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FACTORS AFFECTING ONLINE HOTEL BOOKING INTENTION: A STUDY ON UUM STUDENTS

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ABSTRACT

With the high-speed development of the Internet and artificial intelligence, the hotel booking method was also undergoing innovative changes. Compared with traditional information dissemination media, the Internet has a stronger dissemination ability, wider scope and larger audience. Online reviews about one's experience in using hotel service could be simply disseminated using the Internet platform, which consequently affects the hotel booking intention of future customers. In this regard, it is vital to understand the impact of online reviews on hotel booking intentions in order to develop strategies that will sustain the hotel industry. This study examined the impact of online review in four dimensions which are usefulness, valence, volume and trust towards online hotel booking intention. Besides, the study also investigated the role of self-efficacy towards online hotel booking intention to capture the user's technological capacity dimension. Data were collected using survey questionnaires from 255 UUM undergraduate students. The analysis was performed with the aid of SPSS statistical analysis software. The results suggest that only two dimensions in the online review have significant impact toward online hotel booking intention, namely volume and trust. Moreover, the role of self-efficacy was not observed. Studying online reviews and consumer behavior is beneficial for hotel managers to have a more comprehensive grasp of the factors that affect customers' intention to book hotels online. Implications of this study are further discussed.

Keywords: Online review, online booking intention, consumer review, self-efficacy

INTRODUCTION

The rapidly evolving Internet enforces the industry to change their business operations quickly. A good example of combining information technology with the business operations of the entire hospitality industry was an online hotel booking website (Kim, Kim & Park, 2017). Nowadays, online hotel booking can provide more information to customers such as hotel descriptions, locations and photos. Therefore, this raises the customers' preference to use online hotel booking websites. In addition, customers can also know about one's experience in using a particular hotel service. Customers who have a strong desire for sharing usually will share their experience in the review section of online hotel booking websites. They were pleased to contribute their post-purchase feelings about the hotel or service for altruistic and self-realization purposes. As a result, online reviews are becoming an increasingly popular source of information on travel plans and have a profound impact on consumer purchasing decisions. An e-commerce customers survey shows that 37.9% of customers purchased in travel categories in 2018 (Malaysian Communications and Multimedia Commission, 2018).

Online review is mostly published for non-profit purposes and is published anonymously, so it has high credibility and reference. The customers will not only share the positive comments but also negative comments based on their actual feelings (Hashim & Fadhil, 2017). Therefore, internet word-of-mouth information will directly affect customers' willingness to choose hotels. Whether it is customers or hotel management, online reviews are regarded as an important resource. For customers, online reviews are an important reference for them to make decisions. Likewise, online reviews provide hotel operators with valuable feedback and suggestions for improvement that can assist them in developing winning strategies for their business. Hence, this necessitates knowing the influence of online reviews on online hotel booking intentions. Meanwhile, the role of customer's self efficacy in using online booking is also worth to be investigated as one's behavior is not only determined by the external factors (online reviews), but also the capacity that one's possessed in making the decision (Tao, Nawaz, Nawaz, Butt & Ahmad, 2018).

This study examined whether online reviews and self-efficacy have a significant impact on customer's online hotel booking intention. Understanding these two factors simultaneously could provide better awareness about customer's behavior, which in turn recognizes the valuable aspects for continuous improvement particularly in the hotel industry.

LITERATURE REVIEW

Online review consults the comments on the product experience that customers share on the Internet after using the product (Hashim & Fadhil, 2017). Online review was also called electronic word of mouth (WOM). The spread of word of mouth has been derived into the network circumstance with the rapid development of internet technology (Gellerstedt & Arvemo, 2019). Another study had defined online reviews as peer reviews of products published on their websites by specific companies or third-party websites (Mudambi & Schuff, 2010). From the definition of online reviews in other studies, it can be seen that there are similarities between online review and traditional review, mainly emphasizing internet technology as intermediary. Overall, our study defines "online reviews" as online communication that uses the Internet to disseminate information about products or services, such as experiences, functions, and other characteristics, organizations, and brands.

Online booking intention is defined as customers' intent to book a hotel room. In addition, it can also represent the decision-making process taken by customers when choosing a hotel and the process will change based on certain factors. Therefore, it can be seen that booking intention was usually dependent and affected by certain factors (Wei, Hiribae, Kuen, Yi, & Ling, 2014). Past studies have shown that online reviews have some influence on customers' booking intentions (Adnan & Augustine, 2020; Kim, Kim & Park, 2017; Zhao, Wang, Guo & Law, 2015). This study summarizes

factors based on the general characteristics of online review such as usefulness, valence, volume, trust and self-efficacy.

The usefulness of online reviews

The usefulness of online review can be regarded as the extent to which customers think online reviews are helpful to their purchase intention (Park & Lee, 2009). Sometimes the customers are unaware of the quality and service of hotels before booking a hotel. They will seek information from all aspects for reference in the decision-making process. Therefore, customers will browse the relevant online review of hotels before online booking and they can compare the inquired multiple hotels on the internet to make a decision. In the study by Zhao et al. (2015), they observed the positive relationship between the usefulness of online reviews on online hotel booking intention among business travelers in China. Online reviews can work as a double-edged sword. It may be helpful for customers to express their true feelings, but on the other hand, it can also be false information. Correct and useful comments allow customers to make decisions faster.

The valence of online reviews

The valence of online reviews focused on the positive or negative attributes of the product. Negative review is more diagnostic, which means that the product was of poor quality, while positive review may be related to high-quality or medium quality products (Zhao et al., 2015). Customers had different experiences and feelings about products or services, therefore the online review of the same products will vary accordingly. Comments may cover the advantages and disadvantages of products and services, or they may use some emotional polarity words to reflect the subjective feelings of customers. Positive comments that present detailed numerical ratings and use hotel staff services as the content have greater influence. Research shows that new reviews were more influential than old reviews and recent positive reviews can actually replace the influence of older negative reviews (Sparks & Browning, 2011).

The volume of online reviews

The volume of online reviews refers to the number of comments, or interactive messages from reviewers about a specific product or service (Davis & Khazanchi, 2008). The number of online reviews can be an important factor that affects the hotel's online booking intention. The more online hotel reviews, the more people pay attention to the hotel. Adnan and Augustine (2020) found that when more reviews are available online, the higher the online hotel booking intention among the respondents in Kuala Lumpur. This suggests that a large number of online reviews can help customers acquire advanced information to help them make purchasing decisions. Meanwhile, Zhao et al. (2015) also show a positive relationship between the volume of online reviews and online hotel booking intention. They explain from the perspective of consumer decision-making that consciousness must be formed before the product or service purchase decision can be made.

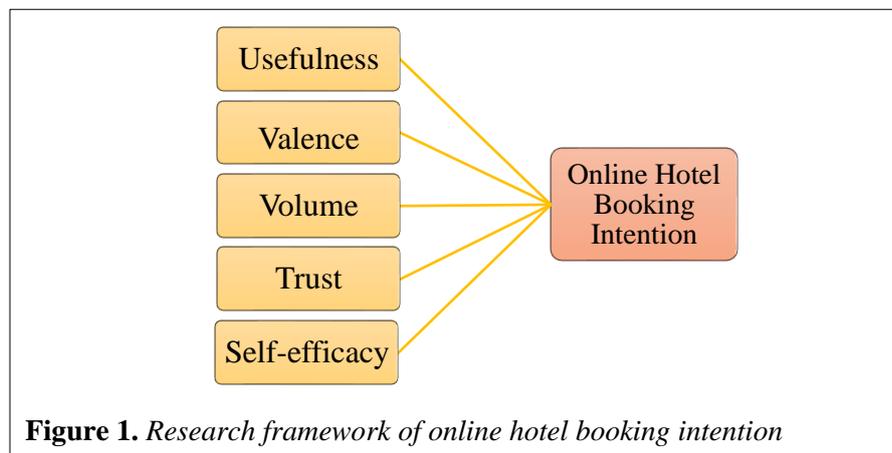
The trust of online reviews

Trust has been defined as the willingness of one party to be unaffected by the effect of the other party based on the expectation that the other party will carry out specific tasks important to the principal (Kim, Kim & Park, 2017). Customers use online reviews to decrease the uncertainty and risk associated with product or service purchases, so online reviews can help them decide their trust level. The trust tendency was mainly manifested in two aspects. As the creator of online reviews, hotels are also the main body of online reviews. Customers' trust in hotels could motivate their purchasing decisions. Another aspect is the trust in third-party evaluation agencies. The third-party evaluation agency gave full play to the autonomy, impartiality and objectivity of evaluation. Therefore, it can be assumed that the customers online hotel booking intention was related to trust, and that trust is greatly affected by online review. Trust is the factor that could drive the relationship between online review and online hotel booking intention. Sparks and Browning (2011) proposed that positive reviews will increase trust in hotels, thereby increasing hotel bookings. It also emphasizes that

positive comment groups that present detailed numerical ratings and hotel staff services as the content have greater influence.

Self-efficacy

Bandura (1986) explains that self-efficacy evaluates an individual's ability to carry out a series of actions necessary to accomplish a particular task. Hence, an individual's cognition of his self-efficacy will greatly determine his willingness to accomplish something. In other words, self-efficacy can be regarded as an individual's evaluation of the difficulty of implementing a behaviour and his confidence in completing a task. Self-efficacy is not only a judgment of an individual's abilities based on past overall experience and performance, but is also an important determinant of future behaviour (Huang, 2016). As introduced by research work on acceptance of innovation, it clarifies whether customers accept that they have understanding, qualifications and ability for using mobile phone technology to make hotel booking (Tao et al., 2018). The term technology self-efficacy was claimed as an individual's affirmation about self-ownership, acceptable satisfaction and the right capability and skill to prosper when faced with technology-related work (McDonald & Siegall, 1992). Therefore, this study considers self-efficacy as an individual's intention, talent and capability to use online hotel booking technology for hotel booking.



The following hypotheses are proposed:

- H1: The usefulness of reviews positively influences hotel online booking intentions.
- H2: The valence of online reviews positively influences online hotel booking intentions.
- H3: The volume of online reviews positively influences hotel online booking intentions.
- H4: The trust of online reviews positively influences online hotel booking intentions.
- H5: Self-efficacy positively influences online hotel booking intentions.

METHODOLOGY

This study uses quantitative methods to collect the data needed for analysis. The aim of study is to determine the factors affecting online hotel booking intention. Descriptive research is used to study the variables of online review and the impact of online hotel booking intentions. Past studies show that young adults, or Millennial are the group that have higher propensity towards online activities because they are more proficient in new technologies, value convenience and have high level of curiosity (Kim et al., 2021; Lee & Leonas, 2010). Therefore, the undergraduate students of University Utara Malaysia were selected as the respondents as they represents the millennials group that suits the objective of this study. Data were collected via online questionnaire. The target sample size was 379, derived from Krejcie and Morgan (1970) sampling table based on the population of 30670 undergraduate students at UUM. The questionnaire consists of two parts. The first part was designed to capture demographic information to understand the background of the respondents. Second part asked about their perception on online review, self-efficacy and online booking intention. The 6 points scale was used in measuring

the level of agreement, which was self-possessed of strongly disagree, disagree, slightly disagree, slightly agree, agree, and strongly agree. The survey questions of the scale were suitable for measuring the opinions and reactions of the respondents to specific problems (Taherdoost, 2019). For data analysis, Statistical Package for Social Science (SPSS) was used to test the hypothesis.

DATA ANALYSIS AND DISCUSSION

The study collected a total of 225 responses, which represents 59.4% response rate. The demographics profile of the respondents is depicted in Table 1. The results show that 68% (153 people) of respondents are female and 32% (76 people) of respondents are male. The percentage of Chinese respondents is comparable to the percentage of Malay respondents which is 40.4% (91 people) and 40% (90 people). In addition, 18.7% of respondents are Indian which is 42 people. The remaining 0.9% (2 people) of respondents indicated that others. Among them, one of the respondents is Bajau and the other is from Brunei. Besides that, 24.4% of respondents are in the category 18-20 years' old which is 55 people. Most respondents are from the category 21-23 years' old which is 64% (144 people). The remaining 11.6% (26 people) respondents are from category 24 years old and above. The respondents mostly are from COB which is 56.9% (128 people) and the second is the respondents from COLGIS which 22.2% (50 people). 20.9% of respondents are from CAS which is 47 people. Furthermore, most of the respondents who participated in the questionnaire were students in category semester 7 and above which is 29.3% (66 people). 28.4% (64 people) of respondents are in category semester 5 and 6. 23.1% (52 people) of respondents in category semester 1 and 2. The students in category semesters 3 and 4 are the respondents who participated the least in the questionnaire which is 19.1% (43 people).

Table 1

Demographic profiles

Item	Category	Frequency	Percent
Gender	Male	72	32
	Female	153	68
Race	Malay	90	40.0
	Chinese	91	40.4
	Indian	42	18.7
	Other	2	0.9
Age	18-20 years old	55	24.4
	21-23 years old	144	64.0
	24 years old and above	26	11.6
College	CAS	47	20.9
	COB	128	56.9
	COLGIS	50	22.2
Current semester	1 - 2	52	23.1
	3 - 4	43	19.1
	5 - 6	64	28.4
	7 and above	66	29.3

Reliability analysis was performed and Cronbach's alpha of each structure was examined. The low alpha coefficient indicates that the project has a low measurement contribution to the interest structure. Therefore, variables with a Cronbach's alpha lower than 0.7 are usually considered eliminated (Kim, Kim & Park, 2017). In the pilot test before, the items in valence were found to be

irrelevant to the factor. After reviewing and adjustment of items in valence, the alpha coefficient increased from 0.236 to 0.735. As shown in Table 2, all values of the variables in the final questionnaire were above 0.7, meeting Cronbach's Alpha acceptable value

Table 2

Cronbach's alpha scores for variables

Variables	No. of items	Cronbach's alpha
Usefulness	4	0.800
Valence	6	0.735
Volume	3	0.710
Trust	4	0.847
Self-efficacy	3	0.875
Online hotel booking intention	3	0.830

Correlation analysis is a simple and easy way to measure the relationship between quantitative data. It can analyze the relationship between variables and relationship strength. In general, a correlation above 0.7 indicates that the relationship is very close. Between 0.4 and 0.7, the relationship is close. Between 0.2 and 0.4 indicates that the relationship is general (Bobko, 2001). The results showed that all the independent variables have significant correlations and correlated in the expected positive direction with online hotel booking intention. The correlation coefficient between trust and intention of online hotel bookings was 0.495, and showed a significance level of 0.01, indicating that there was a significant positive correlation between trust and intention of online hotel bookings. It also showed a significant positive correlation between volume ($r = 0.474$, $p < 0.01$) and usefulness ($r = 0.401$, $p < 0.01$) with online hotel booking intentions. However, it had low correlation between valence ($r=0.384$, $p<0.01$) and self-efficacy ($r=0.267$, $p<0.01$) with online hotel booking intention.

Hypothesis testing of regression models generally uses analysis of variance method and hypothesis testing of regression coefficient generally uses t-test method. The results of the analysis of variance showed that $F=20.163$, $p<0.05$ indicating that the model is statistically significant. Hypothesis H3 and H4 are supported with significant value less than 0.05 ($p<0.05$) for volume ($t = 2.941$, $p = 0.004$) and trust ($t = 3.480$, $p < 0.01$). Thus, it can be concluded that the volume and trust of online review have an impact on online hotel booking intention.

In addition, the trust of online review has a greater impact on online hotel booking intention than the volume of online review. This is because standardized coefficient of trust is greater than standardized coefficients of volume which are 0.265 and 0.222 respectively. On the other hand, the proposed hypothesis H1, H2 and H5 of this study were found to be rejected due to the recorded significant value more than 0.05 ($p>0.05$) which were usefulness ($t = 1.616$, $p = 0.108$), valence ($t = 0.447$, $p=0.656$) and self-efficacy ($t = 1.238$, $p=0.217$). Therefore, the usefulness, valence, and self-efficacy of online review have no significant impact on online hotel booking intentions.

Table 3

Summary of correlation analysis

Variable	Correlation	Interpretation	Standardized Coefficients Beta	Sig.	Result
Usefulness	0.401	Moderate positive relationship	0.115	.108	Not supported
Valence	0.384	Low positive relationship	0.033	.656	Not supported
Volume	0.474	Moderate positive relationship	0.222	.004	Supported
Trust	0.495	Moderate positive relationship	0.265	<.001	Supported
Self-efficacy	0.267	Low positive relationship	0.075	.217	Not supported

The factors that positively influence customer's online hotel booking intentions are the volume of online reviews and the trust in online reviews. This is consistent with Adnan and Augustine (2020) findings that the greater the number of reviews, the greater the impact on hotel online booking intentions. Previous studies have also shown that consumer online hotel booking intention is influenced by both positive and negative reviews (Zhao, Wang, Guo & Law, 2015). When it is difficult for customers to make decisions, a large number of online reviews are very important for consumer decision making. For example, with more hotel reviews and both praise and criticism, customers will have a deeper and more comprehensive understanding of the hotel. So, it had a greater impact on booking decisions.

The trust in online reviews had a significant positive impact on online hotel booking intentions. This is consistent with the research results of the previous study (Kim, Kim & Park, 2017). The possible explanation is that the Internet is a virtual world and customers cannot accurately judge the information and publishing motivation of online review publishers. Therefore, the credibility of online reviews is a good reference. If customers think the credibility of online reviews published were higher, the greater the impact on hotel online booking intentions.

On the contrary, the usefulness of online reviews had no significant influence on online hotel booking intentions. The results contradict the findings of previous studies (Adnan & Augustine, 2020) that show the usefulness of online reviews. However, in this study, the usefulness of online reviews has no significant impact on online hotel booking intention. This may be due to the lack of words by reviewers, which makes customers unable to feel the usefulness of online reviews. For example, "the hotel is very clean, the carpet underneath and the bathroom angle are cleaned and the towels are packaged and not opened" than "the hotel is clean" has more effective information. Moreover, compared with simple and jerky text, online reviews with pictures are more attractive and effective. In addition, the valence of online reviews has no significant impact on online hotel booking intention and may be related to the usefulness of online reviews. With the advent of online review scoring systems, the way of reviewing has been gradually simplified. Most reviewers will rate directly and reduce the process of sharing their experiences. As a result, customers only see positive reviews, but

do not know what the positive reviews are. The same goes for negative reviews. Furthermore, it is also affected by timeliness. The positive reviews or negative reviews from a long time ago make it difficult to distinguish the status quo of the hotel.

Self-efficacy had no significant influence on online hotel booking intentions. It clarifies that online hotel booking intentions of customers will not change due to self-efficacy. This insignificance demonstrated that the build-in help facility of the hotel will not affect their views on online reviews toward online hotel booking intention. Secondly, customers have confidence in their own abilities, and they believe that they can independently complete the process of online hotel booking without help. This also means that customers have a strong ability to accept new things. They were also very capable of learning the ever-changing network technology. The result of findings matches the outcomes of past researchers (Tao, Nawaz & Ahmad, 2018). The respondents were students of UUM between the ages of 18 to 24 years' old which is also known as millennials. Millennials are more interested in new technology and safety seeking (Kim et al., 2021). They have grown up with technology and tech-savvy millennials not only understand the basics but can master the functionality of applications and software much further than another user. They were very self-reliant, resourceful and practical. There was a wealth of information and content on the web, and they knew how to find it quickly. In addition, Millennials are keen to adopt technology as it has more functional value, utility and purpose-based reasons, they value what can provide them with cheaper price options, customization options, faster checkout, and a smoother user experience of digital technology (Nawaz, 2020).

CONCLUSION

This study determines the factors affecting online hotel booking intention to help hotel managers make effective strategic management decisions. Accordingly, results show that the volume and trust of online reviews had a very significant impact on online booking intentions. However, there are still very few complete credit evaluation systems in domestic online review websites. The establishment of an online review evaluation system has a significant effect on improving the usefulness of online reviews. The volume of online reviews also has a significant impact on online booking intentions. If a large number of reviews that are considered untrustworthy appear, the hotel's losses will be difficult to make up for. The hotel management may need to improve their services, reduce negative reviews, and strengthen the management of malicious reviews to avoid undue risks. The era of picture reading has arrived, and a large number of written comments do not represent the real thoughts of the reviewer. The characteristics of young customers also determine their need for individualization. Comments with pictures and text can make them more acceptable. This represents opportunities for future studies to address the effective mechanisms in making the online review more efficient.

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REFERENCES

- Adnan, W. H. & Augustine, A. A. (2020). The Effects of Perceived Price, Website Trust and Online Reviews on Online Hotel Booking Intention in Kuala Lumpur. *Global Scientific Journals*, 374-387.
- Bandura, A. (1986). The Explanatory and Predictive Scope of Self-Efficacy Theory. *Journal of Social and Clinical Psychology*, 359-373.
- Bobko, P. (2001). Correlation and regression. Thousand Oaks, Calif: SAGE.
- Gellerstedt, M., & Arvemo, T. (2019). The impact of word of mouth when booking a hotel: could a good friend's opinion outweigh the online majority? *Information Technology & Tourism*, 289-311.
- Hashim, K., & Fadhil, N. (2017). Engaging with Customer Using Social Media Platform: A Case Study of Malaysia Hotels. *Procedia Computer Science*, 4-11.
- Huang, L. (2016). Flow and social capital theory in online impulse buying. *Journal of Business Research*, 2277-2283.
- Kim, S., Jang, S., Choi, W., Youn, C., & Lee, Y. (2021). Contactless service encounters among Millennials and Generation Z: the effects of Millennials and Gen Z characteristics on technology self-efficacy and preference for contactless service. *Journal of Research in Interactive Marketing*.
- Kim, S., Kim, J., & Park, S. (2017). The Effects of Perceived Value, Website Trust and Hotel Trust on Online Hotel Booking Intention. *Sustainability*.
- Lee, H. & Leonas, K.K. (2020). Millennials' intention to use self-checkout technology in different fashion retail formats: perceived benefits and risks. *Clothing and Textiles Research Journal*, 39(4), 264-280, doi: 10.1177/0887302X20926577.
- McDonald, T., Siegall, M. (1992). The Effects of Technological Self-Efficacy and Job Focus on Job Performance, Attitudes, and Withdrawal Behaviors. *The Journal of Psychology Interdisciplinary and Applied*, 465-475.
- Mudambi, S., & Schuff, D. (2010). Research Note: What Makes a Helpful Online Review? A Study of Customer Reviews on Amazon.com. *MIS Quarterly*. *MIS Quarterly*.
- Nawaz, I. (2020). Characteristics of Millennials and Technology Adoption in the Digital Age. *Handbook Of Research On Innovations In Technology And Marketing For The Connected Consumer*, 241-262.
- Park, C. & Lee, T.M. (2009). Antecedents of online reviews' usage and purchase influence: an empirical comparison of US and Korean Consumers. *Journal of Interactive Marketing*, 23 (4), 332-340.
- Sparks, B., & Browning, V. (2011). The impact of online reviews on hotel booking intentions and perception of trust. *Tourism Management*, 1310-1323.
- Taherdoost, H. (2019). What Is the Best Response Scale for Survey and Questionnaire Design; Review of Different Lengths of Rating Scale / Attitude Scale / Likert Scale. *International Journal of Academic Research in Management*, 1-10.
- Tao, M., Nawaz, M., Nawaz, S., Butt, A., & Ahmad, H. (2018). Users' acceptance of innovative mobile hotel booking trends: UK vs. PRC. *Information Technology & Tourism*, 9-36.
- Zhao, X., Wang, L., Guo, X., & Law, R. (2015). The influence of online reviews to online hotel booking intentions. *International Journal Of Contemporary Hospitality Management*, 1343-1364.