

Devanathan Malmarugan (India)

## Strategic model for predicting customer's intention to purchase apparel online

### Abstract

Shopping for apparel over the internet is a growing phenomenon. Customers make use of the net for information search and purchase. Based on the extensive literature review the objectives of the research are to enlist the service quality parameters, customers expect in online shopping for apparel, and to develop a prediction model using logistic regression, for purchase intention of consumers. This research paper discusses the service quality parameters, the customers expect from online shopping of apparel. The parameters are grounded from available literature on the topic. The tool (questionnaire) and items were developed based on literature, and series of focus group interviews. The reliability was found to be good. The responses were collected from customers from various demographic segments. Based on empirical research, a prediction model for customers intention to purchase is developed. The parameters and the prediction model are useful for decision makers in online marketing of apparel.

**Keywords:** online marketing, apparel, service quality parameters, prediction model.

### Introduction

Purchasing over the Internet is one of the most rapidly expanding channels of shopping, and online shopping is the fastest growing application of the Internet (Shim et al., 2001). Online apparel sales are estimated to total \$12 billion in 2002 (Beck, 2001). However, this figure is dwarfed by apparel sales from other distribution channels, totaling around \$200 billion, and total US online sales, estimated at about \$2.5 trillion. The growth in online apparel sales lags far behind other online product sales, such as books or CDs, and online apparel sales figures currently stand at only 27% of all online sales (Beck, 2001). This necessitates research study on the customer expectations in online purchase of apparel. This research paper examines the service quality parameters and develops a prediction model on intention to purchase apparel online.

### 1. Literature review

When consumers are shopping for apparel, they like to physically examine the products to assess color, size, design, and fabric. Also, for apparel as a product, fit is very important. Due to the sensory and interactive nature of the apparel purchase process, apparel products are categorized as high-risk items (Bhatnagar et al., 2000), and apparel shopping has been associated with high perceived risk (Hawes and Lumpkin, 1986). Several studies have found that the inability to examine apparel products contributes to the high risk associated with the in-home shopping channel (Bhatnagar et al., 2000; Kwon et al., 1991). Kwon et al. (1991) found that non-catalog shoppers tended to have higher risk perceptions related to catalog apparel purchases than catalog shoppers. For Internet shopping, consumers consider apparel products to be risky to purchase on

the Internet because of uncertainty about color, fabrics, and fit (Bhatnagar et al., 2000). However, highly innovative people, who tend to have higher incomes (Leung, 1998; Pepermans et al., 1996; Summers, 1972), higher levels of education (Leung, 1998; Pepermans et al., 1996; Rogers, 1995), greater risk propensity (venturesome) (Darden and Reynolds, 1974; Leung, 1998; Robertson and Kennedy, 1968; Rogers, 1995), and higher occupational status (Rogers, 1995), are more likely to adopt new products and services than people with low general innovativeness (Pastore, 1999). Research shows, for example, that innovators are frequent catalog apparel shoppers, despite the higher risk (Seitz and Massey, 1990). Therefore, an innovative person might adopt and utilize the Internet for apparel shopping even though high risk is associated with purchasing apparel on the Internet.

We might also expect gender differences in Internet apparel shopping behaviors. The previous research has shown that women tend to be more innovative than men (Goldsmith et al., 1987). In addition, the research has shown that women are still the primary shoppers for personal clothing in married households (Dholakia et al., 1995). And, among students, gender stereotypes exist relative to shopping formats and product types with both males and females perceiving the typical shopper to be a woman (Dholakia and Chiang, 2003). Thus, men and women might exhibit different adopting intentions and utilization behaviors about using the Internet for apparel shopping.

**1.1. Internet apparel shopping and the innovation-decision process.** In adopting the innovation-decision process, Young Ha, Leslie Steol (2004) assume that each stage of the innovation-decision process applies to Internet apparel shopping. In the current study, Internet shopping refers to online

information search for apparel products and online purchase of apparel products. At the knowledge stage, consumers become aware of and understand Internet apparel shopping in terms of information search and actual purchasing based on previous conditions such as prior Internet usage, previous in-home shopping experiences, and personal characteristics of the shopper such as general innovativeness and demographic characteristics. To reduce uncertainty about Internet apparel shopping, consumers seek information about Internet information search and Internet purchasing for apparel products. At the persuasion stage, based on their knowledge about Internet apparel shopping in terms of information search and actual purchasing, consumers develop favorable or unfavorable attitudes and beliefs about Internet apparel shopping. These attitudes and beliefs are influenced by the five perceived characteristics of Internet apparel shopping as an innovation. For example, in terms of relative advantage, if consumers perceive Internet apparel shopping to save time and money compared to traditional retail shopping, then the adoption of Internet information search and purchasing for apparel products may increase rapidly. In terms of compatibility, if consumers perceive Internet apparel shopping to be compatible with their lifestyles, then they may rapidly adopt the Internet for information search and purchasing of apparel products. In the case of complexity, if consumers think that the Internet is easy to use for information search and actual purchasing for apparel products, then they may rapidly adopt the Internet for apparel shopping. For trialability, if consumers can try out the Internet, then they may be more comfortable using the Internet for information search and purchasing for apparel products. And for observability, if consumers observe the results of adopting the Internet for information search and actual purchasing for apparel products, they may rapidly adopt the Internet for apparel shopping. During the decision stage, consumers will decide whether or not to adopt the Internet for information search or/and actual purchasing for apparel products based on their attitudes and beliefs developed in the persuasion stage. At the implementation stage, consumers who decide to adopt Internet apparel shopping actually engage in Internet shopping behaviors (e.g., information search and actual purchasing). For example, if consumers decided to adopt the Internet to search for information about apparel products, then they would use the Internet for apparel information search and if consumers decided to adopt the Internet for actual apparel purchasing, then they would purchase some apparel products online during this stage. At the confirmation stage, based on satisfaction with the actual shopping experience during the implementation stage and new information

about Internet apparel shopping, consumers will reconsider whether or not to continue to use the Internet for information search and actual purchasing for apparel products.

**1.2. Internet apparel shopping behavior.** From the shopping process, people derive several different outcomes such as products, information, and pleasure (Lee and Johnson, 2002). In other words, shopping includes both information searching behavior and purchasing behavior. Lee and Johnson (2002) investigated differences among Internet apparel purchasers, browsers, and non-purchasers. They found that purchasers were significantly different from browsers and non-purchasers in terms of perceptions of relative advantages and ease of Internet shopping. In addition, compared to browsers and non-purchasers, Internet apparel purchasers tended to perceive Internet shopping as safe for using credit cards. Browsers and non-purchasers showed similar attitudes toward Internet apparel shopping. The researchers have studied how and why consumers use Internet to make purchases. They have discovered two basic consumer usage patterns: information search and purchase.

**1.3. Online information search.** Information search is the process by which consumers gather information about goods or services before a purchase is made (Shim et al., 2001). Due to the ease of viewing the vast amount of information available and to the interactive nature of the Internet, information search on the web (a.k.a. browsing or "exploratory behavior") is a crucial element in online consumer decision-making (Shim et al., 2001). When a consumer has enough information about a product's price, size, color, function, etc., he/she will make a decision as to the purchase of that product. Therefore, information search can be directly linked to purchasing behaviors. In fact, it is crucial to purchasing behaviors. Shim et al. (2001) proposed that intention to search for information online is a predictor of intention to buy online.

**1.4. Online purchasing behavior.** Online purchasing behavior is the act in which consumers actually pay for goods over the Internet. Many consumers are hesitant to buy online, and more than half abandon their selections before payment occurs (Shim et al., 2001). For apparel purchases, this fear of purchasing may be related to many factors, including perceived financial or product risk (Beck, 2001). However, due to convenience (Beaudry, 1999), good price (Beaudry, 1999), and product variety, consumers used Internet for product purchasing as well as information search. The present research intends to discover how innovativeness of the consumer is related to information search and purchasing behavior.

**1.5. Service quality in online retailing.** Services are the results that customers want, which can be obtained by the interactive processes between customers and service providers (Harvey, 1998). Traditionally, such interactive processes primarily refer to human-to-human interactions through either face-to-face meetings or traditional communication media, such as telephone, fax, and mail.

However, in the context of online retailing, there are almost no face-to-face interactions. Instead, the following two types of interactions may occur:

- ◆ the interactions between customers and online retailers' employees via either Internet-based communication tools, such as e-mail, chat room, and message board, or traditional communication channels; and
- ◆ the interactions between customers and online retailers' Web sites, through which customers can search and retrieve necessary information, and place their orders.

Particularly, these customer-to-Web site interactions in online retailing, to a great extent, have replaced traditional customer-to-employee interactions such as sales clerk services (Lohse and Spiller, 1999).

The unique interacting processes between online retailers and customers present a serious challenge to both practitioners and academicians regarding online service quality measurement. Currently, one of the most widely known service quality measures is SERVQUAL (Parasuraman et al., 1985, 1988), which consists of 22 items measuring five key dimensions of service quality:

- 1) tangibles;
- 2) reliability;
- 3) responsibility;
- 4) assurance; and
- 5) empathy.

However, prior research suggests that service quality tends to be context-bounded and service-type-dependent (e.g., Bienstock, 1997; Jun et al., 1998; Van Dyke et al., 1997). Hence, SERVQUAL may not be sufficient enough for measuring service quality across industries and situations, not to mention online service quality. The SERVQUAL does not embrace the unique facets of online service quality, such as customer-to-Website interactions, since this instrument was constructed based mainly on customer-to-employee interactions. Accordingly, various researchers have recently attempted to identify key service quality attributes that best fit the online business environment. Zeithaml et al. (2000) have found 11 dimensions of online service quality in a series of focus group interviews:

- 1) access;
- 2) ease of navigation;
- 3) efficiency;
- 4) flexibility;
- 5) reliability;
- 6) personalization;
- 7) security/privacy;
- 8) responsiveness;
- 9) assurance/trust;
- 10) site aesthetics; and
- 11) price knowledge.

Later, Yoo and Donthu (2001) developed a measurement instrument of online service quality, SITEQUAL, which consists of four dimensions: ease of use, aesthetic design, processing speed, and security.

Cox and Dale (2001) have noted that traditional service quality dimensions, such as competence, courtesy, cleanliness, comfort, and friendliness, are not relevant in the context of online retailing, whereas other factors, such as accessibility, communication, credibility, and appearance, are critical to the success of online businesses. Similarly, Madu and Madu (2002) propose the following 15 dimensions of online service quality based on the relevant literature review: performance, features, structure, aesthetics, reliability, storage capacity, serviceability, security and system integrity, trust, responsiveness, product/service differentiation and customization, Web store policies, reputation, assurance, and empathy. In the same vein, Wolfinbarger and Gilly (2002), through focus group interviews, a content analysis, and an online survey, have uncovered four factors of online retailing experience: Web site design, reliability, privacy/security, and customer service (this factor is primarily related to the customer-to-employee interactions).

In addition, other studies have attempted to identify key dimensions of service quality in the context of narrowly defined online businesses, such as online banks, portal services, and travel agencies (e.g., Jun and Cai, 2001; Kaynama and Black, 2000; Van Riel et al., 2001), or a certain segment of online business processes, such as Web site design, contents, and online exchange processes (e.g., Aladwani and Palvia, 2002; Kenney and Curry, 1999; Liu and Arnett, 2000; Jarvenpaa and Tactinsky, 1999; Lohse and Spiller, 1999; Swaminathan et al., 1999; Zhang and Von Dran, 2001).

## 2. Objectives of the study

Based on the literature review, the objectives of the study are:

- ◆ to enlist the service quality parameters, customers expect in online shopping for apparel;
- ◆ to develop a prediction model using logistic regression, for purchase intention of consumers.

### 3. Hypotheses

Based on the literature review the hypotheses developed are:

*H1: There is no significance that the variable “It is easy to place an order through web site” is included in the model to predict intention to purchase.*

*H2: There is no significance that the variable “Web sites enable you to touch/try merchandise” is included in the model to predict intention to purchase.*

*H3: There is no significance that the variable “Online shopping protects security and privacy” is included in the model to predict intention to purchase.*

*H4: There is no significance that the variable “Online shopping provides ease of price comparison” is included in the model to predict intention to purchase.*

### 4. Research methodology

**4.1. The questionnaire.** The questionnaire was developed based on the literature review, and the reliability of the tool was found to be 0.66 (Cronbach’s alpha). It is a good measure of reliability. The respondents were required to give their responses on a 5 point Likert scale: (1) is “strongly disagree” to (5) – “strongly agree”. Factor wise reliability is given in the table below.

Table 1. Factor wise reliability

Factor/Constructs	Reliability (Cronbach's alpha)
Factor 1 Q.no. 12. Website facilities Q.no. 13. Touch & try Q.no. 15. Payment options Q.no. 23. Price comparison	0.9
Factor 2 Q.no. 4. Timely delivery Q.no. 5. Products importance	0.7
Factor 3 Q.no. 17. Easy findings Q.no. 19. Unique	0.7
Factor 4 Q.no. 10. Three months Q.no. 11. Easy order	0.81
Factor 5 Q.no. 2. Personal information Q.no. 18. Quality Q. no. 20. Large selection	0.64
Factor 6 Q.no. 21. Immediateness Q.no. 22. Low price	0.64
Factor 7 Q.no. 1. Credit card information Q.no. 14. Security Q.no. 16. Safe shipping	0.62

A pilot study was conducted among 30 respondents to ascertain whether the questionnaire constructs were clearly understood by the respondents and whether the constructs are helping to achieve the objectives of the research.

**4.2. Sampling design.** Simple random sampling method was adopted and 500 customer responses were collected by administering the questionnaire, from the city of Chennai, a metropolitan city in India, representing people from all walks of life. To have a representative sample, respondents were chosen from different age groups and education backgrounds.

### 5. Data analysis

Logistic regression can handle categorical, binary dependent variables and metric independent variables. Given the robustness of logistic regression to violation of the assumption of equality on the variance/covariance matrices across groups, the regression is well suited for application in this situation. Logistic regression allows one to predict a discrete outcome, such as a group membership, from a set of variables that may be continuous, discrete, dichotomous, or a mix of any of these. Generally, the dependent or response variable is dichotomous, such as presence/absence or success/failure. Discriminant analysis is also used to predict a group membership with only two groups. However, discriminant analysis can only be used with continuous independent variables. Thus, in instances where the independent variables are categorical, or a mix of continuous and categorical, *logistic regression is preferred.*

The collected data were analyzed using SPSS software and logistic regression prediction model was developed to predict the intention to purchase (ITP) apparel online.

Table 2. Hosmer and Lemeshow test

Step	Chi-square	df	Sig.
1	8.291	8	.406

Hosmer and Lemeshow’s measure of overall fit has a statistical test, which indicates that there was no statistically significant difference between the observed and predicted classifications. From Table 2, the Hosmer-Lemeshow tests table shows that there is non-significance at 0.05 level. A non-significant chi-square indicates that the data fit the model well.

From Table 3, we can identify the variables which belong to the prediction model. The following discussion from the literature review will evidence for

the independent variables included in the prediction model. Yoo and Donthu (2001) developed a measurement instrument of online service quality, SITEQUAL, which consists of four dimensions: ease of use, aesthetic design, processing speed, and security. Information search is the process by which consumers gather information about goods or services before a purchase is made (Shim et al., 2001). Due to the ease of viewing the vast amount of information available and due to the interactive nature of the Internet, information search on the web (a.k.a. browsing or “exploratory behavior”) is a crucial element in online consumer decision-making (Shim et al., 2001). When a consumer has enough information about a product's price, size, color, function, etc., he/she will make a decision as to the purchase of that product.

Table 3. Variables in the equation

	B	S.E.	Wald	df	Sig.	Exp (B)
V1. Easy to place order	.386	.085	20.782	1	.000	1.471
V2. Websites enable touch & try	.253	.094	7.309	1	.007	1.288
V3. Security & privacy protection	.190	.084	5.071	1	.024	1.209
V4. Ease of price comparison	-.344	.088	15.455	1	.000	.709
Constant	-2.274	1.304	3.039	1	.081	.103

Using the above Table 2, the predictive model is arrived below:

Stage I. At the first stage the Logit value for the intention to purchase (ITP) is arrived at

$$\text{Logit (ITP)} = (-2.274) + (0.386) V1 + (0.253) V2 + (0.190)V3 - (0.344) V4.$$

Stage II. At this stage, the odds ratio is calculated

$$\text{Odds (ITP)} = e^{\text{logit(ITP)}}.$$

Stage III. At this last stage, the probability of the intention to purchase is calculated

$$\text{Probability of ITP} = \text{Odds (ITP)} / (1 + \text{Odds (ITP)}).$$

With respect to the hypotheses developed, for a significance level of .05, the variables “It is easy to place an order through web site”, “Web sites enable you to touch/try merchandise”, “Online shopping protects security and privacy”, “Online shopping provides ease of price comparison” are statistically significant for inclusion in the prediction model.

## 6. Discussion and findings

The statistical analysis conducted reveals an excellent model fit and statistical significance at the over-

all model level as well as for the variables included in the model.

The variables “It is easy to place an order through web site”, “Web sites enable you to touch/try merchandise”, “Online shopping protects security and privacy”, “Online shopping provides ease of price comparison” are predicting the intention to purchase (ITP). This is in line with the findings of similar research.

There has been a consensus regarding the attractive attributes of Internet shopping compared to traditional one. The variables in the prediction model arrived at as parts of the research study are in line with other research findings. The attractive attributes of Internet shopping include time- and money-saving; convenience or easy accessibility; the shopper's ability to screen and select a wide range of alternatives; and the availability of information for making purchasing or ordering decisions (Breitenbach and Van Doren, 1998; Crawford, 2000; Ray, 2001; Schaeffer, 2000; Then and Delong, 1999).

Besides the aforementioned attractive attributes, online retailers have also faced challenges associated with e-marketing. Above all, security and privacy factors are critical for online companies in order to build long-term relationships between customers and sellers (Schoenbachler and Gorden, 2002; Yoon, 2002). Due to consumers’ concern with regard to transaction security and privacy in e-transmission, retailers are now more involved in improving e-transmission security and broader protection policies by providing customized strategies including return policies, interactivity and personalization on Web sites (Detmer, 2002; Verton, 2001).

“It is easy to place order through web site” is based on the convenience online shopping provides to the customer. “Web sites enable you to touch/try merchandise” – this variable is about the bottleneck in online shopping. Customers prefer to feel the merchandise before considering purchase. “Online shopping protects security and privacy” – customers are concerned about their personal details being kept confidential and security of the payment mechanism. “Online shopping provides ease of price comparison” variable is about the ease for the customer to be informed of a wide range of products and their prices without actually visiting the retail outlet.

## Managerial implications and recommendations

The current study provides several important insights in managing apparel shopping web sites. The prediction model arrived at is useful to know the intention to purchase (ITP) apparel online. The marketers of apparel can benefit by being aware of the parameters

considered by customers as important. This is significant for decisions regarding the utilization of the online channel to reach customers. The owners of online shopping web sites can use the results of the study to improve the design, protect the privacy and security of the customers, and improve responsiveness. The parameters seen as important by customers should be developed to achieve sustainable competitive ad-

vantage. The regulatory authorities can frame procedures for ensuring security in payment and confidentiality of the customer details. Though the research was conducted in an emerging market, the findings are in tune with other research studies in online apparel marketing. Further studies can be conducted in related product categories such as jewellery & accessories.

## References

1. Aladwani, A.M., Palvia, P.C. "Developing and validating an instrument for measuring user-perceived Web quality" // *Information & Management*, 2002. – No. 6. – pp. 467-76.
2. Beck, B. "Key strategic issues in online apparel retailing: the need for an online fitting solution" // [www.techexchange.com](http://www.techexchange.com), 2001. – pp. 2-3.
3. Bhatnagar, A., Misra, S., Rao, H.R. "On risk, convenience, and Internet shopping behavior" // *Communications of the ACM*, 2000. – No. 11 (43). – pp. 98-105.
4. Bienstock, C.C. "Measuring physical distribution service quality" // *Journal of the Academy of Marketing Science*, 1997. – No. 1 (25). – pp. 31-44.
5. Beaudry, L.M. "Consumer catalog shopping survey" // *Catalog Age*, 1999. – No. 6 (16). – pp. a5-a18.
6. Cox, J., Dale, B.G. "Service quality and e-commerce: an exploratory analysis" // *Managing Service Quality*. 2001. – No. 2 (11). – pp. 121-31.
7. Darden, W.R., Reynolds, F.D. "Backward profiling of male innovators" // *Journal of Marketing Research*, 1974. – No. 11. – pp. 79-85.
8. Goldsmith, R.E., Freiden, J.B., Eastman, J.K. "The generality/specificity issue in consumer innovativeness research" // *Technovation*, 1995. – No. 10 (15). – pp. 601-12.
9. Goldsmith, R.E., Stith, M.T., White, J.D., "Race and sex differences in self-identified innovativeness and opinion leadership" // *Journal of Retailing*, 1987. – No. 4 (63). – pp. 411-25.
10. Harvey, J., "Service quality: a tutorial" // *Journal of Operations Management*, 1998. – No. 5 (16). – pp. 583-97.
11. Hawes, J., Lumpkin, J., "Perceived risk and the selection of a retail patronage mode" // *Journal of the Academy of Marketing Science*, 1986. – No. 4 (14). – pp. 37-42.
12. Young Ha, Leslie Stoel, "Internet apparel shopping behaviors: the influence of general innovativeness" // *International Journal of Retail & Distribution Management*, 2004. – No. 8 (32). – pp. 377-385.
13. Shim, S., Eastlick, M.A., Lotz, S.L., Warrington, P. "An online prepurchase intentions model: the role of intention to search" // *Journal of Retailing*, 2001. – No. 3 (77). – pp. 397-416.
14. Jun, M., Cai, S., "The key determinants of Internet banking service quality: a content analysis" // *The International Journal of Bank Marketing*, 2001. – No. 7 (19). – pp. 276-91.
15. Jun, M., Peterson, R., Zsidisin, G.A., "The identification and measurement of quality dimensions in health care: focus group interview result" // *Health Care Management Review*, 1998. – No. 4 (23). – pp. 81-96.
16. Kaynama, S.A., Black, C.I., "A proposal to access the service quality of online travel agencies: an exploratory study" // *Journal of Professional Service Marketing*, 2000. – No. 1 (21). – pp. 63-88.
17. Kenney, M., Curry, J., "E-commerce: implications for firms strategy and industry configuration" // *Industry and Innovation*, 1999. – No. 2 (6). – pp. 131-52.
18. Kwon, Y., Paek, S.L., Arzeni, M., "Catalog vs non-catalog shoppers of apparel: perceived risks, shopping orientations, demographics, and motivations" // *Clothing and Textiles Research Journal*, 1991. – No. 1 (10). – pp. 13-19.
19. Lee, M., Johnson, K.P., "Exploring differences between Internet apparel purchasers, browsers, and non-purchasers" // *Journal of Fashion Marketing and Management*, 2002. – No. 2 (6). – pp. 146-57.
20. Leung, L., "Lifestyles and the use of new media technology in urban China" // *Telecommunications Policy*, 1998. – No. 9 (22). – pp. 781-90.
21. Liu, C., Arnett, K.P., "Exploring the factors associated with Web site success in the context of electronic commerce" // *Information & Management*, 2000. – No. 1 (38). – pp. 23-34.
22. Lohse, G.L., Spiller, P., "Internet retailer store design: how the user interface influence traffic and sales" // *Journal of Computer-Mediated Communication*, available at: [www.ascusc.org/jcmc/vol5/issue2/lohse.htm](http://www.ascusc.org/jcmc/vol5/issue2/lohse.htm) 1999. – No. 2 (5).
23. Madu, C.N., Madu, A.A., "Dimensions of e-quality" // *International Journal of Quality & Reliability Management*, 2002. – No. 3 (19). – pp. 246-58.
24. Parasuraman, A., Zeithaml, V.A., Berry, L.L., "SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality" // *Journal of Retailing*, 1988. – No. 1 (64). – pp. 12-40.
25. Parasuraman, A., Zeithaml, V.A., Berry, L.L., "A conceptual model of service quality and its implications for future research" // *Journal of Marketing*, 1985. – No. 4 (49). – pp. 41-50.
26. Pastore, M., "Women use Web to change social landscape" // <http://cyberatlas.internet.com> . 2000b.
27. Pastore, M., "The lifestyle of the online shoppers" // <http://cyberatlas.internet.com> .1999.
28. Pastore, M., "Online clothing sales continue climbing e-commerce ladder" // <http://cyberatlas.internet.com> . 2000 a.

29. Pepermans, R., Verleye, G., Cappellen, S.V., "Wallbanking', innovativeness and computer attitudes: 25-40-year-old ATM-users on the spot" // Journal of Economic Psychology, 1996 – No. 17 pp. 731-48.
30. Robertson, T.S., Kennedy, J.N., "Prediction of consumer innovators: application of multiple discriminant analysis" // Journal of Marketing Research, 1968. – No. 1 (5). – pp. 64-9.
31. Rogers, E.M. Diffusion of Innovation, 4th ed. The Free Press, – New York, NY, 1995. 151 pp.
32. Seitz, V.A., Massey, T.K., "The acceptability of catalogs for apparel purchases", //Clothing and Textiles Research Journal, 1990- 8 No. 4, pp.28-33.
33. Summers, J.O., "Media exposure patterns of consumer innovators" // Journal of Marketing, 1972. – No. 36. – pp. 43-9.
34. Van Dyke, T.P., Kappelman, L.A., Prybutok, V.R., "Measuring information systems service quality: concerns on the use of the survey questionnaire" // MIS Quarterly, 1997. – No. 2 (21). – pp. 195-208.
35. Van Riel, A.C.R., Liljander, V., Jurriens, P., "Exploring consumer evaluations of e-services: a portal site", // International Journal of Service Industry Management, 2001. – No. 4 (12). – pp. 359-77.
36. Wolfinbarger, M., Gilly, M.C., "comQ: dimensionalizing, measuring and predicting quality of the e-tail experience" // www.crito.uci.edu/publications/pdf/comQ.pdf, 2002.
37. Yang, Z., Jun, M., "Consumer perception of e-service quality: from Internet purchaser and non-purchaser perspectives" // Journal of Business Strategies, 2002. – No. 1 (19). – pp. 19-41.
38. Yoo, B., Donthu, N., "Developing a scale to measure the perceived quality of Internet shopping sites (SITE-QUAL)" // Quarterly Journal of Electronic Commerce, 2001. – No. 1 (2) pp. 31-47.
39. Zhang, P., Von Dran, G.M., "User expectations and rankings of quality factors in different Web site domains" // International Journal of Electronic Commerce, 2001. – No. 2 (6). – pp. 9-35.
40. Zeithaml, V.A., Parasuraman, A., Malhotra, A., "A conceptual framework for understanding e-service quality: implications for future research and managerial practice" // Working Paper, 2000. Report No. 00-115, Marketing Science Institute, Cambridge, MA.

## Appendix A. Questionnaire

Table 1. Factors influencing online purchase of textiles

Questions 1 to 5 require responses about demographic profile of respondents						
5. Credit card information used for online purchases is secure						
Strongly disagree	1	2	3	4	5	Strongly agree
Very unimportant	1	2	3	4	5	Very important
6. Personal information provided for online purchases is confidential						
Strongly disagree	1	2	3	4	5	Strongly agree
Very unimportant	1	2	3	4	5	Very important
7. Online retailers are trustworthy						
Strongly disagree	1	2	3	4	5	Strongly agree
Very unimportant	1	2	3	4	5	Very important
8. Online purchases are delivered in a timely manner						
Strongly disagree	1	2	3	4	5	Strongly agree
Very unimportant	1	2	3	4	5	Very important
9. Delivered products match those described on the Web site						
Strongly disagree	1	2	3	4	5	Strongly agree
Very unimportant	1	2	3	4	5	Very important
10. Products purchased online are delivered undamaged						
Strongly disagree	1	2	3	4	5	Strongly agree
Very unimportant	1	2	3	4	5	Very important
11. Product returns are easy for online purchases						
Strongly disagree	1	2	3	4	5	Strongly agree
Very unimportant	1	2	3	4	5	Very important
12. Contacting customer service is easy for online purchases						
Strongly disagree	1	2	3	4	5	Strongly agree
Very unimportant	1	2	3	4	5	Very important
13. I will make an online purchase for a product within the next year						
Very unlikely	1	2	3	4	5	Very likely
14. I will make an online purchase for a product within the next three months						
Very unlikely	1	2	3	4	5	Very likely

Table 1 (cont.). Factors influencing online purchase of textiles

15. It is easy to place an order through web site						
Strongly disagree	1	2	3	4	5	Strongly agree
16. Web sites have 24 hours accessibility						
Strongly disagree	1	2	3	4	5	Strongly agree
17. Web sites enable you to touch/try merchandise						
Strongly disagree	1	2	3	4	5	Strongly agree
18. Online shopping protects security and privacy						
Strongly disagree	1	2	3	4	5	Strongly agree
19. Online shopping provides several options for payment						
Strongly disagree	1	2	3	4	5	Strongly agree
20. Online shopping provides reliable, safe shipping of purchased goods						
Strongly disagree	1	2	3	4	5	Strongly agree
21. In online shopping it is easy to find merchandise						
Strongly disagree	1	2	3	4	5	Strongly agree
22. Online shopping provides quality merchandise						
Strongly disagree	1	2	3	4	5	Strongly agree
23. Online shopping provides unique merchandise, available only through web						
Strongly disagree	1	2	3	4	5	Strongly agree
24. Online shopping provides large selection ( variety ) of merchandise						
Strongly disagree	1	2	3	4	5	Strongly agree
25. Online shopping provides immediate availability of merchandise						
Strongly disagree	1	2	3	4	5	Strongly agree
26. Online shopping provides low prices						
Strongly disagree	1	2	3	4	5	Strongly agree
27. Online shopping provides ease of price comparison						
Strongly disagree	1	2	3	4	5	Strongly agree
28. Online shopping makes well-known national brands available						
Strongly disagree	1	2	3	4	5	Strongly agree