



Factors Affecting the Selection of an E-Commerce Website in Bangladesh: E-tailers' Perspective

Samira Sahel^{1*}, Tasmia Anwar², Barnali Nandi³

¹Department of Business Administration, University of Asia Pacific, Dhaka, Bangladesh, ²School of Business Administration, East Delta University, Chittagong, Bangladesh, ³Department of Business Administration, University of Asia Pacific, Dhaka, Bangladesh.
*Email: samira.sahel87@gmail.com

ABSTRACT

With the phenomenal growth and rapid pervasion of E-commerce observed in recent time, it becomes crucial on the part of the online retailers in Bangladesh to develop an evaluation criteria system in order to keep up with the fierce competition as well as ensure efficient resource allocation. Prompted by this, the research attempted to investigate the factors that influence the customers in choosing websites for making online purchase. Accordingly, 11 e-tailers from the consumer goods sector have been surveyed and the factors that have been ascertained are- ease of usage, privacy and security, past experience, brand image, product variety and customer service. Through the employment of analytical hierarchical process (AHP) the key factors have been ranked. The research reveals that among the chosen factors, ease of usage ranks first securing 45% weight which is followed by privacy and security, past experience, customer service, product variety and brand image. In reaching this judgment, the inconsistency level generated by the synthesis of AHP was 7% which falls below the threshold value of 10%, suggestive of the viability of the result. The implications and findings have been put forward for the e-tailers to make timely decision regarding the features and operations of e-commerce websites.

Keywords: E-tail, Analytic Hierarchy Process, Bangladesh

JEL Classifications: M0, M3

1. INTRODUCTION

The indomitable growth of internet and rapid acceleration of technologies have given rise to online buying and selling through website. Over the past decade, Internet-based technology has steadily gained momentum and molded the way companies market and sell their products and services. Oinas (2002) mentioned that internet retailing is growing in all places including the developing countries. For the marketers, the most significant phenomenon has been the emergence of virtual shops; popularly known as e-tails.

E-commerce in today's world introduces customers with enough choices and convenience allowing flexibility regarding products, services as well as the delivery time. From both buyer and seller's point of view, this saves cost and creates potentials to generate high revenue (Arora, 2016).

Online retails or E-tails help provide an interactive channel, not restrained to any place, time or people. The option to shop online is

more convenient for customers than the usual method of shopping and allows customers to avoid taking the hassle of travelling to stores to get their desired products.

In this era of globalization, Bangladesh, a developing country can be singled out for taking keen interest in e-commerce whereby the government extends considerable support (Hossain et al., 2013). As per the report of E-Cab, the e-commerce industry is growing rapidly in Bangladesh. With an annual growth trending at more than 200% between 2013 and 2016 (E-Cab 2016), people are embracing technology which could be considered a major reason of the growth of the sector by 2020 (Ishtiaque et al., 2017) also predicting a growth of e-commerce in Bangladesh from 36% to 40% in the next few years. The burgeoning interest in saving time, product variety, customer service, competitive pricing, and convenience shopping has strongly prompted customers to shop online.

In April 2016, the total internet penetration was 38.5% (BTRC) out of a population of approximately 161,000,000 (Source: BBC).

E-Cab reported in 2016 that the contribution of e-commerce in gross domestic product was <1% (excluding the connected industries like imports, logistics, banking and exports using e-commerce which will account into nearly 2.5%). Ishtiaque et al. (2017) reported over 80% of e-commerce traffic come from Dhaka, Chittagong and Gazipur accordingly. They also reported 49% shoppers are new where 51% are returning customers.

Amongst the mighty social media platforms, Facebook plays an important role in the growth of this sector. A lot of business owners are selling their produces and offering service through Facebook pages. There are approximately 8000 pages doing businesses through Facebook pages (E-Cab 2016). To name a few includes daraz.com.bd, sindabad.com, bikroi.com, rokomari.com and so forth.

Although customers are purchasing online more than ever but it was also found that number of searches doesn't really translate into number of purchase. This means that customers might search for a product but they won't really make an actual purchase (Kim et al., 2004). Thus it becomes necessary on the part of the marketers and management to unearth exactly what factors affect customers purchase intention/website selection so that online retailers can be more aware and provide products and service accordingly. This study helps to identify factors in light of the retailer's also known as e-tailers' perspective that markedly affect customers' online purchase intention and also examines which factors amongst those studied dominate purchase behavior on a hierarchical basis. The study begins with the hierarchy emphasizing on the relationship between the factors and the website selection. It delves into a number of literatures pertinent with those, in combination with in-depth interviews with e-tailers. The research method that has subsequently been chosen is analytic hierarchical process (AHP). The findings of this study are illustrated and discussed afterwards. Finally, implications and further scopes of research are put forward, and limitations are acknowledged together.

2. OBJECTIVE OF THE STUDY

Multi criteria decision making (MCDM) method is instrumental in making crucial decisions that cannot be reached straightforwardly. The fundamental notion of MCDM is that multiple criteria should be held as the basis of making decisions rather than one (Cheng et al., 2005). Since the problems in the arena of strategic marketing management are getting increasingly complex with time, it occurs that handling all problems employing a single set of guidelines or a common decision model seems difficult. Hence, the utility of AHP comes into force that uses deduction and induction as a means of breaking down complicated problems into a hierarchy of factors, and then makes the due measurements as per comparisons (Saaty, 1980). To sum up, the AHP is a mathematical, objective and decision making tool that sheds lights on solving decision making problems taking uncertainty and multiple criteria characteristics into account (Udo, 2000; Yang and Hunag, 2000). Having a view to achieving a competitive advantage for the retailers considering the difficulty of allocating specific and limited resources for developing marketing strategies, this study adopts the AHP method.

In particular, this study looks forward to enhancing the idea about the factors affecting selecting e-commerce websites by attempting to allocate the weight on particular attributes. An approach as such can suggest the e-tailers and marketing strategists a set of specific guidelines which will aid in crafting and implementing competitive marketing strategies and allocating limited resources prudently. Therefore, this study has attempted to extend an application of AHP by putting a specific focus on the e-commerce sector and has supported market-level influence by restricting the premise within the online retailers of consumer goods.

3. LITERATURE REVIEW

Recent Web site evaluation studies assume that consumers or potential consumers tend to engage themselves cognitively with multifarious features of a Web site and pave way towards further evaluation after the website has been used for a substantial time. Researchers proffer that the first impressions of Web sites are typically formed within milliseconds (Kim and Fesenmaier, 2005; Lindgaard et al., 2006). Thus, it is vital on the part of the e-tailers to construct evaluation measures that can capture and evaluate a destination Web site's ability to attract consumers instantly and without cognitive elaboration (Gladwell, 2005).

Several studies hitherto have identified many factors affecting or influencing customers online purchase intention. Most discussed ones include privacy and security, trust, past experience, product variety, customer service, ease of use, perceived advantages and risks, website design, convenience, refer the factors accordingly and mention here too. By going through existing literature, it can be put forward that while customers' perspective have on and off been taken into account, there lies a paucity of studies *vis-à-vis* its application that considers the management's insights in determining the factors that influence the customers' selection process of e-tailing websites, in the context of Bangladesh to be specific. Prompted by this, the authors have identified six factors by reviewing the studies that significantly induce the website selection process and applied AHP to examine the factors dominating the purchase intentions in a hierarchical order.

From the literature review, the first factor that has been ascertained is convenience and ease of navigation. This can be associated with the user interface of an e-commerce website. Features, layout and ease of use are taken into account in this matter. Griffith et al. (2001) claimed that a well-designed user interface system might cut down a customer's searching cost and time required for information processing significantly. Davis (1989) proposed a technology acceptance model whereby it was mentioned that perceived ease of use could influence user's intention in using the information technology. Schaffer (2000) found 30% of customers leave a website without making a purchase because they are not able to navigate the website with ease. A website which is convenient allows faster response time, helps to complete a transaction efficiently and thus minimizing customers' effort. Jarvelainen (2003) found amongst perceived usefulness and ease of use, ease of usage is more important and influential. Eri and Islam (2011) surveyed Malaysian students and concluded that ease of use is relevant in influencing students' online purchase intention.

Customers find online shopping convenient when the web sites are fast and easy to surf which saves time and takes less effort to shop effectively (Szymanski and Hise 2000). Srinivasan et al. (2002) also found that the impact of ease of usage on e-loyalty is notably significant.

Ranjbarian et al. (2012) labeled ease of use with labels such as site design, easy to navigate, good functionality of web store, but the main factor is the ease with which the user can navigate the website and choose desired product.

Secondly, as internet shopping often requires access to personal data, protecting the privacy is important and businesses have to make sure that the data are secured (Anil, 2001). Elliot and FoWell (2000) revealed that, most e-commerce sites provide privacy and security options but they do not provide details on how those are maintained. Customers fear their information will be made available to third parties (Flavián and Guinaliu, 2006). Thus they are becoming more hesitant about giving away personal information on the web (Yenisey et al., 2005). Major barrier in adoption of e-retail is the lack of trust in website's privacy and security, Ramayah et al. (2003) suggested improving technology and convincing the users regarding privacy and guarantee security, thus allowing the growth of e-commerce or internet shopping. In addition to this, past experience with online shopping has an influence on purchase intention (Shim et al., 2001; Leelayouthayotin, 2004). In addition to this, customer who had positive past experience shopping on the internet were found to make repeat purchases as the amount of perceived risk is reduced (Shim and Drake, 1990; Samadi and Yaghoob-Nejadi, 2009; Ling et al., 2010). A positive experience from past helps customers to be more comfortable in purchasing online and most importantly customers past transactional experience matters more and these being positive will have a positive influence on the purchase intention (Kim and Ahn, 2007). Petre et al. (2006) also claimed that past experience is a reason why customers choose certain websites over others. Another factor that has been deemed vital in dominating purchase decision is brand image; which can be defined as consumer perceptions about a particular brand (Keller, 2003, p. 66). Studies conclude that there lies a positive correlation between brand image and purchase intention (Ling et al., 2010; Laroche et al., 1996). It has been maintained that E-commerce business can gain trust of customers through building brand image, and that the e-commerce websites lacking brand image will be outperformed by the ones who have brand image (Yoon 2002; Bart et al., 2005; Chiang et al., 2006). Websites having well-reputed brands are at an advantageous position, such as they can charge premium price yet having loyal customers (Brynjolfsson and Smith 2000). As per Tan (1999) and Leelayouthayotin (2004), brand image can also work as a risk reliever. Furthermore, Dillon and Rief (2004) stated that product variety is the assortment of alternative and complementary goods available from the retailers and this could be an important factor affecting customer's product perception. Online sellers offering product variety allow customer with opportunities to compare and contrast a large number of products and select the right product to satisfy their needs (Cao and Li, 2007; Gregory and Kingshuk, 2001).

According to a survey of Market Intelligence Centre of the Information Industry Institute in Taiwan, product variety is also one of the main reasons for customers to shop online (Chi et al., 2014). Online retailers can provide an array of products which leads them to have a wide variety of products than typical physical stores. And as a result it also enhances customer welfare (Brynjolfsson et al., 2003). Their research on product variety of online bookstore found that increase in product variety led to customer welfare enhancement of \$731 million to \$1.03 billion in the year 2000 which is a lot more than gains from increased competition and low prices in similar industry.

Finally, Limayem et al. (2000) found customer service to be an important factor influencing customers "online purchase intention." Research showed 68% of customers leave due to bad customer service they experience from companies (refer the book). Poleretzky (1999) mentioned that in the physical world an unhappy customer will tell 5 people whereas in virtual world they will tell 5000 people. What is more, an unhappy customer can easily switch to another seller in e-commerce thus providing good service is necessary (Srinivasana et al., 2002). Customer service in e-commerce environment is different than that of physical stores (Chen and Dubinsky, 2003), mainly because the interaction is not face to face and there is no option to use nonverbal cues (Sharma and Lijuan, 2015). Customers are found to have positive attitudes about e-retailers having web assistants who can assist them in shopping, and this results in frequent shopping if they receive immediate response (Åberg and Shahmehri, 2000), and this will help in creating loyal customer base.

4. METHODOLOGY

AHP a multipurpose MCDM tool for its varied applicability was originally developed by Saaty (early 1970s). As quoted by (Triantaphyllou and Mann, 1995), "AHP is a decision support tool which can be used to solve complex decision problems. It uses a multi-level hierarchical structure of objectives, criteria, sub-criteria, and alternatives (p.35 - p.44)." Subramaniam (2012) stated that, any problem that entails analysis of qualitative and quantitative factors could be addressed by AHP.

Besides, the AHP was initially intended for incorporating various measures into a general score for ranking the alternatives for decision making, and its main functionality is contingent on pairwise comparison judgments (Ngai, 2003). In short, the AHP integrates the judgments and assessments of the experts, and transforms the complex decision making system into a straightforward hierarchy. To conduct pairwise comparison amongst the multiple criteria, the ration scale based evaluation method is employed further. The core strengths of the AHP method lie in its ease of operation and ability to amalgamate the opinions of most decision-makers and specialists. The consensus reached by evaluation experts can further be corroborated based on the theoretical foundation of quantification. However, the process does possess its limitation in terms of the number of experts and the consistency in decision making criteria among the evaluators, which may lead to minor subjective bias. Notwithstanding this, the AHP method, with its prevailing advantages have been extensively

applied to the field of resource allocation, behavioral science and marketing management.

AHP or Analytic Hierarchy Process has been employed in this research to find out the ranking of the factors pertinent to choosing websites. A hierarchy can be developed as a specific arrangement based on the postulation that the corresponding entities can be categorized into distinctive sets, having one group influencing others (Ananda and Herath, 2002; Saaty, 1980). In order to formulate an AHP model, a conceptual framework is required to be developed that addresses a particular decision problem. As Figure 1 depicts, the main part of the qualitative aspect of AHP has been driving all criteria required for defining the overall goal. To identify the key criteria for an e-tail for achieving sustainable competitive advantage, relevant literature has been referred to. As posited before, the first and foremost level of the evaluation framework is that the ultimate goal is to influence selection of an E-commerce website. In the second level, measurable criteria including convenience, ease of usage, brand image, product variety customer service and past experience have been incorporated upon which the ultimate goal is dependent. Ascertaining the relative importance of each criterion can lead to developing evaluation indicators which are essential in achieving the overall goal.

AHP also entails a systematic methodology to calibrate the numeric scale for the measurement of both quantitative and qualitative performances. The scale ranges from 1/9 for least preferred, 1 for equal, and to 9 for extremely preferred thus covering the entire spectrum of the comparison as shown in Table 1.

5. DATA COLLECTION AND ANALYSIS

In this study, the AHP questionnaire was prepared with the six factors affecting the customer decision-making process regarding the selection of E-commerce websites. This questionnaire was afterwards directed at a group of 11 e-tailers who possess adequate experiences and knowledge regarding customer preferences in

Table 1: Pair wise comparison scale for AHP performances

Numerical rating	Verbal judgments of preferences
9	Extremely preferred
7	Very strongly preferred
5	Strongly preferred
3	Moderately preferred
1	Equally preferred
2,4,6,8	Ratings in between

AHP: Analytical hierarchical process

choosing products. The respondents filled out the questionnaire under the pair-wise comparison scale as mentioned above. Filling out the questionnaire necessitates that the respondent provides his/her response at only one side of the diagonal, as the values on the other side depicts inverse of the former. Data analysis for AHP is carried out by Expert Choice software version 11.0. It is to be noted that the inconsistency that might arise out of the subjective preferences in dealing with customer choices should not exceed 0.10.

6. FINDINGS AND RESULTS

This section unfolds the findings and ensuing discussions on AHP techniques. In this analysis, the identified factors from literature namely privacy and security, past experience, brand image, product variety, customer service and ease of navigation are prioritized by using AHP methodology. The data for the study were collected through expert retailers from the arena of e-commerce. Table 2 presents the response to the questionnaire filled out by them.

According to our findings by using AHP, ease of usage has been determined as the most important factor for selection of e-commerce website which secures 45% importance among the 6 criteria. This has been followed by privacy and security (24%), past experience (11%), brand image (9%) customer service (5%) and product variety (3%) respectively. Through extensive perusal of earlier studies and observing the shopping trends, it has been found out that the results are in line with past studies (e.g. Collier and Bienstock, 2006). As derived by the synthesis output (Figure 2), the value of the overall inconsistency is 0.07, which is lower than the threshold value of 0.10, thus giving credence to the reliability of the result.

7. DISCUSSION AND IMPLICATIONS

E-commerce website evaluation is a critical process in measuring the performance measurement efforts devoted by the online retailers. Research on e-commerce website evaluation over the past decade has led to diverse approaches and outcomes rather than a unification of success factors that should be measured to gauge a Web site's performance. The general success factors identified in this study lay out a vital basis for practical evaluation implementation as well as serve as a useful input for future work. In summary, this study found that consumers have a tendency to select website in a hierarchical order of preferences. The findings have important managerial implications for companies looking forward to boosting sales, devising marketing strategies and

Figure 1: Proposed framework of criteria for choosing e-commerce websites

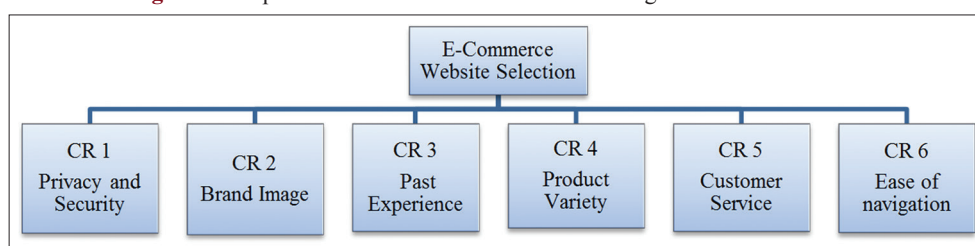
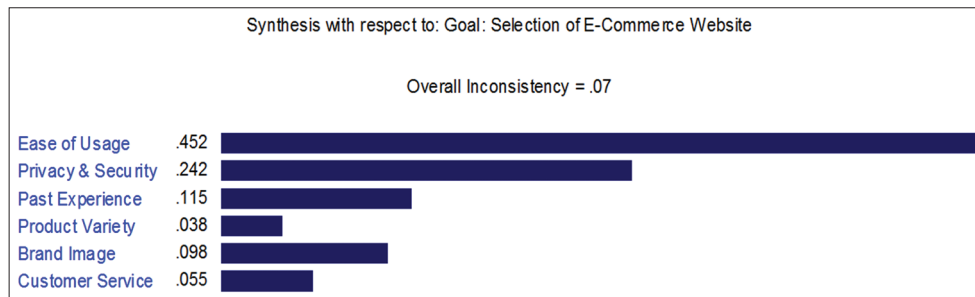


Table 2: Pair-wise comparison matrix of the selected criteria

	Ease of usage	Past experience	Privacy and security	Customer service	Product variety	Brand image
Ease of usage	1	7	3	4	8	4
Past experience		1	1/2	3	2	2
Privacy and security			1	6	8	3
Customer service				1	2	1/3
Product variety					1	1/3
Brand image						1

Figure 2: Ranking of the factors affection customers' selection of E-Commerce Website (generated by expert choice)

allocating resources efficiently. Understanding consumers' need in each factor would help companies to tailor their resources, compose the right formula concerning functionality and design with the right marketing mix, increase the likelihood of consumers being inclined towards their portals and eventually increasing consumer purchase intention.

In addition to this, web developers can also refer to the findings gathered from this study as a critical input in designing website and homepage. In order to allow the e-business to catch up with ongoing global trends, Bangladeshi government should also step forward to improve and develop infrastructure and set up regulations to facilitate and support e-tailers, which will ultimately be beneficial to the country as a whole.

8. LIMITATIONS AND FUTURE STUDIES

The first limitation of this study was that the different operation scopes of online retailers—wholesalers and retailers were not considered having different optimal strategies. Future research directions for researchers can also be suggested from our study. Firstly, only consumer goods were examined in this study, and hence future studies could examine other product categories. Secondly, since the AHP has been widely verified to be an effective technique for studying relative weights among product attributes in a variety of applications, future studies could examine the fundamental factors underlying Internet commerce using the AHP technique and procedures adopted in this study. Thirdly, the study was based on six factors having a significant impact on managerial decision making. However, these factors can also be investigated further by conducting factor analysis where items comprising the corresponding factors can be taken into account. Besides, other factors, such as visual appearance, pricing, return policy etc. can be incorporated in future study. Last but not the least, one of the main operations of AHP is construction of hierarchy. But, this study did not develop any sub-criteria or the alternatives. In order to gain a broader insight and contribute to

existing literature, further studies can take the aforementioned issues into account.

REFERENCES

- Åberg, J., Shahmehri, N. (2000), The role of human Web assistants in e-commerce: An analysis and a usability study. *Internet Research*, 10(2), 114-125.
- Ananda, J., Herath, G. (2002), Assessment of wilderness quality using the Analytic Hierarchy Process. *Tourism Economics*, 8(2), 189-206.
- Anil, S. (2001), Electronic commerce law in Asia: Legal, regulatory and policy issues. *Media Asia*, 28(1), 9-51.
- Arora, M. (2016), Selection of Parameters of E-commerce Websites Using AHP. *Proceeding of 2nd Conference on Innovative Practices in Information Technology and Operations Management*, Apeejay School of Management, Dwarka, New Delhi, India. p22-27.
- 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-scale exploratory empirical study. *Journal of marketing*, 69(4), 133-152.
- Brynjolfsson, E., Hu, Y., Smith, M.D. (2003), Consumer surplus in the digital economy: Estimating the value of increased product variety at online booksellers. *Management Science*, 49(11), 1580-1596.
- Brynjolfsson, E., Smith, M.D. (2000), Frictionless commerce? A comparison of Internet and conventional retailers. *Management science*, 46(4), 563-585.
- Cao, Y., Li, Y. (2007), An intelligent fuzzy-based recommendation system for consumer electronic products. *Expert Systems with Applications*, 33(1), 230-240.
- Chen, Z., Dubinsky, A.J. (2003), A conceptual model of perceived customer value in e-commerce: A preliminary investigation. *Psychology and Marketing*, 20(4), 323-347.
- Cheng, W.L., Li, H., Yu, L. (2005), The analytic network process approach to location selection: A shopping mall illustration. *Construction Innovation*, 5(2), 83-97.
- Chiang, W.K., Zhang, D., Zhou, L. (2006), Predicting and explaining patronage behavior toward web and traditional stores using neural networks: A comparative analysis with logistic regression". *Decision Support System*, 41(2), 514-531.
- Chiu, C.M., Wang, E.T., Fang, Y.H., Huang, H.Y. (2014), Understanding

- customers' repeat purchase intentions in B2C e-commerce: The roles of utilitarian value, hedonic value and perceived risk. *Information Systems Journal*, 24(1), 85-114.
- Collier, J.E., Bienstock, C.C. (2006), How do customers judge quality in an e-tailer? *MIT Sloan Management Review*, 48(1), 35.
- Davis, F.D. (1989), Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13, 319-340.
- Dillon, T.W., Reif, H.L. (2004), Factors influencing consumers' e-commerce commodity purchases. *Information Technology, Learning, and Performance Journal*, 22(2), 1.
- Heim, G.R., Sinha, K.K. (2001). Operational drivers of customer loyalty in electronic retailing: An empirical analysis of electronic food retailers. *Manufacturing & Service Operations Management*, 3(3), 264-271.
- Elliot, S., Fowell, S. (2000), Expectations versus reality: A snapshot of consumer experiences with Internet retailing. *International Journal of Information Management*, 20(5), 323-336.
- Eri, Y., 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.
- Flavián, C., Guinaliú, M. (2006), Consumer trust, perceived security and privacy policy: Three basic elements of loyalty to a web site. *Industrial Management and Data Systems*, 106(5), 601-620.
- Gladwell, M. (2005), *Blink: The Power of Thinking Without Thinking*. New York: Little Brown.
- Griffith, D.A., Krampf, R.F., Palmer, J.W. (2001), The role of interface in electronic commerce: Consumer involvement with print versus on-line catalogs. *International Journal of Electronic Commerce*, 5(4), 135-153.
- Heim, G.R., Sinha, K.K. (2001), A product-process matrix for electronic B2C operations: Implications for the delivery of customer value. *Journal of Service Research*, 3(4), 286-299.
- Hossain, M.A., Ali, M.A., Kibria, M.G., Bhuiyan, M.N. (2013), A survey of e-commerce of Bangladesh. *International Journal of Science and Research*, 2(2), 150-158.
- Ishtiaque, A., Baten, A., Sarwar, A. (2017), How e-commerce is transforming in Bangladesh. *Australasian Journal of Business, Social Science and Information Technology*, 3(4), 166-183.
- Jarvelainen, J. (2003), The Impact of Prior Online Shopping Experience on Future Purchasing Channel Choice. *ECIS 2003 Proceedings*. p. 58.
- Jiuan Tan, S. (1999), Strategies for reducing consumers' risk aversion in Internet shopping. *Journal of Consumer Marketing*, 16(2), 163-180.
- Keller, K.L. (2003), *Strategic Brand Management: Building, Measuring and Managing Brand Equity*. New Jersey: Prentice Hall.
- Kim, H., Fesenmaier, D.R. (2005), Persuasive design of tourism web sites in the United States. In *Proceedings of the Annual Conference of the Travel and Tourism Research Association*, Travel and Tourism Research Association, New Orleans, LA.
- Kim, M.S., Ahn, J.H. (2007), Management of trust in the e-marketplace: The role of the buyer's experience in building trust. *Journal of Information Technology*, 22(2), 119-132.
- Kim, W.G., Lee, C., Hiemstra, S.J. (2004), Effects of an online virtual community on customer loyalty and travel product purchases. *Tourism Management*, 25(3), 343-355.
- Laroche, M., Kim, C., Zhou, L. (1996), Brand familiarity and confidence as determinants of purchase intention: An empirical test in a multiple brand context. *Journal of Business Research*, 37(2), 115-120.
- Leelayouthayotin, L. (2004), *Factors Influencing Online Purchase Intention: The Case of Health Food Consumers in Thailand* (Doctoral Dissertation, University of Southern Queensland).
- 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.
- Lindgaard, G., Fernandes, G., Dudek, C., Brown, J. (2006), Attention web designers: You have 50 milliseconds to make a good first impression!. *Behaviour and information technology*, 25(2), 115-126.
- Ling, K.C., Chai, L.T., Piew, T.H. (2010), The effects of shopping orientations, online trust and prior online purchase experience toward customers' online purchase intention. *International Business Research*, 3(3), 63.
- Ngai, E.W.T. (2003), Selection of web sites for online advertising using the AHP. *Information and Management*, 40(4), 233-242.
- Oinas, P. (2002), Towards understanding network relationships in online retailing. *The International Review of Retail, Distribution and Consumer Research*, 12(3), 319-335.
- Petre, M., Minocha, S., Roberts, D. (2006), Usability beyond the website: An empirically-grounded e-commerce evaluation instrument for the total customer experience. *Behaviour and Information Technology*, 25(2), 189-203.
- Poleretzky, Z. (1999), The call center, e-commerce convergence. *Call Center Solutions*, 17, 76-77.
- Ramayah, T., Dahlan, N., Teck, T.K., Aafaqi, B. (2003), Perceived web security and web-based online transaction intent. *Multimedia Cyberscape Journal*, 1, 131-141.
- Ranjbarian, B., Fathi, S., Rezaei, Z. (2012), Factors influencing on customers' e-satisfaction: A case study from Iran. *Interdisciplinary Journal of Contemporary Research in Business*, 3(9), 1496-1511.
- Saaty, T.L. (1980), *The Analysis Hierarchy Process*. New York: McGraw-Hill.
- Samadi, M., Yaghoob-Nejadi, A. (2009), A survey of the effect of consumers' perceived risk on purchase intention in e-shopping. *Business Intelligence Journal*, 2(2), 261-275.
- Schaffer, E. (2000), A better way for web design. *Information Week*, 784, 194-194.
- Sharma, G., Lijuan, W. (2015), The effects of online service quality of e-commerce Websites on user satisfaction. *The Electronic Library*, 33(3), 468-485.
- 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.
- Shim, S., Eastlick, M.A., Lotz, S.L., Warrington, P. (2001), An online prepurchase intentions model: The role of intention to search: Best overall paper award-the sixth triennial AMS/ACRA Retailing Conference, 2000 1. *Journal of Retailing*, 77(3), 397-416.
- Srinivasan, S.S., Anderson, R., Ponnarolu, K. (2002), Customer loyalty in e-commerce: An exploration of its antecedents and consequences. *Journal of Retailing*, 78(1), 41-50.
- Subramaniam, R. (2012), A review of applications of analytic hierarchy process in operations. *International Journal of Production Economics*, 138(2), 215-241.
- Szymanski, D.M., Hise, R.T. (2000), E-satisfaction: An initial examination. *Journal of Retailing*, 76(3), 309-322.
- Triantaphyllou, E., Mann, S.H. (1995), Using the analytic hierarchy process for decision making in engineering applications: Some challenges. *International Journal of Industrial Engineering: Applications and Practice*, 2(1), 35-44.
- Udo, G.G. (2000), Using analytic hierarchy process to analyze the information technology outsourcing decision. *Industrial Management and Data System*, 100(9), 421-429.
- Yang, C., Hunag, J.B. (2000), A decision model for IS outsourcing. *International Journal of Information Management*, 20(3), 225-239.
- Yenisey, M.M., Ozok, A.A., Salvendy, G. (2005), Perceived security determinants in e-commerce among Turkish university students. *Behaviour and Information Technology*, 24(4), 259-274.
- Yoon, S.J. (2002), The antecedents and consequences of trust in online-purchase decisions. *Journal of Interactive Marketing*, 16(2), 47-63.