Rs.4,01,000 - Rs.5,00,000	98	32.67						
More than Rs.5,00,000	84	28.00						

# FACTORS AFFECTING ONLINE SHOPPING BEHAVIOUR OF CONSUMERS

In order to study the factors affecting online shopping behaviour of consumers, the exploratory factor analysis has been employed. The principal component method of factor analysis has been carried out with Eigen values greater than one through varimax rotation and the results obtained through rotated component matrix are presented in Table 2. The results of Kaiser-Meyer-Olkin (KMO Test) measure of sampling adequacy (KMO = 0.872) and Bartlett's test of Sphericity (Chi-square Value = 0.0012; Significance = 0.000) indicates that the factor analysis method is appropriate.

There are four factors which are extracted accounting for a total of 71.91 per cent of variations on 15 variables. The each of the four factors contributes to 25.86 per cent, 19.43 per cent, 16.72 per cent and 11.90 per cent respectively.

**Table 2: Factors Affecting Online Shopping Behavior of Consumers** 

Factor	Item	Rotated Factor Loadings	Eigen Value	% of Variation	Factor Name
I	I can buy the products anytime 24 hours a day while shopping online	0.68	2.03	23.86	Convenience
	Detail information is available while shopping online	0.63			
	It is easy to choose and make comparison with other products while shopping online	0.65			
	Finding right product online is easy	0.61			
	I get on-time delivery by shopping on-line	0.59			
п	The website layout helps me in searching and selecting the right product while shopping online	0.60	1.49	19.43	Website Features
	The website design helps me in searching the products easily	0.58			
	I prefer to purchase from a website that provides safety and ease of navigation and order	0.62			
	I prefer to buy from website that provides me with quality of information	0.66			
	Online Shopping protects my security	0.64	1.17	16.72	Security
III	I feel safe and secure while shopping online	0.57			
	I like to shop online from a trustworthy website	0.60			
IV	It takes less time in evaluating and selecting a product while shopping online	0.59	1.04	11.90	Time Saving
	Online shopping takes less time to purchase	0.55			
	Online shopping doesn't waste time	0.57			
	Cumulative % of Variation	-	-	71.91	-
	Cronbach's Alpha	-	-	-	0.87

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

Rotation converged in 9 iterations

**Factor - I:** From the results, it is inferred that out of 15 variables, five variables have their high, relatively tightly grouped factor loadings on factor - I.

#### This factor consists of:

- I can buy the products anytime 24 hours a day while shopping online (0.68)
- Detail information is available while shopping online (0.63)
- It is easy to choose and make comparison with other products while shopping online (0.65)
- Finding right product online is easy (0.61)
- I get on-time delivery by shopping on-line (0.59)

Hence, this factor is named as "Convenience".

#### **Factor - II:** is formed with:

- The website layout helps me in searching and selecting the right product while shopping online (0.60)
- The website design helps me in searching the products easily (0.58)
- I prefer to purchase from a website that provides safety and ease of navigation and order (0.62)
- I prefer to buy from website that provides me with quality of information (0.66)

These variables are named as "Website Features".

## Factor - III: This factor includes:

- Online Shopping protects my security (0.64)
- I feel safe and secure while shopping online (0.57)
- I like to shop online from a trustworthy website (0.60)

These variables are named as "Security".

**Factor - IV:** This factor is formed with:

- It takes less time in evaluating and selecting a product while shopping online (0.59)
- Online shopping takes less time to purchase (0.55)
- Online shopping doesn't waste time (0.57) This factor is named as "Time Saving".

The Cronbach's Alpha of the scale was 0.87 indicating that each measure demonstrated acceptable internal consistency. It is inferred that convenience, website features, security and time saving are the factors affecting online shopping behaviour of consumers.

# INFLUENCE OF FACTORS AFFECTING ONLINE SHOPPING BEHAVIOUR ON PURCHASING DECISION OF CONSUMERS

In order to examine the influence of factors affecting online shopping behaviour on purchasing decision of consumers, the multiple linear regressions has been applied and the results are presented in Table 3. The factors affecting online shopping behaviour are considered as independent variables and the purchasing decision is considered as dependent variable.

The results show that the coefficient of multiple determinations  $(R^2)$  is 0.66 and adjusted  $R^2$  is 0.64 indicating the regression model is good fit. It is inferred that about 64.00 per cent of the variation in dependent variable (Purchasing Decision) is explained by the independent variables (Factors Affecting Online Shopping Behaviour). The F-value of 13.827 is statistically significant at one per cent level indicating that the model is significant.

Table 3: Influence of Factors Affecting Online Shopping Behavior on Purchasing Decision of Consumers

Factors Affecting Online Shopping Behaviour	Regression Co-efficient	t-value	Sig.
Intercept	3.614**	10.745	.000
Convenience (X <sub>1</sub> )	.548**	8.143	.000
Website Features (X <sub>2</sub> )	.460**	7.852	.000
Security (X <sub>3</sub> )	.526**	8.054	.000
Time saving (X <sub>4</sub> )	.432**	7.016	.000
$\mathbb{R}^2$	0.66	-	-
Adjusted R <sup>2</sup>	0.64	-	-
F	13.827	-	.000
N	300	-	-

Note: \*\* Significance at one per cent level

The results indicate that convenience, security, website features and time saving are positively and significantly influencing the purchasing decision of consumers at one per cent level. Hence, the null hypothesis of there is no significant influence of factors affecting online shopping behaviour on purchasing decision of consumers is rejected.

### **CONCLUSION**

Majority of consumers of online shopping are males and most of them belong to the age group of 31 – 40 years. Majority of consumers of online shopping are graduates and most of them belong to the annual income group of Rs.4,01,000 – Rs.5,00,000. The exploratory factor analysis shows that convenience, website features, security and time saving are the factors affecting online shopping behaviour of consumers. The regression analysis indicates that convenience, security, website features and time saving are positively and significantly influencing the purchasing decision of consumers at one per cent level.

Online retailers need to ensure that the online shopping process in their websites is designed to be as easy, simple and convenient as possible for online consumers to shop online. With easy to use and user friendly websites, this will encourage buyers to make a purchase decision that may more likely return for repeat purchases. In addition, online retailers also need to ensure that they provide an efficient delivery service to their consumers.

One way to achieve this is for online retailers to keep an adequate inventory of goods and to implement a tracking system that would enable both online retailers as well as customers to track and be informed on the delivery status of goods. However, this can only be accomplished through streamlining and integration of online retailers' current business operation processes with their suppliers, warehouses and delivery companies.

In addition, there is also a need for online retailers to develop a comprehensive privacy policy for their customers on the disclosure of personal information in order to lessen their concerns for privacy. The policy should clearly state that the information collected would be kept confidential and not shared or passed on to another party without their consent.

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