

An Empirical Investigation of Website Design Characteristics, Consumer Trust, and Intention to Shop Online in Hyderabad

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Abstract

The main purpose of the present study is to examine the effect of Website design characteristics and Consumer Trust factors influencing consumers' Intention to shop online with reference to online shopping in Hyderabad. The population of this research consisted of online shoppers from Hyderabad. The sample for the study comprised of 200 online shoppers. Respondents belonged to different age groups and occupations having prior experience in online shopping. A pre-structured questionnaire was used with a 5 point Likert rating scale to measure the factors influencing the respondents' intention to shop online. Snowball sampling was used to collect the data from the sample respondents. Statistical techniques such as mean, standard deviation, correlation, and multiple regression were used for data analysis. The empirical results revealed that Website Design characteristics and Consumer Trust have a strong and positive influence on Consumers' Intention to Shop Online. The study suggests, among other things, that companies must focus on improving their website design characteristics to develop consumers' trust towards online shopping.

Keywords: Internet, online shopping, website design characteristics, trust, e-commerce

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E-commerce is selling of goods and services via electronic media to facilitate exchange of detailed information between buyers and sellers. Online shopping has become a part of business. The Internet makes it easy for consumers to collect data and measure the same, evaluate intentions, and purchase products directly and easily (Ranganathan & Jha, 2007). Consumers are now entering a new era in which the majority of value-adding activities in the economy will move into cyberspace by means of globally connected electronic networks. In this increasing time-constrained world, the Internet stores allow consumers to shop from the convenience of remote locations (Bhatnager, Misra, & Rao, 2000). Since websites are currently the most important tools of marketing and the only interface to e-commerce, designing these sites to accommodate target market preferences should enhance consumers' shopping experience, and perhaps, consequently, motivate them to purchase and repurchase from the same websites. Presently, due to the uncertainty, the unknown, lack of control and potential opportunism, the exchange in an online environment requires trust as an important element (Shankar, Urban, & Sultan, 2002). Behavioral intention represents the intention to act in the buying decision process. Behavioral intent appears in various forms such as a predisposition to buy a brand for the first time or a commitment to repurchase a current brand (Gommans, Krishnan, & Scheffold, 2001). Hence, this research investigates various aspects of online shopping intention, website characteristics, and consumer trust.

Literature Review

Prompongatorn, Sakthong, and Combs (2012) examined the factors influencing consumer trust in Internet shopping in Thailand. They used six independent variables such as Reputation, Security, Privacy, Ease of use, Usefulness, and Integrity and one dependent variable - Trust in online shopping. They found that all six independent variables had an impact on Trust in online shopping. Nierop, Leeftang, Teerling, and Huizingh (2011) in their study considered the effects of the introduction and use of an informational website by a large national retailer on offline customer buying behavior. More specifically, they studied a website's effect on the number of shopping trips and the amount spent per category per shopping trip.

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Zendehtdel , Paim , Bojei, and Osman (2011) explored three dimensions of Trust such as Integrity, Ability, and Benevolence that affect consumers' attitude towards online shopping and online shopping intention in Malaysia. They used the structural equation model to analyze the data collected from a sample 375 students in Malaysia. They found that only Integrity and Ability had an impact on attitude towards online shopping. They also found that there is a relationship between attitude towards online shopping and online shopping intentions.

Thongpapanl and Ashraf (2011) examined the impact of information content and website personalization on performance to identify the most effective ways to design and implement online retailers' website features. They applied the structural modeling analysis for analysis of data on a sample of top US retailers' websites. They found that a large number of information content features for online customers is not sufficient to motivate them. They also found that information target to individual customers influenced customer satisfaction and purchase intention, which in turn influenced retailers' online sales performance. Gaurav (2010) stated that e-commerce has led to the emergence of market space – a virtual world of information that enables marketers to manage content, context, and infrastructure in new and different ways. He further stated that internet is creating a virtual culture which has its own form of manners (netiquette), members of society (netizens), and method of expressing emotions for those who have matured in the net generations.

Maditinos , Sarigiannidis, and Kesidou (2009) examined the impact of five factors on consumer attitude towards online shopping. These factors included Personal Innovativeness of Information Technology, Self-efficacy, Perceived Security, Privacy, and Product Involvement. They used the correlation analysis to determine the relationship among the variables, and used the regression analysis to analyze the effect of these variables on consumer attitude towards online shopping. Yoo, Lee, & Hoffmann (2008) investigated the impact of calculus-based, knowledge-based, and identification - based trust on customer satisfaction and loyalty. They used a sample of 104 responses from university students to analyze the data. They found that knowledge-based trust has the strongest impact on customer satisfaction. Hence, it was suggested that practitioners should focus on developing an appropriate online strategy in terms of how to build up trust based relationships with online customers.

Lee, Huang, and Hsu (2007) in their paper discussed the process through which consumers become loyal to retail service brands. They used a sample of 429 respondents from four international retail service brand settings in different retail formats for empirical analysis. The study revealed that retail service brand settings, brand satisfaction, brand trust, and commitment is the driver of loyalty.

Objectives

The following are the objectives of the present research study :

- 1) To examine the relationship between independent variables such as Website design characteristics, Consumer Trust factors, and Intention to Shop Online with reference to online shopping in Hyderabad.
- 2) To examine the impact of independent variables such as Website design characteristics and Consumer Trust factors towards the dependent variable, that is, Intention to Shop Online with reference to online shopping in Hyderabad.

Hypotheses

- ↵ **H₀: There is a no significant influence of the selected factors on the intention to shop online.**
- ↵ **H₁: There is a significant influence of the selected factors on the intention to shop online.**

Research Methodology

↵ **Scope of the Study :** The study involves online shoppers in the business to consumer (B to C) market segment. The respondents involved in this research study were selected from Hyderabad with the condition of having prior experience in online shopping.

↵ **Population and Sample Size :** The population of this study includes 200 online shoppers in Hyderabad who had purchased different products from online shopping sites.

↵ **Data Collection :** The current study understands the impact of select factors on the intention to shop online. Primary data was collected by using a questionnaire from online shoppers in Hyderabad. Secondary data was collected

from articles in journals related to online shopping. The convenience sampling technique was used to identify people having prior experience of shopping online.

↳ **Survey Instrument** : A structured questionnaire was developed by using a five point rating scale ranging from *strongly agree* to *strongly disagree* with regards to website variables such as - Website design characteristics, Consumer Trust factors towards the dependent variable - Intention to shop online with reference to online shopping in Hyderabad.

↳ **Statistical Tools** : Data analysis was done using SPSS version 17.0 for the data gathered by using the structured questionnaire. Mean, standard deviation, correlation, and multiple regression analysis were used as statistical tools.

Results and Discussion

↳ **Sample Profile** : Online buyers' demographic factors play an important role in devising the online marketing strategy. The demographic features of online buyers in Hyderabad are exhibited in the Table 1.

Table 1 : Sample Profile of the Respondents			
	Categories	Count	Percentage
Gender	Male	152	76%
	Female	48	24%
Age	18-20 years	92	46%
	21-25 years	65	32.50%
	26 -30 years	18	9.0%
	31-35 years	12	6.0%
	36- 40 years	13	6.5%
Marital status	Single	136	68%
	Married	64	32%
Education	Graduate	103	51.50%
	Post graduate	97	48.50%
Occupation	Student	19	9.5%
	Faculty	9	4.5%
	Corporate executive	129	64.5%
	Professionals	39	19.5%
	Businessman	4	2.0%
Income per Month (in ₹)	Less than 10,000	45	22.5%
	10,001-20,000	57	28.5%
	21,001-30,000	63	31.5%
	31,001-40,000	18	9.0%
	41,001-50,000	9	4.5%
	Above 50,000	8	4.0%
Source: Primary Data			

The sample profile results in Table 1 show that male respondents (76%) represented a larger percentage than female respondents (33%). The majority of the respondents consisted of those aged between 21-25 years (32.5%), unmarried (68%), graduate students (51.5%), with monthly incomes ranging from ₹ 21,000 - ₹ 30,000 (31.5%), and employed as corporate executives (64.5%). Since the subjects mainly comprised of young and middle aged graduates who were corporate employees, they were assumed to be more familiar with internet navigation and online shopping.

↳ **Mean and Standard Deviation of the Features of Online Shopping Websites** : The present section describes the factors with mean and standard deviation. The results are presented in the Table 2.

		Mean	Std. Deviation
Website design characteristics	Any time logging	3.57	.980
	In depth information	3.46	.955
	Fast information download	3.37	1.053
	Accuracy of content	3.35	1.000
	Attractive layout	3.51	1.051
	Overall mean of Website Design	17.26	5.039
Consumer trust	Security policy for credit card	3.30	.973
	Privacy protection on site	3.66	.916
	Reliability of delivery	3.59	.942
	Reputed online shopping site	3.51	1.002
	Fast customer service	3.46	.996
Overall mean of Consumer Trust	17.52	4.829	
Intention to shop online	Intention to shop online	3.50	.930
	Intention to recommend the site to others	3.56	.860
	Overall mean of Intention to Shop Online	7.06	1.79

Source: Primary Data

The factor Consumer Trust got the highest mean score (17.52), as can be inferred from the Table 2. Online shoppers rated Privacy to be the most important factor, which is evident from the highest mean score of this factor, that is 3.66, followed by Reliability of Delivery (3.59), Reputed Online Shopping Site (3.51), and Fast Customer Service (3.46). Secondly, the factor Website Design received the second highest mean score - 17.26 (Table 2). Any Time Logging variable received a mean score of 3.57, which is more than the score received by the variable - Attractive Layout (3.51). Thirdly, the variable - Intention to Shop Online received a mean score of 7.06. Intend to Recommend the Website to Others received the highest mean score of 3.56, followed by Intend to Shop Online variable, with a mean score of 3.50.

↳ **Correlation between Factors in Online Shopping :** In this section, the first research objective is discussed. In order to measure the relationship between the constructs of online shopping, the Pearson's correlation was used. The Table 3 shows Pearson's correlation between key mediating variables in case of the sample respondents. The correlation

		Website Design	Consumer trust	Intention to Purchase Online
Website Design	Pearson Correlation	1	.392**	.386**
	Sig. (2-tailed)		.000	.000
	N		200	200
Consumer trust	Pearson Correlation		1	.355**
	Sig. (2-tailed)			.000
	N			200
Intention to Purchase Online	Pearson Correlation			1
	Sig. (2-tailed)			
	N			

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Primary Data

between Consumer Trust and Website Design factor (.392), Intention to Purchase Online and Website Design factor (.386), and Consumer Trust and Intention to Purchase Online (.355) was highly significant amongst online shoppers.

☞ **Effect of Various Factors on Intention to Shop Online :** In this section, the second research objective is discussed. In order to measure and predict which independent variables were the most important factors for the dependent variable, that is, Intention to Shop Online, multiple regression analysis was used. The three major components of the multiple regression output are model summary, ANOVA, and coefficients as presented in the Table 4. The model summary and the ANOVA summary indicate that the overall model of the four independent variables is significantly related to Consumer's Intention to Shop Online [$R^2 = .198$, $Adjusted R^2 = .190$, $F\text{-value} = 24.380$, $p < .005$].

R	R ²	Adj R ²	SEE	F-Value ANOVA	Sig.	Beta	t-value	Sig.	
.445a	.198	.190	1.25208	24.380	.000a	Website Design	.292	4.209	.000
						Consumer Trust	.241	3.478	.001
a. Predictors: (Constant), Consumer Trust, Website Design									
b. Dependent Variable Intention Shop Online									
Source: Primary Data									

The data in the Table 4 shows that the multiple regression is statistically significant (Sig.=0.000). Regression analysis with Trust in Intention to Shop Online as the dependent variable shows that R^2 value is found to be 0.198, i.e. 20% of the variance is shared with the dependent variable. The independent variable Website Design factor has the greatest impact on Intention to Shop Online (Beta = 0.292, Sig. = 0.000). Consumer Trust is the second most important element driving Intention to Shop online (Beta = 0.241, Sig. = 0.001).

☞ **Testing of Hypotheses :** Multiple regression analysis was performed to measure the effect of two independent online shopping factors (Consumer Trust and Website Design) on the dependent factor - Intention to Shop online (Table 4). The results show that both factors influenced the factor - Intention to Shop Online. Hence, the alternate hypothesis is accepted and the null hypothesis is rejected.

Managerial Implications

The present study has some important implications for managers of e-marketing companies in winning consumers' trust and for improving the customers' intention to purchase from an online store.

☞ Managers are recommended to carefully train their employees to enhance their capability of dealing with customers' wants and complaints. Proper communication with regards to timely delivery, service, and security aspects would serve as the best way to create trust for the online shopping websites in the minds of the customers.

☞ Managers should make sure that the website design should be attractive and well organized, which in turn could influence the perceptions of the customers. Consumers would be willing to pay more to enjoy the hedonic value of a sophisticatedly designed website.

☞ It is suggested that managers should present information about their products and services by making use of effects such as graphics, videos, email, and other modes of interaction.

☞ The company should provide the agreement between the website and the consumer without any request. They should clarify all doubts of agreement with relevance to delivery, security, and service details of the consumers. If there is any change in the agreement, then the change should be promptly communicated to the customers.

Limitations of the Study

There are some limitations of the present study. First, the present study is limited to online shoppers from Hyderabad. Another limitation is the respondents' selection of factors, which are few in number. Finally, the results are subject to the common limitation of accuracy of response.

Scope for Future Research

The present study recommends few future research directions. This study only examines a limited number of factors that influence the customers' intention to shop online. Future research studies can extend their scope by considering factors not covered in the present study. Future studies can focus on a larger geographic area - that is, studies can explore online shopping intentions of customers by taking respondents from different states of India. Future research works can also examine customers' intention to shop online with specific reference to products or brands.

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