Customer Preferences of Hotel Information on Online Travel Websites in Thailand

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Abstract

Online hoteling booking continues to grow rapidly in the recent year. A position of hotel placed in the list of available hotel choices plays an important role as customer reviews the hotel information and makes the booking decision on the online travel website. To aid sequencing the hotels to meet most customers' preference, our research aims to find the main factors affecting booking decision on the online travel websites. We found that the security, cleanliness and location of hotels are top 3 criteria in selecting a hotel. 72.5% of respondents prefer sorting the hotel using price and they prefer the cancellation policy with no penalty charged if cancel within the allowed period. The minimum review score of hotel acceptable by consumers is on average 7.42 out of 10 and the most sensitive factor is cleanliness requiring on average 7.77 out of 10 as minimum acceptable level. The importance of review factor is significantly different between genders. The minimum acceptable review score of two factors, worthiness of money and food quality, are significantly different between genders. Due to the difference in preference and information used to evaluate hotel, online travel websites should customize the hotel information based on the customer profiles.

Keywords: customer review, e-business, hospitality industry, online hoteling booking, online travel website.

Introduction

Online hoteling booking is one of the top transactions representing the successful business through e-commerce. PhoCusWright (2014) reported that the online travel website (e.g.expedia.com, hotels.com) represented 38% of the global online market which contributed the gross travel booking exceeding $150 billion in 2013. Also, 15 % of total hotel sales in U.S were contributed by the online travel website, and its gross booking was expected to increase 6% annually.

Currently, most of the online travel websites display a list of available hotel choices with the hotel information and customer review on the webpage. A list of available hotel choice is often sorted by price, star, review score and website recommendation (e.g. agoda.com, hotels.com). A list of available hotel choices plays a critical role affecting on the online shopping behavior as customers make a booking decision based on the hotel information presented on the webpage (Cai and Xu, 2006). Moreover, customer generally observes only a few hotels on a list of available hotel choices in which a hotel placed on a top position is more likely to be viewed more than that on a bottom position. The importance of position effect on the online retailing was mentioned in many literatures (Ghose et al, 2015; Cai and

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Xu, 2006). Moreover, customer has multidimensional product preference and the importance of each dimension or hotel factor is significantly different among the customers. The different types of customers look for different type of information and have different target hotels in mind. As mentioned in the extensive literatures, the importance of hotel factors on the customer choice decision has significantly different based on the type of travelers (Yavas and Babakus, 2005), gender (McCleary et al., 1994) and other demographic characteristics (Prud'homme and Raymond, 2013; Chan and Wang, 2006).

Therefore, it is important for online travel websites to understand the hotel factor affecting on the online booking decision and the level of its importance for each customer group so that they may customize the hotel information to meet the customer's preference. The hotel factors such as cleanliness, comfort, star rating, location, price, security, service quality, and reputation were widely mentioned in many researches as the main factors in selecting a hotel (Chu and Choi, 2000; Sohrabi et al., 2012). Moreover, as the power of e-Word of mouth, 97.7% of respondents from Gretzel and Yoo (2008)'s survey read the online review to confirm the hotel booking decision in which 58.1% of online review readers observed online reviews from the online travel website. The perception of reviews was significantly different based on age and gender. From the experiment study, Vermeulen and Seeger (2009) found that the online review, both positive and negative reviews, enhances the customer's awareness of the hotels. However, the study on the sequencing of hotel choices to be presented on the webpage based on the customer preference was still scarely.

In this research, we study the hotel factors significantly affecting to the customer searching and booking decision through online travel websites. Different from prior literature, we incorporated the importance of review factors in hotel evaluation process, and the position effect of the hotel choices on the webpage to help the online travel websites understand customer behavior and customize the hotel information with a suitable list of available hotel choices to meet the most customers' preference. This study was conducted by the survey method to Thai customers. Our results provide the suggestion for both the online travel website and the hotel manager to improve their marketing strategy.

The rest of the paper is organized as follows. Section II, we present our data set and research methodology. Then, we conduct the data analysis, and provide the analysis result in section III. We finish the paper with conclusion and discussion from our finding.

Research Methodology

This research was conducted by using a survey method to collect information from Thai customers and then data analysis was conducted using SPSS statistic tool. The questionnaires were designed to observe the customer behavior and indicate the main factors affecting the hotel searching and booking decision on the online travel websites. The questionnaire for this study included seventy-six questions classified into five main sections. In the first section, the respondents were asked a few questions about their general profile. The second sections asked respondents to provide their experience in a hotel booking. Then , the third sections is related to experience in an online hotel booking using the online travel website. Only repondents with online hotel experience were asked to complete the related questiones , otherwise they can skip and go for next section of the questionaire. In the forth section, the respondents were requested to evaluate their recent experience in booking a hotel. In the last section, the respondents were asked to express their attitude toward the customer reviews. Throughout the questionnaire, a list of factors in the hotel selection was adapted from prior literatures (Sohrabi et al., 2012; Chu and Choi, 2000) and from the online travel websites including agoda.com, hotels.com, and expedia.com. For the measurement scales, the respondents were requested to indicate the level of importance they perceived to each hotel factor using a five-point Likert-type scale (1 = Very unimportant, 2 = Unimportant , 3 =

Neutral ,4 = Important, 5 = Very important). Moreover, the respondents gave a score to express the level of satisfaction on the given statement using a ten-point Likert-type scale (1=Very poor or unsatisfied, 5 = Neutral, 10= Very excellent or satisfied).

Data collection

The data in this study were collected through questionnaires distributed via both online and offline channels during November 3-19, 2014. Forty–nine questionnaires were completed from online survey and seventy-one questionnaires were collected from offline survey. Thus, the total of 120 questionnaires was used for our data analysis.

Result

Table 1. The demographic characteristics of the respondents

Variable	Range	%	Variable	Range	%
Gender	Male	39.2%		Family	43.57%
	Female	60.8%		Couple	15.08%
			Type of Traveler	Friend	32.96%
	20-30	33.33%		Solo traveler	5.59%
Age	31-40	17.1%		Business	2.79%
	41-50	29.91%			
	Above 50	19.66%		< 3 hours	39.8%
			Internet usage	3-5 hours	31.4%
	High school	0.8%	(per day)	6-8 hours	16.9%
Education level	Collage certificated	2.5%		> 8 hours	11.9%
	Bachelor degree	71.2%			
	Master degree	24.6%	Online booking experience	Yes	52.5%
	Doctoral degree	0.8%		No	47.5%
	< 20,000Baht	31.6%			
Monthly income	20,000-39,990 Baht	27.2%			
	40,000-49,990 Baht	8.8%			
	50,000-69,999 Baht	16.7%			
	≥ 70,000 Baht	15.8%			

Descriptive statistics

The total of 120 respondents participated in this study in which 60.8% of respondents were female and 39.2% were male. The majority of the respondents were 20 to 30 years old. Over 70% of respondents graduated bachelor degree, and most of respondents gained average monthly income less than 20,000 Baht. Classified by the type of travelers, most of the respondents were family (43.57%) and friend (32.96%) while couple, solo traveler and business were accounted for 15.08%, 5.59% and 2.79%, respectively. Most of respondents spent their time on the internet less than 3 hours per day. Most of respondents used the online travel website to search and book a hotel one to two times per years. The characteristics of respondents are presented in Table 1.

Hotel selection criteria

In this section, the respondents were asked to indicate the level of importance they perceived to the following twelve hotel factors when making a booking decision using a five-point Likert-type scale (1 = Very unimportant, 2 = Unimportant , 3 = Neutral ,4= Important, 5 = Very important). As a result, the respondents generally agree that all proposed hotel factors have the important role in the hotel evaluation process. According to Table 2, the security, cleanliness and location of hotels are the top 3 criteria in selecting a hotel with the mean score of importance at 4.62, 4.47 and 4.32, respectively. This finding is quite similar with the survey result of Sohrabi et al. (2012).

Table 2. Hotel selection criteria

Hotel factors	Mean[a]	Std. deviation
Security	4.62	0.79
Cleanliness	4.47	0.86
Location	4.32	0.78
Service	4.25	0.75
Environment	4.21	0.93
Facilities	4.20	0.84
Booking condition	3.94	1.09
Food	3.87	1.06
Price	3.84	0.97
Review	3.82	0.94
Hotel reputation	3.52	0.88
Room type	3.34	0.94

[a] Scale : 1 = Very unimportant, 2 = unimportant , 3 = Neutral ,4 = Important, 5 = Very important

Table 3. Hotel sorting criteria on the hotel booking website

Sorting type	Percent (%)
Price	72.5%
Promotion	59.2%
Distance from destination	53.3%
Review score	40.8%
Popularity	40%
Hotel star	37.5%
Website suggestion	19.2%
Hotel name (A-Z)	10.8%

On the online travel website, a number of hotels are sequentially presented on a long list which customers can sort a list of available hotels to be presented based on the criteria of price rate, distance, review score, star, website recommendation, and ascending order of hotel name. In this section, the respondents were asked to indicate their preferable sorting criteria when searching a hotel. As shown in Table 3, sorting by price is the most preferable sorting criteria when searching a hotel.

Table 4. Sale condition

Sale condition	Mean[a]	Std. deviation
Cancellation policy *		
Free cancellation	4.15	1.19
Cancellation fee	2.90	1.17
Non-refundable	2.85	1.29
Payment method		
Online channel	2.92	1.09
Offline or hotel channel	4.08	1.25

* Free cancellation condition is the cancellation policy with no penalty fee if cancel within the allowed period. Cancellation fee condition is the cancellation policy with charged penalty fee if booking is canceled and amount of fee is depended on cancellation period and hotel policy. Non-refundable condition is cancellation policy that customer cannot get any refund if cancel the booking.
[a] Scale : 1 = Very unimportant, 2 = Unimportant , 3 = Neutral ,4 = Important, 5 = Very important

The sale condition plays an important role to motivate the service sales. Especially for hotel service in which customers face with the uncertain plan , the sale condition (eg. cancellation policy) should be set to meet with the customer bahavior. According to Table 4. , the cancellation policy and paying method have the effect on customer booking decision. With various cancellation policy, we found that customers prefer the free cancellation , the cancellation policy with no penalty fee if cancel within the allowed period. Also, paying money at hotel is the preferable choice for paying method. Therefore, the hotel owner and online travel website should consider these conditions in order to satisfy the customer preference.

Attitude toward customer review

In this section, the respondents were asked to indicate their minimum acceptable review score on the following hotel factors , cleanliness, service, location, worthiness of money and food quality, using ten-point Likert-type scale (1= Very poor, 10 = Very excellent). As shown in Table 5, the minimum acceptable review score of a satisfied hotel is on average 7.42 out of 10, and the most sensitive review factor is cleanliness which requires on average 7.77 out of 10 as minimum acceptable level.

Moreover, we performed the independent sample t-test to analyze the relationship of gender and review score. We found that importance of review factor is significantly different between male and female. The male generally requires higher acceptable review score than female in our result. This finding seems consistent with the survey result of McCleary et al. (1994) and Gretzel and Yoo (2008) that pointed out the gender-based differences service-use preference, hotel selection criteria and impact of online review. According to Table 6, the variances of minimum review score for worthiness of money , service and food quality between male and female is not different, as p-value (at 0.75, 0.083,0.225 respectively) $\geq$.05. Also, the result shows that the minimum acceptable review score of two factors, worthiness of money and food quality, are significantly different between male and female at their p-

value (0.029, 0.009 respectively) ≤ 0.05. However, the minimum acceptable review score of service quality is not different between genders.

Table 5. The minimum acceptable review score

Review factor	Mean[a]	Std.deviation
Cleanliness	7.77	1.94
Service	7.52	1.83
Location	7.40	1.89
Worthiness of money	7.26	1.96
Food quality	7.17	1.88
Average	7.42	1.83

[a] Scale: 1 =Very poor, 5 = Neutral, 10 = Very excellent

Table 6. The relationship between gender and minimum acceptable review score

		Levene's Test for Equality of Variance		t-test for Equality of Means				
		F	Sig.	t	df	Sig.(2-tailed)	95%Confidence Interval of the Difference	
							Lower	Upper
Worthiness of money	Equal variance assumed	0.09	0.75	2.21	115	0.03*	0.09	1.54
	Equal variance not assumed			2.21	93.1	0.03*	0.08	1.54
Service	Equal variance assumed	2.99	0.08	1.73	115	0.09	-0.09	1.28
	Equal variance not assumed			1.79	104	0.08	-0.06	1.26
Food quality	Equal variance assumed	0.23	0.64	2.66	114	0.01*	0.24	1.62
	Equal variance not assumed			2.67	92.4	0.01*	0.24	1.62

* Statistically significant at p ≤ 0.05

Discussion

This research has the potential implications for the online travel websites by suggesting the possible strategies for managing their website to respond the customer shopping behavior. As the online travel website is a large site that collects a number of hotels over the world and welcomes a number of customers, it is a challenge for a online travel websites to manage the hotel list to satisfy the different preference of customers. Also, in the online shopping, the overload of information increases the customer search effort and make confuse on the choice. In order to strategically present the hotels , our study provides the guideline to understand the customer search behavior and the booking decision in an online hotel booking. In the searching process, we found that the majority of customers prefer sorting the hotel

using the criteria of price. Then, in the evaluation process, the security, cleanliness and location of hotels are the top 3 criteria in a hotel decision, respectively. Moreover, most of customers read the online review to evaluate the hotels. We found that importance of review factor is significantly different among the customers. The minimum acceptable review score of a satisfied hotel is on average 7.42 out of 10, and the most sensitive factor is cleanliness which requires on average 7.7 out of 10 as minimum acceptable level. The different types of customers require different type of information and have different target hotels. They generally makes a booking decision based on the hotel information presented on the webpage. Thus, the presentation of hotel choices on the webpage should be designed by considering the multidimensional preference of customers and the position effect of the choices on the website. We suggest that hotels with a higher review score on security, cleanliness and location should be considered put in the upper position of the list. Hotels failing to meet the minimum acceptable review score should be positioned lower in the list or even cut out from the available choice to help customers search faster. Moreover, the sale conditions (e.g. cancellation policy , special deal) have significant effect that motivate or stop the booking decision. Thus, the sale condition should be set up to match with the customer behavior.

Moreover, this study provides the hotel managers understanding how customer perceives on each factor as well as how customer evaluates hotel performance compared with other hotels in order to enable them correctly improve their marketing strategies. The hotel failing to sale its room should firstly invest to improve its security and cleanliness, respectively, as they are the main factors contributing to booking decision. Due to a large number of available hotels on the online travel website, hotel should continuously improve its performance in every main factor to be placed in a top position on a list of available hotel choices and gain a competitive advantage over their competitors. Moreover, the hotel managers should take a look at online review board (e.g. improve their performance according to review comment) because it not only affects to total review score but the hotel's reputation as well due to the power of e-Word-of mouth.

Conclusion

Online hoteling booking has continued to grow globally in the recent year. A list of available hotel choices displayed on the online travel website (e.g.agoda.com, expedia.com, hotels.com) plays an important role affecting on a hotel booking decision as customer makes a booking decision based on the hotel information presented on the webpage. The different types of customers require different type of information and have different target hotels. It is suggested that a list of available hotel choices should be designed based on the customer preference and a hotel with the higher utility perceived by customers should be ranked on a top position to respond the customer searching behavior. In order to provide a suitable list of available hotel choices to meet most preference customers, our research aims to find the main factors affecting to the searching and booking decision on the online travel websites. Also, our study aims to find the possible way to improve the hotel and website performance so that customer may reduce search effort and get higher satisfaction from online hotel booking experience. Our study was performed using the survey method. From our survey results, we found that 52.5% of Thai customers have the online booking experience. In the searching process, the majority of respondents prefer sorting the hotel using the criteria of price. Then, in the evaluation process, the security, cleanliness and location of hotels are the top 3 criteria in a hotel decision, respectively. Moreover, customers generally reserve the hotel in advance to guarantee the available room and get the special room price. However, with the uncertain plan , customers are charged with cancellation fee as penalty of cancellation. We found that customers prefer to have the cancellation policy with no penalty fee if cancel within the allowed period. In addition, online review is incorporated as one

factor to evaluate the hotels. We found that importance of review factor is significantly different among the customers. The minimum acceptable review score of a satisfied hotel is on average 7.42 out of 10, and the most sensitive factor is cleanliness which requires on average 7.7 out of 10 as minimum acceptable level. Also, we found that the minimum acceptable review score of two factors, worthiness of money and food quality, are significantly different between genders. Our results provided the guidelines for hotel managers and online travel website to improve their performance effectively.

In our discussion, we suggested that hotels with a higher review score on security, cleanliness and location should be considered put in the upper position of the list. Hotels failing to meet the minimum acceptable review score should be positioned lower in the list or even cut out from the available choice to help customers search faster. The hotel failing to sale its room should improve its security and cleanliness, respectively. Lastly, the hotel manager and online hotel website should incorporate to provide the service satisfying with the customer preference.

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References

Cai, S. and Xu, Y., 2006. Order effects on consumer product choices in online retailing. *ECIS 2006 Proceeding of the 14th European Conference on Information System*, 92-100.

Chan, E.S.W., & Wong, S.C.K. ,2006. Hotel selection: When price is not the issue. *Journal of Vacation Marketing, 12*(2), 142-159.

Chu, R.K.S., Choi, R., 2000. An importance-performance analysis of hotel selection factors in the Hong Kong hotel industry: a comparison of business and leisure travelers. *Tourism Management*, 21, 363-377.

Ghose, A., Ipeirotis, P.G., Li, B., 2012. Designing ranking systems for hotels on travel search engines by mining user-generated and crowdsourced content. *Management Science*, 31(3), 493-520.

Ghose, A., Ipeirotis, P.G., Li, B., 2015. Examining the impact of ranking on customer behavior and search engine revenue. *Management Science*, 60(7), 1632-1652.

Gretzel,U., Yoo, K.H.,2008. Use and Impact of Online Travel Reviews. *Information and Communication Technologies in Tourism 2008*, 35-46.

McCleary, K.W., Weaver, P.A., Lan. L., 1994. Gender-based differences in business travelers' lodging preference. *The Cornell Hotel and Restaurant Administration Quarterly*, 35(2), 51-58.

PhoCusWright. 2014. OTAs, more than a distribution channel for hotels? [Online]. Avalilable from: http://www.hospitalitynet.org/news/154000320/4067634.html [Accessed 13 April 2015].

Prud'homme, B., Raymond, L., 2013. Sustainable development practices in the hospitality industry: An empirical study of their impact on customer satisfaction and intentions. *International Journal of Hospitality Management*, 34, 116-126.

Sohrabi,B., Vanani,I.R., Tahmasebipur,K., Fazli,S., 2012. An exploratory analysis of hotel selection factors : A comprehensive survey of Tehran hotels. *International Journal of Hospitaltity Management*, 31, 96-106.

Vermeulen, I. E. , Seegers D., 2009. Tried and tested: The impact of online hotel reviews on consumer consideration. *Tourism Management*, 30, 23-127

Yavas, U., Babakus, E., 2005. Dimension of hotel choice criteria: Congruence between business and leisure travelers. *Hospitality Management*, 24, 359-367.