A FRAMEWORK TO ANALYSE THE EFFECT OF HOTEL WEBSITES STIMULI ON EMOTIONS, ATTITUDE AND INTENTIONS MODERATED BY SENSORY CURiosity; LANGUAGE OF INSTRUCTION; CLASSIFICATION OF HOTEL; AND ANNUAL INCOME OF CUSTOMER

Baishali Sarkar
University of Aveiro
baishallife@gmail.com

Sandra Maria Correia Loureiro
University of Aveiro and ISCTE-IUL
sandra.loureiro@ua.pt

ABSTRACT

The present study reviews the literature about the S–O–R framework and proposes an extending model regarding attitude and behavioral intentions as responses. Additionally, the model hypothesizes that sensory curiosity, language of instruction, classification of Hotel, and annual income of customer moderate the relationships between atmospheric cues and consumers’ emotional reactions. The proposed model should be tested using two samples. One sample should gather consumers who have experience of using and booking in hotel websites. Another sample, a group of control, should be composed of people with no experience in using the hotel website for booking.

KEYWORDS

1. INTRODUCTION

Internet and websites have made big change in every sphere of our life. It has brought us the opportunity to get information quickly from anywhere almost without any cost. Before we plan to travel somewhere, we can check in the internet how the weather would be, how the place is, what facilities we can get there to stay or for other requirements, where to stay etc. When a modern educated person chooses to stay at hotel, he expects to get informed about the things what the hotel can offer, and more about the daily normal life requirements. Now if the person gets more useful information about his travel trip, then he gets more attached with that hotel website naturally. This is primary example that hotel websites can provide the touristic information in their own websites, which can make their site more exciting. So, firstly we have to make a good website to attract the tourists.

Previous study of Law and Wong (2003) has identified the three most important factors in a successful website as being ‘secure payment methods’, ‘different price ranges for products/services’, and ‘user-friendly systems’. Authors also added that these three factors may possibly provide a further explanation of the intention of travellers to make purchases over the hotel websites. Record says that number of customers, booking reservation for rooms or any tickets, is increasing day by day, because the safety features in the internet and the awareness. Wong and Law (2005) show that 42.2 million people booked their travel arrangements online that year. Greenspan’s (2004) research tells that in 2003, 67 per cent of internet users who travelled in the US used the internet to obtain information on destinations or to check prices or schedules. Even the cost of a booking via hotel website also could be as low as US $3 to 3.50; however reservation via call centre would cost minimum US $9 (Starkov, 2002). Especially security is concerned as the
biggest fact to make purchase on web according to many researches (Udo, 2001), Law and Leung (2000) and Lang (2000). Price range and user-friendliness are also most critical factors for consumers choosing to purchase air tickets on the Internet Law and Leung (2000) and Lang (2000). Features of an airline website showing helping attributes to customers to make online reservations can lead a customer to purchase the service online Law and Leung (2000). Different variables of usability such as ease of use, good content, well-organized structure, linkage, and good appearance could positively influence the adoption of web shopping (Abels et al., 1997). According to Law and Chung (2003) the features of a hotel website should consist of information on facilities, customer contact, reservations, surrounding area information, and information on management of the website. On the other hand, Choi and Hsu (2001) defined website features as product/service, place, price, promotion, packaging, people, and communication. In advance step, hotel website should include functions that are available to users Murphy et al. (1996). Wong and Law (2005) have shown important process of making online bookings by travellers are:

Quality of the information including the elements of enjoyment and playfulness (Au Yeung and Law, 2003; Perdue, 2001; Ranganathan and Grandon, 2002), Time to assess a website (Au Yeung and Law, 2003), Price (Law and Chung, 2003; Liang and Law, 2003), security of the payment system (Law and Leung, 2002; Law and Wong, 2003), security and privacy (Ranganathan and Grandon, 2002), download time (Udo and Marquis, 2001–2002).

So, all these studies lead us to provide an ideal website, which can attract the customer as well as they can assure them privacy and security of purchasing. We are going to add the tourism information along with these variables as it is the most important part of our study. In the first part, we have discussed detailed about S-O-R model and the main construct in this present context. In the second part, variety of moderate variables such as curiosity, selecting language function, classification of hotels and customer income has been discussed. After that, severally we have focused on our perceptual research model, future methodological process; contribution, implication, limitation and further research.

2. LITERATURE REVIEW

2.1. THEORETICAL FOUNDATION (S-O-R model)

Mehrabian and Russell (1974)’s environmental psychological research is the main theoretical foundation for the current study. The main operation of this study is in the sequence of a stimulus—organism—response (S–O–R) framework. This framework suggests that the stimuli as previous affect the consumers’ emotional states (organism), whose response may result in their retail behaviours (responses) such as store search and in-store behaviour (Thang and Tan, 2003).

2.1.1. STIMULI

The stimuli are operationalized as the atmospheric cues (Donovan and Rossiter, 1982). Baker et al. (1994) presented groups of the elements of store environment as three categories: social factors (people in the store such as customers and employees), design factors (visual cues such as layout, colour, clutter, and cleanliness), and ambient factors (non-visual cues such as smells, sound, and lighting effects). In this study, we have selected 5 stimuli from the previous study. They are (Wong and Law, 2005):

**Information quality**- Price information, useful information, number of hotel web features, links to other sites, visually attractive;

**Sensitivity content**- Sending sensitive information, competitive price;
Time - Time to search for hotel website, time to fill in information to book a room;

Functionality - The website should work properly; and

Usability - The website should be easy to read, navigate, and understand; for hospitality and tourism online businesses, usability website features must be examined to enhance purchase intentions.

Many studies have indicated that variables of usability such as ease of use, good content, well-organized structure, linkage, and good appearance could positively influence the adoption of web shopping (Abels et al., 1997; Jordan, 1998) if a website is not attractive, customers will leave immediately before they can experience how well the usability is.

2.1. ORGANISM

Organism is emotional and cognitive states of consumers (Donovan and Rossiter, 1982). Emotional responses are perceptual, physiological, feeling, and thinking activities and causes a change in the emotional and cognitive state of the consumer (Koo and Ju, 2010). Pleasure and arousal are the two elements of organism in this study.

Pleasure is defined as “the degree to which a person feels good, joyful, happy, or satisfied in a situation” (Menon and Kahn, 2002, p. 32). Arousal is “the degree to which a person feels stimulated, active, or alert. Arousal is measured with items such as stimulated/relaxed, excited/calm, and aroused/un-aroused (Eroglu et al., 2001, 2003). Arousal can be understood as the extent to which an individual who engages in an online shopping feels stimulated, active, or excited when he navigates web pages of the online store. Sherman et al. (1997) showed that pleasure has a positive impact on the amount of money spent and store liking, arousal has a positive effect on the amount of money spent and the number of items purchased. He measured the duration of visit with a single item, the amount of time spent in the store. Wulf, Schillewaert, Muylle, and Rangarajan (2006) empirically demonstrated that the online store with good and necessary content, well established organization, and reliable technology pleases their customers, and lead them to navigate and search more, be satisfied and committed. On the other hand, graphics, colours, and links are important in pleasing and arousing online shoppers, menus have a negative impact on pleasing and arousing them (Koo and Ju, 2010).

2.1.3. RESPONSE

Response is an approach or avoidance behaviours (Donovan and Rossiter, 1982). All positive actions might be directed toward a particular setting. As an example, intention to stay, explore, and affiliate, avoidance behaviours concern the opposite (Mehrabian and Russell, 1974). Donovan and Rossiter (1982) adopted time and money spent, returning, store exploration as their approach behaviours. The quality of the information on a website, including the elements of enjoyment and playfulness, is an important factor in the success of a hotel website (Yeung and Law, 2003) and of websites in general (Liu et al., 2001). Similarly, Perdue (2001) and Ranganathan and Grandon (2002) found that the quality of contents is one of the most important reasons why travellers make a booking on a particular site. As a response our model proposes attitude and intentions.

Ducoffe (1996) already explored the antecedents of consumer attitudes toward website advertising. Traditional advertising influences consumer attitudes through cognitive and affective processes (Lutz, 1985), and the same logic can be assumed to apply to online advertising (Hwang et al., 2011). Web pages especially made for travel products, have proved using of pictures as a successful tool.
Jeong and Choi (2004) found that the content and realism (pictures with or without people) of picture presentations are important predictors of customers’ attitudes toward the website, and their attitudes appear to be a strong predictor of behavioural intentions, by analyzing pictorial presentations from 203 hotel websites in New York.

It is important to understand customers’ purchase intentions because customers’ behaviour can usually be predicted by their intention. In Salisbury et al.’s (2001) study, information quality and price level enhanced the intention of travellers to make purchases over hotel websites. In terms of the dimensions of the intention to purchase, a successful website always has high-quality contents and good security measures (e.g., Choi and Hsu, 2001; Lang, 2000; Law and Leung, 2002; Wong and Law, 2005). Time is also newly identified factor for arousing the intention to purchase (Wong and Law, 2005).

2.2. ATMOSPHERICS

Atmospherics are defined as “the conscious designing of space to create certain buyer effects, specifically, the designing of buying environments to produce specific emotional effects in the buyer that enhance purchase probability” (Kotler, 1973–74, p. 50). Atmospherics in the current study are perceived as any component of websites created by the hotel industries to attract the tourists worldwide along with the individual’s perceptual field and that stimulates its acoustic and visual senses. The conscious designing of web environments makes a hotel perfect to create the positive emotion of web users in order to increase responses from consumers. Web atmosphere helps the consumer to feel the internal and external environment of the hotel. It has the aim to make consumer revisit or browse their websites. As the visual appeal is very important, so the pictures or the design of web environment should be very consciously. This may create the positive emotional responses in users’ mind and it helps to increase the consumer responses for longer time as well as purchase intention in the future. Eroglu et al. (2003) demonstrated that site atmospherics have a positive impact on pleasure and arousal and both of which have a subsequent positive effect on satisfaction and approach/avoidance behaviours.

Zafirooulos and Vrana (2006) have showed the vast “information services and dimensions”, where they have included “surrounding area information” at the web service. Every required data are detailed in that survey, which can play a good advice to all hotel websites.

2.3. MODERATE VARIABLES

2.3.1. SENSORY CURiosity

Curiosity in general reflects an intrinsic desire for new information to stimulate interest and/or remove uncertainty, which is aroused by novel, complex, or ambiguous stimuli, and motivates exploratory behaviour (Litman, Robert and Spielberger, 2005). There are four different types of curiosity: interpersonal, epistemic, sensory, and perceptual curiosity. In this case, we shall discuss only about Sensory curiosity, which is defined as an interest in engaging in adventurous and thrilling experiences that involve relatively little imminent danger (Litman et al., 2005). It motivates people to search for novel and unusual sensory experiences such as rain forest exploration, dog sledding, horse riding, desert voyage, and other explorations (Litman et al., 2005).

2.3.2. LANGUAGE OF INSTRUCTION

People can get or lose interest in anything just for the lack of communication. Language is that important media of communication, which provide the knowledge to the customer what they really want to know. In Leung, Rong, Li and Law (2011), 67.1% responds on the language preference in
hotel websites. Gefen (2000)’s study also proof the language preference to the Chinese customers. English as an international language can cover many country’s e-browsers, but still in Europe, most of the customers from Latin countries have least knowledge in this language. So, they also prefer their own language (I don’t have any citation to prove this statement, but being lived here, I can tell this).

2.3.3. CLASSIFICATION OF HOTELS

According to Law and Cheung (2006), Hotel Class and Perception of importance of overall quality are dependable on each other. In their research, they have revealed that terms of individual hotel classes, the respondents had a neutral perception of the importance of the overall quality of websites for one-star and two-star hotels; but overall quality of web features as important for four-star and five-star hotels. Vrana et al. (2004) measured that the quantity and type of information provided through hotel websites and found out that higher class hotels as well as chain hotels appear to be more active in offering information services. The empirical findings showed that the level of the perceived importance increases with the class of hotel. In other side, Zafiropoulos et al. (2012) showed that hotel class is not significantly correlated with customer contact information and surrounding area information.

2.3.4. ANNUAL INCOME OF CUSTOMER

Income has direct connection with purchasing products. So, previous studies have examined many times with this variables, though, it doesn’t have clear effectiveness which can make a proved relationship between income and the purchase intension of e-browser. According to Tanford et al. (2011) marketing efforts can focus on the fact that full service patrons, more fulltime employed, have higher incomes, travel more during the week for business, spend more on hotel rooms and book more frequently online.

3. RESEARCH MODEL

Previous empirical studies have made the key features to price (discount), security of the payment Law and Leung (2002) and privacy (Ranganathan and Grandon, 2002), rapid information searching for purchasing hotel accommodations (Law and Chung, 2003; Liang and Law, 2003) and tourism products online (Law, 2003). But here we have selected 5 features to conduct our research. Information quality, sensitivity content, time, functionality and usability are those factors.

Time to assess a website is a critical factor according to Au Yeung and Law (2003), to determine whether users are willing to make bookings on the websites of hotels. Udo and Marquis (2001–2002) stated about download time, which is the most important factor in the effectiveness of a website in their opinion.

Mehrabian and Russell (1974) have showed atmospherics are converted into meaningful information and used to comprehend the environment before consumers’ making any judgment or conclusion. Atmospherics cause a change in the emotional state of the consumer. With respect to the links between atmospherics and emotional states, previous empirical research suggested that atmospherics have a positive effect on emotional responses. Mummalaneni (2005) and Davis, Wang, and Lindridge (2008) proved that web atmospheric cues have positive impacts on both pleasure and arousal.

All of the above attributes may potentially prompt travellers to make a purchase over the Internet. Since Internet usage has grown rapidly, it is vital to identify how potential customers perceive hotel websites, because such information may give an indication of how online hotel reservations can be
increased and a hotel’s profitability be improved; and for this reason, the hotel organization has to concentrate more to create the hotel website more attractive to any web visitor. Therefore, based on literature review it is possible to organize the following prepositions:

P1: stimuli in websites will have a positive effect on tourist pleasure.

P2: stimuli in websites will have a positive effect on tourist arousal.

P3a: Pleasure will have a positive impact on attitude.

P3b: Pleasure will have a positive impact on intention.

P4a: Arousal will have a positive impact on attitude.

P4b: Arousal will have a positive impact on intention.

P5: Attitude will have a positive impact on intentions.

P6: The effect of stimuli in website on pleasure will operate differently according to the variability of each moderate variable.

P7: The effect of stimuli in website on arousal will operate differently according to the variability of each moderate variable.

**Figure 1: Perceptual Research Model**

![Perceptual Research Model Diagram]

Source: elaboration by the authors.

4. **PROPOSED METHODOLOGY AND DATA ANALYSIS**

Beatriz Plaza (2010) has shown us how easily the web site performance can be measured by Google analytical feature. This web analyser program analyses number of visitors, the average number of page views per visitor, average page duration, most requested pages, domain classes and referrers; Source of customer visits like direct visits, referring site visits and search engine visits. Even...
analytics tells the web owner how visitors found the site and how they interact with it from search engines, from referring sites and emails, and direct visits (Plaza, 2009). Thus the hotel websites gain insight into how to improve the site’s content and design, as well as we can understand the attitude and intentions of tourist web-visitors.

We can examine our study by researching just one or more hotel website providing all necessary features (facilities information, guest contact information, reservation/ price information, management of website, company profile etc.) along with the tourist information such as area interest, map, distance, transportation, nearby facilities, weather etc (Zafiropoulos and Vrana, 2006). The aim of our study is to show that hotel websites having tourist information expand the local tourism and tourist information also expands the popularity of hotel.

Concurrently, we can test directly the proposed model using a survey technique in each a group of items to measure each construct are organized in a questionnaire.

The main sample should be organized with those who have experience of using and booking in hotel websites. Another sample, a group of control, should be composed of people with no experience in using the hotel website for booking.

5. CONTRIBUTIONS, POTENTIAL IMPLICATIONS AND LIMITATIONS

This study is based on the previous researches, which already have been published in different type of journals. Theoretical aspects of characteristics to build a good hotel websites are major study in the background of this model. S-O-R model is proved as practical process to measure cause and effect. Searching websites is main reason to get useful information. Along with the general information about the hotel and its services, if the site also provides the knowledge of local “places to see” or to know about the local culture, habit, offers typical food to the browsers, the browsers definitely will be interested about the place to go, more than before. With this touch of little information, local places can grow up as new tourist destination. If the hotel stays in distance of some kilometres from famous tourist spot, then they can inform their future customer about public or private transportation availability through the hotel website. This information makes the traveller more assured than the normal one. Giving the maps of area also can be a good step. This article shows theoretically how these small things (stimuli) make changes in people’s mind and make them response. This study is outline to step forward towards the practical research.

The proposed model will contribute to go further in understanding the effects of stimuli in hotel website on attitude and intention, regarding the proposed and not yet fully analysed and studied moderated variables. Therefore, the findings of the empirical research will also provide important considerations for the managers of the hotel websites.

6. CONCLUSIONS

Online satisfaction was found to have a positive impact on purchase intentions, both short-term and long-term, mediating the effect of website quality (Bai et al., 2008). In this way, in this study we propose to test the effect of attitude on intentions. As previous studies found no significance difference between male and female hotel website users in terms of purchasing or searching information from hotel websites (Weber and Roehl, 1999; Law and Wong, 2003), and Bonn et al. (1998), we don’t want to use gender as a variable. But having option to select different language is good for customers to know the hotel and the tourist information.

Consumer attitudes regarding website characteristics directly influences purchases, it did not investigate whether positive website attitudes result in actual purchases. But, by including the
tourism information to the hotel website makes it more acceptable to the customers and even it can transform the web-searchers into web-purchasers more easily. Further study can be discussed practically with different variables used in past researches. We didn’t go through the important variables such as colour, graphics, design, using pictures of web sites; but every point is important to measure the quality of web-service of hotel industry. Next research can be used on the basis of these moderated variables.

REFERENCES


