

December 2003

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Jonna Jaavelainen

Turku Centre for Computer Science, and Turuku School of Economics and Business Administration

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Recommended Citation

Jaavelainen, Jonna, "Preferring Offline Bookings: An Empirical Study of Channel Choice Motives of Online Information Seekers" (2003). *BLED 2003 Proceedings*. 46.
<http://aisel.aisnet.org/bled2003/46>

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16th Bled eCommerce Conference

eTransformation

Bled, Slovenia, June 9 – 11, 2003

Preferring Offline Bookings: An Empirical Study of Channel Choice Motives of Online Information Seekers

Jonna Järveläinen

Turku Centre for Computer Science, Turku School of Economics and Business Administration,
Finland

Jonna.Jarvelainen@Tukkk.fi

Abstract

Gaining revenues from e-commerce has proven to be far trickier than could have been expected from the hype in the late 1990's. The majority of online customers are still information seekers, who make their purchases offline. The tourism industry has achieved a competitive advantage over other sectors, since it has been able to transfer more customers online. Therefore, we should examine and learn from the companies in travel business. This paper reports the findings from a study exploring motives behind booking channel choice. For testing eight hypotheses based on media choice theories, a questionnaire was designed and implemented in a Web survey for customers visiting the Web site of a passenger cruise company. The primary reasons for not using the Internet for travel reservations were: perceiving the booking so complex that discussion with customer service was required, having many special arrangements included in the booking, and distrust in finding the cheapest alternative in the online booking system. Online booking was found to be quick, easy, and especially suitable for simple bookings with no special arrangements. The probability of making a reservation online increased when a customer gained more experience of online shopping.

1. Introduction

On the retail sector, approximately 1% of the total revenues come from electronic commerce transactions (OECD, 2002). In the travel industry, for example Southwest Airlines has reported as high as 26% of its revenues coming from online sales (Nua, 2001). However, outstanding achievements have primarily been reached by only companies that base their low airfares on e.g. minimal distribution costs by selling tickets mainly on the Internet. Still the travel industry is generally more successful than other industries in the online sales and this is why we could learn from the good example of travel businesses in electronic commerce (Nua, 2002; Nua, 2003).

The information intensive travel products should be extremely suitable for selling in electronic media (Anckar & Walden, 2001). Still, for one customer who made a booking

with the online booking system concerned in this study, there were 12 customers who used the system only for checking prices and timetables and 43 customers who searched other information from the company's Web site.

The Internet is widely used as a source of information and a customer service channel, but consumers still prefer traditional channels when purchasing products and services. If we could understand the channel choice motives of the information-seeking customers, online customer service could be improved and therefore companies could benefit from their cost-effective, but expensive investments, the e-commerce systems, when more customers would make their purchases online.

The purpose of this study has been to explore reasons behind poor acceptance of a new purchasing channel, the Internet. Eight hypotheses based on media richness theory, social influence model, technology acceptance model and media appropriateness theory, were used in explaining the channel selections of consumers. The empirical data has been collected from customers of a passenger cruise company with a Web survey. The responses include both quantitative and qualitative data from 2479 respondents collected in 11 days.

2. Media Choice Theories and Research Hypotheses

In organisation science the media choice theories have been used to explain the communication media choices of management and co-workers. The choice of consumers between different purchasing channels is analogous to media choice in organisational context. These established theories bring a new perspective to this relatively fragmented research area of electronic commerce from the position of consumers. All four media choice theories, (media richness theory, social influence model, technology acceptance model and media appropriateness theory) have a unique viewpoint to the research problem: why people who use the Internet for information seeking do not make their travel reservations online.

The research hypotheses are based on the four media choice theories and their basic assumptions presented here. An answer to the research problem is sought by comparing customers who made their previous booking in travel agency, ticketing agency, or telephone (hereafter *traditional bookers*) and customers who made their previous booking with the interactive online booking system (hereafter *online bookers*).

2.1 Media Richness Theory

Media richness theory (Daft & Lengel, 1986; Trevino et al., 1990) has received critique because of its positivistic conception of people's media choices (e.g. El-Shinnawy & Markus, 1992; Huang et al., 1998). However, it has an interesting classification of task features and therefore it will be used in this study.

The theory argues that different media can be placed on a continuum of rich and lean communication, based on four properties: the ability to transmit multiple cues, the immediacy of feedback, the use of natural language, and the personal focus of medium. The richest media on this continuum is face-to-face, followed by telephone, personal documents as letters and memos, impersonal written documents, and numeric documents. On the Web various forms of communication is possible, and in this case the (communication) medium is an interactive online booking system, which cannot convey or interpret multiple cues, nor is it very personal and the language used is not very

natural, but the feedback from the system can be very speedy. Therefore, the system can be classified as a relatively lean medium.

According to the same theory, in order to complete efficiently an ambiguous (equivocal) task an information rich medium is suitable, since the task requires clarification and verbal discussion. Respectively, for an uncertain task the most fitting medium is an information lean one. As uncertainty is defined as lack of information, consequently when more information is received the uncertainty of the task improves e.g. it becomes clearer. Information is more efficiently presented in a written form than verbally.

The booking of a travel product could be described as an uncertain task, since the travel product is an information intensive product. The more information about the product is available, the simpler it is to make a reservation. In addition, the less components or special arrangements are included in the booking, the simpler reservation task is (e.g. Werthner and Klein, 1999; Anckar and Walden, 2001). Therefore, for a simple travel product the most efficient booking channel would be the Internet. However, a traditional booker may consider travel products ambiguous, and the booking tasks requiring discussion, since he/she has chosen a traditional channel. From these assumptions based on the media richness theory, these hypotheses have been made:

Hypothesis 1 (H1): Traditional bookers perceive a booking to be more ambiguous than online bookers.

H2: Traditional bookers have more special arrangements in their bookings than online bookers.

H3: During a booking task, traditional bookers are more willing to discuss with a customer service person than online bookers.

H4: Both traditional and online bookers consider that their booking tasks were efficient.

2.2 Social Influence Model

Social influence model by Fulk et al. (1990) considering the subjective and social aspects of people's media choices has been supported by some studies (e.g. Fulk, 1993; Venkatesh & Morris, 2000), but there are also opposite findings (e.g. Carlson & Zmud, 1999; Minsky & Marin, 1999). In order to find as many reasons as possible for choosing a booking channel this model is also included in the study.

Social influence model argues that media perceptions are partially subjective and socially constructed, not merely based on objective media characteristics (as in media richness theory). Therefore, people's perceptions of the richness of media are different and suitable for particular tasks. The media choice is subjective, retrospective and under the influence of information provided by others. As group norms affect media choices of individuals, a social opinion may even prevent rationally the most efficient behaviour.

The social environments' attitudes towards and experiences of online shopping and travel reservations, as well as the interactive online booking system could have an influence on customers' behaviour. The hypothesis based on the social influence model is:

H5: The perceptions of traditional bookers about their social environments' attitude towards and experience of online shopping and travel bookings are lower than the perceptions of online bookers.

2.3 Technology Acceptance Model

Technology acceptance model (Davis, 1989; Davis et al., 1989) has been used in and supported by numerous studies (Devaraj et al., 2002; Karahanna & Straub, 1999; Lederer et al., 2000). It argues that perceived usefulness and ease-of-use are key factors in the user's acceptance of technologies or computers. Perceived usefulness has been defined as a user's subjective perception of the computer's ability to increase job performance when completing a task. Perceived ease of use is a person's subjective perception of the computer system's effortlessness. Perceived ease of use affects perceived usefulness, so it has also an indirect effect on a user's technology acceptance.

The useful characteristics of online booking are its speed, lower prices, and the ability to present more information compared to traditional booking channels. The online booking system concerned in this study has been designed to be as easy-to-use as possible and developed according to the best practices of online booking systems used by the European passenger cruise companies. In addition, the system is constantly improved based on user feedback. The equivalent payment methods (Internet bank payment, credit cards and mailed bill) as in the traditional bookings are also applied to the online booking system to make the transactions secure. Further, the privacy of a user's personal information is guaranteed to be limited only to mailings of the company accepted by the user. In spite of this the perceived ease-of-use of the online booking system is also checked in this study.

The hypothesis based on the technology acceptance model is:

H6: Compared to online bookers, traditional bookers perceive that the online booking system is less useful and not as easy to use as traditional booking channels.

2.4 Media Appropriateness Theory

Media appropriateness theory (King & Xia, 1997) is based on technology acceptance model, social cognitive theory, and theory of planned behaviour (originally the concept of "media appropriateness" was introduced by Rice (1993), and it was based on social presence and media richness theories). The theory is not as widely used as technology acceptance model, but also other studies have made similar findings (Novak et al., 2000; Shim et al., 2001; Taylor & Todd, 1995). It argues that users make their media choice not only rationally considering media or task features, but also their own experience affects the choice. Increased experience improves skills, abilities, and comfort to use a computer system. If a user has had bad experiences of for example an e-mail system, other means of communication are chosen. Because most of us are familiar with face-to-face conversations, telephone, group meetings, and written notes, we tend to choose traditional media for many tasks, and therefore we may consider the traditional media more suitable for different tasks than the new media.

King and Xia (1997) found in a longitudinal study that when the subjects were able to use a multitude of media, and they gained experience of the new media - more appropriate media was chosen for tasks - instead of using the media in which they had more experience. Experience of online shopping and travel reservations could lower the threshold to book with the online booking system. The hypotheses based on the media appropriateness theory are:

H7: Traditional bookers do not perceive the Internet to be as suitable channel for travel reservations as online bookers.

H8: Traditional bookers have less experience of online shopping and travel reservations than online bookers.

3. The Research Background

The company under study is one of the largest Finnish passenger cruise companies operating in the Baltic Sea, owned by a large European ferry operator. Its substantial market share (between Finland and Sweden is approximately 50% and between Finland and Estonia roughly 20%) and its long reputable history make it a trustworthy company.

The study started with short open-ended customer interviews in a company owned ticketing agency, following the design phase after which the questionnaire was tested; first in a ticketing agency with actual clients and second, 13 academic colleagues tested the questionnaire on the Web. After revisions, the questionnaire was ready for the actual survey. The questionnaire was placed on the company's home page to be presented to all visitors.

The Web was chosen as the survey medium as only 4 percent of the company's total bookings were done via the online booking system. Reaching the customers who had made their reservations online or who had at least access to the Internet would have been difficult otherwise. In addition the customers who did not use or even had access to the Internet could not compare traditional and online booking channels.

An interactive Web survey has many advantages. Compared to the postal mail or telephone surveys, it is a more rapid and an inexpensive way to collect a great amount of data. In addition, the data coding is easy and reliable as in any computer-supported data collection method. The disadvantages are for example a biased sample or results and counting the response rate (e.g. Humphrey, 2000; Zhang, 1999).

Ensuring the validity of the respondents is not easy with Web surveys because of the anonymity ("On the Internet, nobody knows you're a dog" as Peter Steiner's cartoon stated on *The New Yorker* on July 5th 1993. An effort was made to eliminate multiple responses from the same respondent with 1) no-reward policy (e.g. O'Neil & Penrod 2001), 2) a cookie that was saved in the respondent's computer under his own username (and so impeded answering more than once) and 3) a careful screening of responses to find exactly similar responses. To reach the target population and valid subjects, the Web survey was placed on the company's homepage, and only visitors, who had made a reservation with the company during the previous three months, were requested to answer the questionnaire.

3.1 The Operationalisation of the Variables

The questionnaire used was based on a literature review of the four media choice theories. The standardised and pretested measures (Dennis and Kinney, 1998; Karahanna and Limayem, 2000; Suh, 1999) were not applicable without modifications, since most of them have been used in organisational settings, and the questions were mostly work related. The open-ended answers of the pilot study, and company's previous Web surveys were used in the design process as well as the expertise of three colleagues of (Web) surveys and electronic commerce.

A question group was designed for each theoretical hypothesis. All questions concerning the respondent's personal opinions had a five-point Likert scale (1= Strongly agree, 2= Agree, 3= Neither agree or disagree, 4= Disagree, 5= Strongly disagree; "I don't know"

alternative was also available). The previous booking channel was used as the dependent variable, and comparison was made between the online and the traditional bookers (travel and ticketing agency and telephone) for the sake of simplicity. The independent variables were based on the hypotheses:

Ambiguity (H1): The respondents were asked if they perceived the previous booking task as simple, the concepts used during the reservation clear, and that no misunderstandings had occurred.

Special arrangements (H2): The most common special arrangements included in cruise products were documented. The respondents were asked if their previous reservation contained any special cabin arrangements, car, hotel, connections to other transports, or other special arrangements.

Desire for discussion (H3): The respondents were asked if they wanted to discuss with customer service during the booking .

Efficiency (H4): The reservation task performance was also checked; the respondents indicated if the task was quick and the outcome (booked cruise) correct (as he/she expected it would be).

Social environments' attitudes and experiences (H5): The subjects were asked about their perceptions of their near social environment's (near relatives, friends, and colleagues at work) Internet use frequency and attitudes towards online shopping and travel booking. In addition, there were questions whether their near social environment had bought something or made travel bookings on the Internet or with the interactive online booking system, and did they had had any negative experiences of service quality when buying or making travel bookings on the Internet.

Usefulness and ease-of-use (H6): Usefulness was measured by asking if the online booking channel was quicker, easier, cheaper, or more correct than the traditional booking channels, and could the respondents obtain the extra information better online than from the traditional channels.

Internet as booking channel (H7): The respondents were asked about perceptions of the Internet's suitability for travel bookings.

Internet shopping and booking experience (H8): The respondents were asked the number of times they had bought something or booked with the Internet or the online booking system.

3.2 Analysis Methods

All the data analysis was done with the SPSS 10.1 for Windows. Basic frequency tests with the categorical data revealed that the normal distribution assumption was not satisfied. The Spearman correlation coefficient test, which can be used with categorical data and does not require normally distributed data, was used in hypothesis testing. Confidence level used was 99%.

In addition, some deeper analysis tools were considered. Most other tests assume normality of the data, but the logistic regression analysis does not (e.g. Hosmer and Lemeshow, 2000). It was used for predicting which dependent (traditional or online booker) variable group would a respondent belong to, by identifying independent variables that are most useful for this prediction. For the logistic regression analysis, the categorical data was transposed into dummy variables, so the results were easier to interpret, than if the reference cell coding in the SPSS had been used. Qualitative data was analysed with the NVivo 1.3 tool.

3.3 Reliability and Validity

The reliability of the constructs was evaluated with Cronbach alpha values (table 1), which were greater than 0.7 (Nunnally & Bernstein, 1994). The validity of the operationalisations was examined in terms of face, convergent, and discriminant validity. As measures were developed based on validated instruments presented in literature, modified with help of experienced colleagues, and pretested carefully, the face validity of measures was found to be satisfactory.

Table 1: Reliability and Convergent Validity Values of the Multi-Item Constructs, Excluding Single-Item Variables

	Cronbach alpha	Convergent validity (factor analysis) ¹
Ambiguity (Factor 1)	0.774	0.843 0.872 0.808
Social environment's attitudes and experiences (Factor 2)	0.811	0.799 0.896 0.796
Usefulness and ease-of-use (Factor 3)	0.82	0.749 0.704 0.814 0.827 0.707
Internet shopping and booking experience (Factor 4)	0.708	0.749 0.873 0.775

¹ Principal components analysis with Varimax rotation and Kaiser normalisation

The convergent and discriminant validity of the constructs was evaluated with a factor analysis and a correlation matrix. The results of the factor analysis are in table 1. Table 2 contains the correlation matrix of the measures.

In the correlation matrix, some correlations seem to be quite strong. For example, the quick booking and ambiguity measures have a strong correlation (0.559). However, it was not meaningful to include the quick booking item to the ambiguity construct since they measure quite different issues. There is also a correlation between usefulness and ease-of-use construct and “Internet as a booking channel” item. It is quite understandable that the respondents agreed that the Internet is a suitable booking channel and it is useful to make bookings online. Nevertheless, since the suitability and usefulness constructs were based on different theories they were kept apart for analysis purposes.

4. Analysis

The data was collected in 11 days between February 1st 2002 and 11th. The total number of responses was 2511, from which 29 were either totally empty or dropouts; three consecutive and identical responses were also excluded from final analysis. In the first five days about 5% of the Web page visitors answered the survey, after that 4 and 3 percents, which can be explained by repeated visits of the same persons.

Table 2: Correlation Matrix of the Data Set

	Ambiguity	Special arrange- ments	Desire for discussion	Correctness of booking	Quick booking	Social environ- ment	Usefulness and ease-of-use	Internet as booking channel
Special arrangements	ns							
Desire for discussion	ns	0.125						
Correctness of booking	-0.439	ns	ns					
Quick booking	-0.561	ns	0.196	0.360				
Social environment's	-0.093	ns	-0.135	ns	ns			
Usefulness and ease-of-use	-0.172	-0.141	-0.216	0.152	0.130	0.292		
Internet as booking channel	-0.103	-0.108	-0.352	0.110	ns	0.372	0.445	
Experience	ns	ns	-0.369	ns	ns	0.297	0.153	0.348

coefficients significant at 0.001 level, except ns = not significant

4.1 Respondents

The respondents were compared demographically to the respondents of two previous Web surveys, which were applied to give a rough picture of the average visitor on the company's Web site for marketing purposes. A commercial Web site research company implemented one in January 2000. The second one in November-December 2001, was implemented as part of a master's thesis by a student working in passenger cruise company's IT department. The quantities of the respondents were respectively 920 and 2875.

In all three Web surveys, 58.5% of the respondents were women. In addition, the age distribution was very similar; the majority was between 18 and 45 years of age. Geographically the respondents were very similarly dispersed also. The majority of respondents live in the greater Helsinki area and Western Finland, where the departure ports are situated. Therefore, the data in this survey corresponds with the data in the other surveys.

Quite a high percentage, 92% of the respondents used the Internet daily or almost daily. In 2000 (OECD, 2001), 54% of Finnish people used the Internet. Since a Web survey cannot reach the non-users, the high percentage is understandable. Approximately 36% of the respondents had never bought from the Internet. Over 70% had not booked a cruise with the company's interactive online booking system, although over half of the respondents had made a travel reservation from some other company's Web site. Almost one quarter (23.2%) of the respondents had made their previous booking with the interactive online booking system. The testing of the hypotheses was done by comparing traditional bookers to online bookers.

4.2 Data Analysis

The correlation coefficients and logistical regression results are presented in table 3. The correlation values are positive or negative indicating direct or indirect relationship to the (traditional) bookers who had made their previous booking via travel or ticketing agency or telephone. The logistic regression results are in e^B -column that displays odds ratios of logistic regression analysis. There is no single odds ratio for some variables because the logistic regression calculates coefficients for every category in categorical variables.

Table 3: Correlation Coefficients and Logistic Regression Odds Ratios of the Data Set

	n	Correlation	e^B
ambiguity	2421	- 0.112 **	0.831 **
special arrangements	2479	0.163 **	3.307 **
desire for discussion	2410	0.524 **	
strongly agree		0.376 **	8.589 **
agree		0.137 **	2.917 **
disagree		- 0.300 **	0.394 **
strongly disagree		- 0.257 **	0.275 **
quick booking	2435	0.114 **	
strongly agree		0.089 **	1.056
agree		0.039	1.245
disagree		0.045	1.648
strongly disagree		- 0.064 **	0.451
social environment	1403	- 0.136 **	0.958
usefulness and ease-of-use	1626	- 0.219 **	0.921 **
Internet as booking channel	2170	- 0.280 **	
strongly agree		0.276 **	0.482
agree		- 0.002	0.488
disagree		- 0.102 **	2.431
strongly disagree		- 0.034	0.878
experience	2384	- 0.338 **	0.868 **

n = total number of cases in construct

Correlation to traditional bookers, + = direct, - = indirect

e^B = logistic regression odds ratio

** = significant at 0.001 level

Hypothesis 1 (H1): Traditional bookers perceive a booking to be more ambiguous than online bookers.

Contrary to expectations, the traditional bookers considered their previous booking to be simple, involving no misunderstandings, and the used concepts clear. The online bookers, however, perceived their previous booking to be more ambiguous. This can be seen in the negative and statistically significant correlation value. Therefore, H1 cannot be supported.

H2: Traditional bookers have more special arrangements in their bookings than online bookers.

The traditional bookers did have more special arrangements in their bookings than the online bookers, the correlation value is positive, hence H2 supported.

H3: During a booking task, traditional bookers are more willing to discuss with a customer service person than online bookers.

The traditional bookers were more willing discuss with a customer service person than the online bookers, as can be seen from the high positive correlation value, thus H3 supported.

H4: Both traditional and online bookers consider that their booking tasks were efficient.

In the questionnaire, there were two efficiency-items: first, was the outcome (booked cruise) as the respondent expected it to be and second, was the booking process quick. Approximately 89% of the respondents considered the outcome correct in both groups. In addition, 90% of the respondents perceived their previous booking to be quick, although the online bookers were slightly less satisfied (correlation being 0.114). Therefore, H4 can be supported only partly.

H5: The perceptions of the traditional bookers about their social environments' attitude towards and experience of online shopping and travel bookings are lower than the perceptions of the online bookers.

As the negative correlation value indicates, the traditional bookers perceived their social environment's attitudes and experience to be lower than the online bookers. Consequently, H5 is supported.

H6: Compared to online bookers, traditional bookers perceive that the online booking system is less useful and not as easy to use as traditional booking channels.

The online bookers found the online booking system to be more useful and easy to use than the traditional bookers, which can be seen from the negative correlation value. As a result, H6 is supported.

H7: Traditional bookers do not perceive the Internet to be as suitable channel for travel reservations as online bookers.

The online bookers considered the Internet more suitable booking channel than the traditional bookers, as the negative correlation value indicates. Therefore, H7 is supported.

H8: Traditional bookers have less experience of online shopping and travel reservations than online bookers.

The traditional bookers had less experience of online shopping and travel reservations and the online booking system, which can be seen from the negative correlation value. Hence, H8 is supported.

The interpretation of the logistic regression odds ratios is that when the value of the variable increases by 1, the probability that a respondent is a traditional booker increases by odds ratio. Therefore for example the respondents that considered their previous booking ambiguous, are 0.831 times more likely to be traditional bookers. On the other hand, the respondents who strongly agreed wanting to discuss with the customer service, are 8.589 times more likely to be traditional bookers. Thus variables, which have values greater than 1, are related to the traditional bookers and variables that have values less than 1, are related to the online bookers. The model created with the logistic regression was able to predict to the correct group 79.7% of the respondents. By random guesswork the probability would have been 64.3% ($(576/2479)^2 + (1903/2479)^2$). Therefore, the model enables better classification accuracy and discrimination power than random guesswork.

The logistic regression results suggest that the reasons why the traditional bookers choose other booking channels than the Internet are valuing discussion more with the customer service, and having more special arrangements. The open-ended answers explain more; many bookers required extra information that could be obtained in their opinion easier from the customer service person than the company's Web pages. In addition, the

respondents perceived that bookings with many special arrangements were so complicated that the correctness and the inexpensiveness of the booking would have been questionable if it was booked online. Nevertheless, the respondents were mainly accustomed and satisfied with the excellent service of the traditional channels.

The primary reasons why the online bookers booked online were: not wanting to discuss with customer service during booking, being used to booking and shopping online (having experience), and perceiving the online booking to be useful and easy to use. Ambiguity can be treated as just one more variable that is useful in differentiating the traditional bookers from the online bookers instead of a reason for choosing the online booking. The logistic regression analysis did not find social environment's attitudes and experiences sufficiently important to differentiate the traditional bookers and the online bookers.

In table 4, there are correlation coefficients of items in some constructs. Here we can see that the more specialised experience a respondent has gained the more likely he/she is not a traditional booker, e.g. is an online booker. In addition, from usefulness and ease-of use items we can see that the online booking's easiness was valued most, and the effectiveness (quickness and correctness) second. In the open-ended answers, the most commonly stated reason for using the online booking system was: "because it is quick, easy, and handy".

The lower price of the booking was mentioned often in the open-ended answers. The traditional bookers were very concerned about finding the cheapest booking alternative online by themselves, and therefore needed assistance from the customer service. On the other hand, many respondents felt the reservation was cheaper online. They were referring to an experiment of the company, where its loyal customers received an incentive of €5 to the online booking. The online bookings rose up from 200 to 2000 daily bookings for a week, and the relative share of the online bookings increased from less than 2% to over 4% in those months. This small incentive encouraged people to experiment on the online booking system, more than any other marketing effort.

Table 4: Correlation Coefficients of Items in Experience and Usefulness and Ease-Of-Use Constructs

	Correlation
Online experience from	
shopping	- 0.198 **
travel bookings	- 0.254 **
company's booking system	- 0.434 **
Compared to traditional booking	
online booking is quicker	- 0.197 **
online booking is cheaper	- 0.150 **
online booking is easier	- 0.294 **
online booking is more likely to be correct	- 0.195 **
extra information can be obtained better	- 0.063

Correlation to traditional bookers, + = direct, - = indirect

5. Discussion and Limitations

The original research question was: Why people who use the Internet for information seeking do not make their travel reservations online? According to this study, the Internet users do not make complex travel reservations online, but may book cruises with no special arrangements. The experienced online shoppers make more online bookings, but many still want to discuss with a person during booking as they are used to and satisfied with making their travel reservations on the telephone or agencies (“if it is not broken, why try to fix it”).

There are differences in how various media choice theories suit to this kind of research area. The assumptions of media appropriateness model were supported quite strongly in this study, as were also the arguments of technology acceptance model. However, the principles of social influence model were weakly supported, the correlation coefficient was quite small, and the logistic regression analysis did not find it statistically significant. The idea of media richness theory that ambiguous tasks cannot be efficiently performed in lean medium, such as the Internet, was not supported. The online bookers considered the task more ambiguous than the bookers using traditional, richer channels. El-Shinnawy and Markus, (1992) found also that media richness theory may not be applied to new media without modifications.

The results cannot be explained by one single theory. Desire for discussion, experience, appropriateness of the Internet as a booking channel as well as perceived usefulness and ease-of-use were all important factors influencing channel choice. Also the complexity of the booking seems to have a role in this setting. Therefore, some kind of combination of media richness theory, technology acceptance model and media appropriateness theory should be developed in the future.

In managerial sense, the study’s results are interesting. When customers prefer making just simple bookings online, the development of online booking systems should be focused in those bookings, not for booking all kinds of travel products. These two are not totally opposing against each other, but with limited resources, optimising the system for the simple bookings should be preferred according to this study.

As the traditional bookers perceived their bookings to be so complex requiring verbal assistance from a customer service person, this should be considered in the development of online booking systems. The Internet is a medium for information; all the extra information that customer service can give, may also be presented on the Web easily with hyperlinks.

This study must be evaluated keeping in mind its limitations. The Web survey’s shortcomings have been already discussed in the Research background –paragraph. In addition, only the respondents' perceptions of usefulness and ease-of-use has been studied and not the Web site functionality that could have an effect on the results. The reason for this is an agreement made with the company in question that prohibits revealing the details of the Web site and the online booking system and their addresses.

The generalisability of the results is also limited geographically, since the study was made with some customers of a passenger ferry company operating in the Baltic Sea. Although the Finns use the Internet excessively, and go to cruises frequently, further studies are required to apply results into other areas. Although the company is established and trustworthy, the methods of payment secure, and privacy of the users' personal information is guaranteed, the effect of trust could be included in further studies.

Interesting results may emerge if the survey would be repeated after a year. Then for example the influence of monetary incentives the company has offered to its regular

customers could be examined. After all, as the results state, the more experience of online shopping is gained the more likely is that people make their reservation online.

References

- Anckar, B and Walden, P (2001), 'Self-Booking of High and Low Complexity Travel Products: Exploratory Findings', *Information Technology and Tourism*, vol. 4, no. 3, pp. 151-165.
- Carlson, JR and Zmud, RW (1999), 'Channel expansion theory and the experiential nature of media richness perceptions', vol. 42, no. 2, pp. 153-170.
- Daft, RL and Lengel, RH (1986), 'Organizational Information Requirements, Media Richness and Structural Design.' *Management Science*, vol. 32, no. 5, pp. 554-571.
- Davis, FD (1989), 'Perceived Usefulness, Perceived Ease of Use and User Acceptance of Information Technology', *MIS Quarterly*, vol. 13, no. 3, pp. 319-340.
- Davis, FD, Bagozzi, RP and Warshaw, PR (1989), 'User Acceptance of Computer Technology: A Comparison of Two Theoretical Models', *Management Science*, vol. 35, no. 8, pp. 982-1003.
- Dennis, AR and Kinney, ST (1998), 'Testing Media Richness Theory in the New Media: The Effects of Cues, Feedback, and Task Equivocality', *Information Systems Research*, vol. 9, no. 3, pp. 256-274.
- Devaraj, S, Fan, M and Kohli, R (2002), 'Antecedents of b2C channel satisfaction and preference: Validation e-Commerce metrics', *Information Systems Research*, vol. 13, no. 3, pp. 316-333.
- El-Shinnawy, MM and Markus, ML (1992), 'Media Richness Theory and New Electronic Communication Media: A Study of Voice Mail and Electronic Mail', In *Proceedings of the International Conference on Information Systems Ed.*, pp. 91-105,
- Fulk, J (1993), 'Social construction of communication technology', vol. 36, no. 5, pp. 921.
- Fulk, J, Schmitz, J and Steinfeld, CW (1990), 'A Social Influence Model of Technology Use', *Organizations and Communication Technology*, Sage Publications., Newbury Park.
- Hosmer, DW and Lemeshow, S (2000), *Applied Logistic Regression*, 2, John Wiley & Sons, New York.
- Huang, W, Watson, RT and Wei, K (1998), 'Can a lean e-mail medium be used for rich communication?' *European Journal of Information Systems*, vol. no. 7, pp. 269-274.
- Humphrey, T (2000), 'Does Internet research work?' *Journal of the Market Research Society*, vol. 42, no. 1, pp. 51-63.
- Karahanna, E and Limayem, M (2000), 'E-Mail and V-Mail Usage: Generalizing Across Technologies', *Journal of Organizational Computing & Electronic Commerce*, vol. 10, no. 1, pp. 49-66.
- Karahanna, E and Straub, DW (1999), 'The Psychological Origins of Perceived Usefulness and Perceived Ease-of-Use', *Information & Management*, vol. 35, no. 4, pp. 237-250.

- King, RC and Xia, W (1997), 'Media appropriateness: Effects of experience on communication media choice', *Decision Sciences*, vol. 28, no. 4, pp. 877-910.
- Lederer, AL, Maupin, DJ, Sena, MP and Zhuang, Y (2000), 'The technology acceptance model and the World Wide Web', *Decision Support Systems*, vol. 29, no. 3, pp. 269-282.
- Minsky, BD and Marin, DB (1999), 'Why faculty members use E-mail: The role of individual differences in channel choice', *The Journal of Business Communication*, vol. 36, no. 2, pp. 194-217.
- Novak, TP, Hoffman, DL and Yung, Y-F (2000), 'Measuring the customer experience in online environments: A structural modeling approach', *Marketing Science*, vol. 19, no. 1, pp. 22-42.
- Nua (2001), Online air ticket sales doubled in 2000, viewed 23.1.2002.
- Nua (2002), Travel sales fuel rise in online transactions, <http://www.nua.com/surveys/index.cgi?f=VS&art_id=905358241&rel=true> viewed 29.4.2003.
- Nua (2003), Western European online travel sales double, <http://www.nua.com/surveys/index.cgi?f=VS&art_id=905358743&rel=true> viewed 29.4.2003.
- Nunnally, JC and Bernstein, IH (1994), *Psychometric Theory*, McGraw-Hill, New York.
- OECD (2001), *OECD Science, Technology and Industry Scoreboard 2001: Towards a knowledge-based economy*, <<http://www.sourceoecd.org>> viewed 6.3.2002.2002.
- OECD (2002), *OECD Information Technology Outlook 2002*, <<http://www.sourceoecd.org>> viewed 2.9.2002.2002.
- O'Neil, KM and Penrod, SD (2001), 'Methodological variables in Web-based research that may affect results: Sample type, monetary incentives, and personal information', *Behavior Research Methods, Instruments, & Computers*, vol. 33, no. 2, pp. 226-233.
- Rice, RE (1993), 'Media appropriateness: Using social presence theory to compare traditional and new organizational media', *Human Communication Research*, vol. 19, no. 4, pp. 451-484.
- Shim, S, Eastlick, MA, Lotz, S and Warrington, P (2001), 'An online prepurchase intentions model: The role of intention to search', *Journal of Retailing*, vol. 77, no. 3, pp. 397-416.
- Suh, KS (1999), 'Impact of communication medium on task performance and satisfaction: an examination of media-richness theory', *Information & Management*, vol. 35, no. 5, pp. 295-312.
- Taylor, S and Todd, P (1995), 'Assessing IT usage: The role of prior experience', *MIS Quarterly*, vol. 19, no. 4, pp. 561.
- Trevino, LK, Daft, RL and Lengel, RH (1990), 'Understanding Managers' Media Choices: A Symbolic Interactionist Perspective', *Organizations and Communication Technology*, Sage Publications, Newbury Park.
- Venkatesh, V and Morris, MG (2000), 'Why don't men ever stop to ask for directions? Gender, social influence, and their role in technology acceptance and usage behavior', *MIS Quarterly*, vol. 24, no. 1, pp. 115-139.

Werthner, H and Klein, S (1999), *Information Technology and Tourism - A Challenging Relationship*, 1st Edition, Springer-Verlag, Wien.

Zhang, Y (1999), 'Using the Internet for Survey Research: A Case Study', *Journal of The American Society for Information Science*, vol. 51, no. 1, pp. 57-68.