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TO WHOM IT MAY CONCERN

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Germany

Further enquiries:

Prof PA van Brakel
Conference Chair: Annual Conference on WWW Applications
Cape Peninsula University of Technology
Cape Town
+27 21 469 1015 (landline)
+27 82 966 0789 (mobile)

Airline website quality and its impact on user satisfaction and continuance intention

M.N. Nazeer
Department of Information Systems
University of Cape Town
Cape Town, South Africa
Mnabeel.nazeer@gmail.com

A.Stander
Department of Information Systems
University of Cape Town
Cape Town, South Africa
Adrie.Stander@uct.ac.za

Abstract

Numerous studies have investigated the concept of website quality and used various research instruments to assess user-perceived website quality. However, very few of these studies have looked at the airline industry in particular. Furthermore, most of the research instruments used in these studies do not provide a comprehensive set of website quality attributes to assess an airline website. Our study examined the quality of airline websites and its impact on user satisfaction and continuance intention. Using key attributes identified from literature, we formulated a conceptual model of website quality, user satisfaction and continuance intention. The empirical analysis of the model indicated that ease of use, usefulness, response time, and entertainment components of an airline website have a significant direct influence on user satisfaction while only entertainment components significantly influence a user's intention to continue using the airline website.

1. INTRODUCTION

Over the past few years, the explosive growth of the Internet, together with the expansion of public access to this medium, has strengthened the practice of conducting business online and has been the centre of attention for investors and executives in most industries (Liao, To, & Shih, 2006). The airline industry in particular has fostered a dependency on the Internet for most of its marketing and operational activities (Buhalis, 2004). Many airline companies have developed their own websites to facilitate e-commerce transactions (Chu, 2001). Airline websites are both informative and functional, in the sense that they allow Internet users to book their flights online, make hotel and car reservations, register package tours, search for flight information and carry out other key functions (Chu, 2001).

With more and more airline companies joining the Internet bandwagon and using this medium as a powerful tool to generate revenues, competition is always at its highest level in the airline industry (Buhalis, 2004). Since websites are a critical component of the rapidly growing phenomenon of e-commerce in the travel industry (Loiacono, Watson, & Goodhue, 2007; SITA, 2003), there is a need for airline companies to strive for competitive advantage by designing their websites to meet the needs, wants and preferences of their current and prospective customers (Yu, 2008).

Research has shown that it is more likely for customers to visit and purchase at websites that exhibit highly desirable qualities (Law & Leung, 2000; Shchiglik & Barnes, 2004.). This study thus aims to investigate the impact of airline website quality on user satisfaction and continuance intention. Hence, we addressed the following research questions:

- How do the characteristics of website quality, as identified in the conceptual model, impact on user satisfaction and continuance intention?
- How valid is the conceptual model specifically in the context of the airline industry?

The answers to these questions and results of this study can have immediate implications for airline companies operating on the web and provide meaningful insights into the importance of website quality in this industry. It can also provide airline managers and web developers with an understanding of which constructs of website quality impact on user satisfaction and continuance intention.

2. LITERATURE REVIEW

2.1 Overview of the airline industry

Air transport is one of the world's largest industries and has a history of strong underlying growth in traffic volumes (IATA WATS, 2005). The air travel market grew up originally to meet the demand for business travel as companies became increasingly global in their business activities, as reflected in the rapid growth in world trade and investment (IATA WATS, 2005).

After showing strong growth during the late 1990s, the global airline industry was heavily impacted between 2000 and 2003 due to the global economic downturn in 2001 and the subsequent slow recovery (IATA WATS, 2005). The terrorist attacks in the United States on September 11th, 2001, the Iraq war and the SARS epidemic in 2003 further worsened the situation in the air travel industry (Hatty & Hollmeier, 2003). As a result, many airlines needed restructuring and began to look into ways of cutting costs to be able to survive in the adverse conditions (IATA WATS, 2005). The Internet provided a strong medium for the airline industry to achieve these objectives.

2.2 The Internet and the airline industry

The presence of a company on the Internet automatically opens it up for potential customers from anywhere around the world. As with many other industries, the Internet has had an impact on the air travel industries (Yoon et al., 2006). It has provided a direct connection between airlines and customers without the need to use travel agents, thereby leading to cost savings in the distribution of air tickets (Law & Leung, 2000). Previously, airlines have used different channels for selling their tickets, including direct channels such as sales offices and call centres, and indirect channels such as travel agents and tour operators (Yoon et al., 2006). The emergence of the Internet has changed the paradigm of air ticket distribution and offered new alternatives to the airline industry (Buhalis, 2004).

2.3 Internet statistics in the airline industry

Research has shown that travel remains the largest sector of Internet commerce and that travel-related products have rapidly become the largest category of goods sold over the Internet (Chen, 2006; McGee, 2004). A study conducted by Jupiter Research showed that by 2009, online travel sales will account for approximately 33% of the total travel market representing a 70% increase over 2004 (Chen, 2006).

2.4 Airline websites: A consumer perspective

Internet travel has become the most common distribution channel used by prospective travellers to research options, seek out the best prices and book reservations for travel services (Laudon & Traver, 2002). The new customer environment for travel services has been described by Combes and Patel (1997) as an enhanced level of convenience and ubiquity to the shopping experience. Consumers have been empowered with the ability to price and compare features with ease as well as inquire about various aspects of a travel destination without having to speak to a travel agent (Combes & Patel, 1997).

2.5 Website quality

An organisation with a poor website or ineffective services can project a poor image and weaken its position within its industry (Ahn, Ryu, & Han, 2007). Therefore, identifying the key website quality attributes is a first step for organisations to improve the success of their online presence (Carlson et al., 2003). Research on website quality is focused on identifying the significant factors that influence customers' attitude and behaviour in terms of their intentions to revisit and/or purchase from particular websites (Liu & Goodhue, 2008).

Quality factors such as accuracy, completeness, relevancy, security, reliability, customisation, ease of use, speed, functionality and organisation were identified by Liu and Arnett (2000) as website success factors in the context of e-commerce. These factors were further grouped into four major dimensions, namely, quality of information and service, system use, playfulness and system design quality (Liu & Arnett, 2000). Website quality was divided by Wan (2000) into four categories, namely, information, friendliness, responsiveness and reliability.

2.6 Evaluation of website quality

As the development of Internet technology continues to grow at an exponential rate, the measurement of website quality in the context of business-to-consumer (B2C) electronic commerce has forced academics and practitioners to develop rigorous and reliable methods (Carlson et al., 2003; Kim & Stoel, 2004), leading to the developments of well known instruments such as WebQual (Loiacono, 2000).

2.7 User satisfaction

A review of the literature on user satisfaction revealed that satisfaction has been defined in many ways by different researchers. Chea and Luo (2005) defined satisfaction as the judgement that a particular product or a service feature is providing a pleasurable level of consumption-related fulfillment. Satisfaction, according to Oliver (1981, p. 29), has been explained as "the summary psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with a consumer's prior feelings about the consumer experience". According to Cyr, Bonnani, Bowes, and Ilsever (2005),

website satisfaction relates to stickiness and can be understood as the sum of all the website qualities that induce visitors of the website to remain at a particular website instead of moving to another site.

The concept of satisfaction has important implications for online business since it helps to build consumer trust, increases favourable word of mouth, provides an impetus for users/customers to conduct repeat purchases, and predicts purchasing behaviour of users/customers (Bhattacharjee, 2001).

2.8 Continuance intention

From a practical perspective, due to the increasing competition among companies offering their products and services on the Internet, a major challenge for many companies is to generate revisits to their websites (Supphellen & Nysveen, 2001). Companies therefore spend a considerable amount of resources to develop superior websites that attract and retain customers (Supphellen & Nysveen, 2001). Harnessing the ability to both attract new consumers and retain existing consumers on websites has drawn considerable attention from the research community (Babakus, Beinstock, & Van Scotter, 2004). According to Lin and Lu (2000), continuance intention is the extent to which the user would like to reuse or revisit the website in the future.

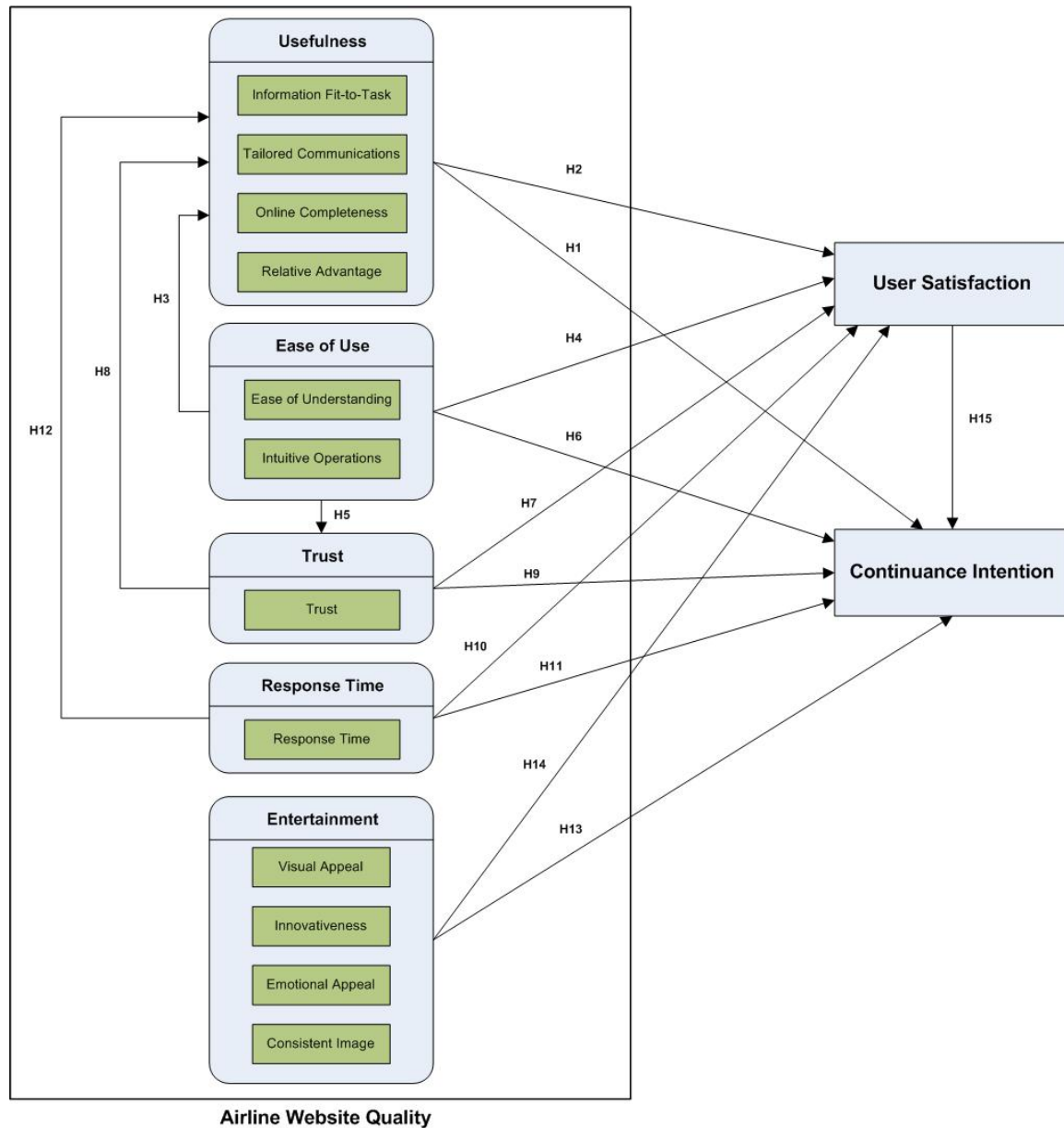
2.9. Link between satisfaction and continuance intention

Much of the literature written on continuance intention point out that user satisfaction is a major predictor of continuance intention. Research has shown that increasing customers' satisfaction with website information through high-quality product or service offerings has a significant positive influence on customer's intention to continue making reservations online (Jeong, Oh, & Gregoire, 2001).

3. RESEARCH MODEL

Based on the above exhaustive literature review, a conceptual model is proposed. This model includes the website quality attributes derived from the WebQual model (Loiacono et al., 2007), and incorporates the link between user satisfaction and continuance intention proposed by Bhattacharjee (2001), and Brown and Jayakody (2008). This is shown in Figure 1:

Figure 1: Proposed conceptual model



3.1 Summary of hypotheses

The following is a summary of the hypotheses which have been formulated:

- H₁: Usefulness (information fit-to-task, tailored communications, online completeness, relative advantage) has a positive effect on Continuance Intention for an airline website*
- H₂: Usefulness (information fit-to-task, tailored communications, online completeness, relative advantage) has a positive effect on User Satisfaction with an airline website*
- H₃: Ease of Use (ease of understanding, intuitive operations) has a positive effect on the Usefulness (information fit-to-task, tailored communications, online completeness, relative advantage) of an airline website*
- H₄: Ease of Use (ease of understanding, intuitive operations) has a positive effect on User Satisfaction with an airline website*
- H₅: Ease of Use (ease of understanding, intuitive operations) has a positive effect on Trust with an airline website*

- H₆: Ease of Use (ease of understanding, intuitive operations) has a positive effect on Continuance Intention for an airline website*
- H₇: Trust has a positive effect on User Satisfaction with an airline website*
- H₈: Trust has a positive effect on Usefulness (information fit-to-task, tailored communications, online completeness, relative advantage) of an airline website*
- H₉: Trust has a positive effect on Continuance Intention for an airline website*
- H₁₀: Response Time has a positive effect on User Satisfaction with an airline website*
- H₁₁: Response Time has a positive effect on Continuance Intention for an airline website*
- H₁₂: Response Time has a positive effect on Usefulness (information fit-to-task, tailored communications, online completeness, relative advantage) of an airline website*
- H₁₃: Entertainment (visual appeal, innovativeness, emotional appeal, consistent image) has a positive effect on Continuance Intention for an airline website*
- H₁₄: Entertainment (visual appeal, innovativeness, emotional appeal, consistent image) has a positive effect on User Satisfaction with an airline website*
- H₁₅: User Satisfaction has a positive effect on Continuance Intention for an airline website*

3.2 Explanation of research model

As previously mentioned, the conceptual model has been adapted mostly from the WebQual framework used in Loiacono et al. (2007). In their study, Loiacono et al. (2007) proposed a hierarchical model of website quality containing 12 first-order factors (i.e., informational fit-to-task, tailored communication, ease of understanding, intuitive operations, response time, visual appeal, innovativeness, emotional appeal, trust, online completeness, relative advantage) derived from the first study conducted by Loiacono (2000), further combined into five second-order factors (Kim & Stoel, 2004).

From the model, the Usefulness and Ease of Use constructs are adapted from the TAM. However, the instrument used for the WebQual model did not specifically include items for these two constructs. They were instead depicted as higher-level categories and were made up of several constructs. Overall, the items related to a combination of these constructs made up Usefulness and Ease of Use. The same applied to the Entertainment category, which was made up of four other constructs (Visual Appeal, Innovativeness, Emotional Appeal and Consistent Image). On the other hand, the instrument contained specific items relating to Trust and Response Time.

User Satisfaction and Continuance Intention have been adapted from the studies conducted by Bhattacharjee (2001) and Brown and Jayakody (2008). By integrating these two constructs, a more comprehensive model assessing the quality of airline websites and its impact on user satisfaction and user's intention to continue using the airline websites is thus produced.

4. RESEARCH METHODOLOGY

A paper-based survey was the predominant measuring device in our study. The target population for the study was domestic and international travellers from any region of South Africa. A proportionate stratified sampling approach was used to draw a relevant sample from the population to ensure that a representative sample is obtained. There were no specific demographic requirements (age, income and gender), apart from the fact that the respondents were required to have used the Internet before. The study

sample was limited to Second-year and Third-year undergraduate and postgraduate students from a research university. These education levels have been chosen since experienced students were more likely to have used an airline website before. The reason for choosing a student sample was because it is considered as a typical segment of Internet users and has been widely used in previous studies (Agarwal & Karahanna, 2000).

A list of airline websites, from four different regions of the world (Africa, Asia & Australia, Europe & Middle East and North America) was adapted from a study conducted by Law and Leung (2000) and included in the survey. These airline websites were chosen by the researcher based on the following set criteria:

- The website has to be offered in the English language.
- The website must have both a booking engine and a search engine.

Because the study was conducted in South Africa and most of the students at the research university were South Africans, all the South African airlines were included in the list for the African region. The justification for the inclusion of all South African airlines is that these students are most likely to have had an experience with an airline company from their own country.

4.1 Measurement development

The WebQual instrument has been used in prior studies and successfully measured user-perceived website quality in other industries (Barnes & Vidgen, 2001; Kim & Stoel, 2004). The 36-item scale used in the instrument was found to possess strong reliability and validity as a measure of website quality (Kim & Stoel, 2004) and thus, formed the basis for measuring website quality in our study.

4.2 Questionnaire structure & content

Our questionnaire consisted of three main sections.

- In the first section, the respondents were given a list of airline websites to choose from before conducting the evaluation.
- The second section of the survey contained multiple items of website quality (adapted from the WebQual instrument), user satisfaction and continuance intention, which the respondents used to rate the website they chose. Items related to satisfaction were adapted from Oliver (1980), Spreng, Mackenzie and Olshavsky (1996) and Anderson and Srinivasan (2003), and appropriately reworded to fit the airline website context. The continuance intention scale was adapted from Bhattacharjee's (2001) three-item measure of IS use intention and also, from work done by Brown and Jayakody (2008) and by Mathieson (1991).
- The final section of the questionnaire gathered non-sensitive demographic data such as the respondents' age, gender, education level, Internet usage experience, what they use the Internet for, the frequency of Internet use, the number of times they have travelled, and the booking channels they have used.

For all variables in our study we used a five-point Likert scale. This was seen as appropriate for the study as it was expected that some of the participants in the research sample would not be very knowledgeable in the area of airline websites.

The survey questionnaires were distributed to the targeted sample in computer

laboratories at the research university. On each day of the evaluation, the student sample who presented themselves at the computer laboratories were given the survey questionnaires and were asked to visit an airline website and evaluate it, based on their experience with the website. The survey questionnaire required respondents to assess the basic look and feel of the website. They were also given a list of e-commerce operations to conduct and were required to simultaneously evaluate the quality of the processes involved to perform these operations. Each student was required to choose and evaluate only one airline website from the list provided.

5. DATA ANALYSIS

5.1 Descriptive statistics

Table 1 shows the demographic breakdown of the respondents:

Table 1: Demographic breakdown of the respondents

Measure		Frequency	Percentage (%)
Gender	Entertainment (e.g. Online games)	82	
	Purchase goods/services online	60	
Age Group	Male	94	64
	Female	51	36
Air Travel Frequency	Other (Advertising, Communications [Skype, Chat, Email], Social Networking [Facebook], Product Searches, News)		
	18-27	137	96
	28-37	3	2
	38-47	8	6
	48-57	1	1
Current Level of Education	Never	1	1
	Once	6	4
	Twice	12	8
	Thrice	4	3
	Undergraduate (Second Year)	37	26
Flight Booking Channels	More than three times	112	79
	Undergraduate (Third Year)	39	28
	Online booking	95	
	Postgraduate Diploma	5	4
	Postgraduate (Honours)	50	35
	Postgraduate (Masters)	6	6
	Postgraduate (Doctoral)	23	1
Internet Experience	Someone else booked my flights for me	77	
	Not familiar at all	0	0
	Only know how to use e-mail	0	0
	Know how to search for basic information	5	3
	Know how to search for information relating to specific goods/services	41	29
Frequency of Internet Use	Know all aspects of the Internet	96	68
	Once a year	0	0
	Once a month	0	0
	Once a week	4	3
	Once a day	25	18
Internet Usage Activities	More than once a day	113	79
	General Surfing	130	
	Educational Research	127	

5.2 Reliability and validity checks

The instrument was evaluated using reliability and validity checks. Item Analysis was conducted on all the items relating to the constructs of website quality and those for constructs of User Satisfaction and Continuance Intention. The 5 second-order categories (Usefulness, Ease of Use, Trust, Response Time and Entertainment) and the 2 constructs (User Satisfaction and Continuance Intention) yielded Cronbach's Alpha values exceeding 0.80, with some even exceeding 0.90. Based on these results, the items for each of the constructs and second-order categories can be regarded as very reliable measures of the constructs/second-order categories and are thus acceptable. These results confirm the strong reliability of the WebQual instrument and are thus consistent with studies conducted by Loiacono et al. (2007).

Exploratory factor analysis was conducted to examine the validity of the constructs. EFA was conducted on all the variables relating to website quality at a cut-off value of 0.60. The Varimax Normalised Rotation method was used to re-align the factors (simplify the columns in the factor matrix), in order to improve the interpretability of the data.

5.3 Analysis and discussion

Data analysis proceeded in two stages. The first stage involved a Correlation Analysis using Spearman Rank Correlation and the second stage involved a Multiple Regression Analysis. The purpose of the correlation analysis test using Spearman Rank Correlation was to measure the strength of the relationships between the constructs/second-order categories in the research model.

Table 2 shows a summary of the Correlation Analysis, specifically for the hypothesised relationships in the research model.

Hypotheses	Constructs/Second-order Categories tested	Correlation Value (r value)	Relationship
H ₁	USEFULNESS vs. CONTINT	0.52	Positive
H ₂	USEFULNESS vs. USRSAT	0.59	Positive
H ₃	EASEOFUSE vs. USEFULNESS	0.50	Positive
H ₄	EASEOFUSE vs. USRSAT	0.63	Positive
H ₅	EASEOFUSE vs. TRUST	0.26	Positive
H ₆	EASEOFUSE vs. CONTINT	0.53	Positive
H ₇	TRUST vs. USRSAT	0.33	Positive
H ₈	TRUST vs. USEFULNESS	0.34	Positive
H ₉	TRUST vs. CONTINT	0.33	Positive
H ₁₀	RESPTIME vs. USRSAT	0.40	Positive
H ₁₁	RESPTIME vs. CONTINT	0.31	Positive

H ₁₂	RESPTIME vs. USEFULNESS	0.33	Positive
H ₁₃	ENTMNT vs. CONTINT	0.69	Positive
H ₁₄	ENTMNT vs. USRSAT	0.69	Positive
H ₁₅	USRSAT vs. CONTINT	0.67	Positive

Table 2: Summary of Correlation Analysis

The results of the correlation analysis from Table x show that all the constructs and second-order categories were significantly and positively correlated with each other ($p < 0.05$).

The second stage of hypothesis testing involved the running of a multiple regression analysis in order to identify the strength of the joint relationship of the independent variables with the dependent variables.

The results indicated that only Entertainment (p -value = 0.000004) and User Satisfaction (p -value 0.000011) were found to directly influence Continuance Intention. As expected, the entertainment side of an airline website (in terms of its visual appeal, innovativeness, the emotional appeal it provides to the user and the consistency of the image it projects to them) influences the user to continue using or perhaps make a future purchase (online flight booking or any other type of monetary transactions) from the website. These findings are in agreement with the view that some consumers seek to be entertained while they browse Internet pages and that if a website provides them with a certain level of entertainment they are more likely to continue browsing (Loiacono et al., 2007).

Results also showed that User Satisfaction has a positive effect on Continuance Intention (p -value = 0.000011) for an airline website. In other words, the more satisfied the user is with an airline website, the more likely he/she will continue using or making a future purchase (online flight booking or any other type of monetary transactions) from the website. These findings are consistent with the similar relationships identified by Jeong et al. (2001) and tested by Bhattacharjee (2001) and Lin et al. (2005). Similar results were also identified by Chiu et al. (2005) and in a more recent study by Brown and Jayakody (2008). These previous studies were conducted in different online contexts. The results of this research therefore add to the generalisability of the original hypothesis.

Usefulness has a positive effect on User Satisfaction with an airline website ($p = 0.0003688$), meaning that the more useful an airline website is (in terms of information fit-to-task, tailored communications, online completeness and relative advantage), the more satisfied the user is with the website. These results were consistent with previous research conducted by Rai et al. (2002) who observed that perceived usefulness positively influenced user satisfaction with an information system.

Furthermore, if users of the airline website perceive the website as easy to understand and provides them with intuitive operations that enhance their online experience, then they would be satisfied with the website. These results are consistent with studies conducted in other contexts such as e-learning systems (conducted by Sun et al., 2008) and health information websites (conducted by Kim & Chang, 2007), where perceived ease of use increases customer satisfaction with the website/online system.

Response Time was also found to have a positive effect on User Satisfaction with an airline website. These results were expected by the researcher since Internet bandwidth was a considerable issue within the university environment in which the study was undertaken. The faster the airline website would load, the more satisfied the user would be.

The fact that the airline website provides the user with some kind of entertainment (in terms of its visual appeal, innovativeness, the emotional appeal it provides to the user, and the consistency of the image it projects to them) increases their satisfaction with the website. Given the age distribution of the sample (see section 5.4), these findings were not surprising. A young sample may more likely to consider Entertainment as a major determinant of satisfaction with an airline website.

Results showed that the three independent variables (Ease of Use, Trust and Response Time) had a positive effect on the Usefulness of an airline website.

The multiple regression results also showed that Ease of Use has a positive effect on Trust with an airline website (p -value = 0.000003). The easier it is for the user to understand the airline website content and perform intuitive operations, he/she will have more trust in the website and feel more comfortable in conducting online e-commerce transactions on the website. These findings are consistent with a very recent study by Tung et al. (2008) where they investigated the association between perceived ease of use and trust in an electronic logistics information system. This shows the possible generalisability of the original hypothesis.

The data analysis revealed that there was support for only ten of the fifteen hypotheses. These findings provide a basis for refining the initial research model.

The strongest and most significant influences identified were those of Ease of Use \rightarrow Usefulness (p -value = 0.000001), Ease of Use \rightarrow Trust (p -value = 0.000003), Entertainment \rightarrow Continuance Intention (p -value = 0.000004), User Satisfaction \rightarrow Continuance Intention (p -value = 0.000011) and Entertainment \rightarrow User Satisfaction (p -value = 0.000118). The positive influence of Ease of Use on Usefulness was expected as this relationship has been heavily emphasised in previous studies, particularly those involving the Technology Acceptance Model by Davis et al. (1989). Literature also provided strong empirical evidence for the association between User Satisfaction and Continuance Intention. This relationship was further confirmed by the results of the current study (with a strong positive correlation of 0.67 and a p -value of 0.000011), within the context of the airline industry.

Amongst the five second-order categories of airline website quality, only Trust did not have an effect on User Satisfaction and Continuance Intention. This was quite surprising since it was expected that with online users being more security-conscious in this new century (Chu, 2001), trust would be a major factor for them in deciding whether they should continue to use the airline website.

6. CONCLUSION

Results indicate that online users seem to be very interested in the entertainment side of airline websites, more specifically in their visual appeal, innovativeness, emotional

appeal and consistent image. All the three hypotheses related to the Entertainment second-order category were supported. An implication that arises out of these results is that in order to target more online users, airline websites must focus more on the previously mentioned website features while designing and updating their websites.

7. REFERENCES

- Agarwal, R., & Karahanna, E. (2000). Time flies when you're having fun: Cognitive absorption and beliefs about information technology usage. *MIS Quarterly*, 24(4), 665-694.
- Ahn, T., Ryu, S., & Han, I. (2007). The impact of web quality and playfulness on user acceptance of online retailing. *Information & Management*, 44(3), 263-275.
- Aladwani, A. M., & Palvia, P. C. (2002). Developing and validating an instrument for measuring user-perceived web quality. *Information & Management*, 39(6), 467-476.
- Anderson, R. E., & Srinivasan, S. S. (2003). E-satisfaction and e-loyalty: A contingency framework. *Psychology and Marketing*, 20(2), 123-128.
- Babakus, E., Beinstock, C. C., & Van Scotter, J. R. (2004). Linking perceived quality and customer satisfaction to store traffic and revenue growth. *Decision Sciences*, 35(4), 713-737.
- Barnes, S. J., & Vidgen, R. T. (2000). *Information and interaction quality: Evaluating Internet bookshop web sites with WebQual*. Proceedings of the 13th Bled Electronic Commerce Conference, Bled, Slovenia, June 19-21, 2000.
- Bhattacharjee, A. (2001). An empirical analysis of the antecedents of electronic commerce service continuance. *Decision Support Systems*, 32(2), 201-214.
- Brown, I. T. J., & Jayakody, R. (2008). B2C e-commerce success: A test and validation of a revised conceptual model. *Electronic Journal of IS Evaluation* (Forthcoming)
- Buhalis, D. (2004). eAirlines: Strategic and tactical use of ICTs in the airline industry. *Information & Management*, 41(7), 805-825.
- Carlson, J., Voola, R., & Sinnapan, S. (2003). *Application of the WebQual instrument to three Australian B2C websites: An exploratory investigation*. Paper presented at ANZMAC 2003 Conference, Adelaide. Retrieved August 2, 2008 from http://www.smib.vuw.ac.nz:8081/WWW/ANZMAC2003/papers/OL09_carlsonj.pdf
- Chea, S., & Luo, M. M. (2005). *E-Service customer retention: The roles of negative affectivity and perceived switching costs*. Proceedings of the 11th Americas Conference on Information Systems, Omaha, NE, USA, August 11-14, 2005.
- Chiu, C.-M., Hsu, M.-H., Sun, S.-Y., Lin, T.-C., & Sun, P.-C. (2005). Usability, quality, value and e-learning continuance decisions. *Computers & Education*, 45(4), 399-416.

- Chu, R. (2001). What online Hong Kong travellers look for on airline/travel websites? *International Journal of Hospitality Management*, 20(1), 95-100.
- Combes, G. C., & Patel, J. J. (1997). Creating lifelong customer relationships: Why the race for customer acquisition on the Internet is so strategically important. *Iword*, 2(4), 1-15.
- Cyr, D., Bonanni, C., Bowes, J., & Ilsever, J. (2005). Beyond trust: Website design preferences across cultures. *Journal of Global Information Management*, 13(4), 24-52.
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35(8), 982-1003.
- Harison, E., & Boonstra, A. (2008). Reaching new altitudes in e-commerce: Assessing the performance of airline websites. *Journal of Air Transport Management*, 14(2), 92-98.
- Hatty, H., & Hollmeier, S. (2003). Airline strategy in the 2001/2002 crisis – the Lufthansa example. *Journal of Air Transport Management*, 9(1) 51-56.
- IATA WATS (2005). *The airline industry: Industry profile*. Retrieved August 12, 2008 from http://adg.stanford.edu/aa241/intro/airlineindustry_2006.pdf
- Jeong, M., Oh, H., & Gregoire, M. (2001). *An Internet marketing strategy study for the lodging industry*. Washington: American Hotel & Lodging Foundation.
- Kim, D., & Chang, H. (2007). Key functional characteristics in designing and operating health information websites for user satisfaction: An application of the extended technology acceptance model. *International Journal of Medical Informatics*, 76(11), 790-800.
- Kim, S., & Stoel, L. (2004). Apparel retailers: Website quality dimensions and satisfaction. *Journal of Retailing and Consumer Services*, 11(2), 109-117.
- Laudon, K. C., & Traver, C. G. (2002). *E-commerce - business, technology, society*. Addison Wesley: New York.
- Law, R., & Leung, R. (2000). A study of airlines' online reservation services on the Internet. *Journal of Travel Research*, 39(2), 202-211.
- Lin, J. C.-C., & Lu, H. (2000). Towards an understanding of the behavioural intention to use a web site. *International Journal of Information Management*, 20(3), 197-208.
- Liu, B. Q., & Goodhue, D. L. (2008). *An exploration of the hygiene and motivator aspects of WebQual constructs in predicting website reuse*. Proceedings of the 41st Hawaii International Conference on System Sciences, Big Island, January 7-10, 2008.

- Liu, C., & Arnett, K. P. (2000). Exploring the factors associated with web site success in the context of electronic commerce. *Information & Management*, 38(1), 23-33.
- Loiacono, E. T. (2000). *WebQual: A website quality instrument*. Unpublished Doctoral Dissertation University of Georgia, Athens.
- Loiacono, E. T., Watson, R. T., & Goodhue, D. L. (2007). WebQual: An instrument for consumer evaluation of web sites. *International Journal of Electronic Commerce*, 11(3), 51-87.
- Mathieson, K. (1991). Predicting user intentions: Comparing the technology acceptance model with the theory of planned behaviour. *Information Systems Research*, 2(3), 173-191.
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17(4), 460-469.
- Spreng, R. A., Mackenzie, S. B., & Olshavsky, R. W. (1996). A reexamination of the determinants of consumer satisfaction. *Journal of Marketing*, 60(3), 15-32.
- Sun, P.-C., Tsai, R. J., Finger, G., Chen, Y.-Y., & Yeh, D. (2008). What drives a successful e-Learning? An empirical investigation of the critical factors influencing learner satisfaction. *Computers & Education*, 50(4), 1183-1202.
- Supphellen, M., & Nysveen, H. (2001). Drivers of intention to revisit the websites of well-known companies: The role of corporate brand loyalty. *International Journal of Market Research*, 43(3), 341-352.
- Tung, F.-C., Chang, S.-C., & Chou, C.-M. (2008). An extension of trust and TAM model with IDT in the adoption of the electronic logistics information system in HIS in the medical industry. *International Journal of Medical Informatics*, 77(5), 324-335.
- Wan, H. A. (2000). Opportunities to enhance a commercial web site. *Information & Management*, 38(1), 15-21.
- Yoon, M. G., Yoon, D. Y., & Yang, T. W. (2006). Impact of e-business on air travel markets: Distribution of airline tickets in Korea. *Journal of Air Transport Management*, 12(5), 253-260.
- Yu, S.-F. (2008). Price perception of online airline ticket shoppers. *Journal of Air Transport Management*, 14(2), 66-69.