FACTORS AFFECTING CONSUMERS’ ATTITUDE TOWARDS ONLINE RESERVATION: AN EMPIRICAL ANALYSIS

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Abstract

With the rapid penetration of Internet in India and the increasing usage of the Internet for commercial purposes makes it imperative to understand and identify the factors which affects the attitude of consumers towards the adoption of Internet as an alternate channel for online reservations in case of Indian online travel industry. In this study we have identified perceived usefulness and playfulness as the significant predictors of consumers’ attitude towards using the Internet as an alternate channel for online reservation. We also found that novelty seeking and anxiety are not the significant predictors of attitude. These findings have implications for the online travel agents primarily because research has shown that a positive attitude leads to behavioural intention and hence behavioural action i.e. purchases (online transactions).

Keywords: Attitude, Internet, Indian Online Travel Industry

1. INTRODUCTION

The emergence of Internet as a cost effective communication medium has brought significant changes in the way businesses and consumers interact with each other. Since the commercial use of internet in 1994, businesses across the world has utilized Internet as an alternative and extended channel to reach consumers transcending geographical borders. Both consumer and firms have their share in benefitting from emergence of Internet as an alternative to the traditional physical channel. From the consumers’ perspective, the use of internet has resulted in saving time, cost and energy spent in getting the desired product (Grewal et al., 2002; Chen and Leteney, 2000). Whereas firms have reaped benefits mainly in terms of improvements in operational efficiency and revenue generation by integrating e-commerce into their value chain activities (Brynjolfsson and Kahin, 2000), and lower transaction costs (Bakos, 1998). With internet changing the dimensions of consumer-firm relation, it is imperative to study the driving and restraining factors behind consumers’ propensity to adopt internet to purchase a product or services.
Lin and Yu (2006) in their study presented a conceptual framework on consumers’ attitude towards adoption of Internet as channel for information searching and ordering. The framework outlined four constructs: perceived usefulness, anxiety, playfulness and novelty seeking. As they have mentioned in their paper that “the proposed framework could be applied to any online industry, particularly on-line travel.” In this study, we are examining the framework from India’s online travel industry viewpoint. Reason for choosing online travel industry being (a) Indian Online Travel Industry is the largest contributor to the B2C E-Commerce Industry, sized at Rs. 5500 crores for the year 2006-07 and is expected to rise to Rs. 7000 crores by the end of 2007-08 (IAMAI, 2007). However, research on consumers’ attitude towards adopting internet for online ticket booking has not been done in Indian context and (b) Internet users in India was estimated at 108 mn in 2007 and is predicted to be 322.4mn in 2012 (Datamonitor, 2008). Further internet access market revenue was USD 2.6bn in 2007 and number of cybercafés in India is estimated as 1, 82,045 in 2008 (IAMAI, 2005). With the positive climate prevailing for internet market, the success largely depends on consumers’ adopting internet for transaction purposes rather than only for information searching.

The objective of the study is to examine the factors affecting consumers’ attitude towards adoption of internet as a channel for online travel reservation. The study makes use of the framework suggested by Lin and Yu (2006) to empirically test the same in Indian context.

The rest of the paper is organized as follows: first we provide the literature review and the associated hypotheses. Next we elucidate the conceptual research framework. Then we describe our research methodology and data analysis. Finally we discuss the results and implications of our findings.

2. LITERATURE REVIEW AND HYPOTHESES

Studies (Davis, 1989; Fishbein and Ajzen, 1975) have underlined that the consumers’ attitude mediates the effects of belief variables on purchase intentions. In Technology Acceptance Model (TAM), attitude is viewed as learned implicit response toward a concept or object (Davis, 1989), here ordering ticket online. In Theory of Reasoned Action (TRA), attitude is defined as an individual’s positive or negative feelings about performing the target behavior (Fishbein and Ajzen, 1975). These
theoretical foundations about attitude stresses that for an individual to accept the technological innovation applications like using internet either for simple online searching of information or ordering things online, attitude towards those technological innovation determine the individual’s acceptance and further usage of it. In the context of online travel, particularly from India’s standpoint, though websites offer reservation facilities to book ticket online, consumers’ are reluctant to avail the online reservation service. As mentioned earlier, Lin and Yu (2006) proposed a conceptual framework studying consumer attitude toward adopting internet as channel. Using an adaptation of the framework, we investigate the consumer attitude towards online travel reservation in India and empirically validate the same. The following provides explanation about the four constructs and hypothesis associated with the same. The four constructs are Perceived Usefulness, Anxiety, Playfulness and Novelty Seeking.

2.1 Perceived Usefulness

Perceived usefulness is defined as the degree to which a person believes that using a particular system would enhance his or her job performance (Davis 1989). Therefore the success of any system, here use of internet as channel for online travel reservation, depends on users’ perception of how much it improves the performance. Researchers have broadly supported the relationship between the consumers’ attitude towards the technology adoption and usefulness of technology applications, particularly in the context of online purchase behavior (Chen et al., 2002; Moon and Kim, 2001). Study by Koufaris (2002) has shown that unlike perceived usefulness, perceived ease of use, another construct put forth in TAM is not positively related to intention to use the application repeatedly, since users gain experience with using an application. So, it can be said that perceived ease-of-use will not be as importance as perceived usefulness because online purchasers are assumed to be users that are already familiar with the web. Thus perceived usefulness has been shown to be an important predictor of technology acceptance (Agarwal and Venkatesh, 2002). Perceived usefulness of on-line purchasing also means that the user’s beliefs about whether he or she, when shopping on line, can search for and compare products, get information and a lower price, and thus gain more from the transaction (Alba et al., 1997). Thus it can be hypothesized that,
Hypothesis 1: Consumers with higher perceived usefulness of Internet will have more favorable attitude towards adopting Internet as a channel for online travel reservation.

2.2 Anxiety

Computer Anxiety was defined as “the fear or apprehension felt by individuals when they used computers, or when they considered the possibility of computer utilization” (Simonson et al., 1987, p.238). According to literature, Computer Anxiety plays an important role in technology acceptance by individual (Korukonda, 2006; Venkatesh, 2000). Venkatesh (2000) have found that computer anxiety negatively affects perceived ease of use of technology. Fagan (2004) has shown that higher levels of computer anxiety lead to lower levels of computer usage. Similar studies have found that higher computer anxiety will cause lower computer self-efficacy, slower development of computing skills, and the perception that software is difficult to use (Hackbarth et al., 2003; Scott and Timmerman, 2005). Consumers’ attitude towards online purchasing might vary depending upon how much he or she believes that process of utilizing computers to do the purchasing will be free of worries or tension. The fact that the consumer is not proficient in handling computer for task of online purchasing will affect the consumers’ decision of whether or not to go for online reservation. When people have higher anxiety, they may have more negative attitude toward Internet usage (Meuter et al., 2003). Thus it can be hypothesized that,

Hypothesis 2: Consumers with lower degree of anxiety arousal in Internet usage have more favorable attitudes toward the adoption of the Internet as a channel for online travel reservation.

2.3 Playfulness

Computer playfulness is defined as a state termed flow to describe the characteristic of the interaction between the user and the system (Webster and Martocchio, 1992; Wosczynski et al., 2002). Research has associated playfulness with intrinsic motivations of individual to indulge in particular activity, here internet usage and has been found to be system independent (Venkatesh, 2000). Individual’s perception about internet usage resulting in fun, curiosity and arousal seeking will motivate them to engage frequently and derive pleasure out of the activity. As Lin and Yu (2006) argue that “When the
context is Internet, the playfulness, such as enjoyment and curiosity, arousing in information searching and ordering may have the same effect as computer playfulness.” Further Moon and Kim (2001) found that it had significant positive effects for participants accepting in World Wide Web not only in entertainment but also in work context. Previous studies have verified that if users are more playful with their computer systems, they will be more willing to use them (Igbaria et al., 1994; Teo et al., 1999). Thus in the context of online travel reservation, it can be hypothesized that,

Hypothesis 3: Consumers who experience a greater sense of playfulness in Internet usage have a more favorable attitude toward the adoption of the Internet as a channel for online travel reservation.

2.4 Novelty Seeking

Novelty seeking is used to describe a characteristic of an individual who are early adopters and usually receptive to new ideas. Novelty seeking has been termed in many ways as “innovativeness,” “personal innovativeness,” by different researchers. Rogers (2003) define ‘innovativeness’ as the degree to which an individual is relatively early in adopting an innovation compared to other members in the social system. Agarwal and Prasad (1998) define personal innovativeness in information technology context as, "the willingness of an individual to try out any new information technology" is referred to as personnel innovativeness. Individuals with high innovativeness tend to use more mass-media (interpersonal communication) and place less value on subjective evaluation by members of their social system pertaining to technology adoption (Agarwal and Prasad, 1998). These individuals have also been found to use the Internet more frequently to search for relevant organization-related material (Larsen and Sorebo, 2005). Individuals that possess high levels of computer self-efficacy and high levels of innovativeness are more likely to accept information technology (Agarwal et al., 2000; Thompson et al., 2006). Novelty seeking is an aspect of innovativeness related to the desire to seek out new stimuli (Hirschman, 1980). Treated as a generalized unobservable predisposition, novelty is defined as the degree to which an individual is receptive to new ideas and makes innovative decisions independently of the communicated experience of others. Highly innovative individuals tend to seek out new, mentally, or sensually stimulating experiences (Venkatramen, 1991). Thus it can be hypothesized,
Hypothesis 4: Consumers with higher degree of novelty seeking have a more favorable attitude toward the adoption of the Internet as a channel for online travel reservation.

3. CONCEPTUAL FRAMEWORK

Figure 1 exhibit the conceptual framework based on the literature review and hypotheses proposed in the earlier section.

![Conceptual Framework](image)

*Figure 1. Framework for Consumers’ Attitude towards Adoption of Internet as Channel*

4. RESEARCH METHODOLOGY

4.1 Data and Sample

Data for the study was collected through an online questionnaire survey among the graduate students with of a reputed business school in Hyderabad. The measurement items for the constructs in the study were adopted from the literature and adapted to the present research context. Items for perceived playfulness and perceived ease of use were adopted from Dabholkar and Bagozzi (2002).
and Moon and Kim (2001); novelty seeking was adopted from Dabholkar and Bagozzi (2002); consumer anxiety and attitude towards internet were adopted from Moon and Kim (2001). The measurement items are shown in table-1. In all 500 questionnaires were distributed out of which 220 were received and of which 214 were usable. So the response rate was 42.8%. The sample included 102 females (47.66%) and rests were males. Respondents selected the website that they had most recently visited and with which they had some purchasing (online reservation) experience in the recent past. The data collection took place in a major business school in Hyderabad with student subjects. Internet researchers generally accept the use of student subjects because students are the most active users of Internet and they also have actual online purchase experiences (Yoo and Donthu, 2001). Gefen et al. (2003) also states that students are the most innovative users of Internet and the most active segments of online shoppers.

4.2 Data analysis and Results

A confirmatory factor analysis was conducted on a measurement model involving the constructs playfulness, perceived usefulness, anxiety and novelty seeking using AMOS 16.0. Reliability of the constructs was assessed by calculating the Cronbach’s alpha and for all the constructs the value was greater than 0.7 which is acceptable (Hair et al., 2006). The composite reliability values for all the constructs were greater than 0.6 which is acceptable for the constructs to be reliable (Bagozzi and Yi, 1988).

The output showed that each indicator (factor loadings ranging between 0.55 and 0.74) loaded significantly on the constructs (p < 0.001), which reflects the convergent validity of the constructs (Anderson and Gerbing, 1988). Further the average variance extracted (AVE) for all the constructs in the model were greater than 0.5 which further supports the convergent validity. The AVE values were greater than the inter-construct squared correlation estimates which supports the discriminant validity of the constructs (Fornell and Larcker, 1981).

The model fit showed that ($\chi^2 = 107.78; df = 59; p<0.001; CFI = 0.930; GFI = 0.910; TLI = 0.906; IFI = 0.931; RMSEA = 0.06$). The values of the fit indices mentioned above indicate a reasonable fit of the measurement model with data (Byrne, 2001).
Next a multiple regression analysis was conducted with attitude towards Internet as the dependent variable and playfulness, perceived usefulness, anxiety and novelty seeking as the independent variables. We measured attitude towards Internet through a multiple item scale with Crobach’s alpha as 0.770. Twenty eight percent of the variance in the dependent variable was explained by the four independent variables. From table-2 it is evident that novelty seeking and anxiety are not significant at 5 percent level of significance and perceived usefulness and playfulness had the greatest impact on the attitude towards Internet.

5. DISCUSSION

The purpose of the study was to identify the factors affecting consumers’ attitude towards online reservation in the online travel sector in India. We found that perceived usefulness and playfulness were the significant predictors of affects consumers’ attitude towards online reservation. These findings are in line with the earlier research findings of Dabholkar and Bagozzi (2002) and Moon and Kim (2001). The fact that anxiety is not a significant predictor of attitude reflects that using internet for online reservation does not cause anxiety in consumers. This reiterates the fact that the use of Internet as an alternate channel for online reservation is getting importance and acceptance among consumers. This has implications for the online travel agents in the form that they should enhance the online booking experience of customers by designing the websites and making the transactions hassle free and safe. This is so because the perceived risk of consumers’ should be low so that he feels at ease to use this alternate channel of booking. Again novelty seeking was not a significant predictor of consumers’ attitude towards this alternate channel. This reflects the fact that consumers do not see anything novel in going online and making a transaction. They perceive Internet as another channel for booking their reservation.

We also found the significant impact of playfulness on attitude toward using Internet as an alternate channel for reservation. This reflects that extrinsic factors have an impact in building the positive attitude. So the online travel agents should make the websites more interactive, because research has shown that interactivity of a website has a positive relation with the electronic satisfaction (Song and Zinkhan, 2008).
Further perceived usefulness had a significant impact on consumers’ attitude. We found that playfulness had a more significant effect on individual’s attitude than perceived usefulness. This implies that extrinsic motivational factors have more powerful effect than the intrinsic factor to build attitude.

In the end we would like to caution the readers not to generalize the findings of the study because this has been conducted only in one city of India. Additional research with a more representative sample needs to be conducted before the findings can be generalized to the population of consumers choosing Internet for online reservation. Again we would like to highlight that the variance explained in our multiple regression model was only 28 percent which clearly shows that a number of other factors like e-satisfaction, website quality and consumers’ trust in a particular online travel agent should be included in future research.

References


IAMAI (2007). “Consumer E-Commerce Market in India 2006/07, A Report by eTechnology Group@IMRB and Internet and Mobile Association In India(IAMAI).” www.iamai.in.


<table>
<thead>
<tr>
<th>Constructs</th>
<th>Measurement Items</th>
</tr>
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<tbody>
<tr>
<td>Playfulness</td>
<td>Using Internet for an online booking gives me enjoyment</td>
</tr>
<tr>
<td></td>
<td>Using Internet for online booking stimulates my curiosity</td>
</tr>
<tr>
<td></td>
<td>Using Internet for an online booking leads to my exploration</td>
</tr>
<tr>
<td></td>
<td>Using Internet for online booking arouses my imagination</td>
</tr>
<tr>
<td>Perceived Usefulness</td>
<td>Using the Internet improve my ability to expedite a booking</td>
</tr>
<tr>
<td></td>
<td>Using Internet for online booking enables me to have more relevant, latest and accurate information</td>
</tr>
<tr>
<td>Novelty Seeking</td>
<td>I am always seeking new ideas and experiences</td>
</tr>
<tr>
<td></td>
<td>When things get bored I like to find some new and unfamiliar experiences</td>
</tr>
<tr>
<td></td>
<td>I like to continually change activities</td>
</tr>
<tr>
<td></td>
<td>I like to experience novelty and change in my daily routine</td>
</tr>
<tr>
<td>Anxiety</td>
<td>If given an opportunity to use a computer to make a booking online, I am afraid that I might damage it in some way</td>
</tr>
<tr>
<td></td>
<td>I would avoid booking online if I knew it involved working with computers</td>
</tr>
<tr>
<td></td>
<td>I need experienced person nearby when I use computer for a booking</td>
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*Table 1. Measurement Variables*
<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Standardized Beta</th>
<th>t-value</th>
<th>p-value</th>
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<tbody>
<tr>
<td>Playfulness</td>
<td>0.230</td>
<td>3.222</td>
<td>0.001</td>
</tr>
<tr>
<td>Perceived usefulness</td>
<td>0.156</td>
<td>2.242</td>
<td>0.026</td>
</tr>
<tr>
<td>Anxiety</td>
<td>0.054</td>
<td>0.770</td>
<td>0.442</td>
</tr>
<tr>
<td>Novelty seeking</td>
<td>0.017</td>
<td>0.253</td>
<td>0.800</td>
</tr>
</tbody>
</table>

Dependent variable: Attitude towards Internet

Table 2. Multiple Regression Output