



Web based Shopping: Consumer's Profiling and their Perceptions Toward Online

Shopping

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Abstract

Online shopping is one of the most popular activities that take place on the internet. Yet the reasons why consumers buy online and what drives them to do so are still unclear. With online shops (e-stores) popping up at a rapid rate in the 21st century, brick-and-mortar stores (physical stores) are no longer the only outlet that attracts consumer spending. Still, many internet users avoid purchasing online due to privacy and security concerns. This paper found that website security/privacy, website design, website reliability/fulfillment and website customer service are the four dominant factors which influence consumer perceptions of their online purchasing experiences. Website reliability/fulfillment had the highest rating score, followed by website customer service. Website design ranked third, and the lowest was website security/privacy. It is analyzed from the survey that when a consumer makes a mind to purchase online electronic goods he or she is affected by multiple factors. The results also suggest that after-sales operations like, dispute settling and delivery, should be carried out promptly and quickly so that consumer would build faith in the system.

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Introduction

Online shopping is one of the most popular activities that take place on the internet. Yet the reasons why consumers buy online and what drives them to do so are still unclear. Although it is implied that consumer acceptance of online shopping is affected by the different products. With online shops (e-stores) popping up at a rapid rate in the 21st century, brick-and-mortar stores (physical stores) are no longer the only outlet that attracts consumer spending. The development of the internet has increased the number of online shopping activities. Still, many internet users avoid purchasing online due to privacy and security concerns. In spite of this, online shopping is

continuing to grow as online enterprises become more sophisticated, which results in the dramatic change of how consumers buy products and services.

Internet makes life simple and innovative. People are doing business online and trade has become more easy and fast due to this. Internet provides new ways to promote business. Website becomes the essence of online business as to show their services and products. Internet gathers all competitors and consumers in one place. It brings new lane to promote, advertise products and services in market. Online consumers are always seeking new products, new attractiveness and the most important thing being price compatibility with their budget. The internet is the best way to save time and money through purchasing online within their range of budget at home or in anywhere. Online consumers don't have limits to online shopping. They also use internet for comparison of prices of goods and services, news, visit social networks and search information and so on.

REVIEW OF LITERATURE

Many studies have been conducted about perception towards online shopping. Most of them have tried to identify factors that affect or contribute to online consumer behavior. Researchers seem to adopt different points of view and focus on different factors in different ways. The various traits existed to a varying degree in every individual. Few studies have been given concerned with the present study.

Some scholars viewed the mission of purchasing as to obtain goods (Bloch and Richins, 1983). Tauber (1972) defined shopping as a series of processes to procure valuable merchandise. Hirschman and Holbrook (1982) further characterized shopping to include the pursuit of excitement, experiences, aesthetic, emotions, enjoyment, and such hedonic motives for making a purchase. They also compared traditional utilitarian consumption with hedonic consumption. Babin et al. (1994) described the value of purchasing in terms of utilitarian values versus hedonic values. Scholars after Babin et al. (1994) further pushed the study of purchasing into the realm of motivation. This study therefore, will classify purchase motivation into utilitarian and hedonic. Babin et al. (1994) argued that the consumer accomplish a purchase mission with careful deliberation and efficiency. Hence this study contends that utilitarian motivation is a key mission of purchasing and it is a motivation that inclines to compel the consumer to pursue products or

services that are instrumental, functional, and cognitive, a motivation that nudges the consumer to achieve the mission of purchase reasonably and efficiently (Hirschman and Holbrook, 1982; Batra and Ahtola, 1991; Engel et al., 1993). Hoffman and Novak (1996) advocated that utilitarian motivation could specifically explain the consumer makes online purchases the consumer weighs product quality, services, and prices, and other practical factors before committing to the purchase. Hedonic motivation contrasts sharply with the practical utilitarian motivation. Many scholars were of the opinion that shopping was more than the boring mission of purchasing or the boring completion of the act of purchasing (Babin et al., 1994) and that the consumer seeks feelings, fantasies, and fun in the process of making a purchase; the hedonic motivation of shopping. Babin et al. (1994) found out that hedonic values could influence impulsive buying while utilitarian values would not. With the prevalence of the Internet, scholars argued that hedonic purchase motivation was one of the important factors that drove the consumer to make online purchases. A review of literature reveals that hedonic purchase motivation has been widely used in the study of physical stores (Babin and Attaway, 2000). But with Internet becoming ever more popular, more and more scholars are of the opinion that hedonic purchase motivation is one of the important factors affecting online shopping (Burke, 1999; Hoffman and Novak, 1996). Studies have shown that background music stimulates consumers and sways consumption behavior, and fast-tempo music makes people happier, more cheerful, and more excited (Morris and Boone, 1998). Purchase intention refers to the probability of a consumer inclining to make a purchase. Higher purchase intention implies higher probability of purchase. Purchase intention is often used as a metric in the prediction of purchasing behavior. In physical stores, what salespeople do and the information provided by the stores all influence consumers' purchase intention while in virtual online stores, the attributes of the website and the Q and A provided also influence purchase intention. Goal-directed and exploratory search can influence consumers' purchase intention (Moe, 2003).

OBJECTIVES AND RESEARCH METHODOLOGY

With online shops popping up at a rapid rate in the 21st century, brick-and-mortar stores are no longer the only outlet that attracts consumer spending. Compared with their physical store cousins, e-stores offer more diverse product choices, individualized products and service

information, shopping convenience, and privacy. The purpose of the study is psychographic segmentation and consumers perception towards online shopping.

In order to provide good piece of work and build understanding in this subject we have conducted initial research in literature on online shopping. We have reviewed those theories and related studies that had similar areas to focus and give particular attention to their consequences. In the present study, the sample of the study is based on convenience. The districts became the first stage of sampling unit. The respondents are selected based on convenience sampling technique (Non-probability sampling technique). In view of time constraints as well as the large population of Internet users in the Punjab and Chandigarh, convenience sampling is used to collect data from individuals who could reasonably interpret the online shopping. The survey has been conducted via email and face-to-face interviews. The sample of this study consists of internet users who know how to make an online purchase, possibly have made one or are willing to make one in the future. This study will try to resolve the relationships between consumer characteristics and their attitude towards online shopping in the context of different product types. Since there are time and resource constraint that is why specific population had been approached in order to generalize the results includes 150 respondents. The questionnaire was officially handed out to subjects for this study, 37 questionnaires were given to students or adults who had prior experience of shopping online in order to test the reliability of the dimensions in the questionnaire. The questionnaires were given to subjects either face-to-face or delivered online.

ANALYSIS

(A)The analysis section has been divided into two parts first is concerned with the segmentation of online consumers by using the cluster analysis technique and second is devoted to finding the consumers perception toward inline shopping.

This first section is developed for the formation of different clusters, which have been developed out of the given sample of the respondents by analyzing their responses towards different perceptual statements pertaining to online shopping. For this purpose, the cluster analysis technique has been employed to differentiate the respondents into various groups on the basis of their psychographic tendencies, based upon their perceptions, regarding online shopping.

Application of K-Mean Cluster Analysis

The general objective of cluster analysis is to participate, or sub-divide, a set of objects into homogeneous sub-groups, or into a hierarchical arrangement of homogenous sub-groups, so as to determine the characteristics specific for each cluster. The cluster may be of brands or persons based on their perceptions for a particular problem or issue. In the present study to segment our respondents K-Mean cluster analysis has been used. This procedure attempts to define homogeneous groups of cases based on selected characteristics, using an algorithm that can handle large number of cases. However, in algorithm numbers of clusters are to be specified. The object of *k*-means analysis is to arrive at a cluster solution for which each case is closer to the mean of the cluster to which it belongs than to the mean of any other cluster. K-Mean cluster analysis needs to assign cases to a fixed number of grouped whose features are not yet known but are based on a set of specified variables.

Statements	Clusters	
	1	2
Feel exciting	4	2
Fun things	4	2
Effectively	4	3
The probability	4	2
Continue to browse online	4	2
Information available on website	4	3
Product not available	4	3
Best Price	4	3
Happiness	4	2
Security and privacy concerns	4	3
Wonderful thing	4	2
Compare alternatives	4	2

Online and acquire more information	4	2
More productive	3	2
Functional	4	2
Excitement, experiences, aesthetic	3	2
Technology awareness, literacy	5	1
Necessary	3	2
Helpful	3	2
Music and web design	5	2
Promotion activity	3	2
Variety of products	4	2
Information	3	1
Practical	3	2
Disposable Income	3	2
Total	95	55

Cluster1: one consists of 95 respondents who are either agreed with the given statements or not sure about few statements. Respondents found in this cluster were moderate in their attitude towards online shopping. In this cluster respondents had shown positive attitudes towards online shopping but at the same time they were not sure as well as agreed with the negative aspects of the online shopping. Respondents in this cluster showing slightly favorable and positive response for online shopping. This can be inferred by observing the mean values in the cluster one towards variables from the serial number one to eight. These statements signified some positive aspects of online shopping like it is Popular in India, Adopted by young Generation, Necessary for modern India, Faster than traditional Marketing, Shifting to online/space market, consumers are satisfied and enjoy to purchase online. Towards the adverse effects of online shopping, the responses received were generally near to neutrality (not sure) or at some times with slightly level of agreement towards the negative effects. So it can be found that respondents were

indifferent to the negative effects of online shopping. This was derived after observing the mean values corresponding to the variables of; online shopping is a waste of time, Customer forget about their market's surrounding the place, exposure of vulgarity and obscenity and leads to irritation and interruption based advertising.

Cluster 2: 55 respondents found in this cluster were negative in their attitude towards online shopping in general. This was observed from the mean values corresponding to different variables given in the table. With regard to the favorable aspects of the E-marketing, the respondents had given indifferent feeling; this was inferred from the mean values corresponding to each of the variables, i.e. from serial number one to eight. Besides, the respondents also expressed extend of agreement for variables which states the negative aspects of online shopping. This was derived after observing the mean values corresponding to the variables of; online shopping is a waste of time, Customer forget about their market's surrounding the place, exposure of vulgarity and obscenity and leads to irritation and interruption based advertising. As far as the ethical issues in online shopping were concerned, respondents had given unfavorable responses. Table 2 reveals the distances between the final cluster centres. These distances show how separated the individual pairs of cluster are. Malhotra (2005) observed clusters that are widely distinct and separated and therefore desirable. This implies that in the present study the two clusters identified are significantly distinct, separated and therefore represent two groups of respondents.

Distances between Final Cluster Centers

Cluster	1	2
1		5.948
2	5.948	

Table indicates ANOVA statistics calculated in respect of each variable for the motive of measuring the variation among the two identified clusters. This was done in order to test the hypothesis. ANOVA statistics indicate there is a significant variation among the two clusters.

Since all the F-values were greater than three (Table value), hence the hypothesis is rejected for all the variables.

(B) In the second section the factor analysis technique was applied on responses of respondents with regard to 26 variables related to the online shopping and factors were extracted. The respondents were asked to rate 26 variables/statements, on a five point Likert scales, which ranged from strongly disagree to strongly agree.

Reliability, validity and unidimensionality

As a test for reliability of constructing measurement, Cronbach's alpha was typically used (Nunnally, 1967). Therefore, the attitude variable data was measured for reliability using Cronbach's alpha, this was selected due to the large number of questionable items that were used to evaluate the different personality traits perceptions towards Online Shopping. The Cronbach's alpha of scale is .619 which was the best indicator to go ahead as the value of Cronbach's alpha coefficient of 0.6 and above is good for research in social science (Cronbach, 1990). Scales that produced Cronbach's alpha coefficients greater than 0.7 were considered to be measuring the same underlying attribute (Nunnally, 1978) and were thus reliable.

it is concerned with consistency among multiple measures of variability. Reliability represents the systematic variance of the constructs (Olery and Vokurka. 1998). The extent to which results are consistent over time and an accurate representation of the total population under study is referred to as reliability and if the results of a study can be reproduced under a similar methodology, then the research instrument is believed to be reliable (Joppe, 2000). There are several procedures to compute the reliability. Some of them are: Alternate or Parallel-forms, Test-Retest (Repetition), Split-half technique and Rational Equivalence. Nevertheless, the single method is not perfect so we have relied on a series of diagnostic criteria to assess internal consistency as hereunder (Hair et al., 2009):

- ✓ The reliability coefficient (Cronbach's alpha) ≥ 0.6 general construct and ≥ 0.4 for broadly defined constructs.
- ✓ Item-to-total correlation (Correlation of the item to summated scale) ≥ 0.5

- ✓ Inter-item correlation (Correlation among items within a factor) ≥ 0.3
- ✓ The Eigen value should be ≥ 1.0
- ✓ The constructs should have at least loading of two item

Scale Reliability Analysis

Variables	Communalities		Mean	Std. Deviation	Cronbach's Alpha if Item Deleted
	Initial	Extraction			
Feel exciting	1.000	.738	3.43	1.068	.634
Fun things	1.000	.681	3.24	1.149	.607
Effectively	1.000	.720	3.43	1.068	.590
The probability	1.000	.857	3.41	1.054	.575
Continue to browse online	1.000	.848	3.56	.976	.585
Information available on website	1.000	.865	3.55	.934	.598
Product not available	1.000	.803	3.59	.902	.621
Best Price	1.000	.580	3.71	.941	.620
Happiness	1.000	.644	2.77	1.021	.601
Security and privacy concerns	1.000	.567	3.40	.854	.593
Wonderful thing	1.000	.643	3.31	1.065	.631
Compare alternatives	1.000	.801	3.19	.982	.603
Online and acquire more information	1.000	.792	2.85	1.009	.616
More productive	1.000	.687	3.53	1.018	.609
Functional	1.000	.736	3.28	.894	.603
Excitement, experiences, aesthetic	1.000	.670	3.20	1.000	.623
Technology awareness, literacy	1.000	.754	3.55	1.044	.620

Necessary	1.000	.617	3.56	.990	.634
Helpful	1.000	.457	3.31	.870	.600
Music and web design	1.000	.727	3.72	.894	.594
Hedonic values and gratification	1.000	.617	3.67	.811	.620
Promotion activity	1.000	.649	3.56	.809	.595
Variety of products	1.000	.742	3.60	.900	.600
Information	1.000	.779	3.48	.891	.586
Practical	1.000	.740	3.44	.842	.598
Disposable Income	1.000	.634	3.43	.975	.607

Summary Item Statistics						
	Mean	Minimum	Maximum	Range	Maximum / Minimum	N of Items
Item Means	3.413	2.773	3.720	.947	1.341	26
Item Variances	.929	.655	1.320	.665	2.015	26
Inter-Item Covariance's	.054	-.242	.846	1.088	-3.503	26
Inter-Item Correlations	.061	-.247	.823	1.070	-3.337	26

Factor analysis for Perceptions towards Online Shopping

According to the scale used if all the 26 items get a rating of 5 each, the total score would be 90. The mean score of the respondents is 88.75. The mean correlation is .061 and it varies from .247 to .823 with a range 1.070. There is a sufficient correlation to go ahead with factor analysis. Factor analysis is done using SPSS software with Varimax Rotated, Principal Component Analysis. The scale reliability is made for factors so classified. In order to identify the underlying dimensions of E-marketing, exploratory factor analysis was employed. The respondents were

asked to rate twenty six variables, on a five point Likert scale, ranging from strongly disagrees to strongly agree. The factor analysis of the twenty six variables; this analysis extracted four factors from the twenty six variables. Each factor was defined by at least three scale items. Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy (MSA) value of .620 is sufficient enough for validating factor analysis results. Here, it is pertinent to mention that $KMO \geq 0.6$ and $p \leq 0.5$ are good enough for research in social sciences (Hair et al., 2009). The Bartlett's Test of Sphericity also has a value of $X^2 = 640.516$, $DF = 325$, which are significant ($p \leq 0.5$) as shown in the table.

Factor Analysis Results									
Variables	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8	Factor 9
Feel exciting	.907								
Fun things	.887								
Effectively	.884								
The probability		.768							
Continue to browse online		.760							
Information available on website		.721							
Product not available			.783						
Best Price			.686						
Happiness			.680						
Security and privacy concerns			.501						
Wonderful thing				.672					
Compare alternatives				.649					
Online and acquire more information				.548					
More productive				.535					
Functional					.675				

Excitement, experiences, aesthetic					.664				
Technology awareness, literacy					.569				
Necessary						.787			
Helpful						.601			
Music and web design							.776		
Hedonic values and gratification							.765		
Promotion activity								.830	
Variety of products								.811	
Information								.580	
Practical									.807
Disposable Income									.686
Eigen Value	3.293	2.353	2.087	1.941	1.697	1.620	1.349	1.257	1.083
Variance %	12.667	9.051	8.025	7.466	6.528	6.233	5.190	4.835	4.166
Cumulative Variance %	12.667	21.719	29.744	37.210	43.738	49.970	55.161	59.996	68.404
Cronbach's Alpha= .619, Kaiser-Meyer-Olkin Measure of Sampling Adequacy= .620, Bartlett's Test of Sphericity (Approx. Chi-Square= 640.516, Df=325, Sig=0.00, Mean= 88.75, SD= 7.699									

The first factor alone has explained 12.667 of the total variation in the factor analysis and might be labeled as Product Attractiveness. It includes three variables; i.e. Feel exciting, Fun things and Effectively. The results indicated that the consumers felt excitement and done various fun things during the process of online shopping. It ranges from .884 to .907. It covers 3.293 of the Eigen values.

The second factor has explained 9.051 of the total variation in the factor analysis and might be labeled as Product Browsing. It includes three variables; i.e. the probability, Continue to browse online, Information available on website. The results indicated that the consumer's shows interest

to get the information available on websites and do browsing to get the relevant data about product before the process of online shopping. It ranges from .721 to .768. It covers 2.353 of the Eigen values.

The third factor has explained 8.025 of the total variation in the factor analysis and might be labeled as Product Reliability. It includes four variables; i.e. the product not available, best price, Security and privacy concerns and happiness. The results indicated that it is important for online merchants to add more ethics in their business and use trust marks, best price and privacy concerns to attract more customers .It ranges from .501 to .783. It covers 2.087 of the Eigen values.

The fourth factor has explained 7.466 of the total variation in the factor analysis and might be labeled as Productivity of product. It includes four variables; i.e. wonderful thing, Compare alternatives, Online and acquire more information, more productive. The results indicated that consumers give more importance to the productivity of the product and prefer to buy quality product as compare with their alternates .It ranges from .535 to 672. It covers 1.941 of the Eigen values.

The fifth factor has explained 6.528 of the total variation in the factor analysis and might be labeled as Functionality of product. It includes three variables; i.e. functional, excitement and technological awareness. The results indicated that consumers likely to buy the product as per the latest technology and online merchants add to that product as per the customer needs just to attract customers .It ranges from .569 to 675. It covers 1.697 of the Eigen values.

The sixth factor has explained 6.233 of the total variation in the factor analysis and might be labeled as Product Necessity. It includes two variables; i.e. necessary, helpful. The results indicated that some consumers buy those products only that fulfill their needs and that decision depend upon their personality's .It ranges from .601 to .787. It covers 1.620 of the Eigen values.

The seventh factor has explained 5.190 of the total variation in the factor analysis and might be labeled as Creative features. It includes two variables; i.e. music and web design, hedonic values

and gratification. The indicated that it is important for online marketers to create user friendly websites by adding features in it which is attractive for consumers. As far as the web sites of the merchants were concerned consumers prefer these websites to be user friendly, convenient and easy to use. It ranges from .765 to .776. It covers 1.349of the Eigen values.

The eighth factor has explained 4.835 of the total variation in the factor analysis and might be labeled as Desired Facilities. It includes three variables; i.e. promotion, variety of products and information. The results indicated that respondents demand facilities from the merchants in the form of discount, information related products and different product varieties. All these elements were considered as the predominant predictors of consumers' purchasing decisions. It ranges from .580 to .830. It covers 1.257of the Eigen values.

The ninth factor has explained 4.166 of the total variation in the factor analysis and might be labeled as Product Excitement. It includes two variables; i.e. practical and disposable income. The results indicated that purchasing power of some consumers depends upon their disposable income and they think practical during online shopping. It ranges from .686 to .807. It covers 1.083of the Eigen values.

Limitations

Limitations of this study are:

- ✓ As we discussed before, there are many factors affecting on online shopping behavior. But in this study because of time constraints we didn't examined all factors influencing on online shopping behavior.
- ✓ Because of using questionnaire as data gathering tools, the respondents may not answer the questions exactly according to what they think and behave.
- ✓ In this research because of time and cost constraints we examined factors affecting on online shopping behavior of consumers in one state. It is obvious that is other state people have different characteristics and behaviors.

Conclusion

In line with Online shopping researches concerning the factors which cause consumer satisfaction in online purchasing experiences, this paper found that website security/privacy, website design, website reliability/fulfillment and website customer service are the four dominant factors which influence consumer perceptions of their online purchasing experiences. Online buyers had different perceptions of these four factors. Website reliability/fulfillment had the highest rating score, followed by website customer service. Website design ranked third, and the lowest was website security/privacy. Each of the four types of online buyers has a different perception of specific website elements and website factors. Regular online buyers were much more satisfied with website variables and website factors than the other online buyers. On the other hand, trial online buyers had the poorest perception of online shopping. Consumers' concerns about online financial security and privacy are closely associated with their perception of how good the technologies for secure payment mechanisms. It is important for E-retailers to adopt advanced encryption technology, and post assurances of their online security on their website, in order to inform online consumers of their security measures. Online purchasers are less satisfied with the website design. Moreover, website efficiency and usability can facilitate the buying process and establish consumer confidence in the site. The online shopping is getting popular among the young generation as they feel it more comfortable, time saving and convenient. It is analyzed from the survey that when a consumer makes a mind to purchase online electronic goods he or she is affected by multiple factors. The main crucial identified factors are time saving, the best price and convenience. The best price factor is popular among people because generally in online markets prices are lower as against the physical markets. People compare prices in online stores and then review all feedbacks and rating about product before making the final selection of product and decision. To purchase online things the electronic goods are in demand because of the best price, convenience and time saving. The main barrier in the process of online shopping is the low level of trust. Due to which consumers are reluctant to make online purchasing. The retail managers should sway consumers through different platforms like social networking sites, ads, promotions, online only discounts etc. to let people cross the threshold and start buying because consumers are still comfortable with brick and mortar format as they appreciate friendly approach of salesman and social element of

shopping, which has been found as important element in shopping . In addition, they need to make website user- friendly and less intriguing. It should encourage online consumers to spend time exploring the site and comparing prices online, provide detail product information and member discounts The results also suggest that after-sales operations like, dispute settling and delivery, should be carried out promptly and quickly so that consumer would build faith in the system. During the process of purchasing, online agents can help customers and simplify the purchasing procedure to give a feeling of friendliness of salesman or demonstrate how to purchase with clear text, images or examples.

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