A Behavioral Model of Consumer's Usage of Travel Blogs

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Abstract: This study aims to construct a behavioral model of consumers' usage of travel blogs and validate the relationships among website experiences, information recommendations, message trust, and behavioral intentions. The subjects were Internet users that have browsed travel blogs, and convenience sampling was adopted. Statistical analyses included descriptive statistics and Structural Equation Modeling (SEM). Research findings demonstrated that there is a direct correlation between information recommendations and message trust. Website experiences influence behavioral intentions after affecting message trust. With information recommendations, the original significant relationship is replaced. In conclusion, website experiences can enhance consumers' behavioral intentions. Information recommendations and enhancement of consumers' message trust should be considered to reinforce future behavioral intentions. The findings of this study can serve as reference for future studies.
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1. Introduction

With the progress of information technology and the prevalence of Internet technology, consumers can share their emotions on the Internet through World Wide Web (Plant, 2004). Blogs are public and rapid communication channels, and individuals can acquire the information they need in a short time by sharing information with other consumers (Pan, MacLaurin & Crotts, 2007). Therefore, blog related studies have become critical in modern marketing fields.

In recent years, the purposes of Internet usage have changed significantly, and Internet users have become accustomed to the convenience of the immense resources on the Internet. Some tourism products are intangible services, and when consumers are planning for a trip, they cannot experience and examine the quality of such products in advance. Thus, they would search for related information beforehand (Litvin, Goldsmith & Pan, 2008), and share their experiences after the trip, which may attract other people to the destinations (Zarem, 2000; Pan et al., 2007). Therefore, it is important for marketing personnel to recognize information that influences consumers the most, the factors that affect consumers' information search behaviors prior to making a purchase decision, and the influences of these factors on behavioral intentions (Novak, Hoffman & Yung, 2000).

In the upcoming trend of an experience economy, experiences become important factors to understand consumption behaviors (Holbrook & Hirschman, 1982; Addis & Holbrook, 2001). Experiences emphasize fun during the processes of searching and browsing (Novak, Hoffman & Duhachek, 2003). However, consumers have different feelings, thus, their experience would vary (Pine & Gilmore, 1998). Therefore, how to satisfy differnet types of information searches by website experiences are issue for future studies.

In addition, Internet information and communication channels are constantly increasing. When consumers lack information or experiences for making purchase decisions, effective information recommendations appear more realistic and realiable to them, as compared with product informaiton or advertising (Herr, Kardes & Kim, 1991). The recommended products are twice as likely to be selected than those that are not recommended (Senecal & Nantel, 2004). In other words, the higher the message trust, the higher the consumers' purchase intentions, contrarily, the lower the trust, the lower the consumers' purchase intentions (Gefen, 2000). Thus, subjective preferences constructed by website experiences will reduce consumers' uncertainties and further influence their trust (Gefen, 2000). Behavioral intentions are a reliable measurement variable to predict consumers' future usage (Hu et al., 2000).

Therefore, recommendations and trust are signifiacnt factors in information search behaviors, as they quickly ease users' uncertainties and further affect their future intentions.

Past researches on blogs have neglected analysis from the perspective of consumers' personal feelings. Therefore, this study attempts to construct a behavioral model of consumers' usage of travel blogs to explore whether website experiences and information recommendations of blogs would influence behavioral intentions through message trust.

2. Conceptual framework

Fishbein and Azjen proposed the Behavioral Intention Model in 1975. In this model, information acquired by personal behavior serves as psychological state evaluations of overall cognitive assessments, and influences consumers' approach or avoidance of the purchasing environment. This study probes into the behavioral model of consumers' usage of travel blogs. Therefore, the theoretical base of the model in this study, as shown in Figure 1, is based on Behavioral Intention Model, as proposed by Fishbein and Azjen (1975).
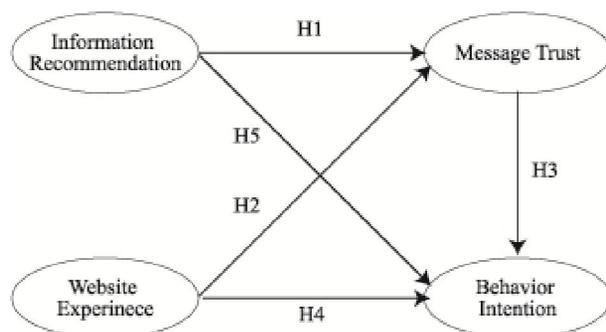

Figure 1. The conceptual framework.

2.1 Information recommendations vs. message trust

Regarding information search behaviors in the tourism market, when consumers cannot judge the quality of the products before a purchase, they tend to rely on past travel experiences. Without sufficient experiences or knowledge, they will construct their trust based on reliable experts' information or a third party's consumption experiences in order to have further positive expectations of the products and service quality (Senecal & Nantel, 2004; Martin & Camarero, 2005; Doyle, 2007). Therefore, high trust in recommendation sources would result in higher purchase intentions of consumers (Gefen, 2000).

Past studies indicated that due to the rapid communication speed of the Internet, information

sources are a factor of online trust (Bart, Shankar, Urban, and Sultan, 2005), and blogs are an important modern interactive platform of information recommendations. Through use experience or related experiences of others, individuals can identify with certain products and share their experiences and information recommendations, which are more convincing and realistic than messages from mass media or advertising (Herr et al., 1991; Smith, Menon and Sivakumar, 2005). Hence, information recommendations on blogs will enhance consumers' decision-making and influence their trust.

2.2 Website Experiences vs. Message Trust

No two people can experience the same experiences since experiences exist in the mind, and the value created depends on the positive or negative trust in things they have experienced (Chaudhuri & Holbrook, 2001). Likewise, cognition of website experience patterns can result in trust or distrust.

According to past researches, most consumers are unwilling to expose personal information on websites. As consumers have more uncertain environmental factors, trust becomes more important (Gronroos, 1994). By interacting online, consumers recognize that the websites provide customized contents or services, thus, they have positive expectations or predictions for future behaviors and construct trust (Doney & Cannon, 1997). However, very few past studies on blogs have probed into the issue from the perspective of experience. Therefore, this study attempts to explore consumers' trust intentions regarding information on travel blogs experiences from the perspectives of website experiences and message trust.

2.3 Message Trust vs. Behavior Intentions

Many researches on trust have indicated that trust plays an important role, and is key to browsers' mutual communications and information sharing (Leimeister, Ebner & Krcmar, 2005). There is also a significant correlation between trust and behavioral intentions (Chaudhuri & Holbrook, 2001; Lee & Turban, 2001). In addition, related tests determined that trust is a mediating variable (Auh, 2005).

Trust influences browsers' attitudes and behavioral intentions when they face an Internet environment (Lin, 2006; Wu and Tsang, 2008). It can effectively reduce the complexity of consumers' decision-making when considering various possible results and predicts consumers' specific behavioral intentions (Gefen, 2000; Coulter & Coulter, 2002). After reinforcing their trust on websites, Internet users become real consumers, and their consumption intentions are influenced (Dayal, Landesberg and Zeisser, 1999). It can be inferred that blog users' trust

can lead to positive behavioral intentions in the future.

2.4 Website Experiences vs. Behavior Intentions

To experience is to create unforgettable experiences and will influence present and future behaviors (Fishbein & Ajzen, 1975). With Internet platforms, consumers increase their experiences through websites, thus, have more positive attitudes toward the websites (Bruner & Kumar, 2000). It is a key factor that influences consumers' intentions.

Many studies have indicated that consumers' decision-making processes and the ultimate purchasing behaviors are usually behavioral reactions to specific experiences (Holbrook & Gardner, 2000). Therefore, if Internet companies can create experiences and allow consumers to recognize their search and experience patterns on websites, the consumers would have a cognitive reaction, and those without demands would also be attracted. The psychological reaction will influence consumers' future behavioral intentions (Zarem, 2000).

2.5 Information Recommendations vs. Behavior Intentions

When selecting products, consumers often seek advices from others' experiences, recommendations, and support, and generate future behaviors (Daneshvary & Schwer, 2000; Doyle, 2007). Online comments affect the beliefs, cognitive attitudes, and actual decision-making of the message receivers (Chatterjee, 2001). According to Senecal and Nantel (2004), regarding the influences of online recommendations on consumers' purchase of online products, individuals who purchase products upon recommended sources are twice the number of those who do not have recommendation sources. Thus, this study proposes the hypothesis that information recommendations do influence behavioral intentions.

Based on above, this study develops the hypotheses as below:
H1: Bloggers' Information Recommendation directly influenced Message Trust.
H2: Bloggers' Website Experience directly influenced Message Trust.
H3: Bloggers' Message Trust directly influenced Behavior Intention.
H4: Bloggers' Website Experience directly influenced Behavior Intention.
H5: Bloggers' Information Recommendation directly influenced Behavior Intention.

3 Research methods
3.1 Questionnaire collection

This study aimed to probe into the behavioral model of consumers' usage of travel blogs. The subjects were Internet users that had searched for tourism information provided by Wretch blog (http://www.wretch.cc/blog) in the past year. Data collection was based on questionnaire surveys. Since the population cannot be defined, online questionnaire survey was conducted by convenience sampling, instead of random sampling. Internet users who have browsed tourism experiences on Wretch blogs were invited to fill out questionnaires on line, and the respondent rate was increased through interpersonal snowballing and e-mails. After eliminating invalid questionnaires with overly consistent or incomplete answers, 400 valid questionnaires were retrieved.

3.2 Measurements

Four instruments were used in this study to gather information on travel consumers' perceptions of information recommendation, website experience, message trust, and behavior intention. (a) The information recommendation scale, a modified version of Herr et al.(1991) and Pan et al.(2007), there is 4 items in this scale. (b) website experience scale was a modified version of Schmitt(1999), there is 5 items in this scale. (c) message trust scale was a modified version of Gefen (2000), there is 5 items in this scale. (d) behavior intention scale was a modified by Fakeye and Crompton(1991), there is 4 items in this scale. All items of the first four parts are measured by a 5-point Likert-type scale from 'strongly disagree (1)' to 'strongly agree (5)'.

3.3 Analysis

To better understanding of the complex relationships among constructs and variables, structural equation modeling (SEM) is used to test theoretical hypotheses (Schumacker & Lomax, 2004). LISREL 8.80 software was used to run the proposed model. For assessment of fit for the proposed model, this study took the suggestions of Byrne (1998), Chou and Bentler (1995), Jöreskog and Sörbom (1993), and Hair, Black, Babin, and Anderson (2010), that the proposed model be evaluated from overall model fit as well as fit of internal structure. Absolute fit indices: chi-square(χ^2), goodness of fit index (GFI), root mean square error of approximation (RMSEA). Incremental fit indices: non-normed fit index (NNFI) and comparative fit index (CFI). Parsimony fit indices: parsimonious normed fit index (PNFI) and normed chi-square(χ^2/df).

4 Results
4.1 Sample characteristics

The characteristics of valid for the study were 400. Over 52.8% (n = 211) of our sample was female, while 47.3% (n = 189) was male. Those whose ages were between under 19 years old account for 8.8% (n = 35), while those who fall between 20 and 24 years old account for 45.5% (n = 182), while those who fall between 25 and 30 years old account for 23.5% (n = 94), while those who fall over 30 old account for 22.2% (n = 89). Overall, younger respondents (aged between 20 and 30 years old) account for 69% of the sample. Most of the respondents in the sample have used the blogs under 1 hour (53.5%, n = 214). Over 30.2% (n = 448) in this survey have used the Internet for over 3 years, while those who fall between 1 and 3 hours account for 38% (n = 152), while those who fall over 3 hours account for 8.5% (n = 34).

4.2 Structural model

First, the negative variables in the error items of the model estimation are examined. According to Figure 2, normalized parameters of the error items are 0.40~0.76, and there are no negative variables, which indicates that the survey meets the statistical assumption. With regard to the measurement of structure, normalized parameters of λx and λy are 0.49~0.77, respectively, which are not above the threshold of 0.95, and thus, meet the statistical assumption. Finally, the possibility of significant standard deviations is examined. In the model, the standard deviations are 0.03~0.11, and there are no significant standard deviations, which meets the statistical assumption. Based on the above, there are no offending estimates in the data of this model, and the overall model fit is validated.

As for the validation of the five hypotheses in this study, $\chi^2_{(129)} = 262.62$, ($p = 0.0$) in the absolute fit measures meet the significance level according to the measurement of overall model fit. It demonstrates that there is a gap between the covariate matrix of the model in this study and that of the empirical data, hence, the model is rejected, as χ^2 is easily influenced by large samples and the statistics have shown that significant other measures should be considered. Absolute fit index, GFI, is 0.93 and is acceptable (0.90), which demonstrates that the model of this study is acceptable. RMSEA is 0.051, below the acceptance value (0.08), which indicates that this model is acceptable. Regarding the relative fit index, NNFI is 0.97, which is above acceptance value (0.90) and demonstrates that the model is acceptable. CFI is 0.97, which is above the acceptance value (0.90) and demonstrates that the model is acceptable. With regard to the Parsimonious Fit Measures, PNFI is 0.80, which is above the acceptance value (0.5) and shows that the model is acceptable. χ^2/df is 2.04,

which is below the acceptance value (3), and indicates that this model is acceptable.

According to the parameter estimation shown in Figure 2.: (1) the analytical result of the influence of information recommendations on message trust shows that the completely normalized coefficient is 0.46 ($t = 4.30$, $p<.05$), and is significant, thus, H1 is supported; (2) the analytical result of the influence of website experiences on message trust demonstrates that the completely normalized coefficient is 0.20 ($t = 1.97$, $p<.05$), and is significant, thus, H2 is supported; (3) the analytical result of the influence of message trust on behavioral intentions shows that the completely normalized coefficient is 0.32 ($t = 3.88$, $p<.05$), and is significant, hence H3 is supported; (4) the analytical result of the influence of website experiences on behavioral intentions shows that the completely normalized coefficient is 0.13 ($t = 1.40$, $p>.05$), and is insignificant, thus, H4 is not supported; (5) the analytical result of the influence of information recommendations on behavioral intentions shows that the completely normalized coefficient is 0.44 ($t = 3.98$, $p<.05$), and is significant, hence, H5 is supported.
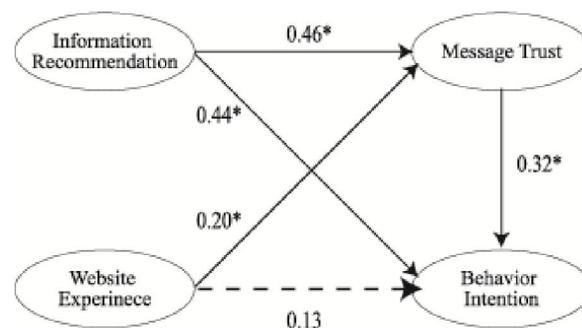

**Figure 2.** Normalized parameter estimation of overall model
Note: *$p<.05$

With regard to H4 (the influence of website experiences on behavioral intentions), which is not supported, this study further examines whether there exists a spurious relation, or there is no original relation. According to the analysis of direct correlation between website experiences and behavioral intentions, asa shown in Figure 3, the completely normalized coefficient is 0.60 ($t = 7.33$, $p<.05$), and is significant. Therefore, website experiences significantly influence behavioral intentions. Subsequently, message trust is included in the model, which demonstrates that website experiences still directly influence behavioral intentions ($\gamma=0.36$, $t = 4.65$, $p<.05$). Website experiences indirectly influence behavioral intentions through message trust ($0.52\times0.46=0.24$).

According to Figures 2 to 5, website experiences positively and significantly influence behavioral intention without information recommendations. However, when message trust is included, website experiences still directly and positively influence behavioral intentions, and could indirectly and positively affect behavioral intentions with message trust as a mediating variable. After information recommendations are included in the model, it is demonstrated in H4 that, the positive influence of website experiences on behavioral intentions no longer exists. It is shown that after information recommendations are included, the significant relation is replaced. However, website experiences still indirectly influence behavioral intentions. It is illustrated that in blogs, the influences of information recommendations and website experiences on behavioral intentions are critical.
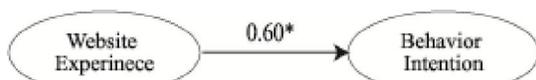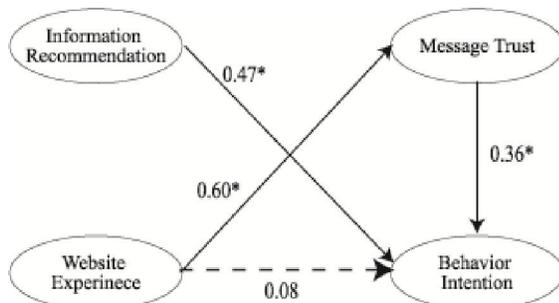

Figure 3. Influence model of Website Experience and Behavior Intention
Note: *p<.05
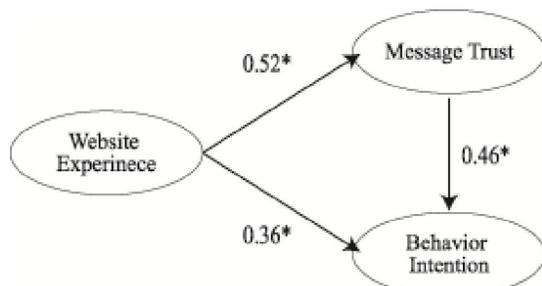
Figure 4. Influence model of Website Experience, Message Trust, and Behavior Intention
Note: *p<.05

Figure 5. Influence model of Website Experience, Information Recommendation, Message Trust, and Behavior Intention
Note: *p<.05

5. Discussion

This study analyzed the behavioral model of consumers' usage of travel blogs by different measures, such as website experiences, information recommendations, and message trust. It found that information recommendations and message trust are critical factors that elaborate upon consumers' behavioral intentions, other than website experiences. Information recommendations on blogs influence consumers' construction of message trust, a result that is consistent with past findings (Bart et al., 2005; Smith, et al., 2005). In addition, website experiences are more reliable, which also agrees with past findings (Doney & Cannon, 1997). There are positive and significant relations between trust and the browser' attitude, as well as trust and behavior intentions. The higher the message trust, the more positive the behavioral intentions, which is consistent with Lin (2006). However, regarding the influence of website experiences on behavioral intentions, this study found that message trust ahs a significant mediating effect, namely, website experiences could indirectly and positively influence behavioral intentions by message trust. Additionally, after information recommendations are included, the significant relation is replaced, thus, information recommendations are the critical variable of website experiences on behavioral intentions, a fact that is rarely mentioned in past researches. Moreover, the variables indicated by this study positively predict consumers' behavioral intentions. The finding showed that in the behavioral model of consumers' usage of travel blogs, information recommendations and message trust are critical factors, which can be included in future studies on the behavioral model of blogs.

Pine and Gilmore (1998) proposed the concept of an experience economy, and suggested the construction of an internet environment for users' experiences and the creation of attractive situations. Hence, constructing positive internet experiences is an effective marketing measure. Moreover, blogs have changed people's habits and communication patterns considerably. Internet users can freely express themselves, share subjective opinions and knowledge on web pages, and allow readers' responses. The internet is now an alternative interactive platform to acquire online information. By information sharing, consumers can acquire information needed from other consumers in a short time, rendering it a critical factor in consumers' decision-making (Pan et al., 2007). In addition, website experiences are important in information searching for consumers; through information recommendations and message trust, users can collect more information in the shortest period of time and

satisfy their information demands and purposes. Subjective preferences upon website experiences would reduce consumers' uncertainties and further influence trust, which could rapidly ease users' uncertainties and influence their intentions.

The empirical findings of this study revealed that, the influence of blogs on the consumers' behavioral model indicates that after receiving the stimulation of information recommendations and website experiences, consumers deal with changes through psychological cognition, and thus, form message trust. Their impressions of products turn into long-term memories, which leads to behavioral intentions. In this process, consumers' internal reactions and behaviors are the main factors of their purchase behaviors.

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