# An empirical study on factors influencing consumers' trust in E-tailers – evidence from India

# **MONAMI BANERJEE**

Ph.D Research Scholar Department of Management Studies National Institute of Technology West Bengal, India

## DR. NEELOTPAUL BANERJEE

Assistant Professor Department of Management Studies National Institute of Technology West Bengal, India

#### **ABSTRACT**

The ever increasing mainstream activity on the internet has opened up a plethora of business opportunities for marketers. The growth of B2C e-commerce has been phenomenal, but still there are challenges that may slow down the growth of B2C e-commerce. In a digital world where product qualities and benefits must be presented in a convincing way over the wired network, building trust becomes increasingly important. This study empirically investigated the antecedents or the factors that are thought to build Indian consumers' online trust. To conduct an empirical investigation a survey of 262 consumers, with online shopping experience, was conducted using a questionnaire. This study tried to attain the objective by applying the statistical technique of factor analysis and extracted six important factors, the first of which relates to the E-tailer's integrity.

Keywords: E-tailers, India, online, trust, web site.

## 1. Introduction

To survive in the midst of intense competition most of the companies are looking for unconventional ways of marketing. Internet is perhaps the best unconventional form of marketing that has been embraced by the companies. Since its inception internet has evolved from a medium meant solely for communication, and used by researchers and scientists only, to a highly technologically inclined commercial medium. The internet has given birth to entirely new business models and opened completely novel opportunities for global marketing. Attracted by the big potentialities offered by the internet, thousands of dot com companies are born every day and important investments are made (Triki & Abidi, 2005). Internet allows companies, regardless of size, to reach international markets at reasonable cost. It offers organizations inexpensive and sophisticated tools for advertising, taking and placing orders, promoting their philosophies, and communicating with their customers all over the world (Palumbo & Herbig, 1998). Internet is an "anytime anywhere' medium (Ramaswamy & Namakumari, 2002) which offers a high degree of interaction and affords consumers unprecedented benefits, from convenience to bargain prices.

The growth of business—to-consumer (B2C) e-commerce has been rapid since its commercialization, but still there are critical challenges that may slow down the future growth of B2C e-commerce. Past studies have concluded that a large percentage of internet users perceive online transactions to be more risk involved than transactions in the traditional market place (Tan, 1998). Consumers perceive a higher level of risk with non store purchase than store purchase decisions (Akaah & Korgaonkar, 1988).

The primary reason for online risk perception being high among the consumers stems from the lack of trust in E-tailing. Trust is one of the most frequently cited reasons for consumers not willing to purchase online (Lee and Turban, 2001) and plays a critical role in facilitating online transactions. In the anonymous digital world trust is critical for building relationship with customers and at the same time extremely difficult to build in the minds of

the consumers. So trust is recognized as the critical factor for the continued growth of B2C e-commerce (Ba, 2001; Houston, 2001; Jarvenpaa, Tractinsky, & Vitale, 2000).

To create long-term customer relationships, firms need to build customer trust (Doney and Cannon 1997; Dwyer, Schurr, & Oh 1987; Ganesan 1994). It is widely agreed that e-commerce can only become a broad success if the general public trusts the virtual environment (Tan & Thoen, 2001). "The most salient source of trust in a retail setting is the salesperson, where consumer trust is dependent on the salesperson's expertise, likeability, and similarity to the customer" (Monsuwe, Dellaert, & de Ruyter, 2004). In online shopping, the salesperson is replaced by the web pages on the marketer's web site (Lohse & Spiller, 1998). In traditional marketplace consumers can get cues from the location and size of a store, the sales personnel in the store, the ambience of the store, can touch and feel the products, whereas in the online environment such cues does not exist. Online shopping, different from traditional shopping, has a unique feature of uncertainty, anonymity, and lack of control and potential opportunism (Sonja & Ewald, 2003). So compared to traditional shopping, the risks involved in online shopping are greater.

Trust is extremely crucial on the internet due to the lack of physical manifestation on the internet. In a digital world where physical interaction is more or less absent, and product qualities and benefits must be presented in a convincing way over the wired network, building trust becomes increasingly important. Customers tend to choose a provider that represents a set of attributes that can be trusted. If consumers trust E-tailers then they will feel comfortable in doing transactions and disclosing personal information to them. Engendering trust in consumers is one of the challenges that online firms have to confront. So it is of utmost importance for the online merchants to understand the factors influencing online consumers' trust in e-tailing.

### 2. Literature Review

The research on the concept of trust has emerged rapidly due to the need of understanding it in order to improve current and future e-commerce implementation.

Past studies have shown that consumers perceive financial, product performance, psychological, physical, social, and time risks when making purchases (Jacoby & Kaplan, 1972; Peter & Tarpey, 1975; Garner, 1986; Mitchell, 1992; Schiffman & Kanuk, 1994). Prior research has shown that consumer concerns about the risks associated with online shopping can be a deterrent to consider the internet as a retail channel (Bhatnagar Misra & Rao, 2000). Trust is a critical factor in reducing the online risk perception among the consumers and facilitates continuous exchange relationships between the buyer and the seller. Trust exists when one party has confidence in an exchange partner's reliability and integrity (Morgan & Hunt, 1994). Trust is a key element for relationship success and tends to be related to a number of elements such as competitive advantage and satisfaction (Ratnasingam & Pavlou, 2003).

Various definitions of trust have been presented in the literature. Trust is commonly viewed as a dynamic process which must be built over time and is dependent on situational context (Lewis & Weigert 1985; Good 1988; Buskens 1998; Macy &Skvoretz 1998). "Mohr and Spekman (1994) stated that trust is the belief that a party's word is reliable and that a party will fulfill its obligation in an exchange. Dwyer and Tanner (2002) defined trust as "the belief in the integrity, honesty and the reliability of another person". Chaudhuri and Holbrook (2001) defined brand trust as 'the willingness of the average consumer to rely on the ability of the brand to perform its stated function." Sahadev (2005) defined trust as an expectation or willingness that exists between two parties. Willingness has been defined by Moorman, Zaltman & Deshpande (1992), as "to rely on an exchange partner in whom one has confidence in".

Online trust can be defined as an internet user's psychological state of risk acceptance, based upon the positive expectations of the intentions or behaviours of an online merchant (Rousseau et al., 1998). Lee and Turban (2001) defined consumer trust in internet shopping (CTIS) as "the willingness of a consumer to be vulnerable to the actions of an internet merchant in an internet shopping transaction, based on the expectation that the internet merchant will behave in certain agreeable ways, irrespective of the ability of the consumer to monitor or control the internet merchant". According to Nah and Davis (2002), consumer trust in the context of e-commerce

can be defined as "the willingness of the consumer (trustor) to be vulnerable to the actions of an online party (trustee) by engaging in online relationship exchanges with the party."

The importance of trust in conducting successful business has been highlighted in several past studies. According to Schurr and Ozanne (1985), trust creates more favorable attitudes towards suppliers as well as customer loyalties. Consumers are willing to transact, and market could function well if consumers trust any brand and the company (Zucker 1986). Consumers often make important buying decisions based, in part, on their level of trust in the product, salesperson, and/or the company (Hosmer, 1995). Chiou, Droge & Hanvanich (2002) found that perceived trust had direct and positive impacts on the overall satisfaction. Pan, Ratchford, and Shankar (2002) found that online trust has a positive impact on Web site traffic.

Derived from the marketing literature, a number of factors that influence online trust can be identified. According to Lumsden and MacKay (2006), factors such as branding, ease of use, professional look-and-feel, website structure, channels available for communication with the vendor, privacy policies, and third party assurance mechanisms have been collectively recognized as being essential to consumers' assessment of trust.

Many consumers are very skeptical about the reliability of the information provided on the internet. It has been recommended that online trust can be increased through honest and full disclosure of information practices (Milne and Boza 1999).

Web site design is a critical part of Internet marketing strategy and an important element in building trust (Hoffman, Novak, & Peralta 1999; Urban, Sultan, & Qualls 2000). A good website usually delivers relevant and quality information which will provide consumers with a positive experience, and will increase consumers' knowledge and awareness as well as their perception of the brand (Keller, 1998) which will influence their level of trust. Bart et al (2005) stated that "a customer's interaction with a store is somewhat similar to his or her interaction with a Web site, and consumers develop perceptions of trust in a Web site based on their interactions with the site".

Landesberg, and Zeisser (1999) discuss security, merchant legitimacy and fulfillment as important determinants of online trust. Belanger, Hiller, and Smith (2002) stated that privacy and security are antecedents of online trust. In the trust model developed by Srivinasan (2004) shows the use of security in building consumer trust for an e-business.

Many researchers have found that word of mouth (WOM) communications do affects brand trust (Reichheld & Schefter, 2000; Parasuraman, Zeithaml, & Berry, 1988). Ha and Perks (2005) stated that word-of mouth and good online experience build online trust.

Past research has repeatedly identified online trust as a crucial factor for consumers' online purchase decisions (Ang & Lee, 2000; Jarvenpaa, Tractinsky & Saarinen, 1999; Teo, 2002). For new online shoppers, experience and knowledge can be gain and trust can be developed, by interacting with past customer, looking into customer feedback and testimonials and other method that are provided by web merchant (Othman, Hussin, & Daud, 2008). In terms of trust formation, consumers can ask opinions or experiences from other consumers to evaluate the trustworthiness of e-Commerce (Pennanen, 2005).

Yoon (2002) studies antecedents of online trust based on surveys of Korean college students and finds that company awareness and reputation are significantly associated with web site trust.

Most scholars in the field of e- business have agreed that the lack of trust in e-commerce is the main factor that contributed to the decreasing number of consumer engaging in e-commerce (Reigelsberger, Sasse, & McCarthy, 2003; Patton & Josang, 2004).

The present study has been undertaken because many researchers in the past have conducted study on isolated dimensions of the construct such as privacy, WOM, web site design, security and so on. This implies that the conclusions provided by these studies cannot be generalized to consumer trust in e-tailing. In this study the most significant set of trust antecedents derived from previous researches are presented as a more comprehensive set and then subjected to empirical testing.

Secondly, at present, there is little research work in the above area in the Indian context, albeit, foreign studies being aplenty. So the primary objective of this research has been to examine which factors proposed in the literature influence consumer trust in e-tailing in India. To attract and retain customers, E-tailers need to have a clear knowledge of these factors in order to develop a strong relationship with the customers and develop customer loyalty.

#### 3. Research Methodology

To conduct an empirical investigation, a survey was conducted, using a questionnaire. The measurement instrument contains 27 items measuring trust antecedents. This study focused on investigating the most prominent set of trust inducing factors derived from the literature along with a few new factors introduced by the authors, and presenting them as an integrated set that can be subjected to empirical evaluation. The questionnaire was pre-tested in a pilot study to fine tune the questionnaire. The pilot study was conducted among a convenience sample of fifteen people consisting of neighbors', friends and colleagues, to evaluate how well the questionnaire was framed and understood. Based on the pilot study and feedback from the participants some items were reworded to improve clarity. Next the survey was conducted to collect the data and then the data were analyzed and interpreted. SPSS version 16.0 was used to carry out the analysis of data.

The respondents were randomly selected to remove the biasness in samples. The samples consisted of consumers living in one major city in India. Random people were chosen from households who are a part of the consumer group. The respondents were randomly picked from those who are 18 years of age and above, of both sexes, either earning or with access to expendable income, and who have made online purchase at least once in the last four months. In this study random sampling method using Kish method of sampling is done. The Kish grid (Kish, 1949) is commonly used by those conducting large scale surveys. In total 262 respondents completed the questionnaire. No replacement was made for households which refused to be a part of the survey or where the selected family member did not match with the defined population. The Kish method (Kish, 1965) involves some sequential steps in which, a) the interviewer is to record the name, gender, age of all the eligible persons & their relation to the housewife (because she is the one who is mostly available), b) then the candidates are arranged according to their increasing age, and c) using a random number table the respondent is chosen.

# 4. Findings and Analysis

The demographic data of the samples are given in *Table 1*, and data related to consumers' internet usage are given in *Table 2*.

	GENDER			
	Frequency	Percent		
Male	147	56.1		
Female	115	43.9		
Total	262	100.0		
	AGE (in years)			
	Frequency	Percent		
18-20	28	10.7		
21-30	91	34.7		
31-40	67	25.6		
41-50	36	13.8		
51-60	29	11.1		
Above 60	11	4.1		
Total	262	100.0		
	EDUCATION			
Post graduate	111	42.4		
Graduate	88	33.6		
Higher secondary	44	16.8		
Secondary	19	7.2		
Total	262	100.0		
МО	NTHLY FAMILY INCOME (in Indian Rupe	ees)		
Less than10 000	16	6.1		
10 001-20 000	24	9.2		
20 001-30 000	62	23.7		
30 001-40 000	98	37.4		
40 001-50 000	37	14.1		
Greater than 50 000	25	9.5		
Total	262	100.0		
	STATUS			
Student	77	29.4		
Service	112	42.7		
Self Employed	39	14.9		
Housewife	21	8.0		
Retired	13	5.0		
Total	262	100.0		

Table 2: Data related to Internet Usage

	FREQUENCY OF INTERNET USE						
	Frequency Valid Percent						
Everyday	225	86.0					
Once in two days	26	9.9					
Once a week	11	4.1					
Total	262	100.0					
	TIME SPENT PER INTERNET SESSION	I					
	Frequency	Valid Percent					
Less than1hr	24	9.2					
1hr-2hr	188	71.8					
More than 2hr	50	19.0					
Total	262	100.0					
MA	IN PURPOSE FOR USING THE INTER	NET					
	Frequency	Valid Percent					
For entertainment	22	8.3					
For shopping	25	9.5					
For collecting information	96	36.8					
For communication	119	45.4					
Total	262	100.0					

Factor analysis attempts to identify underlying variables, or factors, that explain the pattern of correlations within a set of observed variables. Factor analysis is often used in data reduction to identify a small number of factors that explain most of the variance observed in a much larger number of manifest variables.

To test the sampling adequacy, Kaiser-Meyer-Olkin Measure of Sampling Adequacy was computed. Kaiser (1974) recommends values greater than 0.5 as acceptable. Kaiser had refined the index further and suggested that anything in the .90s was 'marvelous', in the .80s 'meritorious', in the .70s 'middling', in the .60s 'mediocre', in the .50s 'miserable' and below .5 'unacceptable'. In this study, as given in *Table 3*, Kaiser-Meyer-Olkin Measure of Sampling Adequacy was found to be 0.881. This indicates that the factor analysis is appropriate for these data.

Table 3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure o	.881	
Bartlett's Test of Sphericity	5.262E3	
	df	351
	Sig.	.000

Bartlett's measure tests the null hypothesis that the original correlation matrix is an identity matrix. A significant test tells us that the R-matrix is not an identity matrix; therefore, there are some relationships between the variables that are to be included in the analysis. For this study, Bartlett's test is highly significant (p<0.001), and therefore factor analysis is appropriate.

Communalities are designed to show the proportion of variance that the factors contribute to explaining a particular variable. Principal Component Analysis works on the initial assumption that all variance is common, therefore, before extraction the communalities are all 1. The amount of variance in each variable that can be explained by the retained factors is represented by the communalities, as shown in *Table 4*, after extraction.

**Table 4: Communalities** 

Communalities	Initial	Extraction
Secured online payment process	1.000	.773
Security seal of trusted third party	1.000	.746
Privacy policy clearly stated	1.000	.828
Privacy policy can be found easily in the web site	1.000	.641
Word of mouth	1.000	.705
Feedback can be given online	1.000	.537
Link to other useful sites	1.000	.605
Product delivered undamaged	1.000	.771
Users' testimonials posted on the web site	1.000	.599
Product delivered as per order specifications	1.000	.774
Error free bill	1.000	.742
Web site has chat room to interact with other customers	1.000	.776
Return policy clearly stated	1.000	.759
Product delivered on time	1.000	.777
Multiple payment option	1.000	.654
Shipment can be tracked online	1.000	.802
Shipment cost details given	1.000	.769
Grievance can be lodged online	1.000	.633
Few & easy steps involved in placing orders	1.000	.708
Responds to queries & requests promptly	1.000	.718
Web site has a search engine	1.000	.449
Web site has a professional look	1.000	.729
Detail information about the product features, quality and price	1.000	.641
Web content easy to read & understand	1.000	.776
Web site can provide information tailored to customers' needs	1.000	.717
Web content visually appealing	1.000	.635
Site map available	1.000	.663
Extraction Method: Principal Component Analysis.		

Table 5 lists the Eigen values associated with each factor before extraction, after extraction and after rotation. Eigen values are designed to show the proportion of variance accounted for by each factor (George and Mallery, 2010). Before extraction there are twenty seven components in the data set. The Eigen values associated with each component represent the variance explained by that particular component. Next all components with Eigen value greater than 1 are extracted, which leaves us with six factors. In the final part of the table (Rotation Sums of Squared Loadings), the Eigen values of the factors after rotation are displayed. Rotation has the effect of optimizing the factor structure. Before rotation Factor 1 accounted for considerably more variance than the remaining five (41.53% compared to 7.792%, 7.352%, 4.868%, 4.546%, and 4.116%), however after extraction it accounts for only 33.938% of variance (compared to 14.042%, 5.994%, 5.760%, 5.554%, and 4.809%).

The percentage of total variance is used as an index to determine how well the total factor solution accounts for what the variables together represent. The index for the present study accounts for 70.097% of the total variance for building consumers online trust. This is a very good extraction as it can economize on a number of factors (from twenty seven, it has reduced to six factors), while we have lost only 29.903% information content.

**Table 5: Total Variance Explained** 

			Total	Variance	Explained				
Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumul ative %	Total	% of Variance	Cumula tive %
VAR 1	11.19 2	41.453	41.453	11.19	41.53	41.453	9.163	33.938	33.938
VAR 2	2.104	7.792	49.245	2.104	7.792	49.245	3.791	14.042	47.980
VAR 3	1.985	7.352	56.597	1.985	7.352	56.597	1.618	5.994	53.974
VAR 4	1.312	4.858	61.455	1.312	4.868	61.455	1.555	5.760	59.734
VAR 5	1.225	4.536	65.990	1.225	4.546	65.990	1.500	5.554	65.288
VAR 6	1.109	4.106	70.097	1.109	4.116	70.097	1.298	4.809	70.097
VAR 7	0.897	3.321	73.418						
VAR 8	0.826	3.057	76.476						
VAR 9	0.786	2.91	79.386						
VAR 10	0.692	2.563	81.949						
VAR 11	0.613	2.272	84.221						
VAR 12	0.551	2.042	86.263						
VAR 13	0.482	1.787	88.049						
VAR 14	0.444	1.643	89.692						
VAR 15	0.408	1.510	91.202						
VAR 16	0.393	1.456	92.657						
VAR 17	0.296	1.096	93.753						
VAR 18	0.281	1.039	94.792						
VAR 19	0.261	0.966	95.758						
VAR 20	0.229	0.848	96.606						
VAR 21	0.209	0.774	97.380						
VAR 22	0.157	0.58	97.960						
VAR 23	0.15	0.554	98.514						
VAR 24	0.128	0.473	98.988						
VAR 25	0.115	0.426	99.414						
VAR 26	0.102	0.378	99.792						
VAR 27	0.056	0.208	100.000						
Extraction Me	ethod: Pr	incipal Comp	onent Analysis	5.					

Table 6 shows the Rotated Component Matrix which is a matrix of factor loadings for each variable onto each factor. Loading on factors can be positive or negative. Comrey (1973) suggested that loadings of 0.55 are good, those of 0.63 very good, and those of 0.71 are excellent. He also agreed with Child (1970) that a reasonable cutoff point would be 0.3, with loadings below that figure being ignored in explanation of a factor. Factor loadings less than 0.5 have not been displayed as the criterion value has been selected as 0.5. The variable web site has a search engine (VAR 22) does not load onto any factor as the entire factor loading values of this variable is less than 0.5.

Table 6: Rotated Component Matrix							
	Rotate	d Componen	t Matrix				
	Components						
	Integrity	Security & Privacy	Useful Information	Convenience in use	Web Design	Word of mouth	
Product delivered undamaged (VAR 8)	.863						
Product delivered on time (VAR14)	.859						
Product delivered as per order specifications (VAR10)	.838						
Error free bill (VAR 11)	.827						
Shipment can be tracked online (VAR 16)	.808						
Return policy clearly stated (VAR 13)	.794						
Shipment cost details given (VAR 17)	.768						
Multiple payment option (VAR 15)	.765						
Few & easy steps involved in placing orders(VAR19)	.735						
Responds to queries & requests promptly (VAR 20)	.731						
Web site has chat room to interact with other customers (VAR 12)	.696						
Users' testimonials posted on the web site (VAR 9)	.674						
Grievance can be lodged online (VAR 18)	.653						
Feedback can be given online (VAR 6)	.606						
Link to other useful sites (VAR 7)	.602						
Privacy policy clearly stated (VAR 3)		.876					
Secured online payment process (VAR 1)		.838					
Security seal of trusted third party (VAR 2)		.735					
Privacy policy can be found easily in the web site(VAR 4)		.606					
Detail information about the product features, quality and price (VAR 23)			.825				
Web site can provide information tailored to customers' needs (VAR 25)			.823				
Web content easy to read & understand (VAR 24)				.862			
Site map available (VAR 27)				.764			
Web content visually appealing (VAR 26)					.781		
Web site has a professional look (VAR 22)					.759		
Word of mouth (VAR 5)						.712	

	Rotate	d Component	t Matrix				
	Components						
	Integrity	Security & Privacy	Useful Information	Convenience in use	Web Design	Word of mouth	
Product delivered undamaged (VAR 8)	.863						
Product delivered on time (VAR14)	.859						
Product delivered as per order specifications (VAR10)	.838						
Error free bill (VAR 11)	.827						
Shipment can be tracked online (VAR 16)	.808						
Return policy clearly stated (VAR 13)	.794						
Shipment cost details given (VAR 17)	.768						
Multiple payment option (VAR 15)	.765						
Few & easy steps involved in placing orders(VAR19)	.735						
Responds to queries & requests promptly (VAR 20)	.731						
Web site has chat room to interact with other customers (VAR 12)	.696						
Users' testimonials posted on the web site (VAR 9)	.674						
Grievance can be lodged online (VAR 18)	.653						
Feedback can be given online (VAR 6)	.606						
Link to other useful sites (VAR 7)	.602						
Privacy policy clearly stated (VAR 3)		.876					
Secured online payment process (VAR 1)		.838					
Security seal of trusted third party (VAR 2)		.735					
Privacy policy can be found easily in the web site(VAR 4)		.606					
Detail information about the product features, quality and price (VAR 23)			.825				
Web site can provide information tailored to customers' needs (VAR 25)			.823				
Web content easy to read & understand (VAR 24)				.862			
Site map available (VAR 27)				.764			
Web content visually appealing (VAR 26)					.781		
Web site has a professional look (VAR 22)					.759		
Word of mouth (VAR 5)						.712	
Extraction Method: Principal Componer Rotation Method: Varimax with Kaiser N							

Table 6 reveals the six factors influencing consumers' online trust in e-tailing which are discussed below.

#### Factor 1: INTEGRITY

This is the most important factor influencing consumers' online trust. Integrity is consistency of actions, values, methods, principles, expectations, and outcomes. Integrity is regarded as the honesty and truthfulness of the Etailer's actions. There are fifteen loads to this factor.

# Factor 2: SECURITY AND PRIVACY

Security is the protection against danger, loss, and crime. Privacy means the state of being free from unsanctioned intrusion. There are four loads to this factor namely *privacy policy clearly stated, secured online payment process, privacy policy can be found easily in the web site,* and *security seal of trusted third party.* Consumers' perception of risk reduces drastically if they feel that the online merchant does not compromise with their security and privacy concerns.

## Factor 3: USEFUL INFORMATION

Useful information can be used advantageously, beneficially, or for several purposes. The variables that load this factor are *detail information about the product*, and *ability of the web site in providing information tailored to customers' needs*. In the online market place where physical interaction is more or less absent, consumer's confidence can be gained by providing extensive information about the marketer's offerings and at the same time filtering the information content according to the consumer's needs.

#### Factor 4: CONVENIENCE IN USE

Convenience is anything that saves or simplifies work, adds to one's ease or comfort. This factor contains the variables web content easy to read and understand, and site map available. If the E-tailer's web site is not convenient to use then the consumers will feel uncomfortable and may perceive the web site not easy to use resulting in dissatisfaction.

#### Factor 5: WEB DESIGN

While design is the art and process of integrating individual elements of design into a pleasing unity, web design is the creation of web sites focusing on both the aesthetics and the mechanics of a web site's operation. It focuses on the look and feel of the web site. There are two loads to this factor namely, web content visually appealing, and web site has a professional look. A visually appealing web site with a professional look generates the "feel-good factor" among the consumers and reflects the brand image of the E-tailer or befitting the business it carries out.

# Factor 6: WORD OF MOUTH

Word of mouth creates awareness, perceptions, attitudes, and behavior. Word-of-mouth promotion is important for every business, as each happy customer can bring in dozens of new ones. There is only one load to this factor.

# 5. Conclusion

From the present study it is revealed that in India, consumers who purchase online are mostly young people comprising of students and people in services within the age group of 21-40 years. The study also indicates that most of the consumers who shop online have a graduate or post graduate degree and financially well off. The majority of the consumers use internet every day, and spent around 1-2 hours per internet session. The main purpose of using the internet is for communication followed by retrieving information.

The initial twenty seven variables are reduced into six factors, among which the marketer's *integrity* is considered to be the most important factor influencing consumers' online trust. The marketers in the virtual world can gain the consumers' confidence and faith by delivering the products on time, undamaged and according to the specifications mentioned by the customers, and sending error free bill. Online merchants can enhance their integrity by providing the consumers' the option of tracking their shipments, easy and quick ways of placing orders, and multiple ways of payment. In the B2C e-commerce environment, marketer's transparency will also have a positive impact in the consumers' evaluation of their integrity. Transparency can be presented in the form of the E-tailer having a clear return policy, providing shipment cost details and chat room to interact with other customers, posting users' testimonials, giving opportunity to lodge grievance and feedback online, and having link to other useful sites. All these attributes emphasize the honesty of the E-tailer and convince the

consumers about the E-tailer's integrity. Once consumers have no question mark over the marketer's integrity, their trust in the online marketer will grow and become stronger over time.

The next two important factors that act as antecedents to Indian consumers' online trust are *security and privacy*, and *useful information* content in the web site. Purchasing in the virtual world is very much like venturing in the unknown, as there is a lack of physical interaction or cues, so security and privacy plays a critical role in generating consumers trust. The online firms need to display evidence of security through their web sites and should explicitly state their privacy policy without leaving anything in the consumers' realm of imagination. While purchasing on the internet consumers' depend heavily on the information content of the web sites. The firms doing business over the internet should incorporate extensive information about their offerings and serve customized information as per the consumers' information needs. Once consumers' have the information that they are looking for they will feel more assured to do transaction with the E-tailer.

The other antecedents to consumers' online trust are *convenience* in using the web site, the *web design*, and *word of mouth* promotion. The E-tailers web site should be developed in such a way so that the consumers can navigate through the pages of the web site with ease. Navigation through the web site without confronting complex problems shall ensure a positive experience among the consumers. The design of the web site should visually appeal to the aesthetic sense of the consumers, and have a professional look and feel to reflect the brand image of the retailer. A pleasant experience coupled with the "feel good" factor also steers consumers trust in online marketers.

The presence of search engine in the web sites does not play any role in developing consumers trust in the digital environment. It can be said that most probably online consumers rely on Google for searching purpose rather than search engine in an online vendor's web site.

The reduced online trust influencing scale, developed by reducing the initial twenty seven variables into six factors, can be used in future B2C e-commerce studies to relate it to consumers online purchase intentions or other relevant online behavior of consumers in India.

## References

- Akaah, I. P., & Korgaonkar, P. (1988). A conjoint investigation of the relative importance of risk relievers in direct marketing. Journal of Advertising Research, August/September, 38 44.
- Ang, L. & Lee, B.C. (2000). Influencing perceptions of trustworthiness in internet commerce: A rational choice framework. In Proceedings of Fifth Collecter Conference on Electronic Commerce, Brisbane, Australia, 1-12.
- Ba, S. (2001). Establishing online trust through a community responsibility system. Decision Support Systems, 31, 323–336.http://dx.doi.org/10.1016/S0167-9236(00)00144-5
- Bart, Y., Shankar, V., Sultan, F., & Urban, G.L. (2005). Are the Drivers and Role of Online Trust the Same for All Web Sites and Consumers? A Large-ScaleExploratory Empirical Study. Journal of Marketing, 69 (October 2005), 133–152.http://dx.doi.org/10.1509/jmkg.2005.69.4.133
- Belanger, F., Hiller, J.S., & Smith, W.J. (2002). Trustworthiness in Electronic Commerce: The Role of Privacy, Security, and Site Attributes. Journal of Strategic Information Systems, 11 (December), 245–70. http://dx.doi.org/10.1016/S0963-8687(02)00018-5
- Bhatnagar, A., Misra, S., & Rao, R.H. (2000). On risk, convenience, and internet shopping behavior. Communications of the ACM, 43(11), 98 105.http://dx.doi.org/10.1145/353360.353371
- Buskens, V. (1998). The social structure of trust. Social Networks, 20(3), 265-289.http://dx.doi.org/10.1016 /S0378-8733(98)00005-7

- Chaudhuri, A., & Holbrook, M. B. (2001). The chain of effects from brand trust and brand affect to brand performance: the role of brand loyalty, Journal of Marketing, 65(2), 81–93.http://dx.doi.org/10.1509/jmkg.65.2.81.18255
- Child D. (1970). The Essentials of Factor Analysis, London: Holt, Rinehart and Winston.
- Chiou, J.S., Droge, C. and Hanvanich, S. (2002). Does customer knowledge affect how loyalty is formed? Journal of Service Research, 5(2), 113-125.http://dx.doi.org/10.1177/109467002237494
- Comrey A. (1973). A First Course on Factor Analysis. London: Academic Press.
- Doney, P.M., & Cannon, J.P. (1997). An Examination of the Nature of Trust in Buyer–Seller Relationships. Journal of Marketing, 61 (April), 35–51. http://dx.doi.org/10.2307/1251829
- Dwyer, F. R., & Tanner, J. F. (2002). Business Marketing: Connecting Strategies, Relationship and Learning. Boston, MA: McGraw-Hill.
- Dwyer, R.F., Schurr, P.H., & Oh, S. (1987). Developing Buyer–Seller Relationships. Journal of Marketing, 51 (April), 11–27.http://dx.doi.org/10.2307/1251126
- Ganesan, S. (1994). Determinants of Long-Term Orientation in Buyer–Seller Relationships. Journal of Marketing, 58 (April), 1–19. http://dx.doi.org/10.2307/1252265
- Garner, S. J. (1986). Perceived risk and information sources in services purchasing. Mid-Atlantic Journal of Business, 24, Summer, 49 58.
- George, D. & Mallery, P. (2010). SPSS for Windows Step by Step: A Simple Guide and Reference, 18.0 Update: Pearson Education, Inc.
- Good, D. (1988). Individuals, interpersonal relations, and trust. In D. Gambetta (ed.), Trust: Making and breaking Cooperative Relations: New York, Blackwell.
- Ha, H. Y., & Perks, H.(2005). Effects of consumer perceptions of brand experience on the Web: Brand familiarity, satisfaction and brand trust. Journal of Consumer Behavior, 4(6), 438-52.http://dx.doi.org/10.1002/cb.29
- Hoffman, D. L., Novak, T.P., & Peralta,M (1999). Building Consumer Trust Online. Communications of the ACM, 42 (4), 80–85.
- Hosmer, L. (1995). Trust: the connecting link between organizational theory and philosophical ethics. Academy of Management Review, 20, 379–403.
- Houston, D.A. (2001). Trust in the networked economy: doing business on web time. Business Horizons, March-April, 38 44.
- Jacoby, J., & Kaplan, L. (1972). The components of perceived risk. Proceedings of 3rd Annual Conference, Association for Consumer Research, 382 393.
- Jarvenpaa, S.L., Tractinsky, J., & Saarinen, L.(1999). Consumer trust in an internet store: A cross cultural validation (electronic version). Journal of Computer Mediated Communication, 5 (2). Retrieved from: http://jcmc.indiana.edu/vol5/issue2/jarvenpaa.html
- Jarvenpaa, S.L., Tractinsky, J., & Vitale, M. (2000). Consumer trust in an internet store. Information Technology and Management, 1 (1), 45 71.http://dx.doi.org/10.1023/A:1019104520776
- Kaiser, H.F. (1974). An index of factorial simplicity. Psychometrica, 39, 31 –36.http://dx.doi.org/10.1007 /BF02291575

- Keller, K. L. (1998). Strategic Brand Management: Building, Measuring, and Managing Brand Equity. New Jersey: Prentice Hall.
- Kish, L. (1949). A procedure for objective respondent selection within a household. Journal of the American Statistical Association, 44, 380 387.
- Kish, L. (1965). Survey Sampling. New York: John Wiley.
- Landesberg, D.H., & Zeisser, M. (1999). How to Build Trust Online. Marketing Management, Fall, 64-69.
- Lee, M., & Turban, E. (2001). A trust model for consumer Internet shopping. International Journal of Electronic Commerce, 6, 75-91.
- Lewis, D. and Weigert, A. (1985). Trust is a social reality. Social Forces, 63(4), 967-985.
- Lohse, G., & Spiller, P. (1998). Electronic shopping. Communications of the ACM, 41, 81-87 http://dx.doi.org /10.1145/278476.278491
- Lumsden, J., & MacKay, L. (2006). How Does Personality Affect Trust in B2C e-Commerce? International Conference on Electronic Commerce, August 14-16, Fredericton, Canada
- Macy, M.W., & Skvoretx, J. (1998). The evolution of trust and cooperation between strangers: A computational model. American Sociological Review, 63(10), 638-660.http://dx.doi.org/10.2307/2657332
- Milne, G.R., & Boza, M. (1999). Trust and Concern in Consumers' Perceptions of Marketing Information Management Practices. Journal of Interactive Marketing, 13(1), 5-24.http://dx.doi.org/10.1002 /(SICI)1520-6653(199924)13:1<5::AID-DIR2>3.0.CO;2-9
- Mitchell, V. W. (1992). Understanding consumers' behaviour: Can perceived risk theory help? Management Decision, 30, 26 31.http://dx.doi.org/10.1108/00251749210013050
- Mohr, J., & Spekman, R. (1994). Characteristisc of Partnership Success: Partnership Attributes, Communication Behavior and Conflict Resolution Techniques, Strategic Management Journal, 15(2),135-152. http://dx.doi.org/10.1002/smj.4250150205
- Monsuwe, T., Dellaert, B., & de Ruyter, K. (2004). What drives consumers to shop online? A literature review. International Journal of Service Industry Management, 15, 102-121.http://dx.doi.org/10.1108 /09564230410523358
- Morgan, R.M., & Hunt, S.D. (1994). The Commitment-Trust Theory of Relationship Marketing. Journal of Marketing, 58 (July), 20-38.http://dx.doi.org/10.2307/1252308
- Moorman, C., Zaltman, G., & Deshpande, R. (1992). Relationships between providers and users of market research: the dynamics of trust within and between organizations. Journal of Marketing Research, 29(3), 314-328.http://dx.doi.org/10.2307/3172742
- Nah, F.F.H. & Davis, S. (2002). HCI Research Issues in E-Commerce. Journal of Electronic Commerce Research, 3(3), 98-113.
- Othman, N.Z., Che Hussin, A.R., & Daud, A.R. (2008). Trust Mechanisms: An Integrated Approach for E-Commerce Website Development Process. 3rd International Symposium on Information Technology, 26 29th August 2008.http://dx.doi.org/10.1109/ITSIM.2008.4631568
- Pan, X., Richford, B.T., & Shankar, V. (2002). Can Differences in E-Tailer Prices Be Explained by Service Quality? Journal of the Academy of Marketing Science, 30(4), 433–46.http://dx.doi.org/10.1177 /009207002236915

- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). A multi-item scale for measuring consumer perceptions of service quality, Journal of Retailing, 64, 12–40.
- Patton, M.A., & Jøsang, A. (2004). Technologies for Trust in Electric Commerce. Electronic Commerce Research, 4, 9-21.http://dx.doi.org/10.1023/B:ELEC.0000009279.89570.27
- Palumbo, F., & Herbig, P (1998). International marketing tool. Industrial Management & Data Systems, 98(6), 253-261.http://dx.doi.org/10.1108/02635579810228381
- Pennanen, K. (2005). Consumer's Trust Formation Process in e-Commerce: Development of a Theoretical Framework. Frontiers of E-Business Research.
- Peter, J. P., & Tarpey, L. (1975). A comparative analysis of three consumer decision strategies", Journal of Consumer Research, 2, 29 37.http://dx.doi.org/10.1086/208613
- Ramaswamy, V. S., & Namakumari, S. (2002). Marketing Management. McMillan Business Book.
- Ratnasingam, P., & Pavlou, P. (2003). Technology trust in internet-based interorganizational electronic commerce. Journal of Electronic Commerce in Organizations, 1(1), 17-41.http://dx.doi.org/10.4018/jeco.2003010102
- Reichheld, F.; Schefter, P. (2000). E-loyalty: your secret weapon on the web. Harvard Business Review, 78,105-113.Retrievedfrom:http://www.pearsoned.ca/highered/divisions/text/cyr/readings/Reichheld Schefter T2P1R1.pdf
- Riegelsberger, J., Sasse A.M., & McCarthy, J.D. (2003). The researcher's dilemma: evaluating trust in computer-mediated communication. International Journal of Human-Computer Studies, 58, 759–781. http://dx.doi.org/10.1016/S1071-5819(03)00042-9
- Rousseau, D.M., Sitkin, S., B., Burt, R.S., & Camerer, C. (1998). Not so different after all: A cross discipline view of trust. Academy of Management Review, 23(3), 393 404.
- Sahadev S (2005). Exploring the role of expert power in channel management: An empirical study, Industrial Marketing Management, 34, 487–494.http://dx.doi.org/10.1016/j.indmarman.2004.11.002
- Schiffman, L.G., & Kanuk, L.L. (1994), Consumer Behaviour. Prentice Hall, Englewood Cliffs, NJ.
- Schurr, P. H., Ozanne, J. L.(1985). Influences on exchange processes: buyers' preconceptions of a seller's trustworthiness and bargaining toughness, Journal of Consumer Research, 11, 939–953. http://dx.doi.org/10.1086/209028
- Sonja, G. K., & Ewald, A. K. (2003). Empirical research in on-line trust: a review and critical assessment," International Journal of Human-Computer Studies, 586, 783 - 812
- Srinivasan, S. (2004). Role of trust in e-business success, Information Management & Computer Security, 12(1), 66-72.http://dx.doi.org/10.1108/09685220410518838
- Tan, S.J. (1998). Strategies for reducing consumer's risk aversion in internet shopping. Journal of Consumer Marketing, 16(2), 163-180.http://dx.doi.org/10.1108/07363769910260515
- Tan, Y.H., & Thoen, W. (2001). Towards A Generic Model of Trust for Electronic Commerce. International Journal of Electronic Commerce, Winter 2000-2001, 5(2), 61-74.
- Teo, S.H.T. (2002). Attitudes toward online shopping and the internet. Behaviour & Information Technology, 21(4), 259-271.http://dx.doi.org/10.1080/0144929021000018342

- Triki, A., & Abidi, I (2005). Web advertising as a tool of marketing communication. Retrieved from: http://www.medforist.grenoble\_em.com/contensus/conference%20Tunisia%0IEBC%202005/papers/June25/51.pdf
- Urban, G.L., Sultan, F., & Qualls, W. (2000). Placing Trust at the Center of Your Internet Strategy. Sloan Management Review, 42 (1), 39–48.
- Yoon, S.J. (2002). The Antecedents and Consequences of Trust in Online Purchase Decisions. Journal of Interactive Marketing, 16 (2), 47–63.http://dx.doi.org/10.1002/dir.10008
- Zucker, L. G. (1986). Production of trust: Institutional sources of economic structure, 1840–1920, Research in Organizational Behavior, 8, 53–111.