

FACTORS DETERMINING INDIAN CONSUMERS' ATTITUDES TOWARDS ONLINE SHOPPING

Manika Jain*
Sanjay K. Jain**

ABSTRACT

The paper aims to assess Indian consumers' attitudes towards online shopping and examine the impact of select factors like perceived usefulness, website design, perceived ease of use, perceived risks and benefits, shopping orientations, and online shopping experience. Literature has identified these as significant factors influencing consumer attitudes towards online shopping. A structured, non-disguised questionnaire was administered to 603 online shoppers to collect data on consumers' attitudes towards online shopping and the factors that determine it. Based on analysis, only four factors, viz., perceived benefits, website design, perceived ease-of-use, and online shopping experience, emerged as significant factors affecting consumers' online shopping attitudes. The paper provides implications for online marketers based on the research findings.

Keywords: Online shopping, Consumer Attitude, Shopping Orientation, Past Experience

1. INTRODUCTION

The Internet has proved to be a dynamic virtual medium for channeling flows between customers and firms. Despite this, e-commerce held a small share of India's retail trade, at about 7%, in 2023 (E-Commerce Industry Report, November 2025, IBEF). To fully tap the country's online shopping potential, it becomes imperative to identify the factors that determine consumer attitudes towards online shopping and suggest strategies to help e-marketers attract a larger number of online shoppers more frequently. Past studies reveal that consumer adoption of online shopping depends upon consumer attitudes towards online shopping (e.g., Fishbein & Ajzen, 1975; Ajzen, 1991), which in turn depend upon several internet technology and consumer related factors such as perceived usefulness and ease-of-use of internet as a shopping medium, perceived risk and benefit of making online purchases, website design, consumers shopping orientation and past online shopping experience (Davis *et al.*, 1989; Lohse & Spiller, 1998; Li *et al.*, 1999; Tan & Teo, 2000; Lee, *et al.* 2001; Mathwick *et al.*, 2001; Burke, 2002; Parasuraman & Zinkhan, 2002; Li & Zhang, 2002; Anckar *et al.*, 2003; Cheung *et al.*, 2003; Heijden, 2003; Lim, 2003; Dillon & Reif, 2004; Lee, 2009; Lopes & Galletta, 2006; Richards & Shen, 2006). Since studies investigating the impact of all these factors examined in juxtaposition are lacking in the Indian context, the present study has been undertaken to fill this gap in the literature. More specifically, the study aims to assess e-shoppers' attitudes towards online shopping and examine the impact of the aforementioned antecedents posited as significant determinants of consumer attitudes towards online shopping in prior studies.

2. CONCEPTUAL FRAMEWORK

2.1 Consumer Attitude towards Online Shopping

Consumers' attitude towards online shopping may be defined as their psychological state, positive or negative evaluative feelings, related to making purchases on the internet (Fishbein & Ajzen, 1975). Behavioral models such as the Theory of Reasoned Action (Fishbein & Ajzen, 1975), Triandis' (Triandis, 1980), Technology Acceptance Model (Davis, 1989), the Theory of Planned Behavior (Ajzen, 1985), and the Decomposed Theory of Planned Behavior (Taylor & Todd, 1995) explain the adoption and usage of information technology. In all these models, attitude towards a specific behavior has been proposed as a significant factor influencing consumer decision making and reinforcing that (Engel *et al.*, 1968, 1986; Howard & Sheth, 1969; Howard, 1989; Gatignon & Robertson, 1985; Schifter & Ajzen, 1985; Bagozzi & Warshaw, 1990). In the online shopping literature, too, there has been evidence in support of the influence of consumer attitudes on the use of the internet as a purchase medium (Shim & Drake, 1990; Limayem *et al.*, 2000; Flynn & Goldsmith, 1993; Fenech & O'Cass, 2001; Goldsmith & Bridges, 2000; Chen *et al.*, 2002).

*ARSD College, University of Delhi, Dhaula Kuan, New Delhi, Delhi; Email: manika80@gmail.com (Corresponding Author)
**Department of Commerce, Delhi School of Economics, University of Delhi, Delhi

In the literature, consumers' attitudes toward online shopping have been posited as a multidimensional construct. It has been conceptualized as consumers' acceptance of the internet as a shopping medium (Jahng et al., 2001). Then, it may also refer to consumer preference for a specific online store. These two dimensions are negatively associated with the third dimension, the perceived risks associated with online shopping, such as financial risk, product risk, and concern for privacy and security (Senecal, 2000; Borchers, 2001; Bhatnagar et al., 2000). The fourth dimension is consumers' trust in online stores, which has been observed to reduce the perceived risks of online shopping significantly. Perceived control, enjoyment, and perceived membership benefits have also emerged as other important antecedents of consumer attitude towards online shopping (Koufaris et al., 2001; Cho et al., 2001). Bellman et al. (2000) examined the relationship between consumers' personal characteristics and their attitudes towards online shopping. They found that more time-constrained consumers tend to shop online more frequently. Bhatnagar et al. (2000) and Jarvenpaa et al. (2000) found that while the convenience of using the internet as a shopping medium positively impacts consumer attitudes towards online shopping, the perceived risks thereof are negatively related to consumer attitudes.

2.2 Antecedents of Consumer Attitude towards Online Shopping

Several variables have been proposed as determinants of customer attitudes towards online shopping in the online marketing literature. Through this research, we propose to study the impact of perceived usefulness and perceived ease of use of online shopping media, perceived risks and perceived benefits of online shopping, website design, consumers' shopping orientations, and past online shopping experience. A schematic presentation of the antecedent variables examined in the study, and their impact on consumers' online shopping attitudes, is shown in Fig. 2.2. (Note: *The conceptual framework empirically investigated in the study is enclosed in the larger dotted square.*)

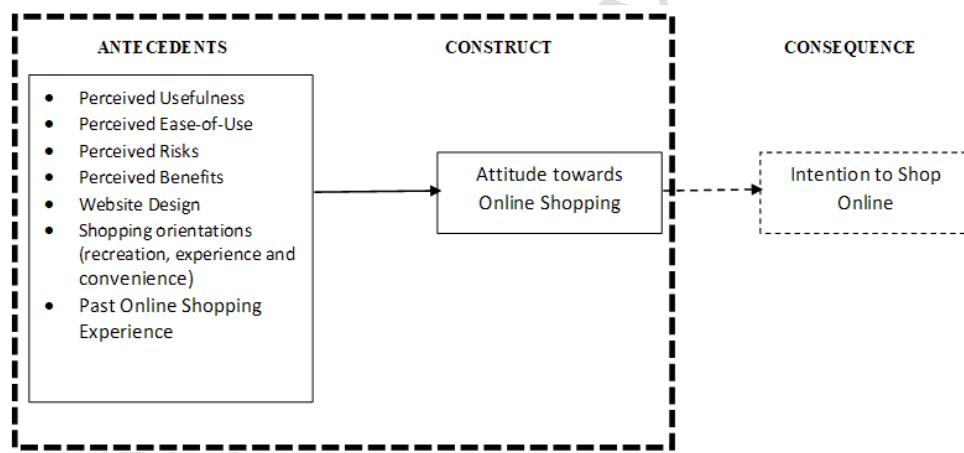


Fig. 2.2: Antecedents of Consumer Attitudes towards Online Shopping

Source: Adapted from Monsuwe et al. (2004).

a) **Perceived Usefulness:** Davis et al (1989), Elliot & Fowell (2000), Lee et al. (2001), Cheung et al. (2003), Ramayah & Jantan (2003), Heijden (2003), Klopping & McKinney (2004), Monsuwe et al. (2004), Richards & Shen (2006), and Lee (2009) observed a positive impact of perceived usefulness of the internet on the consumers' attitude towards online shopping. Hence, we posit:

H1: The higher the perceived usefulness of the internet as a shopping medium, the more favorable the attitude of consumers towards online shopping.

b) **Perceived Ease of Use (PEOU):** Lee, et al. (2001) recognized that ease of information search, ordering, use and customer service influences consumers' online shopping attitude positively (Davis, 1989; Davis et al., 1989; Elliot & Fowell, 2000; Lee, et al., 2001; Cheung, et al., 2003; Ramayah & Jantan, 2003; Heijden, 2003; Klopping & McKinney, 2004; Monsuwe' et al., 2004; Richards and Shen, 2006 and Lee, 2009). Hence, we posit:

H2: The greater the perceived ease-of-use of the internet as a shopping medium, the more favorable is the attitude of the consumers towards online shopping.

c) **Perceived risks:** Technology, product, and vendor are significant sources of risks associated with online shopping (Lim, 2003; Su, 2003; Richards & Shen, 2006). Perceived risks associated with

return policy, delivery date, guarantee and warranty, product performance and service quality have been associated with unfavorable attitude towards online shopping (Lim, 2003; Li et al., 1999; Tan & Teo, 2000; Li & Zhang, 2002; Cheung et al., 2003; Dillon & Reif, 2004; Anckar et al., 2003; Lopes & Galletta, 2006). Hence,

H3: Online shoppers who perceive online shopping to be risky have a less favorable attitude towards online shopping.

d) Perceived Benefits: Benefits such as convenience, information and transaction and delivery capabilities have been observed to influence consumer attitude towards online shopping positively (Lim, 2003; Dholakia & Uusitalo, 2002; Soopramanein & Robertson, 2003; Richards & Shen, 2006; Li et al., 1999; Tan & Teo, 2000; Li & Zhang, 2002; Cheung et al., 2003; Dillon & Reif, 2004; Anckar et al., 2003; Lopes & Galletta, 2006).

H4: Online shoppers who perceive online shopping to be beneficial have a more favorable attitude towards online shopping.

e) Website Design Efficacy: Lohse and Spiller (1998), Li and Zhang (2002), Cheung, et al. (2003), Liao, et al. (2006), Chen, et al. (2004), Richards and Shen (2006); Heijden (2003) and Constantinides (2004) have found that online retail store attributes such as the number of links, image sizes, information content and presentation, search mechanism, media richness, perceived visual attractiveness, enjoyment, interface, network speed, ease of navigation, and website credibility enhance the online consumers' web experience, which positively influences their attitude towards online shopping

H5: The more effective the design and layout of the website, the more favorable the attitude of the online shoppers towards online shopping.

f) Shopping orientation: Literature has classified shopping orientations as recreation/fun, convenience, and experiential (Li et al., 1999; Swaminathan et al., 1999; Richards & Shen, 2006). For recreational shoppers, shopping is a fun and leisure activity, and they are information-seekers. Convenience shoppers value convenience and time saved while shopping. Experience-oriented shoppers rejoice in the sensory aspects of brick-and-mortar shopping. Consumers' attitudes towards online shopping depend on their shopping orientations (Li et al., 1999; Swaminathan et al., 1999; Richards & Shen, 2006; Ghazali et al., 2006). Hence,

H6: Online shoppers who rank high on recreation orientation have a less favorable attitude towards online shopping.

H7: Online shoppers who rank high on experience orientation have a less favorable attitude towards online shopping.

H8: Online shoppers who rank high on convenience orientation have a more favorable attitude towards online shopping.

g) Past Online Shopping Experience: It has been observed that satisfactory previous online shopping experiences result in higher amount spent on frequent online purchases (Lynch & Beck, 2001; Li & Zhang, 2002; Park & Jun, 2003; Cheung et al., 2003; Koyuncu & Lien, 2003; Yoh & Damhorst, 2003; Yang, 2005; Dillon & Reif, 2004; Jarvenpaa & Todd, 1996; Monsuwé et al., 2004; Weber & Roehl, 1999). Hence,

H9: The more satisfied consumers are with their past online purchases, the more favorable their attitude towards online shopping.

3. RESEARCH METHODOLOGY

A survey of 700 online shoppers across India was conducted to test the hypotheses. A non-probability convenience sampling technique was used to select the respondents for the study. A structured, non-disguised questionnaire was administered (in person and via e-mail) to collect responses. The response rate was 86.14%. Age-wise, 84.08% of the respondents were in the 18-25 and 26-35 year age groups. The youth are more tech-savvy and hence, more likely to shop online; therefore, their higher representation in the study sample should not be of much concern. Gender-wise, the sample was

equitably distributed, with 50% males and 50% females. The scale items from previous studies were adapted to assess consumers' attitudes towards online shopping and its antecedents. The responses were recorded on a 7-point Likert scale. Responses to the eight-item online shopping attitude scale (Chen et al., 2004) were coded as 7 for 'highly favorable attitude towards online shopping', 4 for 'indifferent', and 1 for 'least favorable attitude towards online shopping'. An average score of these responses was calculated, and the resultant variable was used as the dependent variable to study the impact of the antecedent variables on it (Jain & Jain, 2011).

Perceived usefulness was measured by a 5-item scale adapted from Davis (1989). Responses were coded as 7 for 'strongly agree that the internet is useful as a shopping medium' and 1 for 'strongly disagree'. *Perceived ease of use* was measured using a 6-item scale adapted from Davis (1989). Responses were coded as 7 for 'strongly agree that the internet is an easy-to-use shopping medium' and 1 for 'strongly disagree'. Perceived risk was measured through an 11-item scale adapted from Forsythe et al. (2006). The responses to these statements were coded as 1, indicating 'strongly perceive online shopping to be risky', and 7, indicating 'weak perceptions about the risks associated with online shopping'. *Perceived Benefits of Online Shopping* were measured through a 16-item scale adapted from Forsythe et al. (2006), where 7 indicates 'strongly perceive online shopping to be beneficial' and 1 indicates 'weak perceptions about the benefits of online shopping'.

Website Design Efficacy was measured using a 7-item scale adapted from Liu et al. (2008). Responses were coded from 7 to 1, where 7 represented 'strongly agree that websites are effectively designed' and 1 represented 'strongly disagree'. *Convenience, recreation, and experiential orientation* were measured through 3-statements scales adapted from Li et al. (1999) and Richards and Shen (2006). Responses were measured on the seven-point Likert-type scale wherein 7 represented 'strong convenience orientation', 'weak recreation orientation', and 'weak experiential orientation'. *The previous online shopping experience* was measured using a 5-item scale proposed by Dillon and Reif (2004). The responses were coded as 7 for 'highly satisfactory experience' and 1 for 'highly dissatisfactory experience'. The questionnaire was pre-tested with 50 respondents. Based on the comments received, the wording of a few scale items was modified. Reliability of each scale was assessed using Cronbach's alpha coefficient. Results are reported in Table 1. Barring the three orientation scales, the remaining scales have alpha values greater than 0.70, indicating high reliability.

Table 1: Reliability Results for Scales Used in the Study

Variable	Source	Scale Items	Cronbach's Alpha Value
Consumer Attitude towards Online Shopping	Chen et al., 2004	8	0.946
Perceived Ease-of-Use	Davis, 1989	6	0.979
Perceived Usefulness	Davis, 1989	5	0.978
Perceived Risks	Forsythe et al., 2006	11	0.926
Perceived Benefits	Forsythe et al., 2006	16	0.987
Website Design	Liu et al., 2008	7	0.985
Experience Orientation	Richards and Shen, 2006	3	0.651
Recreation Orientation	Richards and Shen, 2006	3	0.665
Convenience Orientation	Richards and Shen, 2006	3	0.610
Previous Online Shopping Experience	Dillon and Reif (2004)	5	0.985

4. ANALYSIS

The collected data were analyzed using descriptive statistics, correlation, and regression techniques.

4.1 Correlation analysis

Analysis of the data reveals that surveyed respondents hold only a moderately positive attitude towards online shopping ($M = 4.37$; $SD = 0.64$). The relationship of consumer attitude towards online shopping with each of the hypothesized antecedents was examined with the help of Karl Pearson's correlation coefficients. The results are presented in Table 4.1. All antecedent variables except perceived risks,

recreation orientation, and experience orientation (proposed relationships with attitude towards online shopping were reversed) had significant correlations with consumer attitude towards online shopping.

Table 4.1: Consumer Attitude towards Online Shopping & Its Antecedents

Variables	Mean	SD	Summary Statistics and Correlation Results
Online Shopping Attitude	4.37	0.64	
Perceived Usefulness	5.72	0.80	0.33**
Perceived Ease-of-Use	5.67	0.76	0.41**
Perceived Risk	3.10	0.88	0.40
Perceived Benefit	5.52	0.67	0.43**
Website Design Efficacy	5.64	0.79	0.46**
Recreation Orientation	2.22	0.90	0.08
Experience Orientation	2.42	0.99	0.10
Convenience Orientation	5.65	0.92	0.15**
Past Online Shopping Experience	5.62	0.84	0.25**

*Note: 1. Significance level (one-tailed): **p≤ 0.01, *p≤ 0.05*

We, thus, find that except H₃, H₆, and H₇ (about perceived risks of online shopping and recreation and experience orientations), all other hypotheses, viz., H₁, H₂, and H₄, H₅, H₈, and H₉, were supported by the survey results, hence, accepted.

4.2 Regression Results

To examine the influence of antecedent variables and to assess their relative importance in explaining variations in consumers' attitudes towards online shopping, multiple regression analysis was used. VIF statistics were used to assess multicollinearity among the independent variables. Since the VIF values for each independent variable are less than 10, our data set is not at risk of multicollinearity.

Table 4.2: Consumer Attitude towards Online Shopping and its Antecedents: Regression Results

	β	t-Statistic	p-Value	VIF Statistic
<i>Dependent Variable: Attitude towards Online Shopping</i>				
Constant				
<i>Independent Variables</i>				
Perceived Usefulness	-.04	-1.04	.296	2.96
Perceived Ease-of-Use	.12**	3.22	.001	2.79
Perceived Risk	.39	17.75	.000	1.29
Perceived Benefit	.33**	8.03	.000	2.52
Website Design Efficacy	.23**	6.44	.000	2.67
Recreation Orientation	.02	0.79	.426	1.52
Experience Orientation	.09	4.29	.000	1.53
Convenience Orientation	.04	1.62	.106	1.66
Past Online Shopping Experience	.04*	1.82	.069	1.17
Model Statistics	Adjusted R² = 0.57, F = 89.06, p = 0.00			

*Note: 1. Significance level: **p≤ 0.01, *p≤ 0.10*

The adjusted R² value of 0.57 (p ≤ 0.01) indicates that nine antecedent variables together explained 57% of the variation in consumer attitude towards online shopping. However, only four of these variables were found to be statistically significant antecedents of consumer attitudes. Perceived benefits of online shopping emerged as the most important antecedent (β = 0.33; p≤ 0.01), followed by website design efficacy (β = 0.23; p≤ 0.01), perceived ease-of-use of the internet as a shopping medium (β = 0.12; p≤ 0.01), and past online shopping experience (β = 0.04; p≤ 0.10). Past online shopping experience is found to be only marginally significant, with a significance level ≤ 0.10.

5. CONCLUSIONS AND IMPLICATIONS

This study examined the significance of various factors affecting consumers' attitudes towards online shopping. Online marketers may employ insights from this study to design strategies to encourage a favourable consumer attitude towards online shopping. *Consumer perception of the benefits* of online shopping emerged as the most decisive influence on consumer attitude towards online shopping. The Internet offers unique opportunities to online marketers to offer time, place, and form utilities to their consumers. *Website design efficacy* emerged as a significant antecedent to consumer attitude towards online shopping. Simple but prompt consumer interface, well-presented and accurate information, easy

and speedy navigation, minimal buffering, and comprehensive search mechanisms are some key areas where online marketers can compete for a larger market share. *Consumers' perceived ease of use of the internet as a shopping medium also significantly influences* their attitude towards online shopping. Online marketers must therefore strengthen their back-end processes to ensure ease of ordering, payment, cancellation, return, refund, and grievance redressal. *Consumers' past online purchase experience* also emerged as a significant antecedent. Online marketers are therefore advised to ensure that consumers' online shopping experiences remain on the higher end of the consumer satisfaction continuum. Consumers' shopping orientations have not emerged as significant determinants of online shopping attitude, thanks to the ever-evolving technology. There are options for try-and-buy for experience-oriented consumers (e.g., Caratlane.com, Myntra.com). For recreation-seekers, interactive websites with links to social networks (Ajio.com, Lenskart.com, etc.) are available, and for convenience-oriented consumers, there is a 24/7 shopping model (Blinkit, Swiggy, etc.).

6. STUDY LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

The assumptions of a research design limit its scope. This study may have limited generalizability due to the sample selection method. In the future, larger samples randomly selected from across the country or the world may be used to overcome this limitation. This research examined a selected set of antecedents of consumer attitudes towards online shopping. The impact of antecedents such as culture and customization may be examined in future studies. The mediating and moderating effects of factors affecting consumer attitudes towards online shopping may be investigated in the future. The scale employed in the present study to measure consumer attitudes comprises items that are more antecedent-specific than those that merely measure attitudes towards online shopping. This limitation may be addressed in future research. The attitudes towards online shopping in specific purchase situations and product categories can be studied in the future.

REFERENCES

Ajzen, I. & Fishbein, M. (1980). *Understanding Attitudes and Predicting Social Behavior*, Englewood Cliffs, Prentice-Hall, New Jersey, USA.

Ajzen, I. (1985). From Intentions to Actions: A Theory of Planned Behavior. In J. Kuhl & J. Beckman (Eds.), *Action-control: From cognition to behavior*. Heidelberg: Springer, 11-39.

Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*. 50, 179-211.

Ankar, B., Christer, C. & Pirkko, W. (2003). Factors Affecting Consumer Adoption Decisions and Intents in Mobile Commerce: Empirical Insights. *16th Bled E-commerce Conference, e-Transformation*, Bled, Slovenia.

Bagozzi, R.P. & Warshaw, P.R. (1990). Trying to Consume. *Journal of Consumer Research*, 17(2), 127-141.

Bellman, S., Lohse, G. L. & Johnson, E. J. (1999). Predictors of Online Buying Behavior. *Communications of the ACM*. 42(12), 32-38.

Bhatnagar, A., Misra, S. & Rao, H. R. (2000). On Risk, Convenience, and Internet Shopping Behavior - Why Some Consumers are Online Shoppers While Others are Not. *Communications of the ACM*. 43(11), 98-105.

Borchers, A. (2001). Trust in Internet Shopping: A Test of a Measurement Instrument. *Proceedings of the 7th Americas Conference on Information Systems*. 11, 799-803.

Burke, R. R. (2002). Technology and the Customer Interface: What Consumers Want in the Physical and the Virtual Store. *Journal of the Academy of Marketing Science*. 30, 411- 432.

Chen, L., Gillenson, M. L. & Sherrell, D.L. (2002). Enticing Online Consumers: An Extended Technology Acceptance Perspective. *Information & Management*. 39(8), 705-719.

Chen, L.-d. & Tan, J. (2004). Technology Adaptation in E-Commerce: Key Determinants of Virtual Stores Acceptance. *European Management Journal*. 22(1), 74-86.

Cheung, C. M.K., Lei, Z., Timothy, K., Chan, G. W.W. & Moez, L. (2003). Online Consumer Behavior: A Review and Agenda for Future Research. *16th Bled E-commerce Conference, e-Transformation*, Bled, Slovenia.

Factors Determining Indian Consumers' Attitudes towards Online Shopping

Chong, A. Y. L., Darmawan, N., Ooi, K. B., & Lee, V. H. (2010). Determinants of 3G Adoption in Malaysia: A Structural Analysis. *Journal of Computer Information Systems*. 51(2), 71-80.

Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioral sciences*. Hillsdale, NJ: Erlbaum.

Constantinides, E. (2004). Influencing the Online Consumer's Behavior: The Web Experience. *Internet research*. 14(2), 111-126.

Cronbach, L. (1951). Coefficient Alpha and the Internal Structure of Tests. *Psychomerika*, 16, 297-334.

Davidson, A. R., Yantis, S., Norwood, M., & Montano, D. E. (1985). Amount of Information about the Attitude Object and Attitude-Behavior Consistency. *Journal of Personality and Social Psychology*. 49(5), 1184-1198.

Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13(3), 319-340.

Davis, F. D., Bagozzi, R.P., & Warshaw, P. R. (1989). User Acceptance of Computer Technology: A Comparison of Two Theoretical Models. *Management Science*, 35(8), 982–1003.

Dholakia, R. R. & Uusitalo, O. (2002). Switching to Electronic Stores: Consumer Characteristics and the Perception of Shopping Benefits. *International Journal of Retail & Distribution Management*. 30(10), 459-469.

Diillon, T. W. & Reiiff, H. L. (2004). Factors Influencing Consumers' E-Commerce Commodity Purchases. *Information Technology, Learning, and Performance Journal*. 22(2), 1-12.

Eastlick, M. A. & Lotz, S., (1999). Profiling Potential Adopters and Non-Adopters of An Interactive Electronic Shopping Medium. *International Journal of Retail & Distribution Management*. 27(8), 209–223.

Elliot, S., & Sue, F. (2000). Expectations Versus Reality: A Snapshot of Consumer Experiences with Internet Retailing. *International Journal of Information Management*. 20(5), 323-336.

Engel, J. F., Blackwell, R. D. & Miniard, P. W. (1986). *Consumer Behavior*. 5th Ed., Dryden Press, Chicago.

Fazio, R. H. & Zanna, M. P. (1978). Attitudinal Qualities Relating to the Strength of the Attitude-Behavior Relationship. *Journal of Experimental Social Psychology*. 14, 398-408.

Fazio, R. H., Powell, M. C., & Williams, C. J. (1989). The Role of Attitude Accessibility in the Attitude-To-Behavior Process. *Journal of Consumer Research*. 16, 280-288.

Fenech, T. & O'Cass, A. O. (2001). Internet Users- Adoption of Web Retailing: User and Product Dimensions. *Journal of Product & Brand Management*. 10(6), 361-381.

Fenech, T. (1998). Using Perceived Ease of Use and Perceived Usefulness to Predict Acceptance of The World Wide Web. *Computer Network and ISDN Systems*. 30(1-7), 629-630.

Fishbein, M. & Ajzen, I. (1975). *Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research Reading*. Addison-Wesley Publishing Company, USA.

Flynn, L. R. & Goldsmith, R. E. (1993). A Validation of Goldsmith and Hofacker Innovativeness Scale. *Educational and Psychological Measurement*. 53, 1105–1116.

Forsythe, S. M. & Shi, B. (2003). Consumer Patronage and Risk Perceptions in Internet Shopping", *Journal of Business Research*, 56, 867– 875.

Forsythe, S., Liu, C., Shannon, D. & Gardner, L. C. (2006). Development of a Scale to Measure the Perceived Benefits and Risks of Online Shopping. *Journal of Interactive Marketing*. 20(2), 55- 75.

Gatignon, H. & Robertson, T. S. (1985). A Propositional Inventory for New Diffusion Research. *Journal of Consumer Research*. 11(4), 849–867.

Ghazali, E., Dilip, M., & Nurul Azlinawatee, M. (2006). Exploratory Study of Buying Fish Online: Are Malaysians Ready to Adopt Online Grocery Shopping? *International Journal of Electronic Marketing and Retailing*. 1(1), 67-82.

Goldsmith, R.E. & Bridges, E. (2000). E-Tailing VS Retailing: Using Attitudes to Predict Online Buying Behavior. *Quarterly Journal of Electronic Commerce*. 3, 245-253.

Heijden, H. V. D. (2003). Factors Influencing the Usage of Websites: The Case of a Generic Portal in The Netherlands. *Information and Management*. 40(6), 541-549.

Howard, J. (1989). *Consumer Behavior in Marketing Strategy*. Prentice Hall, New Jersey, USA.

Howard, J.A. & Sheth, J.N. (1969). *The Theory of Buyer Behavior*. Wiley, New York, USA.

Images Retail Bureau (2016). *Online Shopping Trends: Facts and figures on Indian e-COMM sector*, <http://www.indiaretail.com/2016/08/30/retail/online-shopping-trends-facts-figures-on-indian-e-comm-sector/>

Indian Brand Equity Foundation (2022). E-Commerce Industry Report, Retrieved from <https://www.ibef.org/industry/ecommerce-presentation#>

Jahng, J., Jain, H. K. & Ramamurthy, K. (2001). Product Complexity, Richness of Web-Based Electronic Commerce Systems and System Success: A Proposed Research Framework. *Proceedings of the 5th Americas Conference on Information Systems*. 4, 520-522.

Jain, S. K. & Jain, M. (2011). Exploring Impact of Consumer and Product Characteristics on E-Commerce Adoption: A Study of Consumers in India. *Delhi Journal of Technology Management for Growing Economies*. 2, 35-64.

Jarvenpaa, S. L. & Todd, P. A. (1996). Consumer Reactions to Electronic Shopping on the World: Exploring the Impact of the World Wide Web. *International Journal of Electronic Commerce*. 1(2), 59-88.

Jarvenpaa, S. L., Tractinsky, N. & Vitale, M. (2000). Consumer Trust in an Internet Store. *Information Technology and Management*. 1, 45-71.

Klopping, I. M., & Earl, M. (2004). Extending the Technology Acceptance Model and the Task-Technology Fit Model to Consumer E-Commerce. *Information Technology Learning and Performance Journal*, 22(1), 35-48.

Koufaris, M., Kambil, A. & Labarbera, P.A. (2001). Consumer Behavior in Web-Based Commerce: An Empirical Study. *International Journal of Electronic Commerce*, 6(2), 115-138.

Koyuncu, C. & Donald, L. (2003). E-Commerce and Consumer's Purchasing Behavior. *Applied Economics*, 35(6), 721-726.

Kutner M.H., Nachtsheim, C.J., & Neter, J. (2004). *Applied Linear Regression Models*. 4th Ed., McGraw-Hill Irwin.

Lee, D., Jinsoo, P., & Joongho, A. (2001). On the Explanation of Factors Affecting E-Commerce Adoption. *Proceedings of the 22nd International Conference on Information Systems*, New Orleans, Louisiana, 109-120.

Lee, M. (2009). Factors Influencing the Adoption of Internet Banking: An Integration of TAM and TPB with Perceived Risk and Perceived Benefit. *Electronic Commerce Research and Applications*, 8(3), 130-141.

Lee, M. K. O., & Turban, E. (2001). A Trust Model for Consumer Internet Shopping. *International Journal of Electronic Commerce*, 6(1), 75-91.

Li N. & Zhang, P. (2002). *Consumer Online Shopping Attitudes and Behavior: An Assessment of Research*. Proceedings of the 8th America's Conference on Information Systems (AMCIS '02), Dallas, August 9-11.

Liang, T.P. & Lai, H.J. (2002). Effect of Store Design on Consumer Purchases: An Empirical Study of Online Bookstores. *Information & Management*, 39(6), 431-444.

Liao, C., Palvia, P. & Lin, H. (2006). The Roles of Habit and Website Quality in E-Commerce. *International Journal of Information Management*, 26(6), 469-483.

Lim, N. (2003). Consumers' Perceived Risk: Sources Versus Consequences. *Electronic Commerce Research and Applications*, 2, 216-228.

Limayem, M. & Khalifa, M. (2000). Business-to-Consumer Electronic Commerce: A Longitudinal Study. *Proceedings of the 5th IEEE Symposium on Computers and Communications*, 286-290.

Limayem, M., Khalifa, M. & Frini, A. (2000). What Makes Consumers Buy from Internet? A Longitudinal Study of Online Shopping. *IEEE Transactions on Systems, Man and Cybernetics, Part A*, 30(4), 421-432.

Liu, X., He, M., Gao, F. & Xie, P. (2008). An Empirical Study of Online Shopping Customer Satisfaction in China: A Holistic Perspective. *International Journal of Retail & Distribution Management*, 36(11), 919-940.

Lohse, G. L. & Spiller, P. (1998). Electronic Shopping. *Communications of the ACM*, 41(7), 81-88.

Lohse, G., Bellman, S. & Johnson, E. J. (2000). Consumer Buying Behavior on the Internet: Findings from Panel Data. *Journal of Interactive Marketing*, 14(1), 15-29.

Factors Determining Indian Consumers' Attitudes towards Online Shopping

Lopes, A. & Galletta, D. (2006). Consumer Perceptions and Willingness to Pay for Intrinsically Motivated Online Content. *Journal of Management Information Systems*, 23(2), 203-231.

Lynch, P. D. & Beck, J. C. (2001). Profiles of Internet Buyers in 20 Countries: Evidence for Region-Specific Strategies. *Journal of International Business Studies*, 32(4), 725-748.

Mckinney, L. N. (2004). Internet Shopping Orientation Segments: An Exploration of Differences in Consumer Behavior. *Family and Consumer Sciences Research Journal*, 32(4), 408-433.

Monsuwe, T. P., Dellaert, B. G.C. & Ruyter, K. (2004). What Drives Consumers to Shop Online? A Literature Review. *International Journal of Service Industry Management*, 15 (1), 102-121.

Park, C. & Jun, J. (2003). A Cross-Cultural Comparison of Internet Buying Behavior Effects of Internet Usage, Perceived Risk and Innovativeness. *International Marketing Review*, 20(5), 534-53.

Ramayah, T. & Jantan, M. (2003). Internet Usage among Malaysian Students: The Role of Demographic and Motivational Variables. *International Conference on Innovation in Higher Education*, Kiev, Ukraine.

Ranganathan, C. & Ganapathy, S. (2002). Key Dimensions of Business-To-Consumer Websites. *Information & Management*, 39(6), 457-465.

Richards, J. & Shen, D. (2006). E-Commerce Adoption among Chinese Consumers: An Exploratory Study. *Journal of International Consumer Marketing*, 18(3), 33-55.

Schifter, D. B. & Ajzen, I. (1985). Intention, Perceived Control, and Weight Loss: An Application of the Theory of Planned Behavior. *Journal of Personality and Social Psychology*, 49, 842-851.

Senecal, S. (2000). Stopping Variables in Online Buying Processes: An Innovation Diffusion Approach. *Proceedings of the 6th Americas Conference on Information Systems*, 5, 1380-1385.

Shih, H. P. (2004). An Empirical Study on Predicting User Acceptance of E-Shopping on the Web. *Information & Management*, 41, 351-368.

Shim, S., Drake, M.F. (1990). Consumer Intention to Utilize Electronic Shopping. The Fishbein Behavioral Intention Model. *Journal of Direct Marketing*, 4(3), 22-33.

Soopramanien, D. G. R., & Robertson, A. (2003). Internet Usage and Online Shopping Experience as Predictors of Consumers' Preferences to Shop Online across Product Categories. *Management Science Working Paper Series*, The Department of Management Science, Lancaster University, UK.

Srinivasan, S. S., Ralph Anderson, & Kishore Ponnavolu (2002). Customer Loyalty in E-Commerce: An Exploration of its Antecedents and Consequences. *Journal of Retailing*, 78, 41-50.

Su, B.-c. (2003). Risk Behavior of Internet Shopping: Comparison of College Students Versus Non-Student Adults. *Proceedings of the 5th International Conference on Electronic Commerce (ICEC)*, Pittsburgh, Pennsylvania, USA.

Swaminathan, V., Lepkowska-White, E. & Rao, B. P. (1999). Browsers or Buyers in Cyberspace? An Investigation of Factors Influencing Electronic Exchange. *Journal of Computer-Mediated Communication*, 5(2).

Tan, M. & Teo, T. S.H. (2000). Factors Influencing the Adoption of Internet Banking. *Journal of the Association for Information Systems*, 1(5), 1-42.

Taylor, S. & Todd, P. A. (2003). Understanding Information Technology Usage: A Test of Competing Models. *Information Systems Research*, 6(2), 144-176.

Triandis, C. H. (1980). Values, Attitudes and Interpersonal Behavior. *Nebraska Symposium on Motivation, 1979: Beliefs, Attitudes and Values*, University of Nebraska Press, Lincoln, USA.

Yang, Kenneth C. C. (2005). Exploring Factors Affecting the Adoption of Mobile Commerce in Singapore. *Telematics and Informatics*, 22(3), 257-277.

Yoh, E., Lynn, M., Stephen, D., Sapp & Laczniak, R. (2003). Consumer Adoption of the Internet: The Case of Apparel Shopping. *Psychology and Marketing*, 20(12), 1095-1118.