웹사이트에서의 고객만족과 충성도

Customer Satisfaction and Loyalty to Tourism Websites

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ABSTRACT

The main purpose of this paper is to investigate the relationship between website environmental characteristics (website characteristics, user characteristics, and external environments), satisfaction, trust and loyalty in tourism e-business. The following results were determined by verifying five hypotheses using LISREL. Website environments partially support perceived satisfaction and also perceived trust. Satisfaction has a strong effect upon perceived trust while satisfaction doesn't affect perceived loyalty. Trust significantly impacts perceived loyalty in tourism e-business.

Key Words: Tourism information website; loyalty; satisfaction; trust

INTRODUCTION

Interaction in the Internet environment has a lower quality than interaction in the off-line environment because buyer and seller are not together in the same place. S-H Kim et al. (2002) believe that problem of trust in the Internet environment is more important than off-line and trust is essential for a transaction.

Bakos (1997) and Strader et al. (1997) believe that a customer can reduce exchange costs and search costs through the Internet. However, loyalty to a website is also dramatically reduced because one mouse click will easily take the customer anywhere on the Internet.

J-M Ahn et al. (2001) believe that even though an Internet company can increase its number of customers, profit does not easily increase due to the low loyalty of customers.

Reichheld (1993) believes that loyalty is important because the retention of customers comes with a high potential for transaction over a long period of time. This loyalty is directly correlated with the success of a company, so it needs to be highly concentrated on the retention of current customers.

The purpose of this study is to investigate the relationship between website

environments (that is: website characteristics, user characteristics, and external environment), satisfaction, trust and loyalty in tourism e-business. An empirical analysis will be performed in order to verify these relationships within a conceptual framework. The results from this study can provide a differential competitive advantage and strategy for customer retention in the long term.

The target site selected for this study is the Cheju province website (www.provin.Cheju.kr) for tourism information, because it has an electronic commerce function. Therefore for the purpose of this study it is well suited for the analysis of relationship between satisfaction, trust, and loyalty.

LITERATURE REVIEW AND HYPOTHESIS

Ives et al.(1980) argued that 3-D (an environment, process, and system) analysis is required for a framework for studying information systems.

Internal environment, external environment (political, economic, social, cultural, educational, legal), organizational environment (organizational objective, task, structure, flexibility, management philosophy), user environment (primary user, intermediary), IS development environment (development method & technology, design work-forces and their characteristics, IS structure & management for development and maintenance), and IS operation environment (software, hardware, database, proc/doc, human resources of operation sector) need to be considered.

Based on the above Ives' framework, this study will investigate environmental characteristics of websites, such as website characteristics (IS development and operational environments), user environments, and external environments for tourism information. Most of the on-line traveling companies are small or medium size companies, so this particular organizational environment was excluded.

Before the detailed analysis, theoretical concepts about satisfaction, trust, and loyalty based on previous research will be explained. In Table 1, a summary of previous research was explained by independent variables, dependent variables, research results, type of websites, and subjects for the survey.

Jarvenpaa et al.(1999, 2000) argued that the reputation and of and trust in on-line traveling company websites have an influence on purchase intentions.

Environmental Characteristics

Website Characteristics

Porter and Millar (1985) and Palmer & Griffith (1998) argue that it is important to consider the user interface, because regardless of computer experience, any user can connect to a website for tourism information which is information-concentrated. System performance is also important to consider, because the provision of service is heavily reliant on the company computer system. It is important not to neglect the importance of the website content because products for tourism are more information-concentrated than

other products.

User Environment

S-J Yun (2000) from the study for role and formation of customer trust about on-line purchasing decisions, the user environment was a preceding factor in the formation of trust.

The user environment includes technical points (Internet experience and frequency for website users, technical acceptance level) and non-technical points (flow to and amusement by Internet, EC experience, regardless of IT).

External Environment

Kim & Prabhakar (2000) believe the external environment for a company includes 'word of mouth', 'reputation', and 'size' of their website. Uncertain perceptions by customers can be influenced by word of mouth, that is users talking about their experiences and giving hints to others for new products.

H-T Kim (1997) defines reputation as the outstanding characteristics or attributes of certain subjects about which other people think For instance, in an Internet shopping mall, when customers have transactions with companies with a good reputation, the risks perceived by customers are reduced. Eventually customers can perceive Internet shopping as a useful tool.

The size of a website refers to the amount of information and the numbers of visitors.

Table 1. Summary of previous studies
(Researchers / Indep. Var / Dep. Var./ Research Results / Type of Websites / Target)

1. Jarvenpaa et al. (1999, 2000)
 Independent variables: size of company, reputation
 Mediate variables: trust, risk
 Control variables: Internet usage & purchase frequencies, shopping amusement, attitude for computer, previous purchase experience
 Dependent Variables: Purchase Intention
 Results: Influence on independent & mediate variables (control variable is not significant).
 Type: Online bookstores, online traveling site
 Target: Student & non-student
2. Bhattacherjee(2002)
 Independent variables: friendliness of company
 Mediate variables: trust for online company
 Dependent Variables: Purchase intention
 Results: Influence on independent & mediate variables
 Type: Online bookstores
 Target: Students, users
3. Pavlou & Chellappa(2001)
 Independent variables: privacy, security
 Mediate variables: overall satisfaction of EC experience, reputation

Dependent Variables: Trust
Results: Influence on independent & mediate variables
Type: Overall Internet shopping
Target: Internet users
4. Pavlou(2003)
Independent variables: trust for e-retailer
Mediate variables: usefulness, ease of use, risk
Control variables: overall satisfaction of EC experience, reputation, frequency of EC
Dependent Variables: Real trade
Results: Influence on real trade for independent & mediate variables
(EC frequency was not significant).
Type: Online bookstores, General online business
Target: Students, Internet users

Satisfaction

'Cumulative customer satisfaction' is a result of overall evaluation, as it consists of individual experiences with each transaction. Transaction-specific customer satisfaction is a judgment of satisfaction, comparing expectation and result for individual transactions. Therefore, in this study, the concept of 'cumulative customer satisfaction' is used. Customer satisfaction in this paper is defined by Fornell et al. (1996) as an overall evaluation based on several transactions and usage experience within in a period of time.

Trust

A definition of trust by Whitener et al.(1998) is that trust for truster is a positive voluntary expectation of a trustee. Cheskin Research(1999) reported that trust of electronic commerce could be formed by: safe security, brand, search, satisfaction, presentation, and technology. This study argued that trust was a result of experience over a period of time.

Loyalty

Kolter et al.(1989) argued that loyalty could be defined as a tendency for 'loving' a specific brand and/or company. Rosenberg et al. (1983) believe loyalty is a critical component for company profits.

Griffin(1996) believed that if a company acquired loyalty from customers, the company can have six benefits: reducing marketing costs, transaction costs, turnover costs, and failure costs, increase of successful cross sales, and a more positive effect through word of mouth.

Desouza, (1992); Jones et al., (1995); Zeithaml et al., (1996) argue that loyalty as a qualitative index is more related to the profits of a company, than the market share as a quantitative index.

Reichheld (1993) believes an Internet site can survive if the website increased the loyalty of users in order to acquire customers in a highly competitive environment.

S-H Kim (2002) believes that in the Internet environment, stable and sustainable

loyalty can be formed by implementing a form of trust along with satisfaction Based on Kim's study, loyalty was investigated using satisfaction and trust in this paper.

Sesting the Hypotheses

Environment Characteristics and Satisfaction

Selz et al. (1998) propose that evaluation for websites includes ease of search, color, structure, and design problems such as ease of connection (technical problems), ease of understanding (content problems). In summary, websites for tourism information are required to demonstrate an easy search engine, ease in getting acquainted, and good information. Connection speed is also a primary factor for customer usability. Therefore, website characteristics will have a positive influence on the satisfaction and trust formation for users

C Park et al. (2001) and C-J Yun (2000) believe that high-frequency Internet users can have high satisfaction and trust because they may have good knowledge of, and high friendliness towards websites. Satisfaction from previous experiences of electronic commerce has a positive influence on trust of and satisfaction with a website.

In external environments, users can reduce perceived risks by using a website with a good reputation, so external environments will have an important role in satisfaction. Therefore, the following hypotheses can be made:

Hypothesis 1: Environment characteristics of website for tourism information will have a positive(+) influence on website satisfaction.

H 1-1: Website characteristics will have a positive(+) influence on website satisfaction for tourism information.

H 1-2: The user environment will have a positive(+) influence on website satisfaction for tourism information.

H 1-3: The outside environment will have a positive(+) influence on website satisfaction for tourism information.

Environment Characteristics and Trust

Adequate color and layout will increase usability of the search function in a website's characteristics. Cheskin Research(1999) argued that the usability of the search unction can increase the trust in a website.

Internet usage frequency and previous electronic commerce experience have positive influences on trust (S-J Yun, 2000). He also suggested that factors for the formation of trust included the reputation of the company, and the variety of product selection.

Ratnasinham(1998) argued that minimum legal conditions need to be specified to form trust in an Internet shopping environment. Expectation for legal protection can be defined as the expectation of a customer to be legally protected in an Internet shopping

environment (G-S Kim et al, 2002).

Outside environments will have positive influences on trust as determined from previous studies. Therefore, the following hypotheses can be made:

Hypothesis 2: Environment characteristics of a website for tourism information will have a positive(+) influence on website trust.

H 2-1: Website characteristics will have a positive(+) influence on website trust for tourism information.

H 2-2: The user environment will have a positive (+) influence on website trust for tourism information.

H 2-3: The outside environment will have a positive(+) influence on website trust for tourism information.

Satisfaction and Trust

Pavlou et al.(2001) and Kim et al. (2002) provided empirical results that satisfaction of an Internet shopping mall has a positive influence on trust.

Garbarin et al.(1999) said that the performance of service has a positive influence on customer satisfaction, and satisfaction has a positive influence on trust. Ganesan(1994) also confirmed this result in studying a relationship between manufacturers and distributors. S-H Kim(2002) also proved that satisfaction has a positive influence on trust.

Satisfaction in an Internet shopping mall will have a positive influence on trust as determined through previous studies. Therefore the following hypothesis can be made:

Hypothesis 3: Customer satisfaction of website for tourism information will have a positive(+) influence on website trust.

Satisfaction and Loyalty

Y-G Lee et al., (2002) believes a satisfied customer becomes a loyal customer. Satisfaction is a preceding factor of trust (G-H Cho, (1999), Y-G Lee et al. (2002), J-W Park et al. (2002) argue that customer satisfaction has a direct influence on customer loyalty in Hotel, food & beverage, or fast-food industries. Therefore customer satisfaction can have a high probability of determining a positive influence on loyalty.

Bakos (1997) believes that customer loyalty will be dramatically decreased in an Internet environment with low exchange costs. Selnes (1993) and Samuelsen et al.(1997) suggested that new concepts would be required in an Internet environment, which emphasized innovation and creativity. Therefore the question is raised of whether a satisfied customer will become a loyal customer. The results from previous studies by J-M Ahn et al., (2001), S-H Kim et al, (2002), J-Y Kim et al. (2002), J-Y Cho et al. (2002) showed that satisfaction will have a direct or indirect influence on loyalty.

If the customers of a website are satisfied, then they have a high probability of becoming loyal customers. Satisfaction in a website for tourism information will have a

positive influence on loyalty as determined through previous studies. Therefore, the following hypothesis can be made.

Hypothesis 4: Customer satisfaction with a website for tourism information will have a positive(+) influence on loyalty.

Trust and Loyalty

Garbarino et al.(1999) revealed that trust plays a mediate role in service and repurchase intentions. Loyalty based on customer trust can increase usage time on the Internet and reduce the turnover rate of a website. The role of trust has an influence on loyalty such as purchase beliefs, future repurchase intention, and words of mouth. S-H Kim et al.(2002) proved that the trust of a shopping mall for Internet users has a significant influence on loyalty. J-S Kim et al.(2002) also confirmed this result. Trust will have a positive influence on loyalty as determined by previous studies. Therefore, the following hypothesis can be made.

Hypothesis 5: Customer trust in a website for tourism information will have a positive(+) influence on loyalty.

RESEARCH METHOD

Research Model

A research model is proposed in Figure 1. In this model, environmental characteristics of websites for tourism information (website characteristics, user characteristics, and external characteristics) have an influence on satisfaction (H1) and trust (H2). Second, satisfaction has an influence on loyalty (H4). Finally, trust has an influence on loyalty (H5).
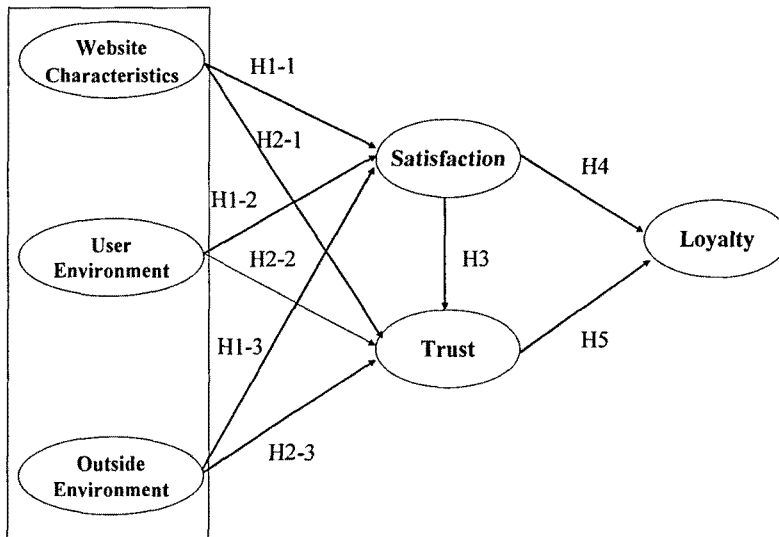
T.I. Website Environ. Char.   Figure 1. Research Model

Definition of Variables

Independent variables were selected as environmental characteristics of a website, mediate variables such as trust and satisfaction, and the dependent variable was loyalty.

Environmental characteristics of a website include: website characteristics, the user environment, and the external environment. 'Website characteristics' means: 'design', 'technology', and 'content' that can influence trust and satisfaction. 'Design' considers consistent usability, flow (commitment), freshness, clarity, information search capability, color, and layout. In this study, information search, color, and layout were selected as elements of design. 'Technology' means response time, connection, and system stability. 'Content' means speed, superior quality, understanding, clarity, and provision of various sources.

The 'user environment' means technical points (Internet experience) and non-technical points (Internet flow). The technology acceptance level means the accommodation level, whether accepting a new information technology (IT) or not, for users. (for example, new kinds of soft or hardware etc.) This measurement includes, intention of new IT, acceptance level of newness, and preferable experience in Internet usage (G-S Kim, et al., 2002).

Table 3. Definition of Variables

Variables		Definition	Sources	# of Items
W	Website Design	Ease search, color,	Shankar et al., 2002; C-Y Lee et al., 2001;	3

			layout	J-W. Kim, 2000; Cheskin, 1999; Davis et al., 1998	
E B S I T E E N V .	Char.	Technology	security, response time, accessibility	C-Y Lee et al., 2001; Pavlou et al., 2001; Cheskin, 1999	3
		Contents	Good Information, Ease of understanding	Shankar et al., 2002	3
	User Env.	Technical	Internet Experience, Internet Usage, TAM	C-W Lee et al., 2002; Shanker et al., 2002	3
		Non-technical	Flow, Amusement, EC experience	S-J Cho, 2002; Shanker et al., 2002	3
	Outside Env.	Words of Mouth (WoM)	Usefulness, usability, & trust for WoM	H-G Lee et al., 2002	3
		Websites Reputation	Reputation, superior, perception,	S-H Kim et al., 2002: Gallaugher, 1999; Steinfield et al., 1999; Shankar et al., 2002	3
		Company Scale	# of visitors, quantity of info., # of products	Shankar et al., 2002; H-G Lee et al., 2002	3
Satis-faction	Overall satisfaction of website, satisfaction of website visit & usage			Churchill et al., 1982; Fornell et al., 1996	3
Trust	Service belief, belief about superior service, product belief			Garbarino et al., 1999; Ganesan, 1994: Jarvenpaa et al., 1999; C-Y Lee et al., 2001; Shanker et al., 2002; Grabner-Krauter, 2003	3
Loyalty	Repeated visit, Positive words of mouth, recommend to others			S-H Kim et al., 2002; Dick et al., 1994; C. Park, 2000; S-L Han et al., 2000; N-W Choi et al., 2001	3

'Flow' on the Internet can be defined as, 'a perceived involvement by situational and fundamental existence of self'. A perceived involvement has an influence upon the effort in understanding the purchasing situations of customers. In this study, 'flow on the Internet' was measured by attention to the Internet, curiosity, and the relationship to customer lifestyle.

'Reputation' was defined as the perception of, and discussion by customers of a website outside the actual website environment.

'Satisfaction' is defined as the overall satisfaction of customers based on website experience.

'Trust' is defined as the level of belief in a website.

'Loyalty' is defined as a possibility of repeated usage of a specific Internet shopping mall in the future.

The summary of operational definitions and sources are provided in Table 3.

Survey and Data Collection

Survey

The questionnaire form was developed using previous research that was mentioned in the background study. (See Background and Literature Review.) The questionnaire

form was constructed so that each variable has 3 questions (items) in Table 3. A pretest was conducted with 10 subjects and corrected some problems in the meaning and expressions on the survey form. The Likert scale was used with a 5-point scale for each question. The survey was conducted for 35 items including demography characteristics.

Data Collection

The website from Cheju, which has local autonomy for tourism information (www.provin.Cheju.kr) was selected. The reason for this selection is that electronic commerce for this website is possible when making a real-time reservation. So this kind of website is suitable for the goal of this study, which has a focus and will analyze the relationship between satisfaction, trust, and loyalty.

Junior students studying tourism management were selected from Pusan and Kangwon province as subjects. They were asked to do a website search for 30 minutes and make a reservation for a honeymoon vacation at Cheju Island for 2 nights and 3 days. Once these tasks were completed, the subjects were asked to answer the survey form.

A frequency analysis for demographic characteristics was conducted. Based on a factor analysis for each variable, the Structural Equation Method (SEM) was used for the relationship between variables.

ANALYSIS AND RESULTS

Characteristics of Sample

The subjects for this experiment were college junior students majoring in tourism management. The total numbers of subjects was 123 in Kangwon province and 127 in Pusan province. A total of 270 questionnaire forms were collected, but only 250 were used due to some incomplete forms. Male subjects made up 101 of the total and there were 149 female subjects.

Reliability of Measurement Instrument and Validity Analysis

Reliability Testing

In this study, Cronbach's 'Alpha Coefficient for an Internal Consistency' was used to verify the reliability. Cronbach's Alpha Coefficient is a measurement of identical concepts for multiple items and is used to increase the reliability of finding items that decrease reliability, and then exclude those items. The reliability for each variable was over 0.7 except for website characteristics. Table 4 shows a reliability result for six factors.

Table 4. Result for reliability analysis

	Out. Env. Char.	Satis.	User Env.	Trust	Loyalty	Website Char.
Cronbach's Alpha	0.8883	0.9209	0.7880	0.8320	0.8320	0.5936
Standard Alpha	0.8843	0.9209	0.7898	0.8330	0.8370	0.5990

Validity Testing

A factor analysis using principal component analysis with the Varimax Rotation Method was performed to verify the validity of this study. The result of the validation shows that each eigen value (see Table 6) for each factor was over 1.0 and the factor loading shows reasonable values.

The degree of explanation by variance shows a total of 71.435% for the six factors. Each factor is shown as the research originally planned. However, items for the external environment characteristics, and the website characteristics were excluded because they are mixed. Reanalysis of this data displays the six factors such as: outside environment characteristics, website characteristics, satisfaction, user characteristics, trust, and loyalty. Results of the factor analysis are showed in Table 5.

A correlation analysis was performed to check for a relationship between variables, to verify the influence of each independent variable upon loyalty. The correlation analysis shows that all variables are related, except for the user environment. Results for the correlation analysis are showed in Table 6.

Table 5. Validity analysis by factor analysis

Classfication	Outside Env.	Satisfaction	User Env.	Trust	Loyalty	Website Char.
Words of Mouth1	.915	-2.882E-03	3.159E-02	.137	7.288E-02	3.346E-02
Words of Mouth2	.902	.179	5.863E-02	5.066E-02	4.853E-02	.146
Words of Mouth3	.902	4.237E-02	-2.978E-03	.105	-1.367E-02	.137
Good Reputation	.532	.142	9.693E-03	.485	.154	.192
Usage Satisfaction	6.455E-02	.887	.102	.171	9.674E-02	.162
Visit Satisfaction	8.020E-02	.884	8.867E-02	.221	.147	.119
Overall Satisfaction	.101	.847	.121	.213	7.700E-02	.180
Internet Exp.	.111	2.037E-02	.790	6.068E-02	4.091E-02	2.099E-02
Internet Use Freq.	-3.262E-03	2.873E-02	.763	.117	-.111	.148
Internet Use Trend	.201	5.727E-02	.744	-1.499E-02	.130	-.241
Internet Enjoyment	-8.169E-02	.138	.704	-2.631E-02	-2.653E-02	.156
Internet Flow	-9.527E-02	8.817E-02	.631	.212	-5.279E-02	.212
Service Trust	7.954E-02	.190	.180	.834	5.377E-02	.166
Product Trust	.172	.187	.101	.820	5.607E-02	3.009E-02
Service Excellence Accept	.124	.465	2.810E-02	.657	7.114E-02	.256
Recommendation	8.644E-02	.101	2.295E-02	4.078E-02	.873	2.587E-02

Friendly	1.133E-02	3.704E-02	-7.061E-02	.144	**.862**	3.422E-02
Revisit	4.020E-02	.125	9.355E-03	-9.279E-03	**.830**	7.893E-02
Color	5.930E-02	7.087E-02	8.741E-02	6.835E-02	.182	**.813**
Construct	.236	.238	.107	.129	-8.061E-02	**.621**
Connect Speed	.157	.258	.129	.240	4.719E-02	**.527**
Eigen Value	5.887	2.641	2.302	1.925	1.162	1.084
Variance Ratio	28.032	12.576	10.962	9.168	5.533	5.164
Tot. Var. Ratio	28.032	40.608	51.570	60.738	66.271	71.435

Table 6. Result for Correlation Analysis

Pearson Coeff.	Website Cha.	Out. Env. Cha.	User Env.	Satis.	Trust	Loyalty
Website Cha.	1.000					
Out. Env. Cha.	.363**	1.000				
User Env.	.245**	.111	1.000	1.000		
Satisfaction	.462**	.256**	.225**	.554**	1.000	
Trust	.464**	.369**	.240**		.176**	
Loyalty	.162*	.148*	.008	.233**		1.000

** correlation coefficient was significant in 0.01 level and
* correlation coefficient was significant in 0.05 level(both sides).

Hypotheses Testing

Testing of the Research Model

For the hypothesis testing, covariance analysis was performed to determine how the model and parameters fit together. A structural model of this study is shown in Figure 2.

Measurement for each parameter was used as a value that was calculated from the factor score using factor analysis. Fitness of a suggested model was shown as $x2=59.48$, df=158, p=.000, RMESA=.07, GFI=.91, AGFI=.85, CFI=.92, NFI=.91. All of GFI, CFI, and NFI were over .90 except AGFI=0.85, so it is satisfactory for explaining a cause-effect relationship between the variables of the units of study.

Testing of Research Hypotheses

As a result of the verification for hypothesis 1, hypothesis 1-1 (which was if the perception of a websites' characteristics is positive, then satisfaction will be higher) was accepted with a path efficient which was 0.38, and the t-value was 3.24(p<0.01). This result agrees with the result from Kim et al.(2002) which explains that the factor for enhancing system capability to an easier connection for the customer created a positive influence in customer satisfaction.

Hypothesis 1-2 (if Internet experience, frequency, and commitment (flow) for customers were high, then satisfaction will be high) was accepted with a path efficient of

0.21 and a t-value of 2.02(p<0.01). This result agrees with the result from Yun (2000) and Park et al.(2001).

Hypothesis 1-3 (if the user perception of the outside environment such as word of mouth and reputation for a website is positive, then customer satisfaction will be higher) was rejected with a path coefficient of 0.10 and a t-value of 1.11(p>0.05). This result agrees with the result from Kim et al.(2002).

As a result of the verification for hypothesis 2, hypothesis 2-1 (which was if the perception of website characteristics is positive, then trust will be higher) was rejected with a path efficient of 0.01 and a t-value of 0.90(p>0.05). This result agrees well with the results from Kim et al.(2002) and Ratnasinham (1998).
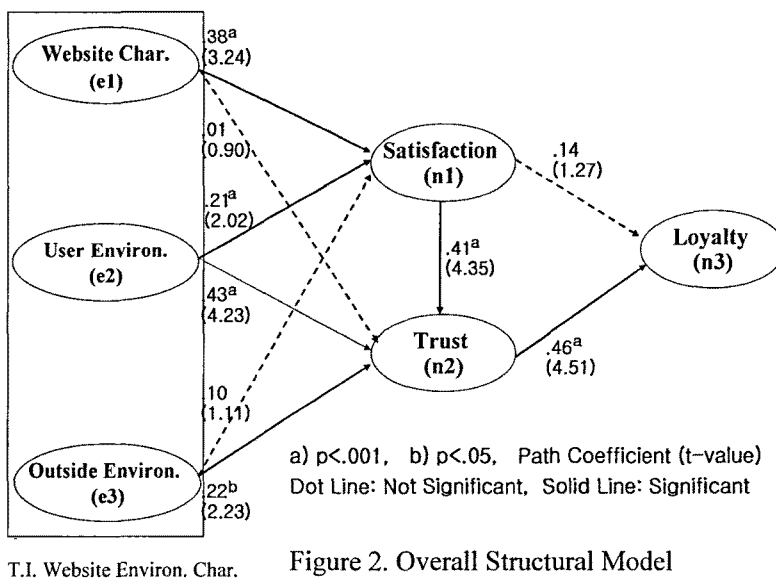
T.I. Website Environ. Char.   Figure 2. Overall Structural Model

Hypothesis 2-2 (if Internet experience, frequency, and commitment (flow) for customers is high, then customer trust will be high) was accepted with a path efficient of 0.43 and a t-value of 4.23(p<0.01). This result agrees with the results from Yun (2000) and Park et al.(2001).

Hypothesis 2-3 (if user perception of an outside environment such as word of mouth and reputation for a website is positive, then customer trust will be higher) was rejected with a path coefficient of 0.22 and a t-value of 2.23 (p<0.01). This result agrees well with the results from Ratnasinham (1998) and Kim et al.(2002).

As a result of the verification for hypothesis 3, hypothesis 3 (customer satisfaction with a website for tourism information will have a positive influence on trust) was accepted with a path efficient of 0.41 and a t-value of 4.35(p<0.01). This result agrees the results from Kim et al.(2002), Garbarin et al.(1999), Ganesan (1994), and Pavlou et al.(2001).

As a result of the verification for hypothesis 4, hypothesis 4 (customer satisfaction

with a website for tourism information will have a positive influence on loyalty) was rejected with a path efficient of 0.14 and a t-value of 1.27($p > 0.05$). This result was not in agreement with the previous result. However, satisfaction was an indirect influence on loyalty by a mediate role of trust.

As a result of the verification for hypothesis 5, hypothesis 5 (customer trust of a website for tourism information will have a positive influence on loyalty) was accepted with a path efficient of 0.46 and a t-value of 4.51($p < 0.01$). This result agrees with the results from Kim et al.(2002), Kim et al.(2002), and Garbarin et al.(1999).

Table 7. Relationship Results for Research Hypotheses

Hypotheses		Path	Path coeff.	t value	decision
H1	H1-1	Website Char. → Satisfaction	.38	3.24**	accept
	H1-2	User Env. → Satisfaction	.21	2.02**	accept
	H1-3	Outside Env. → Satisfaction	.10	1.11	reject
H2	H2-1	Website Char. → Trust	.01	0.90	reject
	H2-2	User Env. → Trust	.43	4.23**	accept
	H2-3	Outside Env. → Trust	.22	2.23*	accept
H3		Satisfaction → Trust	.41	4.35**	accept
H4		Satisfaction → Loyalty	.14	1.27	reject
H5		Trust → Loyalty	.46	4.51**	accept

x^2=59.48, d.f=158, p=.000, GFI=.91 AGFI=.85 RMESA=.07 CFI=.92 NFI=.91 *
$p < 0.05$ ** $p < 0.01$

CONCLUSION AND DISCUSSION

The main purpose of this study was to determine which factors (user satisfaction, trust, and loyalty) can influence a website for tourism information under local autonomy, which is also a public company.

First, the environment characteristics of a website for tourism information were investigated. Second, which characteristics can influence customers' satisfaction, and trust formation. Third, determining that once satisfaction and trust are formed they can have an influence on loyalty.

To accomplish these goals, the target selected was a website of the Cheju provincial office in South Korea which has the capability for electronic commerce. A survey was conducted among 250 college students as subjects and then subjected to an empirical analysis.

The results were determined using a structural equation model to test hypotheses:
1) Hypothesis 1 (environmental characteristics of a website for tourism information can have a positive influence on satisfaction formation) was partly accepted. Both website characteristics (H1-1) and user environment (H1-2) have a significant influence on satisfaction formation, so this result was in agreement with previous research. However, outside environments (which means words of mouth and

reputation) do not have a significant influence on satisfaction formation, thus this result indicates that words of mouth for a website was not enough and the reputation of local autonomy did not have a significant effect on users' satisfaction.

2) Hypothesis 2 (environmental characteristics of a website for tourism information can have a positive influence on trust formation) was partly accepted. If the perception of user environments (H2-2) and outside environments (H2-3) is positive, then trust will be higher. However, website characteristics (H2-1) were not significantly based on trust formation. The history of electronic commerce at a website for tourism information, of local autonomy, is just beginning. So the indication of significant influence on exterior environments (word of mouth and reputation) is a promising capability that is still developing.

3) Hypothesis 3 (user satisfaction with a website for tourism information can have a positive influence on trust formation) was accepted. This result agreed with the private sector of companies using Internet shopping malls (Kim, 2002). It is a supporting argument that satisfaction with a website is a preceding factor for trust. This suggested that it is better to design the color and structure of a website for tourism information and to consider a system that has a high-speed connection in providing higher satisfaction with a website for customers. If marketing and public image are well integrated for experienced Internet customers, the formation of trust will be higher.

4) Hypothesis 4 (user satisfaction with a website for tourism information can have a positive influence on loyalty) was not accepted.

5) Hypothesis 5 (trust in a website for tourism information can have a positive influence on loyalty) was accepted. The result of hypotheses 4 and 5 shows even though customer satisfaction will play a key role on a retention (continuous transaction) relationship for a website for tourism information, trust needs to be cultivated along with satisfaction. In this way, a more stable and long-term loyalty can be formed and sustained. It is no argument that user satisfaction is a primary concept in marketing, but trust that can affect the formation of loyalty is a very important variable in an empirical analysis of this study.

The issue of trust is more important in an Internet environment than in a real environment, as it is reconfirmed that trust for each transaction is essential.

This study tried anew to demonstrate a relationship analysis between satisfaction, trust, and loyalty to a website for tourism information, so it is possible to indicate a direction for development in the tourism information field.

NOTE: Most customers in Korea are not willing to supply their credit card numbers. Instead they prefer to pay on the Internet by wire transfer from a bank, or use the Korean 'Telebank' system. Therefore at the beginning of a transaction it is not automatically necessary to supply a credit card number. (Once a transaction is completed, a teller from reserved hotel, or car-rental company will give a confirmation call.) The use of this kind of

optional payment system is a notable difference between the Korean market and that of the USA.

LIMITATION AND FUTURE STUDY

Regardless of the good intentions of this study, there are some shortcomings. These limitations are as follows:

1) The subjects targeted were college students, and therefore in a very limited job category.

2) The website targeted was limited to a single, specific kind of website, so it will be necessary in future studies to broaden the scope to include different, or general types of websites. Also it is possible to see a difference between the public and private sectors in relation to company service providers.

In the near future, it will be necessary to overcome these limitations, so that a direction for the development of the tourism information field can be suggested in more detail.

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