# A FRAMEWORK EXPLAINING HOW CONSUMERS PLAN AND BOOK TRAVEL ONLINE

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## ABSTRACT

The dynamics of online searching and purchasing is becoming better known and understood as researchers study various products sold via the Web. Even though there is a prevalence of travel products purchased online, integrated frameworks that identify the various determinants of the decision process and how they interact is still sparse in travel literature. In this study, a Conceptual Framework was developed showing the connection between online searching, planning and booking of leisure travel products and the relationship between these variables is tested using logistic regression. It confirms that consumers plan then book travel and that beliefs and attitudes influence one's intention to book travel online. Furthermore, beliefs about travel agents affect beliefs and attitudes towards online searching. This study aims to make a contribution by testing for the first time the relevant variables of planning and booking in a proposed Framework. It uses data collected from an online questionnaire completed by 1,198 respondents. We could expect that more travel products will be booked online in the future as online intelligent agents become more user-friendly and powerful, and as portable devices such as smartphones and iPads become more prevalent and versatile.

JEL: M31, O32, D10, D81

KEYWORDS: Decision Process, iPhone, Leisure Travel, Mobile Devices, Online Travel Searching

# **INTRODUCTION**

What is known about the consumer decision making process is that the consumer has a limited capacity for processing information (Bettman, 1979). When given a choice, the consumer rarely undertakes very complex analyses of available alternatives, but rather will use simple decision heuristics. This allows them to avoid the overly burdensome task of assessing all the information available about all the alternatives in order to arrive at a choice. The consumer undertakes an external search to the extent that information now available in memory is judged to be inadequate. Additional information will be acquired until the consumer perceives any additional exertion to be too costly in terms of time or effort expended. Consumers do not enjoy applying a great deal of effort on decision making. Equity theory demonstrated that as more effort is spent on decision-making, consumers' satisfaction with the decision process diminishes (Oliver & Swan, 1989).

More recently, consumers use the Internet for planning purposes as well as transactional ones. Motivation is the reason for this behavior. Consumers also search the Web for information of interest to them and thereby seek some form of gratification through this search process. This planning and searching behavior applies to the travel sector as well as many other areas. Information searching and planning often take place before purchases especially in the travel sector due to high levels of involvement with the product of travel and the large cost (Conyette, 2010). Motivational theory and uses and gratifications theory well explain why travel consumers use the Internet in planning or researching their travel before purchasing or booking a transaction. What is lacking in travel literature are frameworks that track components of the complex consumers decision process and confirm the relationships of variables in the framework.

In this research, a Conceptual Framework was developed showing the connection between the online searching component and booking of leisure travel products. In addition, the relationship between key

variables of searching and booking is tested through logistic regression. The importance of developing a framework is that it helps us understand how travelers acquire information and this gives marketers an opportunity to influence consumers' buying behavior. More information about a destination, for instance, will increase the likelihood of incidental and intentional learning by travelers (Gursoy and McCleary, 2003). The Framework builds on knowledge of tourist's information search behavior conducted by researchers such as Schmidt and Spreng (1996), Gursoy and McCleary (2003), and Hyde (2008).

The remainder of the paper is organized as follows. The next section describes the relevant literature. After this I discuss the data and methodology used in the study. The results are presented in the ensuing section. The paper closes with concluding remarks.

# LITERATURE REVIEW

When buyers determine a greater likelihood of making a disappointing purchase, they seek additional information. For higher priced items, the cost of making a disappointing purchase is higher and as a result, so are the benefits from pre-purchase efforts to acquire information (Laband, 1991). Therefore, rationally, consumers' search should increase when the importance of the purchase increases. However, search activity for information itself costs consumers as well. Perceived cost of information search is defined as "the consumer's subjective assessment of monetary, time, physical effort, and psychological sacrifice that he or she expends searching for information" (Schmidt & Spreng, 1996, p. 253). When the outcome of the search is potentially more beneficial consumers are likely to spend more time and effort searching (Bettman, 1979).

The cost of information search for consumers is influenced in part by the accessibility of information. Accessibility is higher when consumers are aware of the availability of information and it is in a format that is easy to understand (Schmidt & Spreng, 1996). The role of online search tools for finding information, and XML in presenting the information is therefore important.

The search for information is clearly one of the stages of the consumer purchase decision process and it has been the subject of much empirical research (Punj & Staelin, 1983; Srinivavsan & Ratchford, 1991). Consumers stop their information search efforts short of being perfectly informed. Different factors affect when they stop, the most common of which are the cost of information search, the level of consumer product knowledge, the type of purchase, and the level of consumer involvement.

It has become critical for companies to determine the types of gratifications that impel consumer use of the Internet for information search. A study of Americans shows they like using the Web as a search tool and regard the Internet as a source of information for learning and research. People recognize the Internet as a useful communications medium, and derive personal gratification from using it as a socialization venue (Stafford & Gonier, 2004).

A large percentage of Internet users have a primary goal of simplifying their lives and saving time. Forsyth, Lavoie, and McGuire (2000) called these consumers simplifiers and discovered they comprise 29 percent of Internet consumers and over 50 percent of all online transactions.

Even though the Internet has given consumers a greater amount of information, online tools have reduced consumers' search costs. These tools assist consumers in decision-making, and improve the quality of their decisions (Haubl & Trifts, 2000). Humans have limited resources for information processing despite the assistance of online tools by virtue of their limited memory, attention, or motivation, for instance (Payne, Bettman & Johnson, 1993).

In explaining consumer attitudes about online shopping and predictors of online behavior, it was discovered that there are more than demographic factors that influence the amount of money people spend online, or whether or not they buy there. Bellman, Lohse & Johnson (1999) claimed the explanations are whether consumers like being online and whether the time they have for buying things elsewhere is limited. They also found the most significant predictor of online buying behavior is the desire to look for product information. Another predictor is what they called a wired lifestyle. A wired consumer has been on the Internet for years, uses it to send and receive email messages, likes to be the first to use the latest communication technologies, and uses the Internet at work as it improves their productivity. Because these consumers use the Internet for many activities it is natural to expect them to use it to search for product information and to buy products.

Discretionary time was also reported to influence a person's decision to shop online. As the total number of hours worked by members of a household increases consumers have less time to search for and buy products in a traditional store. This is especially the case for dual-income households. These consumers may have used catalogs in the past but now take advantage of E-commerce sites on the Web. Bellman, Lohse & Johnson (1999) believed consumers value the Web's ability to save them time over its cost savings capability. Thus, it appears the behavior of consumers in an online environment is different from traditional consumer behavior. In addition, consumers are motivated in different ways and may utilize online tools in various ways to derive diverse forms of gratification.

Numerous researchers including Joines, Scherer & Scheufele (2003), Korgaonkar and Wolin (1999) suggest motivations play a greater role in Web usage than do demographics, although demographics has been demonstrated to be influential (Conyette, 2011). A classification system developed by McGuire (1974) identified categories of motives. One category most related to the area of travel planning is what McGuire termed a cognitive preservation motive or the need to categorize. People have a need to organize the vast array of information and experiences they encounter in a meaningful yet manageable way.

Furthermore, uses and gratifications theory explains why people use the media and what gratifications they seek in media use. Ko, Cho & Roberts (2004) developed a model to explain the effects of motivations and interactivity in establishing consumers' attitudes and purchase intentions. Motivations are looked upon as the antecedent conditions and the consequent conditions are viewed as gratifications. In other words, gratifications sought by consumers (the motivations for media use) and gratifications obtained (the results of media consumption). Four motivations for using the Internet were identified in that study: information, convenience, entertainment, and social interaction.

Travelers want to visualize their vacation and see what they are getting into. This is consistent with the findings of Haubl & Trifts, (2000) who report online tools assist consumers in decision-making, and improve the quality of their decisions. Also, respondents will allow the online intelligent travel decision aids (ODA) to influence them or give them ideas. This makes sense as they are the types of people who really do not organize their vacation. An interesting insight came from those travelers who organize a vacation essentially around a travel agent's recommendations. The value they see and the expectations they have for an ODA is that it performs like a travel agent by making trip planning easier, providing suggestions, answering any question, providing one-stop shopping, etc. Bechwati and Xia (2003) found that the consumer considers an ODA an effort saver since they recognize if it were not for an ODA they would have to do the work themselves. Moreover, Haubl and Trifts (2000) described one of the key functions of electronic decision aids as that of making recommendations.

The implications for travel marketers are clear. Make navigating and searching on a website as inexpensive and time efficient as possible, and provide relevant information about a destination so that it

reduces search costs (Gursoy and McCleary, 2003). Moreover, travel websites should be engaging and helpful by providing powerful intelligent tools that assist in the decision process (Conyette, 2010).

Information search and plans often take place before purchases. This was confirmed during construction of the Conceptual Framework (Conyette, 2010). While creating this Framework, participants in focus groups, interviews and case studies often raised this topic of the desire to research. Other researchers such as Hyde (2008) uncovered a similar dynamic. Hyde tested a model of pre-vacation decision-making and demonstrated three interrelated but unique stages including information search, plans and bookings. Tourists search for travel and destination information, make a plan of the vacation, and then book components of the vacation. Hyde also makes the point that many tourism researchers use information search and vacation planning interchangeably but rarely has the relationships between the three stages been explored.

The Conceptual Framework developed in this research emerged in part from insights provided through literature and it also used qualitative research methods to refine these insights. The finding of the qualitative research is described in the following section. Thus, the Framework implies that a significant predictor of travel buying behavior is found in the search and planning behavior that often takes place before travel booking. Confirming the significance of the search and planning process through logistic regression is the aim of this research. Figure 1 shows the Framework and the three hypotheses tested.

Figure 1: Research Framework and Hypotheses



This figure shows the three hypotheses tested in the Conceptual Framework. Other components of this Framework were tested in an earlier work conducted by the researcher. Source - Determinants of Online Leisure Travel Planning Decision Processes: A Segmented Approach (2010).

# DATA AND METHODOLOGY

Qualitative research conducted between 2007 and 2008 confirmed these explanations between researching, planning and booking travel. Focus groups revealed that participants consult the Internet, travel agents, friends and relatives for suggested destinations and then they search for good deals

primarily on airfare or hotels. Sometimes travelers also engage in an extensive research or planning process. It was even suggested that women spend more time searching the Internet than men. They compare prices and check details thoroughly and then discuss the travel specifics with their partner. Personal interviews undertaken also showed that an ODA could provide worry-free, planning assistance.

In case studies carried out by this researcher, respondents more likely to research and plan extensively with online and offline aids were those with a disdain for novelty and surprise. This appears to be older respondents. The opposite seems true for younger respondents. Hyde's (2008) tour planning research confirms this idea. Hyde's paper also supports the notion that the time tourists spend consulting travel guidebooks, friends and relatives, and word-of-mouth advice increases confidence, encourages the traveler to be more independent of a fixed tour itinerary, and reduces the need for pre-vacation accommodation booking.

Following the development of the Conceptual Framework, data was collected to test for the first time components of it that deal specifically with searching and booking. In an online survey conducted by this researcher in 2008, a total of 1198 completed surveys were collected for data analysis. Data analysis was performed using Stata 10 software.

For each of the three hypotheses, the Pearson chi-square test of independence with an alpha of 0.05 between variables was firstly used to assess if there was independence between each predictor and response variable. This was followed by univariate logistic regression tests, using a level of significance of 0.05 to determine whether the independent variable in the model is significantly related to the outcome variable. Finally, models were built for each hypothesis by selecting variables for the multivariable analysis using a stepwise method to explain the predictors for the response variable of each hypothesis.

Thus, I propose: H1:Consumers who have more negative beliefs about booking with a travel agent will have more positive beliefs about online travel searching than consumers who have less negative beliefs about travel booking with an agent. The predictor variable was "beliefs about booking with travel agent" and response variable was "beliefs about online travel searching". Beliefs of booking with travel agent included variables 'convenient', 'safe', 'expensive', 'easy', and 'enjoyable'. Beliefs of searching with the Internet included variables 'convenient', 'easy', and 'enjoyable'. Five 7-point semantic differential items (difficult/easy, enjoyable/unenjoyable, convenient/inconvenient, expensive/inexpensive, safe/risky for credit card use), were used to measure beliefs about booking with a travel agent. Beliefs about searching with a travel website used the first three items. These semantic differential items were used in an earlier study conducted by this researcher (Conyette, 2010).

#### RESULTS

Each belief of the predictor variable was tested for correlation with each belief of the response variable. Statistically significant associations between "beliefs about booking with travel agent" and "beliefs about online travel searching" were discovered with all variables except three. Table 1 summarizes Pearson tests where *p*-values of greater than 0.05 indicate no correlation between variables.

There was no correlation between ease of booking with a travel agent and ease of researching travel with the Internet. Likewise, there was no correlation between ease of booking with a travel agent and enjoyment of researching travel with the Internet. Also, there was no relationship between enjoyment of booking with a travel agent and ease of researching travel with the Internet. This implies respondents who did not enjoy researching with the Internet or found it difficult would book with a travel agent. Thus, the predictor variables having no association with the response variables were dropped from further analysis. Univariate logistic regression tests were then used. When the *p*-value associated with this test is less than

0.05, we reject the null hypothesis that  $\beta_1 = 0$ , and we conclude the independent variable contributes significantly in explaining variation in the response variable.

Table 1: Correlation Analysis Showing Dropped Var	iables
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Variables	Keep/Drop	df	Pearson	p-value	n
Ease of booking with a Travel Agent Enjoyment researching travel with the Internet	Drop	36	40.8676	0.265**	1088
Ease of researching travel with the Internet Enjoyment booking with a travel agent	Drop	36	41.7736	0.234**	1094
Ease of booking with a Travel Agent Ease of researching travel with the Internet	Drop	36	45.2193	0.139**	1089

This table shows Pearson chi-square test of independence where p-values of greater than 0.05 indicate no correlation between predictor and response variables. As a result, these variables were deleted from univariate logistic regression and model building.

Predictor variables of 'difficult' and 'enjoyable' booking with a travel agent were already dropped. However, predictor variables of 'convenient', 'safe' and 'expensive' booking with a travel agent were significantly related to the response variables and therefore were kept. Finally models were built by selecting variables for the multivariable analysis using a stepwise method to explain the predictors for the response variables. The importance of each variable included in the models was verified through an examination of the Wald test statistic. Even though numerous models for each predictor were created, the best model appears to be found by using the response variable belief 'easy' online travel searching, and predictor variables 'safe' and 'expensive'. Table 2 displays response variables Belief Online Searching is 'easy', and predictors Beliefs booking with Agent is 'safe' &'expensive'. Most p-values of the predictor variables are below 0.05 indicating a good fit. Hypothesis  $H_1$  is partially supported with these predictor variables since interpreting odds ratios among categories of predictor variables implies that when a respondent believes booking with a travel agent is 'expensive' there is a greater probability their belief would be that searching travel online is easy. This matches with the finding of Convette in an earlier study where consumers who had more positive beliefs about travel agent booking were shown to have lesser intention to purchase travel online than do consumers who had less positive beliefs about travel agents (Convette, 2010).

Belief Online Searching Easy	<b>Odds Ratio</b>	Std. Err.	Z	P> z	[95% Conf. In	terval]**
Belief Safe booking Agent_2	1.493	0.2181	2.75	0.006	1.121	1.988
Belief Safe booking Agent_3	1.536	0.3396	1.94	0.052	0.9961	2.369
Belief Safe booking Agent_4	1.549	0.3436	1.98	0.048	1.003	2.393
Belief Safe booking Agent_5	1.473	0.4373	1.31	0.191	0.8239	2.636
Belief Safe booking Agent_6	3.559	1.117	4.04	0	1.924	6.585
Belief Safe booking Agent_7	3.298	0.9044	4.35	0	1.927	5.645
Belief Expensive booking Agent_2	1.398	0.2673	1.75	0.079	0.9615	2.034
Belief Expensive booking Agent_3	1.669	0.3052	2.8	0.005	1.166	2.389
Belief Expensive booking Agent_4	1.678	0.3068	2.83	0.005	1.173	2.401
Belief Expensive booking Agent_5	1.810	0.3392	3.17	0.002	1.254	2.614
/cut1	0.0029	0.1469	-0.2851	0.2910		
/cut2	1.225	0.1520	0.9274	1.523		
/cut3	2.139	0.1610	1.823	2.454		
/cut4	2.984	0.1771	2.637	3.331		

This table shows response variables Belief Online Searching is 'easy' to predictors Beliefs booking with Agent is 'safe' & 'expensive'. Most pvalues of the predictor variables are below 0.05 indicating a good fit. The importance of each variable included in the model was verified through an examination of the Wald test statistic for each variable following ML, and a comparison of each estimated coefficient with the coefficient from the model containing only that variable. Ordered logistic regression Number of obs = 1091 LR chi2(10) = 56.31 Prob > chi2 = 0.0000 Log likelihood = -1585.608 Pseudo R2 = 0.0174

I propose H2: Consumers who have more positive beliefs about online travel searching will have a more positive attitude toward online travel searching than consumers who have less positive beliefs about

online travel searching. The response variable is "attitude toward online travel searching" as measured by the variables 'good', 'desirable', 'beneficial', and 'positive'. For a global measure of attitude, four 7-point semantic differential items (positive/negative, good/bad, desirable/undesirable, useless/beneficial) used in an earlier study (Conyette, 2010), were replicated here. Predictor variables are "beliefs about online travel searching" as measured by the same variables used in Hypothesis 1. Each belief of the predictor variable was firstly tested for correlation with each attitude of the response variable. All variables were significantly related and thus kept. Univariate logistic regression tests were then used. All predictor variables were useful predictors and hence were kept. Finally, models were built. For each attitude all the beliefs 'convenient', 'enjoyable' and 'easy'. Internet searching is beneficial to respondents. Table 3 shows the response variable Attitude 'Beneficial', and Belief predictors. All p-values of predictor variables are less than 0.05 indicating a strong fit. The importance of each variable included in the model was verified through an examination of the Wald test statistic for each variable following ML, and a comparison of each estimated coefficient with the coefficient from the model containing only that variable.

I posit that H3: Consumers who have more positive attitude about online travel searching will have a greater intention to search travel products online than consumers who have a less positive attitude toward online travel searching. The response variable is intention to search online as operationalized by the survey question "How likely is it that you will research any travel product through the Internet within the next six months?" One 7-point highly likely/highly unlikely bi-polar scale was used to determine travel researching intention. An earlier study operationalized intention to book travel online in a similar manner (Conyette, 2010). The predictor, "attitude toward online travel searching", was measured by variables used in hypothesis 2 above. Hypothesis H<sub>3</sub> is supported with all predictor variables but one of the best fitting models is with attitude variables 'desirable' and 'beneficial' as can be seen in Table 4.

Attitude beneficial	Odds Ratio	Std. Err.	Z	P> z	z  [95% Conf. Interva	
Belief convenient_2	1.904	0.2887	4.25	0	1.415	2.563
Belief convenient_3	2.744	0.5679	4.88	0	1.829	4.117
Belief convenient_4	2.612	0.8224	3.05	0.002	1.409	4.841
Belief convenient_5	3.046	1.119	3.03	0.002	1.482	6.260
Belief convenient_6	4.165	1.714	3.47	0.001	1.859	9.330
Belief convenient_7	9.209	3.977	5.14	0	3.949	21.471
Belief enjoyable 2	2.145	0.3593	4.56	0	1.544	2.978
Belief enjoyable 3	2.548	0.4880	4.88	0	1.750	3.709
Belief enjoyable_4	4.020	0.9201	6.08	0	2.567	6.296
Belief enjoyable_5	2.783	0.8929	3.19	0.001	1.484	5.219
Belief enjoyable 6	6.981	2.534	5.35	0	3.427	14.221
Belief enjoyable_7	8.213	4.770	3.63	0	2.631	25.641
Belief easy_2	1.762	0.2789	3.58	0	1.292	2.403
Belief easy_3	1.941	0.3718	3.46	0.001	1.333	2.825
Belief easy_4	2.906	0.6843	4.53	0	1.831	4.610
Belief easy_5	4.200	1.192	5.05	0	2.407	7.326
Belief easy_6	4.770	2.052	3.63	0	2.053	11.084
Belief easy_7	11.454	5.681	4.92	0	4.333	30.279
/cut1	0.7738	0.1267	0.5254	1.022		
/cut2	2.581	0.1503	2.286	2.876		
/cut3	3.568	0.1652	3.244	3.892		
/cut4	4.443	0.1848	4.080	4.805		
/cut5	5.245	0.2121	4.830	5.661		
/cut6	6.355	0.2722	5.822	6.889		

Table 3: Hypothesis 2 Be	est Fitting Model
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This table shows the response variable Attitude 'Beneficial' to Belief predictors. All p-values of predictor variables are below 0.05 indicating a strong fit. The importance of each variable included in the model was verified through an examination of the Wald test statistic for each variable following ML, and a comparison of each estimated coefficient with the coefficient from the model containing only that variable. Ordered logistic regression Number of obs = 1105 LR chi2(18) = 452.89 Prob > chi2 = 0.0000 Log likelihood = -1514.267 Pseudo R2 = 0.1301

This table shows the response variable Online Searching Intention and Attitude predictors. Most p-values of the predictor variables are below 0.05 indicating a good fit. The importance of each variable included in the model was verified through an examination of the Wald test statistic for each variable following ML.

Online Searching Intention	Odds Ratio	Std. Err.	Z	P> z		[95% Conf. Interval]**
Attitude Desirable_2	1.590	0.4403	1.68	0.094	0.9246	2.736
Attitude Desirable_3	2.350	0.7073	2.84	0.005	1.302	4.239
Attitude Desirable_4	2.194	0.6488	2.66	0.008	1.228	3.917
Attitude Desirable_5	2.081	0.5553	2.75	0.006	1.234	3.511
Attitude Desirable 6	1.179	0.2976	0.66	0.512	0.7195	1.934
Attitude Desirable_7	0.7953	0.2048	-0.89	0.374	0.4800	1.317
Attitude Beneficial 2	1.550	0.2784	2.44	0.015	1.090	2.204
Attitude Beneficial_3	2.307	0.4934	3.91	0	1.517	3.508
Attitude Beneficial 4	1.968	0.5173	2.58	0.01	1.176	3.295
Attitude Beneficial_5	2.941	0.8822	3.6	0	1.634	5.295
Attitude Beneficial 6	3.540	1.167	3.84	0	1.855	6.756
Attitude Beneficial 7	2.028	0.8219	1.74	0.081	0.9164	4.488
/cut1	1.416	0.2189	0.9873	1.845		
/cut2	2.598	0.2298	2.148	3.049		

Table 4: Hypothesis 3 Best Fitting Model

This table shows the response variable Online Searching Intention to Attitude predictors. Most p-values of the predictor variables are below 0.05 indicating a good fit. The importance of each variable included in the model was verified through an examination of the Wald test statistic for each variable following ML, and a comparison of each estimated coefficient with the coefficient from the model containing only that variable. Ordered logistic regression Number of obs = 1107 LR chi2(12) = 94.21 Prob > chi2 = 0.0000 Log likelihood = -924.442 Pseudo R2 = 0.0485

Support for all three hypotheses of the Framework implies that a significant predictor of travel buying behavior is dependent on search and planning behavior that often occurs before travel booking. Internet searching is perceived to be beneficial and desirable by respondents. Logistic regression confirms the significance of the search and planning process in this study as it did for other elements of the Framework that were tested in an earlier study (Conyette, 1010). All elements of the Framework seem to be well conceived. Beliefs about booking with travel agents, travel websites and searching travel on the Web, attitudes towards online travel searching and booking, social support, social acceptance, and prior experience are all determinants that ultimately affect online travel booking intention.

People who do not enjoy researching with the Internet or find it difficult would book with a travel agent. However, those with favourable beliefs and attitudes about online travel searching will more likely search for travel products online and in turn will probably book travel online. Furthermore, given the availability of numerous advanced tools, mobile software, databases, and apps for travelers such as Google Goggles, Wikitude's - Mobile Augmented Reality Guide, Poynt, Urbanspoon, and Yelp, we can expect that travelers will become more and more comfortable using technology and the Web, and the products will become more user-friendly. Consumers are aware of how the Internet can empower and engage them and they are not willing to give this up even if travel agents offer them good personal service. Consequently, one could predict that the inclination to depend on and use the Internet will grow. Consumers will also use their portable devices in greater numbers to search and book travel products using the Web.

Numerous AR applications built for smartphones are currently on the market using Google's Android operating system. A special browser app such as Wikitude World Browser runs on Android phones and iPhones. Wikitude.org has thousands of entries for frequently visited tourist locations in London, Paris and other major cities, points of interest (POI) and location-specific, hyperlinked media content which can be viewed on the Wikitude World Browser. Furthermore, companies like Sony are developing systems that a person can wear like sunglasses that will accomplish the same thing (Cascio, 2009). These devices will change sightseeing and touring activities of tourists. Pointing the device on a building can tell you what you are looking at. An image on the phone's screen becomes layered with things such as restaurant

reviews of restaurants shown on the street, or directions to the nearest subway stop since the device recognizes its location by combining GPS technology, the smartphone's internal compass and the camera viewfinder. Therefore, the device acts as a guidebook. Numerous researchers predicted this type of human interaction with smart devices, computers or robots (Drascic, Grodski, et al., 1993) and now we are entering an era where this interaction is becoming commonplace.

## CONCLUSION

A Conceptual Framework was developed showing the connection between online planning and booking of leisure travel products. The main aim of this research was to test, using logistic regression, how beliefs and attitudes about online travel searching influence online travel searching intention. This conception of the decision process highlights the importance of the act of searching that sometimes precedes purchasing of leisure travel products. The Framework tracks components of the complex consumer decision process and primary findings ratify the significance of searching and planning before travel booking takes place. The methodology used involved Pearson chi-square test of independence between variables to assess if there was independence between each predictor and corresponding response variable. Univariate logistic regression tests determined whether the independent variable in the model was significantly related to the outcome variable. Finally, models were built for each hypothesis. Logistic regression of selected variables in the Framework confirms that consumers plan then book travel and that beliefs and attitudes about online searching. This is consistent with an earlier study that demonstrated beliefs about travel agents affect online booking intention (Conyette, 2011).

When people search the Internet, they use search engines to view specific areas of interest. In the process of searching for interesting information, a user may encounter certain stimuli that activate or create a need. They also use the Internet to help plan travel itineraries and expenditures. Furthermore, the Internet is often used to book or purchase various travel products. These activities take place before travel begins but also while travel is in progress. We could expect that as online intelligent agents become more user-friendly and powerful, and as portable devices such as smartphones, iPads, etc. become more popular, consumers of travel products would be more likely to use these devices during their travel. In fact, for travelers, having such a portable communications device is ideal since they incorporate access to the Web, high quality cameras, and enabling applications such as online computational photography.

Limitations in the study are that survey respondents expressed their intention to search travel online but these do not necessarily reflect enduring behavioral patterns of subjects. The survey instrument was administered on the Internet. Subjects were referred to the website which included the survey and appropriate instructions. Every respondent saw the same questionnaire and had the same instructions to guide them. Although the survey was pretested it is difficult to determine if participants fully understood the questions asked. In addition, consumers without much Internet experience most likely did not complete the survey. Future research could include examining how mobile devices will be used for searching and booking travel products as consumers grow more accustomed to the capabilities of these devices. Also, observing how marketers will interact with consumers during the search process in order to influence their buying behavior, and the ways in which organizations will integrate online intelligent tools with mobile devices to create competitive advantages.

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