

Print ISSN: 1738-3110 / Online ISSN 2093-7717
<http://dx.doi.org/10.15722/jds.14.7.201607.15>

Effect of Consumer Innovativeness on Online Buying Behavior in an Emerging Market

Devinder Pal Singh*

Received: May18, 2016. Revised: June 5, 2016. Accepted: July 15, 2016.

Abstract

Purpose – India is predicted to lead the world in online sales, but the behavioral range of online consumer has not been researched adequately. Moreover, the research on the role of psychological variables like consumer innovativeness in online purchase behavior has not been investigated. This paper aims to unravel the role of ‘consumer innovativeness’ in predicting online purchase intention. Further, this paper examines the effect of consumer innovativeness on ‘online information search’ and ‘attitude’ in online purchase areas.

Research design, data, and methodology – This study uses factor analysis to confirm the convergent and discriminant validities from the adopted scales. Regression analysis was employed to test the various hypotheses in this study.

Results – This study finds that consumer innovativeness affects positively ‘information search’, ‘attitude’ and ‘purchase intentions’ in online purchase circumstances.

Conclusions – Consumer Innovativeness has emerged as a significant factor affecting online purchase intentions. It has also been confronted with an important variable affecting online information search and attitudes for online purchase.

Keywords: Innovativeness, Online Shopping, Information Search, Attitude, Online Purchase Intention.

JEL Classifications: M31, M39, D21.

1. Introduction

Emerging markets like India offer significant opportunities for e-commerce due to widespread Internet penetration and rising consumer affluence. India’s e-commerce revenue is expected to surge from USD 30 billion in 2016 to USD 120 billion in 2020, growing at an annual rate of 51%, the highest in the world (ASSOCHAM, 2016). The number of online shoppers in the country is anticipated to swell from 39 million in 2015 to 220 million in 2020 growing at a CAGR of 41% (CII-Deloitte, 2016). Online sales are restricted to few Indian young people who purchase small-value products for their personal use (Gupta, Handa, & Gupta, 2008). There is a significant gap in understanding the Indian online shopping behavior (Beldona, Racherla, & Mundhra, 2011). It mandates understanding the psychological

factors influencing the online consumer behavior. Consumer innovativeness or novelty seeking has been considered as a salient psychological variable influencing consumer behavior (Manning, Bearden, & Madden, 1995; Hirschman, 1980). Since online shopping can be viewed as an innovative way of shopping, innovativeness should have a bearing on its adoption (Chang, Cheung, & Lai, 2005).

Innovativeness in the context of online buying has been largely under researched. Some studies (Limayem, Khalifa, & Frini, 2000; Donthu & Garcia, 1999) have concluded that innovativeness had a positive relationship with online purchase while others (Khare, Singh, & Khare, 2010; Sin & Tse, 2002; Citrin, Sprott, Silverman, & Stern, 2000) have found the relationship to be insignificant. Innovativeness varies across countries (Tellis, Yin, & Bell, 2009), and it does not affect adoption uniformly across various cultures (Truong, 2013). Similarly, the relationship between online novelty seeking and information search (significant determinant of consumer behavior) has not been empirically much tested in the Indian

* Associate Professor, Regional Centre for IT & Management, Punjabi University, Punjab, India. E-mail: sidhudps@gmail.com.

context. Its relationship with online information-search, shopping attitudes and purchase intentions is still unexplored. It merits understanding the role of innovativeness on online buying in this emerging market. This paper aims at examining the relationship between consumer innovativeness, information search, online purchase attitude and online purchase intentions in the Indian context.

2. Literature Review

2.1. Innovativeness

Innovativeness refers to the extent to which an individual is interested in new ideas (Chang, Cheung, & Lai, 2005). Innovativeness is the inclination to buy new and different products (Roehrich, 2004). It significantly influences new adoption process (Truong, 2013; Manning, Bearden, & Madden, 1995). Since online shopping can be considered as an innovative shopping, innovativeness could have an influence on its adoption (Chang, Cheung, & Lai, 2005).

There is a gap in knowledge of Indian online purchase behavior (Beldona, Racherla, & Mundhra, 2011). There is scant research on innovativeness, information search, attitudes and online purchase intentions.

2.2. Information Search

Information search is a deliberate attempt to acquire information to fill gaps in one's knowledge (Case, 2007). Consumers' pursuit for information stimulates them to explore the Internet. Information search is an essential motivation for online consumers (Rose & Samouel, 2009; Noble, Griffith, & Adjie, 2006). They spend time and money in information search that may subsequently lead to purchasing (Maity, Hsu, & Pelton, 2012).

Information search has a positively associated with online buying (Yuliharsi, Islam, & Daud, 2011). Product information search is one of the antecedents of consumer's purchase intention (Kim & Park, 2005). In offline consumer behavior, innovativeness is positively related to information search (Stella & Adam, 2006).

In the online consumer behavior context, information search has been acknowledged to affect online shopping (Liu & Forsythe, 2010; Rose & Samouel, 2009; To, Liao, & Line, 2007) but its relationship with innovativeness is still under researched. The internet serves as a source of information on product feature, prices, retailer information and store comparison (Khare, Singh, & Khare, 2010). Consumers increasingly assemble online product information or even surf for enjoyment (Demangeot & Broderick, 2007). Information search strongly influences online shopping intentions (Bigne-Alcaniz, Ruiz-Mafe, Alda's-Manzano, & Sanz-Blas, 2008; So, Wong, & Sculli, 2005).

2.3. Attitude

Attitude refers to the affective evaluation of online shopping (Wang, Wang, & Wang, 2006). It is an important predictor of online purchase intentions (Wang, Wang, & Wang, 2006; George, 2004; Hansen, Jensen, & Solgaard, 2004; Monsuwe, Dellaert, & Ruyter, 2004; Vijayasathy, 2004). Innovativeness is positively related to online purchase intentions (Park, Burns, & Rabolt, 2007). Attitude mediates the relationship between innovativeness and purchasing intention.

2.4. Shopping Intention

Intentions are the forerunners of behavior, and they are the potent predictors of behavior (Ajzen, 1991). The stronger the intentions the greater is the likelihood that an action will be performed (Ajzen, 2001; Ajzen, 1991).

Past studies provide strong support for positive effect of innovativeness on attitude and online shopping intentions (Bigne-Alcaniz, Ruiz-Mafe, Alda's-Manzano, & Sanz-Blas, 2008; Goldsmith, 2001; Limayem, Khalifa, & Frini, 2000). Further, innovativeness positively effects online shopping information search (Bigne-Alcaniz, Ruiz-Mafe, Alda's-Manzano, & Sanz-Blas, 2008).

The present study explores the relationship between online novelty seeking and purchase intentions. Further, it extends the relationship by inclusion of two important variables namely information search and attitude. The study seeks to understand the association between online innovativeness, information search, attitude and shopping intentions. Based on extant literature we propose the following hypotheses:

- <H1> There is a positive relationship between consumer innovativeness and information search.
- <H2> There is a positive relationship between consumer innovativeness and consumer attitude
- <H3> There is a positive relationship between consumer innovativeness and intention to shop online.
- <H4> There is a positive relationship between consumer attitude and intention to shop online.
- <H5> There is a positive relationship between information search and intention to shop online.

3. Research Methodology

The study adopted the consumer intercept method of survey. Four hundred respondents were intercepted across the various shopping centers and malls of the Chandigarh City, in northern India. The country's census (2011) ranks the city highest on the Internet density in the country. Data was collected using a self-completion questionnaire administered to the respondents. The study used published scales to operationalize the variables under study. The

construct 'innovativeness' was operationalized with scale of Manning, Bearden & Madden(1995). To measure information search, attitude and online purchase intentions scales of Khare & Rakesh (2011) were adopted. The items related to the constructs were measured on a 5-point Likert scale, ranging from 'strongly disagree' to 'strongly agree'. The research employed factor analysis to verify correct loading of items on corresponding factors and to confirm the applicability of constructs in the Indian context. The relationships between the various variables were tested employing regression analysis.

Four hundred respondents were intercepted across the numerous shopping places of Chandigarh city and asked to complete the questionnaire. The effective sample size constituted of 326 respondents. The sample is comprised of 72.4 per cent males and 27.6 per cent females. The sample varied in age from below 18 years to 70 years of age.

4. Results

The exploratory factor analysis was conducted employing varimax rotation. Four factors were extracted (Eigen values>1) and the items loaded correctly on the corresponding factors as in earlier studies. The results established the measurement scales' convergent and discriminant validities. The regression results <Table 1>show that the variable 'innovativeness'is a significant predictor of information search (R²= 0.414, p< .001). The R² shows that 'innovativeness' independently accounts for 41.2 % of variance in the online information search.

The β value (0.643) shows innovativeness as a salient contributor for online information search. The ANOVA test shows that the predicted regression by variety seeking is significant in the model (F=228.179, p<0.001). It indicates that innovativeness is an important stimulator for online information search.

<Table 1> Regression Results-Innovativeness

Independent variable	Dependent Variable	β	R square	Adjusted R square	F value	Significance
Innovative-ness	Information Search	0.643	0.414	0.412	228.179	0.001**
	Attitude	0.475	0.225	0.223	94.315	0.001*

**Significant at .001 level

The regression results show the variable innovativeness as a significant predictor of attitude towards online shopping (R²= 0.223, p<0.001). The R² shows that 'innovativeness' independently accounts for 22.3 % of variance in the attitude towards online shopping.

<Table 2> Regression results- Online shopping intentions

Model	Dependent Variable	β	R square	Adjusted R square	F value	Significance
1	Dependent variable: Online shopping intentions Innovativeness	0.724	0.524	0.523	355.914	0.001**
2	Dependent variable: Online shopping intentions Innovativeness Attitude	0.623 0.196	0.554	0.551	199.964	0.001**
3	Dependent variable: Online shopping intentions Innovativeness Attitude Information search	0.573 0.188 0.097	0.559	0.555	135.874	0.001**

**Significant at .001 level

The β value (0.475) elucidates that innovativeness significantly predicts attitude towards online purchase. The ANOVA test shows that the predicted regression by 'innovativeness' is significant in the model (F=94.315, p< .001). It indicates that 'innovativeness' is an important predictor of attitude towards online purchase. The results prove that hypotheses <H1> and <H2> are true.

The stepwise regression results showed that "innovativeness"; 'information search' and 'attitude' significantly affected online purchase intentions. The above variables were responsible for total 55.5% of the variance in the online purchase intention.

Variable 'innovativeness' was the main predictor of online purchase intention (R²= 0.524; F=355.92; β=0.724; p< .001). The addition of 'attitude' along with 'novelty seeking' saw a further increase in predictability of the regression model (R²= 0.554; F=199.96, p< .001). The predictor variables namely 'novelty seeking', 'attitude' and 'information search' together accounted for 55.9% of the variance in model (R²= 0.559; F=135.87; p< .001). Results of regression results prove the H3, H4 and H5 to be true.

5. Discussion

The study is successful to the extent of explaining the relationships between online innovativeness, information search, attitude and shopping intentions. Online innovativeness behavior has surfaced to be a significant predictor of online 'information search', attitude and purchase intentions.

This has major implications for online retail companies.

Novelty seeking positively influences adoption of innovations (Truong, 2013; Manning, Bearden, & Madden, 1995). This mandates that companies incorporate innovative website design so as to attract consumers to their sites. Websites should promote their offerings in terms of the level of novelty they provide in goods and services. Innovators are early adopters and could be the opinion leaders of their groups (Ho & Wu, 2011). Innovators should be made to try novel products so that they become advocates of the products. Since innovators are early adopters, price-skimming strategy should be adopted (Bigne-Alcaniz, Ruiz-Mafe, Alda's-Manzano, & Sanz-Blas, 2008). Companies could adopt social media tools to highlight the innovative products.

Information search positively influences the online purchase. The websites may provide sufficient information as it would increase the time spent by the consumers on browsing, and alleviate consumers' perceived risk (Smith & Sivakumar, 2004). Information search can be amplified with adequate website speed and pleasant website background. Featuring novel products would result in more information search and further facilitate the online purchase.

Attitude is the fundamental antecedent of purchase intentions. Attitude may be influenced by promotions by emphasizing that the products offered by the company are novel, genuine and competitively priced. It is necessitated that the companies ensure novelty in their websites and entice consumers for more information search so as to have a positive attitude and intentions for online shopping.

References

- Ajzen, I. (2001). Nature and operation of attitudes. *Annual Review of Psychology*, 52, 27-58.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179-211.
- ASSOCHAM (2016). E-commerce industry will cross \$38 bln mark by 2016; Indian e-commerce market set to grow by 67% in 2016: study. Retrieved May 15, 2016, from <http://www.assochem.org/newsdetail.php?id=5427>
- Beldona, S., Racherla, P., & Mundhra, G. D. (2011). To buy or not to buy: Indian consumers' choice of online versus offline channels for air travel purchase. *Journal of Hospitality Marketing & Management*, 20(8), 831-854.
- Bigne-Alcaniz, E., C. Ruiz-Mafe, Alda's-Manzano, J., & Sanz-Blas, S. (2008). Influence of online shopping information dependency and innovativeness on Internet shopping adoption. *Online Information Review*, 32(5), 648-667.
- Case, D.O. (2007). *Looking for Information: A Survey of Research on Information Seeking, Needs and Behavior*. London, UK: Academic Press.
- Chang, M. T., Cheung, W., & Lai, V. S. (2005). Literature derived reference models for the adoption of online shopping. *Information & Management*, 42, 543-559.
- CII-Deloitte (2016). E-Commerce in India: A game changer for the economy. Retrieved May 15, 2016, from <https://www2.deloitte.com/content/dam/Deloitte/in/Documents/technology-media-telecommunications/in-tmt-e-commerce-in-india-noexp.pdf>
- Citrin, A. V., Sprott, D. E., Silverman, S. N., & Stem, D. E. (2000). Adoption of Internet shopping: the role of consumer innovativeness. *Industrial Management and Data Systems*, 100(7), 294-300.
- Demangeot, C., & Broderick, A. J. (2007). Conceptualising consumer behaviour in online shopping environments. *International Journal of Retail & Distribution Management*, 35(11), 878-894.
- Donthu, N., & Garcia, A. (1999). The Internet shopper. *Journal of Advertising Research*, 39(3), 52-58.
- George, J. F. (2004). The theory of planned behavior and Internet purchasing. *Internet Research*, 14(3), 198-212.
- Goldsmith, R. E. (2001). Using the domain specific innovativeness scale to identify innovative Internet consumers. *Internet Research*, 11(2), 149-158.
- Gupta, N., Handa, M., & Gupta, B. (2008). Young adults of India-online surfers or online shoppers. *Journal of Internet Commerce*, 7(4), 425-444.
- Hansen, T., Jensen, J., & Solgaard, H. S. (2004). Predicting online grocery buying intention: A comparison of the theory of reasoned action and the theory of planned behavior. *International Journal of Information Management*, 24(6), 539-550.
- Hirschman, E. C. (1980). Innovativeness, novelty seeking, and consumer creativity. *Journal of Consumer Research*, 7(3), 283-295.
- Ho, C. H., & Wu, W. (2011). Role of innovativeness of consumer in relationship between perceived attributes of new products and intention to adopt. *International Journal of Electronic Business Management*, 9(3), 258-266.
- Khare, A., & Rakesh, S. (2011). Retailing in Indian malls: Antecedents to retailers' preferences for mall- store Space. *International Review of Retail, Distribution and Consumer Research*, 21(2), 187-200.
- Khare, A., Singh, S., & Khare, A. (2010). Innovativeness/novelty-seeking behavior as determinants of online shopping behavior among Indian youth. *Journal of Internet Commerce*, 9(3), 164-185.
- Kim, J., & Park, J. (2005). A consumer shopping channel extension model: attitude shift toward online store. *Journal of Fashion Marketing and Management*, 9(1), 106-121.
- 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, Systems and*

- Humans*, 30(4), 421–432.
- Liu, C., & Forsythe, S. (2010). Sustaining online shopping: moderating role of online shopping motives, *Journal of Internet Commerce*, 9, 83-103.
- Maity, M., Hsu, M. K., & Pelton, L. E. (2012). Consumers' online information search: gen yers' finding needles in the Internet haystack, *Journal of Marketing Channels*, 19(1), 49-76.
- Noble, S. M., Griffith, D. A., & Weinberger, M. G. (2005). Consumer derived utilitarian value and channel utilization in a multi-channel retail context, *Journal of Business Research*, 58, 1643-1651.
- Manning, K. C., Bearden, W. O., & Madden, T. J. (1995). Consumer innovativeness and the adoption process, *Journal of Consumer Psychology*, 4(4), 329-345.
- Roehrich, G. (2004). Consumer innovativeness: concepts and measurements. *Journal of Business Research*, 57, 671-677.
- Park, H. J., Burns, L. D., & Rabolt, N. J. (2007). Fashion innovativeness, materialism, and attitude toward purchasing foreign fashion goods online across national borders: The moderate effect of internet innovativeness, *Journal of Fashion Marketing and Management*, 11(2), 201-214.
- Rose, S., & Samouel, P. (2009). Internal psychological versus external market-driven determinants of the amount of consumer information search amongst online shoppers. *Journal of Marketing Management*, 25(1), 171-190.
- Sin, L., & Tse, A. (2002). Profiling Internet shoppers in Hong Kong: demographic, psychographic, attitudinal and experiential factors. *Journal of Interactive Marketing*, 15(1), 7-29.
- Smith, D. N., & Sivakumar, K. (2004). Flow and Internet shopping behavior: A conceptual model and research propositions, *Journal of Business Research*, 57, 1199-1208.
- So, W. C. M., Wong, T. N. D., & Sculli, D. (2005). Factors affecting intentions to purchase via the Internet. *Industrial Management & Data Systems*, 105(9), 1225–1244.
- Stella, J., & Adam, S. (2006). Consumer traits: an investigation of influences, Proceedings of the ANZMAC2006(pp. 1-7), Australia, Brisbane: QUT.
- Taylor, S., & Todd, P. (1995). Understanding information technology usage: A test of competing models. *Information Systems Research* 6(2): 144-176.
- Tellis, G. J., Yin, E., & Bell, S. (2009). Global consumer innovativeness: Cross-country differences and demographic commonalities. *Journal of International Marketing*, 17(2), 1-22.
- To, P. L., Liao, C. & Lin, T. H. (2007). Shopping Motivations on Internet: A study based on utilitarian and hedonic value, *Technovation*, 27, 774–787.
- Truong, Y. (2013). A Cross-country study of consumer innovativeness and technological service innovation, *Journal of Retailing and Consumer Services*, 20, 130-137.
- Verhoef, P. C., Nesline, S. A., & Vroomen, B. (2007). Multichannel customer management: understanding the research-shopper phenomenon. *International Journal of Research in Marketing*, 24, 129-148.
- Vijayarathy, L. R. (2004). Predicting consumer intention to use on-line shopping: The case for an augmented technology acceptance model. *Information and Management*, 41,747-762.
- Wang, S., Wang, S., & Wang, M. T. (2006). Shopping online or not? Cognition and personality matters. *Journal of Theoretical and Applied Electronic Commerce Research*, 1(3), 68-80.
- Yuliharsi, Islam, M. A., & Daud, K. A. K. (2011). Factors that Influence Customers' Buying Intention on Shopping Online. *International Journal of Marketing Studies*, 3(1), 128-139.