

Measuring the Factors Affecting Hotel Online Reservation: A Structural Equation Modeling Approach

*Farah Adiba Mohd Radzi, Wan Rusni Wan Ismail, Norfezah Md Nor, Hasniza Abdullah,
Hashim Fadzil Arifin, Anderson Ngelambong and Mohd Salehuddin Mohd Zahari*

Faculty of Tourism and Hotel Management, Universiti Teknologi MARA Cawangan
Pulau Pinang, 13500 PermatangPauh, Pulau Pinang, Malaysia

Abstract: The emergence of hotel online booking websites allows customers to have direct access to guests' reviews, best price and the overall information related to hotels. Customers can even make a comparison between hotels before making a decision. This has made the online booking another popular platforms for the public to book a hotel room at their convenience. Fair reviews by previous guests in another way help to promote hotels indirectly. However, some reviews did give adverse impact to the hotels in so many ways which will influence the customer buying intention. This study examines the structural relationships of price, hotel brand, positive reviews and negative reviews to customer hotel online reservation intention. Questionnaires that consist of price, hotel brand, positive reviews, negative reviews and customer hotel online reservation intention were distributed to 200 respondents who had experienced using online hotel booking. Findings showed that the significant relationships between price, hotel brand, positive and negative reviews to customer hotel online reservation intention are confirmed in Structural Equation Modeling (SEM). Implications and suggestions for future research are also provided.

Key words: e-WOM • Online booking • Brand image • Customer hotel online reservation intention

INTRODUCTION

Nowadays Internet development has improved, where people using the internet to get information and communicate with people all around the world without any limitation and it has driven people to the Knowledge Era which the Internet helps them to capture information and knowledge creation [1]. Online hotel reservation become easier because customers can book a hotel room through the website without going to hotel site or make a phone call to make a room reservation. In the PhoCusWright online travel website survey, 38% of the online global market has contributed to the gross travel booking that exceeding \$150 billion in 2013 [2]. The examples of the website are expedia.com and hotel.com.

Agreeing to Statistic Brain [3], it stated that 148.3 million number of booking made on Internet each year, the percentages of people booking through the website is 57% and 65% on the same day hotel reservation made from a smart phone for each year. From it, we can know

most of the customers make a reservation through online websites rather than a visit to a travel agent and hotel property personally.

According to Ladhari and Michaud [4], the Internet provides countless advantages compare with traditional WOM (Word-of-Mouth) include speed and ease of access to information, it is available for a long time and without involving face-to-face human pressure. Nowadays, a hospitality industry uses Internet as their platform to advertise products and service. It can help the company to understand more in-depth from a customer perspective about the product and service.

E-WOM (Electronic Words of Mouth) also known as comment in the website has become popular, where people comment about something that may attract the interest of people to give an opinion or likes the comments and sometimes it becomes one of the reasons people using the comments as the solution to make a decision when buying something through an online website. Furthermore, a study stated that the use of mass

media advertising to promote hospitality property is widely reachable and effective to gain people attention. The existence of e-WOM makes the advertising to become inexpensive and highly effective [5].

The use and access of electronic word of mouth (e-WOM) giving people the opportunity and ability in posting positive and negative e-WOM [6] that relate to anything that people feel interested with either the service or hotel itself. Through the website, people or traveller could share their opinion about the hotel accommodation, service and information that help the future customers to decide on choosing the hotel that they can stay.

Literature Review

Hotel-Online Reservation: The improvement in technology allowing people to interact with each other by meeting face-to-face through websites such as Skype and from that people mostly spend their time with Internet rather than talking with people surrounding them. The existence of Internet allows people to access to a variety of websites either to find information, chatting and purchasing of product or service.

Nowadays people who want to travel will use websites to search information regarding the hotel accommodation, service, product, distance of the hotel from the airport and the transportation provided in the area of the hotel [7]. People usually gain information about the hotel it either form a friend or family recommendation but their also search from other resources like comments from the previous customers that have already experience the product or service from the hotel the customer stayed. The comments can be obtained from websites such as Trip Advisor and Hotel.com.

From the websites that people are commenting, the future customers can review the destination they interested in to visit when going vacation by search the accommodation provided within the areas, restaurants, interesting places such as night market and museum and other products or services that may relate with the tourist's activities [8]. Websites also give customers information about any promotion or events that may be organized by the hotels such as the price of rooms that different in each website and Ramadan buffet that advertise through hotel websites.

Most of the hotel companies have been actively involved in multiple distribution channels to sell their product and service efficiently using the combination of traditional and electronic channels because not all channel represented is a good match for the organization to improve their promotion sale. It is important for

organization to depend and believe to the channels that best matches in achieving organizational goals [9].

Hotel Brand: The spread of Internet has improved the communication of people from face-to-face communication to electronic word communication where consumers can also gain more information thru Internet usage about anything that they may interest with. Branding provides the products and services with the power of the brand and its something that will always be remembered and recognized by local or international customers [10].

Hotel branding involves the hotel reputation in the eye of customers in term of service that customers receive from the moment guest arrive at that the hotel property. There are studies mention that e-WOM can affect the hotel branding especially the positive comment online will result in higher booking intention of the hotel [11]. Meanwhile, the negative comment through online of hotel branding will have slight effect and guest still booking the hotels even receive negative comments about it because the reputation that hotels hold in the markets.

The credibility hotel brand could influence customers to book the hotel even there are negative e-WOM and helping customers in making a decision. A hotel that already known by a public tend to have more follower rather than an unknown hotel it because they have their reputation that will be remembered by previous customers and it will increase people interest to have intention in booking the hotel based on brand. The hotelier will use the Internet as a middle person to promote the service and product with low-cost distribution channel, that may have significant effect on the business and customers itself [12]. Therefore, the first hypothesis is developed.

H¹: There is a relationship between hotel brand and online hotel reservation intention.

Positive e-WOM: Consumers rely on price and types of the brand product when they are purchasing something, but there is certain type of consumers that rely on information that were provided in the products and from people who has experience in using the products [13]. With the increase of technology use, people more depending on the comments that posted by the customers who have experienced the products and from it, customers who may have the interest to buy the product or service will consider whether to buy or not. Most people use e-WOM as a reference when they want to know about food, a place for travel and cosmetic product.

After they review the comments, the consumers will try the product and service by visiting the place themselves and use products from it they also will give comments about the product and service that has been an experience.

The e-WOM is considered as more reliable and credible information from sources other and is effective as a decision making aid when the consumers trust recommender, so e-WOM give an effect on recipients when they make a decision on product and service that interested with. When a customer what to know about the product or service of certain hotel before they make a reservation, they will find information either from the hotel itself or other resource and e-WOM is one of place where customers can gain information. Some of the information in this e-WOM websites can be trusted and some not. Thus, futures customers need to make research about the info not only depend on one site but study other website e-WOM that provides comments about the hotel.

Trust influenced by behavioural intentions of customers that likely to purchase either through online or offline [14]. The future customers will trust the comments when they review profiles, reputation and profile picture of the commenters whether it true or fake and from it can contribute to trust establishment in the reviewer [15].

The credibility of positive e-WOM to the customers is important because people need reliable information [16]. They can depend on especially when future customers want to find information about the hotel they want to book or visited. From the e-WOM platform, future customers will gain extra information about a hotel whether it gives the negative or positive perception to the previous customers. People will search information about the hotel either through hotel website or asking other people opinion because some people more prefer to using comments as the reference when making a decision to booking hotel online. There are types of people who prefer to call the hotel directly asking about the room, facilities and promotion that may have at that times. Hence, the second hypothesis is developed.

H²: There is a relationship between positive e-WOM and online hotel reservation intention.

Negative e-WOM: The information gain from e-WOM can help the customers make decision immediately but when they gain more information from different kinds of people or websites it can make the guests confuse with information which one the customer should trust because different commenters have different perception about the

products and service and it can influence the customers to make a wrong decision on their hotel booking. Therefore, the information credibility of e-WOM that perceived by customers should be reviewed as reasonable, true or accurate of the message for them to make the best decision when booking a hotel through a website [5].

The information quality of product or service is defined as perception customer toward the quality information that provided by the websites about product or service. The quality information gives effect to customers' satisfaction with the info given [17]. The information that customer gains some of them can be true or not cause people write a comment based their perception and the info quality can ensure the hotel company the potential customers and retain them with websites if the customers' belief with the info they gain from the website.

The information quality is essential when a customer is searching for information of hotels based on e-WOM and to ensure the quality of information a customer must not focus on one website only; they also need to search other resources. Other than that, customer need to ensure the sources of e-WOM can be trusted by asking the commenter privately their experience and find other info that stated the commenter is someone that can be trusted. Other study also found that credibility e-WOM will help customer's decision-making process and reduce the uncertainty other resources information [5].

The negative e-WOM have the big impact on customers when they make a hotel booking because customers want to know about the hotel from inside and outside, so they must make a decision either to book the hotel or not based on the comments and the way hotel reply the question when asking about the hotel through phone call. Thus, the third hypothesis is developed.

H³: There is a relationship between negative e-WOM and online hotel reservation intention.

Price: The advancement of technology in term of Internet has helped people to connect without meeting face-to-face, Internet make people job became easier and it provide a person with a solution for the problem their facing with. In the hospitality industry especially the hotelier, they need to promote the service and produce to the public. Thus, it is important for the hoteliers understanding a customer intention when they book hotel accommodation through online [18]. Then, the price is one of the reasons that effect future customer intention to book a hotel through online rather than personally go walk-in.

Today people use the internet to find something that may interest them or find solution for their answer. A traveller wants to find an accommodation to stay when going travel with low price and mostly they will find it using the internet as one of the platforms. It is an opportunity for a hotelier to generate revenue with a reservation made by a customer through hotel website either direct hotel website or third party website [12].

Customers are affected by the rates offers by hotel website and third party website because most of the customer searches accommodation that can provide them with good service and comfortable place with lower price. Statistic shows that 65.4% tourists prefer to make hotel reservation from a brand website such as www.marriott.com and 19.5% prefer to book hotel from a merchant website such as Expedia or Hotel.com [3] and the statistic, we can make prediction that most customers prefer to make reservation through online website rather than go direct walk-in or phone call.

Price is important for tourist or traveller when they want to make a hotel reservation and they will evaluate the quality either it acceptable with a price that being offered with because some hotel offers a lower price with low service and quality that cannot be accepted by some tourists [19]. A reason for a customer to make a choice on online hotel reservation is because the price that offered by hotel websites is different, so the customer has a variety of choice to make based on the price offered from lower price to higher price. Therefore, the fourth hypothesis is developed.

H⁴: There is a relationship between price and online hotel reservation intention.

MATERIALS AND METHODS

Participants and Procedures: The participants of this research comprised of customers that used online hotel reservation. Data were collected by self-administered questionnaires to 200 participants and all questionnaires were found useful and were used for further analysis.

Measures: A 5-item instrument was used to measure hotel online reservation (HOR) that was adapted from the work of Eid (2011). Next, a 10-item instrument was used to measure positive e-WOM (PEW) that was adapted from the work of Tseng and Hsu (2010). A 10-item instrument was next used to measure negative e-WOM (NEW) that was adapted from the work of Law and Chung [20]. A 10-item instrument was next used to measure hotel branding (HBR) that was adapted from the

work of Oh [21]. Lastly, a 5-item instrument was used to measure price (PRC) that was adapted from the work of Oh [21]. All of the elements were measured by using the 5-point Likert Scale.

Data Analyses: The demographic information turned into used to offer an overview of respondents' profile. Principal factor analysis was performed to reduce the number of factors or elements from each variable. The final results from this factor analysis were then used for additional analysis using Structural Equation Modeling (SEM) with AMOS 22.0 program. It aims to locate the most optimal model or a mixture of the variables that suits nicely with the data on which it is built and serves as a purposeful representation of the reality from which the data has been extracted and gives a parsimonious explanation of the data [22]. In this research, the SEM method was applied to detect the impact of price, hotel brand, positive and negative reviews to customer hotel online reservation intention.

RESULTS

Profile of Sample: Out of 200 respondents surveyed, 71% of the respondents are female and 29% are male. The respondents of the questionnaire survey are from different age range, where respondents of 18 to 25 years old are the most dominants respondents with frequencies of 65.9 %. Meanwhile the rest 23.2 % of the respondents from age range 26 to 33 years old, 3.7 % from age range 32 to 41 years old and 4.9 % from age above 42. It indicates that most of the respondents are from a younger generation. Based on the descriptive analysis of the respondent's occupation status from a questionnaire survey, the highest number of respondents is students with 54.9 % and second highest is self – employed with 36.5 %. The rest of respondents are employed with 4.9 % and unemployed with 1.2 %. By referring to the data collected it can be concluded that most of the people who involve in the online hotel booking are students and employed person.

Structural Equation of Hypothesized Final Model: Built on the modification index of CFA, the measurement model of exogenous and endogenous and the final hypothesized model confirmed the constructs of hotel brand (HBR), positive e-WOM (PEW), negative e-WOM (NEW), price (PRC) and hotel online reservation intention (HOR) of the hypothesized paths. In SEM, factor analysis and hypotheses are verified in the same analysis. SEM methods also provide fuller evidence about the magnitude

Table 1: Summary of the Goodness Fit of Hotel Branding (HBR), Positive e-WOM (PEW), Negative e-WOM (NEW), Price (PRC), Hotel Online Reservation (HOR) and Final Model

Model Fit Indicator	HBR	PEW	NEW	PRC	HOR	Final Model
(x ²)	21.344	15.422	18.565	15.489	166.334	208.236
DF	3	2	4	3.4	4	138
CMIN/DF	1.322	1.441	1.601	2.331	1.779	1.654
P	0.024	0.016	0.027	0.005	0.000	0.000
GFI	0.988	0.990	0.992	0.944	0.945	0.902
RMSEA	0.074	0.076	0.078	0.064	0.080	0.063

to which the study model is sustained by the data. The goodness of fit indices for the 40 observed variables of HBR, PEW, NEW, PRC and HOR show that the reading is right if it arrays from 0.283 to 0.863 for the significance standardized regressions weight. Standard error (SE) for each observation displays the goodness of fit and low level reading from 0.084 to 1.674 and estimate (square multiple correlations) of observation indicate the contribution level to the latent variable (0.023 to 0.762). The standardized regression weight between HBR and HOR is 0.361, between PEW and HOR, is 0.376, between NEW and HOR is 0.276 and between PRC and HOR is 0.329. The final model indicates the model clarified in a substantial part of the variance in all the endogenous variables (square multiple correlations) that shows the four exogenous variables (HBR, PEW, NEW and PRC) at the same time described 36.7% variance in HOR. Lastly, from the Structural Model, the reading for GFI is at 0.90 (acceptable fit criteria) and RMSEA is less than 0.08. The measurement model has a good fit with the data based on evaluation standards consisting of GFI and RMSEA (Bagozzi & Yi, 1988). Table 1 recaps the goodness of model fit of HBR, PEW, NEW, PRC, HOR and the structural model. The structural models testing of endogenous variables (HOR) fulfills the GFI (GFI > 0.90) and RMSEA principle (less than 0.08).

DISCUSSION

The hotel branding has strong correlation relationship with future customer's intention to book a hotel online because the branded hotels are the one who offers an online booking platform and the customers have a higher expectation with service that serve by branded hotels. When positive and negative e-WOM has strong relationship with customer's booking hotel intention, it means that customers will expect the hotel is good for stay when there are a lot of positive comments, but if there are negative comments made by previous customers it will cause high possibility for future customers not to book a hotel. Also, the variable of price has strong

relationship with future customers' intention to book a hotel because it depends on customers finding intention. There is certain people book hotel based on the price, the service hotel offered to customers or the cleanliness of the room, therefore future customers can using the online booking and e-WOM as referred to find this types of information.

CONCLUSION

The contribution gained from this research helps to improve people knowledge and understand more about the e-WOM effect towards future customer's decision on intention to reserve a hotel online. Other than that, based on the findings of the research, it research, it could identify the types of websites that preferred by customers when booking a hotel online and can discover the effects that will attract people intention in booking a hotel through websites. As a conclusion from the result, it indicates that hotel branding, positive and negative e-WOM and the price has effects toward customer intention to book a hotel.

Recommendations: In this study, the researchers identify the effect of hotel brand, positive and negative e-WOM and price that influence future customers' intention to booking a hotel through online. Based on this study, the recommendation that can be put into focus is the researcher should widen the range and focus on other effects as well that related to future customer intention hotel booking online. Also, for this study, larger sample size is recommended by added the international tourist's as a sample for search they opinion that related to this research. From that recommendation, it will produce a better resourceful result. The hotels also need to take action on negative comments from the online reviews as they could affect the reservation intention from the guests.

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