Analysis of Customer Satisfaction during Online Purchase

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Abstract

This research attempted to find out the factors that are affecting customers' satisfaction to shop online. To shop on Internet becomes an alternative for consumers since it is more comfortable than conventional shopping which usually attributed with anxious, crowded, traffic jam, limited time, parking space and etc. With the development of Internet, online shopping is developing rapidly in our country as a new way for shopping and with this many global retailers are creating better platforms for customers to shop. To increase the understanding in this area, the research is conducted so that insights can be developed on customer satisfaction and what all affect customer satisfaction during online shopping. This research adopted survey by questionnaire approach. Questionnaires are distributed randomly to general public (working professionals as well as students) to gauge their intention while online shopping. Findings of this research will provide a benchmark to understand retailers that key factors that drive customer satisfaction. The study revealed that website design, payment security, Ease of shopping, accurate product information; price and delivery services have positive impact on customer satisfaction

Keywords: Customer satisfaction, Online shopping,

Introduction

Internet is an unusual thing that rules the digital world in recent time. According to report of Singapore based digital agency which is known for its APAC reports states that "India's digital landscape is growing very fast and the major proliferation of internet is through mobile devices. Due to easily and well accessed internet the usage of the same is huge. The report also figures out statistics of somewhat 243.2 million internet users and 106 million active users in India. Besides these India is also acting as proliferate base for mobile usage which also indirectly increased the use of various web based apps through the device. 70% of the page views in internet are accessed through mobile. Thus internet is truly ruling the country's heart and nerves. The internet offers various benefits and offers to consumers that drive them more towards online shopping. Online shopping provides quick access to product related information, saving consumers time, effort and money, quality of the product, and shopping experience. Thus there is an immense shift in people's interest for online shopping due to convenience in shopping, varied options available online, easily comparable prices. This rapid increase of online customers' base points towards the issue of customer satisfaction as a key factor in online purchase, as that will directly influence the purchase and re-purchase decision of customer. Most satisfied customers usually have the intent of re-

purchase, if product performance meets their expectation. Customer satisfaction is influenced by number of factors. Various researches have been conducted to categorize different variables/factors that affect online shopping. Some of them are discussed thoroughly during reviewing the literatures. Thus in order to expand and influence customer and improve the business performance customer satisfaction is a key ingredient and the retailers doing business online must have a clear understanding on the various factors that positively influence customer satisfaction. With regard to this, the present research aims to identify key factors that positively affect customer satisfaction and statistically validate the same through performing multivariate statistical tools. The objective of this study is

   a. To determine the factors that affect customer satisfaction.
   b. To establish and validate that the determined factors positively affect customer satisfaction.

Theoretical Background and Literature Review

The European Public Administration Network (EUPAN) explained a model which suggests that customer satisfaction with regard to any service is related to his/her experience. If the experience of the shopping and the services offered greatly exceeds the expectations of customer, then satisfaction will be elevated. A customer has to be satisfied with their initial e-commerce shopping experience before purchasing more goods and services online. Many studies has been done to identify the background of consumer satisfaction towards online shopping (Jun, Yang and Kim, 2004; Ballantine, 2005). It is found that consumers' attitudes and thinking with regard to convenience and security concerns have noteworthy effects on their intention to purchase online (Limayen et al., 2000). Shanker et al. (2003) had also contended that service provided during the purchase is very important for customer to opt for repeat purchases online.

In addition, researcher from various areas identified three categories of variables that affect customer satisfaction towards online shopping. They are technology factors, shopping factors and product factors. Through this study, the researchers had identified the various factors that affect of customer satisfaction towards online shopping. The various literatures reviewed and studied greatly emphasize on the following factors as most dominant such as ease in the use of website or website design, convinienience in shopping, security, information quality, payment method, e-service quality, product quality, product variety, and delivery service.

Lee and Lin (2005) through their research envisaged that website design positively influences overall customer satisfaction as ease in handling and accessing things in a particular e commerce websites increase the satisfaction level in customer. Cyr (2008) during his research work proposed that ease in acceding websites, ease in navigation of products in website have a positive influence on online shopping behaviour and customer satisfaction. Another important factor affecting online shopping satisfaction is security. Various literatures also demonstrated about security issues during online shopping. It was further discussed that ability of online portal to protect customer's personal information helps to build trust and enhances the satisfaction level. According to the prior research (Elliot & Fowell, 2000; Szymanski & Hise, 2000), as awareness of security risk decreases, satisfaction with the information service of online stores is expected to increase. In other words, strong security attribute does increase the degree of customer satisfaction. The other major factor that attributes towards customer satisfaction is accuracy of information about product in the e – commerce websites. Accurate information about the product and quality has significant effect on consumer satisfaction in online shopping. Also online shoppers expect websites to provide for secure payment, and maintain the privacy of online communication (Franzak et al., 2001). Besides this, Liu et al.

(2008) found that higher level of information quality will improve customer satisfaction in online shopping. Findings of the research revealed that there is a significant positive effect of overall e-service quality on customers' satisfaction towards online shopping.(Jung-Hwan & Chungho, 2010).

In a study conducted by Liu et al. (2008), they argued that information quality, website design, merchandise attributes, ease in transactions, security/privacy during internet transaction, payment, delivery, and customer services are strong predictors of customer satisfaction in the online shopping environment. It is also revealed through the same study that wide range of merchandise variety and comparatively low price will have positive effects on customer satisfaction in the online shopping environment. Delivery problem is a very common phenomena existing in the online shopping environment and has direct impact on shopping and customer satisfaction. Delayed delivery has a negative effect on satisfaction. Findings from a variety of research indicated that delivery performance has noteworthy influence on customer satisfaction and it accounts for a greater variance in online buying satisfaction.

Thus through an elaborate review of existing literatures on customer satisfaction through online shopping it is quite evident that customer satisfaction is dependent on many factors. For the present study we will consider some of those factors which majorly influence the customer satisfaction and through that will try to establish the research. The factors identified through literature survey and considered for this research are

  a. Website design.
  b. Payment security.
  c. Ease of shopping.
  d. Accurate Product Information.
  e. Price.
  f. Delivery services.

Hypothesis

From the literature study hypotheses developed for this study which are listed below -

H1: Website design has positive impact on customer satisfaction during online shopping.

H2: Payment security has positive impact on customer satisfaction during online shopping.

H3: Ease of shopping has positive impact on customer satisfaction during online shopping.

H4: Accurate Product Information has positive impact on customer satisfaction during online shopping.

H5: Price has positive impact on customer satisfaction during online shopping.

H6: Delivery services have positive impact on customer satisfaction during online shopping.

Methodology

This comes under a correlational study which attempts to investigate the statistical relationship between online customer satisfaction which is a dependent variable and is dependent on few independent variables such as Website design, payment security, Ease of shopping, accurate product information, price and delivery services. The sample for this study consists of students and working professionals. The non-probability convenience sampling (Sekaran, 2000) was chosen as the sampling design in this study. This was because convenience sampling is most often used during the exploratory phase of a research project and in perhaps the best way of getting some basic information quickly and efficiently. A total of 150 questionnaires were distributed at random to students and working professional and 120 samples have been collected. In this study, questionnaire consists of 25 close ended questions which were employed. There are two sections in the

questionnaire- section A & section B. Section A indicating demographic information and section B indicating variables related information which measured online customer satisfaction which comprise six variables. The questions consisted of a range of responses of strongly agree to disagree, on a 5 point scale. These questions incorporate all of the variables that were determined to be an important in the customer satisfaction.

Results & Discussion

Table 1 depicts the demographic profile of respondents. In this study demographic variables consisted of gender, age, education level, monthly income & marital status.

Table 1: Summary of Demographic profile

Demographic Variables	Categories	Frequency	Percentage (%)
Gender	Male	69	58
	Female	51	42
Age	21 to 30 years old	31	26
	31 to 40 years old	65	54
	41 to 50 years old	24	20
Qualification	Degree	50	42
	Master	60	50
	PhD	10	8
Marital Status	Single	66	55
	Married	52	43
	Divorce	2	2
Monthly Income	Less than 3,0000	77	64
	Between 3 lakhs – 5 lakhs	30	25
	Above 5 lakhs	13	11

Reliability Analysis

The Cronbach alpha values of the variables under study are highlighted in the Table 2 below. The reliability coefficient (Cronbach Alpha) of the variables exceeded the minimum acceptable level of 0.70 (Nunnally & Bernstein, 1994).

Variables	Number of items	Number of item included	Cronbach Alpha
Website design	3	3	0.711
Payment security	3	3	0.701
Ease of shopping	5	5	0.733
Accurate product information	5	5	0.836
Price	2	2	0.753
Delivery services	2	2	0.789

Multiple Regression Analysis

The result of multiple regression analysis was shown in Table 3(a) and Table 3(b). The value of Tolerance ranges from 0.598 to 0.816, which were all larger than 0.10, and the VIF value ranges from 1.226 to 1.671, which are all less than 5 (Hair et al., 2006). Therefore, it can be indicated that the problem of multicollinearity does not exist among the eight independent variables.

Table 3a. Model summary

Model	R	R^2	Adjusted R^2	F	Significance
1	0.735	0.540	0.254	31.272	0.000

Table 3b: Regression Analysis - ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig
Regression	613.942	6	102.32	38.90	.000
Residual	920.154	350	2.63		
Total	1534.096	356			

a. Predictors: (Constant), Website design, payment security, Ease of shopping, accurate product information, price and delivery services

b. Dependent Variable: Customer satisfaction

Table 3c. Regression analysis – Coefficients

Model	Unstandardized coefficients		Standardized coefficients			Collinearity Statistics	
	B	Std. Error	β	t	Sig.	Tolerance	VIF
(Constant)	2.115	.904		2.325	.015		
Website Design	.066	.022	.126	2.765	.005	.744	1.209
Payment security	.087	.033	.134	2.863	.003	.766	1.269
Ease of shopping	.077	.039	.119	2.077	.037	.698	1.661
Product Info	.158	.078	.097	2.018	.045	.762	1.389
Price	.089	.046	.093	1.988	.048	.776	1.298
Delivery service	.178	.040	.223	4.529	.000	.624	1.638

a. Dependent Variable: Customer satisfaction

The p values of all the six independent variables are less than the alpha value of 0.05. Therefore, the research concludes that all the six independent variables i.e. Website design, payment security, Ease of shopping, accurate product information, price and delivery services are positively related to customer satisfaction. All the hypotheses proposed previously in the research are supported.

Besides, based on the Coefficients table (Table 3c), the following multiple regression equation formed:

Customer satisfaction = 2.115+ 0.066 (website design) + 0.087 (payment security) + 0.077(ease of shopping) + 0.158 (product info) + 0.089 (price) + 0.178 (delivery service)

The data of Standardized Coefficients explains the intensity among variables. The ranking of the variables based on intensity are as follows:

- Delivery service (0.223)
- Payment security (0.134)
- Website design (0.126)
- Ease of shopping (0.119)
- Product Info (.097)
- Price (.093)

From the standardized coefficients values above it can be concluded that the most important variable that affects customer satisfaction very positively during online purchase is the delivery services and the second most powerful variable is security during payment. Rest other variables follows after the two.

Based on Table 3 (a), the study also concludes that the change of customer satisfaction can be explained 54 percent (r^2 = 0.540) by website design, payment security, Ease of shopping, accurate product information, price and delivery services.

Conclusion

This researcher attempted through this paper to conduct a decisive study of six determinants derived from elaborative literature i.e. that website design, payment security, Ease of shopping, accurate product information; price and delivery services have positive impact on customer satisfaction from the aspect of online shopping in different e commerce sites.

In addition, the research findings will provide insight and feedback to the online retailers in re-drafting/ re-considering their managerial strategies as how to get better performance to increase the customer satisfaction level and standout in the highly competitive business in online environment. Online retailers should re-evaluate all these six variables that highly impact customer satisfaction and should initiate and re-construct their strategies accordingly to sustain in the extremely competitive business environment. These variables are actually acting as customer feedback while online shopping, what exactly they feel and what they need while shopping online. This study will act as an important part for evaluating and enhancing their performance.

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