



---

## **DRIVERS AFFECTING E-TOURISM SERVICES ADOPTABILITY**

**Dr. Kapil Jain\***

**Dr. Jyoti Sharma\***

**Jyoti Jain\*\***

---

**Abstract:** *India has become one of the favorite medical tourism destinations for the tourists. Many foreign tourists visit India for this purpose. They use online tourism services to find locations and places offering these services. Online tourism services are the services which are offered by the tourism portals to travelers through the Internet. Peoples want everything to be properly planned and they are taking initiatives to plan their own trips according to their convenience and this has made possible easily by the use of online tourism service portals. Travel portals make the traveler self-dependent and provide all information on single click. Although, there are many benefit of e-Tourism service providers but still the growth rate of user of e-tourism services are unsatisfactory. This is because of many unidentified reasons. The present study was an attempt to identify major drivers affecting adoptability of e-Tourism services. The study used Principal Components Matrix method of Factor Analysis with Varimax Rotation with Kaiser Normalization and revealed five drivers namely Utility, Economic, Reliability, Efficiency and Security which affect adoptability of e-Tourism services.*

**Keywords:** *Tourism, e-Service, Perception, e-Tourism, Online services.*

---

\*International Institute of Professional Studies, Devi Ahilya University, Indore, India

\*\*Institute of Management Studies, Devi Ahilya University, Indore, India



## **INTRODUCTION**

Tourism sector is one of the emerging service sectors of the Indian economy. As reports indicate, tourism is a very fast growing sector contributing almost 6 % in the GDP and also giving employment to lot of people. It is expected that, by the end of 2020, tourism in India could contribute Rs. 8,50,000 crores to the GDP. It can also be considered as the backbone for other sectors like transportation, civil, hospitality. Tourism sector is also one of the significant contributors to foreign exchange reserve of the country. As the report titled "Indian Tourism Industry Analysis" projected, foreign tourist arrivals in the country are expected to grow at a CAGR of around 8% during 2010-2014 due to increasing business and leisure needs. The use of Information and Telecommunication Technology (ICT) play an important role in growth of tourism services. With the increasing role of ICT in this sector, a different type of tourism, electronic tourism (e tourism), has emerged which is radically transforming the tourism industry worldwide. Now, customers give priority to search for information related to tourism services on the Internet. Online tourism services are the services which are offered by the tourism site and portals to customers on the Internet. Generally people prefer to use Internet to make their working fast and convenient. Since peoples want everything to be properly planned and so they are taking initiatives to plan their own trips according to their convenience and this has made possible easily by the use of online tourism service portals. The main aim of these portals is to make the traveler self-dependent and to provide all information on single click. Internet is a one stop-shop where travelers find each and everything from a very popular destination to a remote place. These services also help the domestic as well as foreign tourists.

India has become one of the favorite medical tourism destinations for the tourists. Many foreign tourists visit India for this purpose and they use online services to find location of the places offering these services and they get everything just by typing it on the search engines and automatically various links are displayed with the desired information. As Aarex India mentioned in their report (2009), medical tourism is expected to generate revenue of Rs. 12,000 crore by the end of year 2015 and over 3.5 lakhs patients from across the world are expected to come to India for treatment. Today, the Indian medical tourism industry is at a nascent stage, but has an enormous potential for future growth and development. This sector has the highest growth potential after IT and BPO and will bracket India among the



world's elite healthcare providers. Thus one can find everything by using online services. These online tourism services play a very important role in promoting any countries' tourism. There are various tourism services which are available online like airline ticket bookings, railway ticket bookings, hotel bookings, car rental, bus bookings, cruise bookings etc.

Now the travelers are reaching their destinations before traveling and online tourism services have made it possible. One can find each and every destination on internet with the tourist attractions which are worth seeing. And what is the right time to visit a particular place and also about the history art and craft and culture of that place with the food available there. One can also compare the destinations by searching the information's about both and can compare the prices of different sites also with the help of internet and then can decide which place to visit. Every destination has its specialty like Goa is famous for beaches. Kerala for back waters and Jodhpur for havellies etc. so the traveler can choose his desired place by viewing all these information's online.

e-Tourism not only facilitates the travelers, on the other side it also give opportunities to SMEs to develop their business across the world. As Internet based electronic commerce removes all geographical boundaries, firms get scope for getting business across the boundaries. OECD (2000) revealed that advent of Internet-based e-Commerce provides considerable scopes for the tourism industry to expand their customer base, enter new service markets and develop their business. WTO (2001) also accepted that e-Business make possible SMEs the opportunity to undertake their business in new and more cost-effective ways. According to WTO, the Internet is revolutionizing the distribution of tourism information and sales.

### **RECENT STUDIES ON E-TOURISM WORLDWIDE**

The study of Internet based electronic commerce in the tourism industry has emerged as a 'frontier area' for information technology. The studies on this area of research was critically reviewed with a view to developing a framework suitable for tourism industry. E-commerce is defined as the process of buying and selling or exchanging products, services and information via computer networks including the Internet (Turban, Lee, King & Chung, 2000). As Hasan and Harris (2009) defined electronic commerce 'as the use of electronic transmission mediums to engage in the transaction, whether buying or/and selling, of



products and services which required transportation, may be physically or even digitally, and from one location to another location'. Since due to so many benefits of e-Commerce like less transaction cost, time saving, easy to access, nowadays e-Commerce is becoming first choice for any corporate organization, it doesn't matter whether it produce goods or rendering services. However, adoption of ICT is one part of the story. In particular, network access costs, dissemination of information on electronic commerce, training, skill development and human resources provide big challenges for the business organizations. Pastuszak (2010) found in his study that 'reception of e-Business solutions is one of the major challenges emerging in the current economy, which contemporary companies have to face. The level of e-Business reception acts as an indirect determinant for the level of competitiveness of a company'. He explored original e-Business reception model (EBRM). This study was mainly focused on both types of companies, i.e. manufacturing and service companies. As the findings of this study revealed, between the two focus groups, service-oriented companies have a higher level of reception of e-Business solutions as compare to manufacturing companies.

Cho and Jerome (N.A.) revealed the factors that affect the relationship between customers and the online service providers. The study was focused on the factors that affect the customer satisfactions by the services provided by online travel agencies. A very interesting point out here stated by the authors is the ease of use and the attitude of the users toward the usage of the online purchases. They have also mentioned if the online services are beneficial to the consumers of different levels and different ages, how it helps the online agencies to understand attitude of customers improve them. Study firmly believes that the customers should be very much aware of the information regarding the online trade they make, and also it is the responsibility of such service industries to keep them notified. Ekinci and Cobanoglu (N.A.) focused on the positive and negative aspects of the online purchase the customers do with regards to their travel plans. They strongly stated that e-Purchases should be more beneficial and more convenient to the customers by providing several facilities. e-Commerce sites are expected to have a vaster and clearer detailing and a better way of communication with their customers, if the want to get positive response from the travelers and increase their business. Many a times the travelers face certain difficulties like, inadequate knowledge of their travel destinations, faulty bookings, etc. and to reduce



such issues the service providers should have a proper management to ease the travel purchases made by sending booking confirmations, 24 hour assistance and also marketing managers readily available to inform the customers and ease and solve their problems. This reduce in risk factors certainly will build up a confidence amongst the customers and thus boost up the sales. The study also suggested that complete customer satisfaction is the key to this business and thus a valued brand name can be achieved. As there are number of literatures available in the area of electronic tourism services or Internet based tourism service but still very few researched are there which focused and used primary data to explore the various drivers affecting adoptability of e-Tourism services. Therefore, there is need to put some efforts to explore these drivers and understand their importance in e-Tourism.

## **RESEARCH METHODOLOGY**

Creswell (2003) stated in his study that a qualitative research approach is usually used in studies intended to measure attitude. Additionally, further he stated that, if the aim of the study is to identify factors that affect an outcome, the utility of an intervention, or understanding the best predictors of outcomes, then a quantitative approach is preferable. As the present study is an empirical research in nature, a qualitative approach was adopted to enable the researchers to appreciate all aspects of the subject and to develop a set of critical variables. For the analysis point of view, qualitative information was converted into quantitative data, so that parametric tools can be applied. As the study is based on the electronic tourism and drivers affecting adoptability of e-Tourism services in India, therefore, concentrated on the primary data only which was collected via using questionnaire. Questionnaire was distributed amongst the sample of 150, which were from Indore and around Indier city. The sample was chosen by purposive convenience sampling method of sampling which is one of the non probability techniques. Out of total nos. of 150 distributed questionnaires, 131 filled questionnaire were collected and out of them only 111 questionnaire were used because of rest 20 questionnaire were not filled completely. All items of the questionnaire were tested using standard statistical tools including content and criteria validity, reliability was also calculated to measure the internal consistency amongst the items. For checking the reliability of the variables Cronbach's Alfa was calculated and the value of Cronbach's Alfa was 0.73 (73 %) which is acceptable. Required data was collected



through the self administered questionnaire containing 31 questions. Data was collected on the basis of five pointer likert scale (Strongly agree to strongly disagree). Principal Component Matrix (PCA) method of factor analysis with *varimax rotation* was used to reduce the items.

## DEMOGRAPHICAL PROFILE

Sixty-three percent (63%) of the participants were male and rest of 37% was female. Almost half of the participants (44.1%) were 18-29 years of age and slightly less (39.2%) were 30-39. The remaining 16.7% were older than 39. Detailed information about the demographical profile of the subject is provided in table 1 as below;

**Table 1 : Respondents Profile**

		Gender	Age				
			18-29 years	30-39 years	40-49 years	50-60 years	More than 60 years
Occupation	Service Personal	Male	64.10%	59.30%	65.80%	58.80%	70.60%
		Female	35.90%	40.70%	34.20%	41.20%	29.40%
	Professional	Male	59.30%	61.00%	65.50%	68.80%	76.00%
		Female	40.70%	39.00%	34.50%	31.20%	24.00%
	Self Employed	Male	66.70%	78.60%	66.70%	70.60%	75.00%
		Female	33.30%	21.40%	33.30%	29.40%	25.00%
	Home maker	Male	0.00%	0.00%	0.00%	0.00%	0.00%
		Female	100.00%	100.00%	0.00%	100.00%	0.00%
	Student	Male	50.00%	35.70%	50.00%	50.00%	100.00%
		Female	50.00%	64.30%	50.00%	50.00%	0.00%
Others	Male	100.00%	33.30%	100.00%	100.00%	0.00%	
	Female	0.00%	66.70%	0.00%	0.00%	0.00%	
Income per month in INR	Less than Rs. 10,000	Male	67.40%	63.30%	100.00%	60.00%	75.00%
		Female	32.60%	36.70%	0.00%	40.00%	25.00%
	Rs. 10,000 to Rs. 24,999	Male	62.10%	59.60%	67.60%	60.50%	73.70%
		Female	37.90%	40.40%	32.40%	39.50%	26.30%
	Rs. 25,000 to Rs. 39,999	Male	67.50%	72.00%	68.80%	75.00%	100.00%
		Female	32.50%	28.00%	31.20%	25.00%	0.00%
	Rs. 40,000 to Rs. 54,999	Male	61.80%	52.50%	50.00%	73.10%	83.30%
		Female	38.20%	47.50%	50.00%	26.90%	16.70%
	Above Rs. 55,000	Male	53.30%	50.00%	72.20%	60.00%	75.00%
		Female	46.70%	50.00%	27.80%	40.00%	25.00%

## DATA ANALYSIS

The factor analysis technique was used for data analysis. Factor analysis is designed to group all variable into a smaller number of factors by looking at the correlations between the variables (Rodeghier 1996). This technique is often used to determine whether a set of



variables are related to an underlying dimension or not. For the data analysis, statistical package SPSS was used to identify drivers affecting adoptability of e-Tourism services. The factor analysis resulted in 13 variables and deletion of all other items with communalities extraction (items loading less than 0.5 are deleted (Hair *et al.*, 2005)). Communalities extractions for all the 13 final variables are more than 0.5 and hence acceptable. The items converged into five factors structures with Rotation Sums of Squared Loadings\ variance of 68.57 percent (under acceptable limit (Nunnally, 1978)). The rotated component matrix is shown below in Table 2. The study revealed total five drivers/ factors namely Utility, Economic, Reliability, Efficiency and Security.

**Table: 2 Factor\ Driver loading (Rotated Component Matrix<sup>a</sup>)**

	Component				
	Utility	Economic	Reliability	Efficiency	Security
Ease of accessibility	0.799	0.217	0.087	0.083	0.134
Online tourism services are more user friendly as they cross all boundaries of space, and language.	0.704	0.143	0.087	0.216	-0.098
It is very comfortable to use online tourism services	0.673	0.091	-0.362	0.004	0.282
These services are more cost effective as the user's interaction is directly with the company.	0.025	0.628	0.165	-0.013	-0.041
Online tourism services make deciding and finalizing your plans hassle free.	0.34	0.575	0.047	0.193	-0.188
Promotional strategies of online tourism services	0.431	0.563	-0.097	0.264	-0.03
Online tourism services are reliable with lesser probability of errors.	0.015	-0.024	0.845	-0.076	0.005
Privacy of personal information	0.373	-0.031	0.764	0.223	0.116
Online tourism services are technologically more advanced as users get all the facilities like online ticketing, hotel booking, check-in etc in a single click	0.191	0.037	0.69	0.034	0.094
Efficiency of these services remains the same all the time	-0.2	0.083	-0.056	0.768	-0.214
Save time and resources	0.107	0.059	-0.195	0.538	0.081
Online tourism services let the users have secure money transactions.	0.176	0.368	0.265	0.343	0.603
These services lack the personal touch of interaction which affects the user's rate of usage.	0.369	0.58	0.149	0.117	0.539

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 10 iterations.



## **DISCUSSION AND CONCLUSION**

The in depth analysis resulted in Five Drivers/ Factors which affect adoptability of e-Tourism services in India. These drivers can be further explored as;

### **DRIVER ONE: UTILITY**

The driver namely utility explained variance of 20.45 % and composite of 3 items namely i) Ease of accessibility (0.799), ii) Online tourism services are more user friendly as they cross all boundaries of space, and language (0.704) and iii) It is very comfortable to use online tourism services (0.673). This driver expresses a Cronbach's Alpha reliability of 73 % and Guttman Split-Half Coefficient reliability of 0.71 which is statistically acceptable. This driver represents the convenience of tourism services which are available online. The user not required to go personally to a travel agent or some travel agency for any travel services, he just needs a computer with internet connectivity for planning his tour and booking ticket. Now user can book airline tickets, hotels, cars, buses, travel packages etc. either from his home or office very conveniently. Within few clicks one can get all the required information for planning tour. These services are user friendly as the travel portals can be accessed in any language which the user wants. There are no geographical boundaries because while sitting in one country the user can use e-Tourism services of some other place also. Even while booking hotels, user can search the desired category and services he want in a hotel and can also have a view of the hotel property and then book accordingly after getting satisfied with the facilities offered by the hotel and can also check the availability of rooms on the date he wishes to go. Likewise while booking railway tickets the seat availability can be checked easily through online portals and the route and stoppage points can also be viewed. These travel portals are so designed that the user does not need to have any technical knowledge to access them, everything is easily available and most of the planning of the tour is done automatically by the portals itself only after the user gives some of his basic information like the date of travel, desired destination and the number of traveller. The users can make the booking of tourism services in advance by using online services so that they can travel easily in the peak seasons also. There are many services which are given to the customers only when they make the bookings online. Cancellation options are also given to the users and can be used easily. Thus tourism services provided online are





comfortable, user friendly and easily accessible. Therefore, the driver shows that the utility of the tourism websites affect adoptability of e-Tourism services.

#### **DRIVER TWO: ECONOMIC**

This is second driver which revealed by the study. The driver named Economic explained variance of 17.68%. The composition of the driver Economic is also included three items i.e. i) These services are more cost effective as the user's interaction is directly with the company (0.628), ii) Online tourism services make deciding and finalizing your plans hassle free (0.575) and iii) Promotional strategies of online tourism services (0.563). Cronbach's Alpha reliability of the driver was also tested through SPSS which is acceptable with 71.1% and Guttman Split-Half Coefficient reliability of 0.68 which is also statistically acceptable. This driver represents that the online tourism services are economic in nature. Through online tourism services user can directly go to the site of the airline company and buy tickets and thus gets the tickets at an economic price as there is no middle man between the company and the agents who charge the commission and increase the price. The same applies in hotel bookings also. User also get to know the most economic deals from online travel portals, as all the prices are displayed in just one click. The user can also keep a check on prices of airline tickets by visiting online travel portals and book ticket for day on which price is less and this is only possible by tourism services available online. They can give the finest guidance to plan journey effectively well in advance to save a lot of money. There are certain seasons in which tickets are priced at low level and there are a lot of websites available on Internet, which maintain their visitors' database and post them about the latest offers. The rebate and discounts provided on special flights are also promoted on websites which support to determine the finest time to travel. These services also help to decide and plan trip hassle free as all the information needed before, after and while travelling are available online.

Promotional strategies of online services also attract many users to avail their services as they keep on flashing new offers and discounts on the most visited sites. The users also get a good deal from these promotional activities as there are some services which are specially designed for promotional purposes and these are limited period services and get expired soon. Promotional strategies also help the user to know the different type of packages or services which the portal has launched otherwise, it will not be known as long as the



customer does not visit travel agency or tour operator. Thus online tourism services are more cost effective which also helps the user in hassle free deciding and finalizing of plan and the promotional strategies attract the users to avail these services.

#### **DRIVER THREE: RELIABILITY**

The driver namely reliability explored a variance of 11.85 % and composite of 3 items namely i) Online tourism services are reliable with lesser probability of errors (0.845), ii) Privacy of personal information (0.764) and iii) Online tourism services are technologically more advanced as users get all the facilities like online ticketing, hotel booking, check-in etc in a single click (0.69). This driver expresses a Cronbach's Alpha reliability of 67 % and Guttman Split-Half Coefficient reliability of 0.64 which is statistically acceptable. The traveller is required to enter plenty of information about the travel destinations while planning their tour but due to e-tourism services they enjoy error free transactions. Therefore the services provided by tourism companies over the internet are quite reliable because there is lesser probability of errors. Also the e-Tourism websites are kept updated to help the users for getting the latest genuine information's about their travel destinations. When the bookings are made, the passenger enters his personal detail like his name, age, address, contact number, etc., which is kept with the company itself confidentially. As mentioned earlier the websites are technologically advanced and are kept up-to-date so that the user gets the latest and perfect information about the available tickets of the desired destinations. In the light of these benefits it can be concluded that the reliability is also one of the important driver which affect adoptability of e-Tourism services.

#### **DRIVER FOUR: EFFICIENCY**

The driver efficiency is fourth driver revealed by the study with the rotation sums of squared loading variance of 9.67%. This driver is composed with two items first "Efficiency of these services remains the same all the time (0.768)" and second "Save time and resources (0.538)". This driver expresses a Cronbach's Alpha reliability of 71.25 % and Guttman Split-Half Coefficient reliability of 0.66 which is statistically acceptable. This driver shows that online portal are efficient as compare to traditional way of booking, here the user can use number of options to set customized package for him. The fundamental usages of e-Tourism services are for booking travel packages which can vary from time to time. As the role of agent starts after the booking, traveler save his time which is required in offline dealing like



for general discussion, bargaining, promotions etc. with traveler. It also indicates that as online services also save resources and ultimately save monetary cost which results increase in profit on one hand and on the another side it also reduces cost of the service, which encourage traveler to opt more services. The driver namely Efficiency supports both types of efficiency monetary and non monetary.

#### **DRIVER FIVE: SECURITY**

The driver security is fifth driver revealed by the study with the rotation sums of squared loading variance of 8.92%. This driver is composed with two items first "Online tourism services let the users have secure money transactions (0.603)" and second "These services lack the personal touch of interaction which affects the user's rate of usage (0.539)". This driver expresses a Cronbach's Alpha reliability of 68.65 % and Guttman Split-Half Coefficient reliability of 0.63 which is statistically acceptable. The driver namely security is one of the most important drivers which plays an important role in the growth of online transaction in the country and in the rest of world also. All the user are concerned with the driver security, but in the present study, the driver namely 'security' come at the last with least the rotation sums of squared loading variance of 8.92%, which does not mean that in the selected sample or group of respondent, security is not important as like utility, economic, reliability and efficiency. In the e-Tourism, travellers are required to trust unknown tourism service providers especially if the traveller does not travel frequently. In the current age of information and communication technology, almost all the big travel service providers are offering e-Tourism facility through their own portal an even some other public portal also. This online e-Tourism service option gives a big opportunity to travellers for saving their time, money but due to security threat, they hesitate to use e-Tourism services.

#### **CONCLUSION**

Present study was based on the electronic tourism and aimed to explore the major drivers affecting adoptability of e-Tourism services in India, therefore, it was concentrated on the primary data only. The study revealed total five drivers/ factors namely Utility, Economic, Reliability, Efficiency and Security. As the findings indicates that in India, there is huge scope to improve the percent of e-Commerce adoptability, increase in the percent og e-Commerce adoptability would be ultimately resulted positive change in the e-Tourism penetration rate. The study found major five drivers based on the primary data, which are as important as all



other required supports including infrastructure, laws, awareness etc. to increase the adoptability e-Tourism services in India.

## **REFERENCES**

1. Berkowitz, E. M., Walker, O. C., & Walton, J. R. (1979). In-home shoppers: The market for innovative distribution systems. *Journal of Retailing*, 55, 15-33.
2. Bhatnagar, A., Misra, S., & Rao, H. R. (2000). On risk, convenience, and Internet shopping behavior. *Communications of the ACM*, 43(11), 98-105.
3. Cardoso, J. (2005) 'E-Tourism: Creating Dynamic Packages using Semantic Web Processes', Departamento de Matemática e Engenharias, Universidade da Madeira Portugal.
4. Cho, Y, C and Agrusa, J.(N.A.) 'Assessing Use Acceptance And Satisfaction Towards Online Travel Agencies' College of Business Administration, Hawaii Pacific University, Honolulu, HI, USA
5. Ekinici, Y. and Cobanoglu, C. (N.A.) 'An Empirical Analysis Of Internet Users Intention To Purchase Vacations Online' School of Management Studies for the Services Sector University of Surrey, Guildford, GU2 7XH, UK
6. Flint, J & Herbert, R (2000), 'Marketing, The Internet & Regional Small Business', Presented at ANZMAC 2000 Conference – Visionary Marketing for the 21<sup>st</sup> Century, Facing the Challenge, Gold Coast, Australia, 28 Nov – 1 Dec.
7. Griffiths, JM, Ronald, GH, Ellen, AS & Pat, C (1986), Diffusion of innovations in library and information science Final report, Rockville, Md, King Research .
8. Griss, M & Pour, G (2001), 'Accelerating Development with Agent Components', *Computer* Vol 34, No 5, pp 37-43.
9. Huhns, M (2000), 'An Agent-Based Global Economy'. *IEEE Internet Computing*, Vol 4, No 6, pp 83-84.
10. Kelly, P., Lawlor, J. and Mulvey, M. (N.A.) 'A Review Of Key Factors Affecting Consumer's Adoption And Usage Of Self Service Technologies In Tourism' Dublin Institute of Technology, College of Arts and Tourism, Cathal Brugha Street, Dublin 1. Ireland
11. Magion, R. (N.A.) 'Critically discuss the changing role of Information Technology in relation to the Tourism Industry' *Sociology of Tourism Assignment*.



12. Maroudas, Gregory, Louvieris, Panos, (N.A.) 'Exploring factors that determine consumer attitude towards Intelligent Software Agents' University of Surrey, Guildford, GU2 7XH Surrey, UK,
13. Ng, K.L. (2000), Dare to Fail to Succeed: Cnet.com, [Online] Available: <http://malaysia.cnet.com/e-business/expert/help/000616/index.html>.
14. Norhayati, A.M. (2000), "Barriers to putting businesses on the Internet in Malaysia", *Electronic Journal of Information Systems in Developing Countries*, Vol. 2, No. 6, pp. 1-6.
15. Paynter, J. and Lim, J. (2001), "Drivers and impediments to e-commerce in Malaysia", *Malaysian Journal of Library and Information Science*, Vol. 6, No. 2, pp. 1-19.
16. Plaza, B., Galvez, C.G. and Flores, A.G. (2010) 'Orchestrating innovation networks in e-tourism': A case study. Department of Applied Economics, Faculty of Economics, University of the Basque Country, Avda Lehendakari Agirre 83, 48015 Bilbao, Spain.
17. Reino, S. (N.A.) 'Developing Framework For The Assessment Of E-Tourism Capability.
18. Robertson, R.A. (2005), "A framework of critical drivers in successful business-to-business e-commerce", *Proceedings of the IEEE Southeast Conference*, pp. 378-383.
19. Roscoe, J.T. (1975), *Fundamental Research Statistics for the Behavioral Sciences*, New York, NY: Holt, Rinehart and Winston.
20. Simpson, L., & Lakner, H. B. (1993). Perceived risk and mail order shopping for apparel. *Journal of Consumer Studies and Home Economics*, 17, 377-398.
21. Straub, D. W. (1989). Validating instruments in MIS research. *MIS Quarterly*, 13(2), 147-166.
22. 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), 1-24.
23. Udo, G. J., & Marquis, G. P. (2001-2002). Factors affecting e-commerce web site effectiveness. *Journal of Computer Information Systems*, 42(2), 10-16.
24. Vellido, A., Lisboa, P. J. G., & Meehan, K. (2000). Quantitative characterization and prediction of on-line purchasing behavior: A latent variable approach. *International Journal of Electronic Commerce*, 4(4), 83-104.