

# Online Buying Behavior: A Case Study of Jalandhar City in Punjab

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### Abstract

Role of internet in everybody's life is increasing. It is accessible to almost everyone. It has changed the way we live. Marketers are also using Internet as the medium to sell their products to customers. Marketers need to represent their company on the internet to attract more customers and enjoy larger market share in today's competitive business environment. So it becomes important for them to understand the factors which consumers consider while making online purchase. The objective of this study is to examine the factors influencing online shopping and to find out that how these factors affect willingness to purchase online. Data was collected from 200 respondents in Jalandhar city of Punjab with the help of a questionnaire. Factor analysis and Multiple Regression analysis have been used as statistical techniques to analyze the data. Results found Website Security, Reliability of the website, Return and Exchange policy, reasonable prices offered, Customer Services Offered, Positive Customer Reviews regarding website and informative website are the factors influencing online buying behavior. Web site security has been found to be the most important predictor of willingness to buy online.

**Keywords:** Online Buying Behavior, Website Security, Internet Technology, Willingness to buy

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### Introduction

Internet technology provides an immense platform for conducting business globally in today's competitive environment. It has widened the scope of business and marketing. The way consumer buys the products and services has changed because of E-commerce. The way of seeking and using the information has also changed because of Internet. Benefits of Internet are not only limited to the business houses but they have reached the customers also. There are no time and location limitations in online buying. People can shop anytime and from anywhere in this world. Internet offers 24 hours open market to its users with a wider range of products and services. Trend of using the Internet is increasing and people not only use internet for online shopping but also for searching information about the various products offered by the marketers. To survive in this highly competitive market, the success of the businesses depends on how well the business groups can integrate this medium in their business model today (Richa, 2012).

Online shopping behavior (also called online buying behavior and Internet shopping/buying behavior) is the process of buying the products or services via the Internet. The process consists of five steps similar to those associated with traditional shopping behavior starting from need recognition to actual buying and then after sales services (Liang and Lai 2000).

Studying consumer behavior in the word of internet became an area of research for researchers and has wide scope. But to understand and analyze the consumer behavior we need to understand the factors that influence the online buying decisions. It is very important for the E-marketers to understand these factors, so that they can make their marketing strategies accordingly and gain large market share by attracting new customers and retaining the existing customers.

### Need of the Study

In today's world, there are number of online retailers, and if a seller wants to sell products through its website, it needs to have an edge over the competitors. Moreover, the perception of the online consumer is different from the perception of the traditional consumer. According to a study by Marketing Science Institute, customers judge websites on the basis of Efficiency, Fulfillment, Reliability, Privacy, Responsiveness, Compensation and Contact (Zeitham, Bitner, Gremler & Pandit, p.124, 2008). So, understanding the online buying behavior becomes very important for the marketers to survive in this competitive market. This can be done by serving the customers as per their needs. It becomes very important to understand the needs of the customers and the factors that influence them while taking a decision of buying online. It will help them to serve their customers better and plan their strategies accordingly. Hence for online retailers it is very important to know what influences consumer while shopping online so that they can design their websites accordingly and attract large online traffic.

### Objectives of the Study

- 1.To determine the factors that influences the online buying behavior in Jalandhar city of Punjab.
- 2.To examine the relationship between the factors identified and willingness to buy online.

### Literature Review

Ho and Wu (1999) conducted a study in which they found positive relationships between online shopping behavior and five factors which include e-stores, logistical support, product characteristics, websites technological characteristics, information characteristics, and homepage presentation.

Li, Kuo and Russell (1999) conducted a study that tested a

model of consumer online buying behavior and found that education, convenience orientation; experience orientation, channel knowledge, perceived distribution utility, and perceived accessibility are predictors of online buying.

Vellido et al. (2000) conducted a research in which they identified nine factors affecting user's perception towards online shopping. Risk perception of the users was found to be main factor out of the nine and other factors identified were control over, and convenience of, the shopping process, affordability of merchandise, customer service and ease of use of the shopping site. Jarvenpaa et al. (2000) conducted a study in which consumers attitude towards specific web based stores was studied, in which perceptions of the store's reputation and size were assumed to have influence over the consumer trust of the retailer. Positive relation was found between the level of trust and attitude toward the store, and negative relation between the level of trust and perception of the risks involved in buying from that store. It was concluded that the attitude towards the store and the risk perception influence the consumer's intention to buy from the store.

Park and Kim (2003) conducted a study to examine the relationship between various characteristics of online shopping and consumer purchase behavior. Data was collected by doing online survey with 602 Korean customers of online bookstores. It was found that information quality, user interface quality, and security perceptions affect information satisfaction and relational benefit and that were found significantly related to each consumer's site commitment and actual purchase behavior.

Kim and Benbasat (2003) found four trust related issues as personal information, product quality and price, customer service, and store presence in their study. Trust plays a major role in online buying decisions and if there is no trust, it is found that consumers do not buy.

Wang, Liu and Cheng (2008) conducted a research to examine the factors and they reported risk perception, privacy and Internet experience as the factors influencing online buying behavior.

Prasad and Aryasri (2009) found convenience, customer service, trust, web store environment and web shopping enjoyment as the factors influencing buying behavior. It was concluded that convenience, web store, online shopping enjoyment and customer service had a significant impact on willingness to buy from online retail store.

Dahiya (2010) conducted a research based study using factor analysis as a statistical technique to determine the factors impacting the behavior of consumers towards online shopping in India. Sample size consisted of 580 respondents from Delhi, Mumbai, Chennai, Hyderabad and Bangalore. The results of the study concluded that five

categories of factors have influence on online buying i.e. Demographic factors, Psychographics factors, Online shopping feature and policies, Technological factors and Security factors.

Rao and Mehdi (2010) conducted a study examining the behaviour of internet users. Security was found to be the most important factor influencing buying behavior followed by reliability factor.

Chandra and Sinha (2013) conducted a study to determine the factors influencing the online behavior and found the four factors: website design/ features, convenience, time and security.

### **Research Methodology**

#### **Sample**

Sample size consisted of 200 respondents selected from the city of Jalandhar in Punjab. Jalandhar city was selected as a representative city in study as it has geographically central location in Punjab. Also it is one of the prosperous and developed cities of Punjab. The research was conducted between November 2014 to February 2015.

#### **Sampling Technique**

Judgmental and snowball sampling techniques were used to collect the sample. Initial set of respondents were selected on the basis of judgmental sampling. But then subsequently additional units were obtained on the basis of information given by initial sample units and then further referrals were taken from those selected in the sample. Judgmental sampling was based on the following parameters: The sample comprised of only those people who have done online shopping. Only those people having credit cards (may be their own or of parents) were part of the sample. The sample comprised of people whose minimum qualification was at least Graduation.

#### **Data Collection**

Both primary and secondary data was collected for the study. Questionnaires were used to collect the primary data. Twenty statements (Cronbach's alpha =0.743) were measured on a five-point Likert scale ("Strongly Agree=5" to "Strongly Disagree=1"). The statements were included in the questionnaire to determine the factors influencing the online buying behavior and to measure the willingness of the respondents to buy online five items (Cronbach's alpha= 0.787) were measured on a five point likert scale ("Strongly agree=5" to "Strongly disagree=1"). These items were: "I

feel like buying the products online", "I am willing to buy from the site offering wide range of products", "I am willing to buy online because of convenience", "I enjoy while buying online" and "I am willing to buy online as it saves time". Secondary data was collected from the various journals, books, websites etc.

### **Data Analysis and Interpretation**

Data analysis and interpretation means extracting meaningful information from the data collected and analyzing the information statistically.

#### **Percentages**

Percentages have been calculated for demographic variables.

#### **Factor analysis**

Factor analysis technique is used to identify the factors affecting online buying behavior. In order to serve this objective, the information collected through twenty statements has been condensed into important dimensions with the help of factor analysis. For measuring the sample/data adequacy KMO test has been applied. Bartlett's test of sphericity provides statistical probability that the correlation matrix has significant correlations among at least some of the variables.

#### **Multiple Regression**

Multiple regression analysis was used as the statistical technique to examine the relationship between factors affecting online buying behavior (Independent Variables) and willingness to buy (Dependent Variable). Multiple regression can establish that a set of independent variables explains a proportion of the variance in a dependent variables at a significance level.

#### **Limitations**

- Sample size of 200 respondents is very small to draw the inferences about the whole population.
- The study is limited to the Jalandhar city in Punjab. So we cannot say that the same kind of response will exist throughout India.
- Time and cost constraints were also there.

### **Results and Discussion**

Demographic Variables: Age and Gender were taken as demographic variables.

**Table-1 Sample Profile**

Categories	Number	Percentage(%)
<b>Gender</b>		
Male	82	41
Female	118	59
<b>Age</b>		
21-29yrs	84	42
30-39 yrs	64	32
40 and above	52	26
Total	200	100

From the Table-1 above we can see that majority of the respondents were female i.e. 59 percent and 41 percent were male. Also majority of the respondents 42 percent were in the age group 21-29 yrs, followed by 32 percent in the age group 30-39 yrs and rest of the 26 percent were above 40 yrs.

#### Factors Influencing Online Buying Behavior

To identify the factors affecting online buying behavior factor analysis was conducted. Factor analysis has been applied to twenty statements measured on a five-point

Likert scale. The value of KMO test (= .794 which is greater than 0.5) shows fairly adequate sample. The appropriateness of the factor analysis is examined in terms of presence of correlations among the variables. For this purpose, Bartlett's test of Sphericity conducted which indicates the strength of the relationship among variables. The observed significance level was found to be (.000). Thus it is good to proceed for factor analysis with the data.

**Table-2 Principal Component Analysis with Varimax Rotation**

S.NO		Component						
		1	2	3	4	5	6	7
S1	I will purchase from the site where my privacy is protected	<b>.879</b>	.029	.088	.190	.033	-.054	.098
S2	I generally prefer buying from the site that gives free of cost shipping facility	.245	.103	-.247	<b>.698</b>	.065	.149	.087
S3	The product should be delivered on time	-.124	<b>.787</b>	.156	.288	.215	.256	.176
S4	Dealing with the site having simple return & exchange policy is desirable	.271	.123	<b>.765</b>	.076	-.214	.076	.017
S5	Return/ exchange procedures should be easy.	-.009	.176	<b>.789</b>	.066	.033	.187	.147

S6	Detailed information about the products on the site increases my intention to buy from that site	.269	.088	.118	-.276	.047	.143	<b>.678</b>
S7	A good website has adequate security features.	<b>.768</b>	.219	.218	.056	.372	-.077	.377
S8	It is good to deal with the website that responds to the customers queries immediately	.137	.076	.023	.145	<b>.765</b>	.076	.012
S9	Website should have a section for registering complaints of the customers.	.370	-.053	.188	.176	<b>.787</b>	.378	.087
S10	I prefer the site having positive word of mouth	.112	.019	.165	.245	.021	<b>.657</b>	.115
S11	I consider the experiences of other people with the site.	.056	.124	.197	.132	.079	<b>.689</b>	.161
S12	Feeling safe and secure while transacting online is important.	<b>.878</b>	.117	.041	.112	-.161	-.123	.138
S13	I prefer buying from the site offering reasonable prices.	.233	.145	.030	<b>.677</b>	.201	.126	-.004
S15	I read the customer reviews about a site before purchasing from it	.035	.133	.370	.201	.113	<b>.723</b>	.267

S16	I should get what I ordered	.203	<b>.867</b>	.176	.231	.197	.065	.116
S17	The delivered product should be same as specified on the website	.078	<b>.793</b>	.133	.081	.267	.154	.097
S18	It should not take too long for exchanging the product.	.055	.165	<b>.874</b>	-.009	-.016	.223	.239
S19	I generally prefer buying from the site that gives discount offers	.213	.234	.009	<b>.687</b>	.073	.115	.119
S20	Websites showing reviews of other people about the product are more trustworthy.	.134	.221	.165	.180	.003	.143	<b>.693</b>
	Eigen value	4.15	3.58	3.16	2.94	2.61	2.32	1.56
	% of variance	14.045	12.134	11.011	9.111	8.001	7.312	6.012
	Cumulative Variance	14.045	26.179	37.19	46.301	54.302	61.614	67.626

(KMO MSA=0.794; Bartlett=811.443)

Extraction Method: Principal Component Analysis

Rotation Method : Varimax with Kaiser Normalization

As the Table-2 shows that Principal component analysis has been used for extracting the factors and the number of factors to be retained is based on total variance explained.

The result of factor analysis over 20 statements shows that there are 7 factors that influence the online shopping. Preferences with Eigen values greater than one were extracted and all factor loadings greater than 0.5 were retained. The name of the factors, the statement labels and factor loadings are summarized in the Table-3.

**Table-3 Naming of Factors**

Factor	Label	Variables	Value
Website Security	S1	I will purchase from the site where my privacy is protected	.879
	S7	A good website has adequate security features.	.768
	S12	Feeling safe and secure while transacting online is important.	.878
Reliability of the Website	S3	The product should be delivered on time	.787

	S16	I should get what I ordered	.867
	S17	The delivered product should be same as specified on the website	.793
Simple Return & Exchange policy	S4	Dealing with the site having simple return & exchange policy is desirable	.765
	S5	Return/ exchange procedures should be easy.	.789
	S18	It should not take too long for exchanging the product.	.874
Reasonable Prices Offered	S19	I generally prefer buying from the site that gives discount offers	.687
	S2	I generally prefer buying from the site that gives free of cost shipping facility	.698
	S13	I prefer buying from the site offering reasonable prices.	.677
Customer Services Offered	S8	It is good to deal with the website that responds to the customers queries immediately	.765
	S9	Website should have a section for registering complaints of the customers.	.787
	S14	Website taking feedback from customers better understands them.	.679
Positive Customer Reviews Regarding Website	S15	I read the customer reviews about a site before purchasing from it	.723
	S10	I prefer the site having positive word of mouth	.657
	S11	I consider the experiences of other people with the site.	.689
Informative websites	S6	Detailed information about the products on the site increases my intention to buy from that site	.678
	S20	Websites showing reviews of other people about the product are more trustworthy.	.693

The set of twenty statements were subjected to factor analysis using principal component method so as to identify the minimum number of factors that determine the maximum variance. The seven factors were extracted that explained 67.626 percent of the variance.

#### **Factor 1- Website Security**

This was the most important factor that explained 14.045 percent of the variance. The statements included in this factor are S1 “I will purchase from the site where my privacy is protected”, S7 “A good website has adequate security features” and S12 “Feeling safe and secure while transacting online is important” having factor loadings as .879, .768 and .878 respectively.

#### **Factor 2- Reliability of the Website**

This factor explained 12.134 percent of the variance. The statements included in this factor are S3 “The product should be delivered on time”, S16 “I should get what I ordered” and S17 “The delivered product should be same as specified on the website” having factor loadings .787, .867 and .793 respectively.

#### **Factor 3- Simple Return and Exchange Policy**

This factor explained 11.011 percent of the variance. The statements included in this factor are S4 “Dealing with the site having simple return & exchange policy is desirable”, S5 “Return/ exchange procedures should be easy” and S18 “It should not take too long for exchanging the product” having factor loadings as .765, .789 and .874 respectively. This factor suggests that complicated return and exchange policies bother consumers. Thus marketers should try to make the return and exchange policies as simple as possible.

#### **Factor 4- Reasonable Prices Offered**

This factor explained 9.111 percent of the variance. The statements included in this factor are S19 “I generally prefer buying from the site that gives discount offers”, S2 “I generally prefer buying from the site that gives free of cost shipping facility” and S13 “I prefer buying from the site offering reasonable prices” having factor loadings as .687, .698 and .677 respectively. This shows that consumers are price conscious and thus offering discounts and reasonable prices to consumers can help the marketers to attract larger market share.

#### **Factor 5 Customer Services Offered**

This factor explained 8.001 percent of the variance. The statements included in this factor are S8 “It is good to deal with the website that responds to the customers queries immediately”, S9 “Website should have a section for registering complaints of the customers” and S14 “Website taking feedback from customers better understands them” having .765, .787 and .679 as factor loadings respectively. As customer is the king, serving them by offering best services will help the marketers to gain the confidence of the customers.

#### **Factor 6 Positive Customer Reviews regarding website**

This factor explained 7.312 percent of the variance. The statements included in this factor are S15 “I read the customer reviews about a site before purchasing from it”, S10 “I prefer the site having positive word of mouth” and S11 “I consider the experiences of other people with the site” having .723, .657 and .689 as factor loadings respectively.

#### **Factor 7 Informative Website**

This factor explained 6.012 percent of the variance. The statements included in this factor are S6 “Detailed information about the products on the site increases my intention to buy from that site” and S20 “Websites showing reviews of other people about the product are more trustworthy” having .678 and .693 as factor loadings respectively.

#### **Relationship between seven Identified Factors and Willingness to buy Online**

To examine the relationship between these seven identified factors and intention to purchase online, multiple regression analysis was conducted. Table-4 shows the relationship between web security, reliability of the website, simple return and exchange policy, reasonable prices offered, customer services offered, positive customer reviews, informative website and willingness to buy online. Web security, reliability of the website, simple return and exchange policy, reasonable prices offered, customer services offered, positive customer reviews and informative website were taken as independent variables and willingness to buy online was taken as dependent variable.

**Table-4 Influence of seven identified Factors on Willingness to buy online**

Dependent Variable	Independent Variables		t-value
Willingness to Buy	Constant	4.788	21.13**
	Website security	0.322	4.65*
	Reliability of the website	0.135	2.33**
	Simple return and exchange policy	0.068	3.02**
	Reasonable prices offered	0.275	3.53**
	Customer services offered	0.152	2.14*
	Positive customer reviews regarding website	0.210	2.98**
	Informative website	0.065	3.64

R-Square: 0.34, F- ratio 11.03\*\*

Table-4 shows the beta values of the seven independent variables. Beta value of Website Security is 0.322, Reliability of the website is 0.135, Simple return and exchange policy is 0.068, Reasonable prices offered is 0.275, Customer services offered is 0.152, positive customer reviews is 0.210 and information website is 0.065. R-Square of 0.34 value shows that web security, reliability of the website, simple return and exchange policy, reasonable prices offered, customer services offered, positive customer reviews and informative website explains 34% of the variance in the dependent variable i.e. Willingness to buy. Here all the independent variables were found to have significant impact on the dependent variable except Informative Website. Web security has been found to be the most important significant predictor of the dependent variable, followed by reasonable prices offered, positive customer reviews regarding website, customer services offered, reliability of the website and simple return and exchange policy. The positive sign of the beta values of independent variables indicate that greater the extent of these independent variables, more will be the willingness of the respondent to buy online.

In this study Website security was found to be the most important factor influencing online buying behavior of the people. This is in consistent with the study by Rao and Mehdi (2010). People want to be safe while transacting online. Customer services and prices offered by the website also affect the decision of the people of buying online. These results are similar to the results found in the study by Kim and Benbasat (2003). As the consumer is the king of the market, it becomes very important for the marketers and

online retailers to offer excellent services to their customers and for price conscious consumers, reasonable prices should be offered.

### Conclusion and Marketing Implications

The factors found in this study influencing online buying behavior are: Website Security, Reliability of the website, Return and Exchange policy, reasonable prices offered, Customer Services Offered, positive customer reviews regarding website and informative website .Website security was found to be the most important factor and predictor of the willingness to buy. This shows that in a country like India, although most of the people are much aware about the internet and using it in their day to day life but still they have the fear in mind of losing the privacy by giving their personal information on the internet. They do not want to disclose any of their private information while working online. People will not hesitate to buy online if the option of “Cash on Delivery” is given by the website. E-retailers should try to win the trust of their customers by designing reliable websites. Sometimes customers face the problem of not getting the product which was ordered by them. Firstly, there is a need to avoid these kinds of situations by the marketers but still in case they arise, there must be some kind of arrangement of returning the product at the time when it was delivered. The company should take it back and exchange the same or replace for the customer. Moreover customers do not want to waste their time in returning and exchanging the products which usually involves lengthy and complicated procedures for the same. Companies should try to make them as simple as possible. Assessing the needs of the customers and fulfilling the same

should be the main motive of every online retailer. The companies should give emphasis on designing of a website. Website should include the necessary information needed by the customer. Website should not be designed as an online brochure of the products but it should invite people to buy the products offered by it. So, the online retailers should take the measures to secure the privacy of the consumers, provide information to them about the products, offer reasonable prices and take care of the needs of the customers to survive in this competitive market. Winning the heart of every customer is like winning the market share.

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