



Decoding Significant and Trivial Factors Influencing Online Hotel Ratings: The Case of Saudi Arabia's Makkah City

Ibrahim Abdullah Alhamad¹, Harman Preet Singh^{1*}

¹ Department of Management and Information Systems, College of Business Administration, University of Ha'il, SAUDI ARABIA.

*Corresponding Author (Email: drharmanpsingh@gmail.com).

Paper ID: 12A7H

Volume 12 Issue 7

Received 04 March 2021

Received in revised form 21 April 2021

Accepted 29 April 2021

Available online 06 May 2021

Keywords:

Consumer satisfaction; Digital economy; Hotel facilities; Electronic word of mouth; Online hotel ratings; Online review ratings; User-generated content; Hotel's level of comfort; Hotel's cleanliness; Hotel's breakfast; Religious tourism; Heritage tourism; Makkah hotels.

Abstract

The hospitality and tourism industries are significant revenue and employment generators on a global scale. Saudi Arabia has enormous potential for developing its tourism industry, particularly religious tourism. The tourism industry can assist the Saudi economy in increasing non-oil revenues and achieving Saudi Vision 2030. Tourists in the modern internet age expect high-quality hotel services and rely on online booking websites for travel advice and bookings. Hotels can survive, thrive, and excel if they can satisfy guests and earn positive online reviews. This study determines the factors influencing online hotel ratings in a significant and minor way. This research chose Saudi Arabia's most important religious city, Makkah. This study analyzes consumer reviews found on the Booking.com website. Facilities, comfort, cleanliness, location, and staff all significantly impact online hotel ratings, whereas breakfast and complimentary Wi-Fi have a minor impact. The hotels in Makkah can use this study's findings to increase customer traffic, increase revenue, and contribute to Saudi Vision 2030. By addressing the identified significant and minor factors, hotels in religious destinations can improve their online ratings and customer satisfaction.

Disciplinary: Business Management and Information Systems, Hotel Management, Tourism and Hospitality.

©2021 INT TRANS J ENG MANAG SCI TECH.

Cite This Article:

Alhamad, I. A., Singh, H. P. (2021). Decoding Significant and Trivial Factors Influencing Online Hotel Ratings: The Case of Saudi Arabia's Makkah City. *International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies*, 12(7), 12A7H, 1-11. <http://TUENGR.COM/V12/12A7H.pdf> DOI: 10.14456/ITJEMAST.2021.134

1 Introduction

A country's ability to thrive depends on all economic sectors (Barros, 2005), including the hospitality and tourism sectors. While a country's growth stimulates its hospitality and tourism

industry's performance, the industry contributes to the country's social, economic, and cultural development (Go et al., 1994). In the hospitality and tourism sector, the hotel industry is one of the most important industries. Hotel is a unique asset class as it usually is single-use, requires specific management expertise, and its value is directly related to its ability to generate future net income (Harper, 2008). The demand for quality hotel services is growing globally. The customers' perception of hotel service quality is crucial to their success and survival (Faullant & Matzler, 2008). In the past, traditional word of mouth (WOM) played a key role in influencing consumer expectations. With the growing users and Internet usage (Singh, 2017; Singh, 2018a; Singh, 2018b; Alshammari & Singh, 2018; Singh & Alshammari, 2020), electronic word of mouth (E-WOM) is currently playing a crucial role in affecting consumer perceptions. This becomes particularly important as consumers are increasingly turning to social media for travel and booking advice.

According to a study by ComScore Inc., 87% of customers identify online reviews significantly influence their purchase decision (Lipsman, 2007). So, online reviews assist the customers in empowering them to decide on making online purchases. Thus, online UGC is the new WOM and a valuable marketing communication tool. Online UGC provides critical insights to understand consumer behavior and enhance their satisfaction, leading to increased hotel bookings and improved profitability (Lipsman, 2007). Such improved profitability for hotels feeds and contributes to the country's hospitality and tourism industry and economic growth.

To boost tourism, the Saudi Commission for Tourism and National Heritage (SCTNH) is also working on innovative ideas like the Umrah Plus Program, allowing Umrah performers to visit valuable and distinctive tourist sites (Ministry of Tourism, 2017).

There are many methods employed in existing research to evaluate data from online reviews, including surveys (Ayeh et al., 2013; Kang & Schuett, 2013; Senders et al., 2013), case studies (Chalkiti & Sigala, 2008; Munar & Jacobsen, 2013), and interviews (Ayeh et al., 2012), etc. In this study, we obtain the online consumer reviews from Booking.com for hotel bookings in Makkah, Saudi Arabia. The online consumer reviews of the popular site like Booking.com is based on breakfast cleanliness, comfort, facilities, location, staff, value for money, and free Wi-Fi. So, this study considers the effect of these factors on online hotel ratings by developing and testing eight hypotheses. We also use the control variable of the star rating of the hotel in the present study.

This study asks two research questions:

- (1) What factors could have a significant influence on the online ratings of hotels?
- (2) What factors could have a minor influence on the online ratings of hotels?

2 Literature Review

Compared to traditional WOM, online WOM is the preferred choice of consumers due to its reliability, speed, convenience, unbiasedness, and trustworthiness (Sun et al., 2006; Akehurst, 2009; Li et al., 2012; Flanagin & Metzger, 2013). The advent of E-WOM and online UGC has altered the consumption of information by tourists and influences their decision-making. Tourists have

become cyber tourists and actively search the internet to look for pertinent information, create social bonds, and build an online identity (Gu & Ryan, 2008; Guex, 2010). It is increasingly realized in practice and research that online review ratings of tourists present an opulent source of data that can contribute to the hotel industry's analysis and management (Kim & Hardin, 2010; Lu & Stepchenkova, 2012). This is particularly important because most consumers use online reviews to make their hotel booking decisions (Park & Kim 2008; Schlosser, 2011).

Research shows that tourists' online review ratings impact hotel bookings and sales (Archak et al., 2011). Radojevic et al. (2017) opined that effective review ratings to the target consumers help an organization improve its sales volume and increase the customer base. Online review ratings influence the hotels' brand reputation and help them monitor their service quality. According to Radojevic et al. (2017), the review ratings provide the customers with an overall idea of the critical utility and value delivered by an organization. Guo et al. (2017) observed that the other customers' reviews encourage a new customer to build trust in the business's propositions.

In the digital economy, online UGC increasingly influences consumer choices (Xiang & Gretzel, 2010). This is facilitated by the fact that travelers' prior experiences reduce choice uncertainty for other consumers (Gretzel & Yoo, 2008). Various factors determine the consumers' preference for hotels. According to O'Connor's (2008) London hotels study, factors that influence hotels' online review ratings are location, facilities, room size, breakfast, staff, etc. According to Li et al. (2012), inadequate facilities or lack of comfort levels in the hotel room lead to lower consumer satisfaction levels. The same study also reports that food and beverage management, value for money, etc., are other important factors for consumers. Kim et al.'s (2016) New York hotels study report that hotel facilities, cleanliness, staff, and attitude are imperative factors influencing online review ratings.

The main factors that can influence online ratings of hotels are breakfast, cleanliness, comfort, facilities, location, staff, value for money, free Wi-Fi, etc.

3 Conceptual Model and Hypotheses

It is important to develop the conceptual model of this research to explore the main factors influencing online ratings of hotels. Figure 1 presents the research's conceptual model.

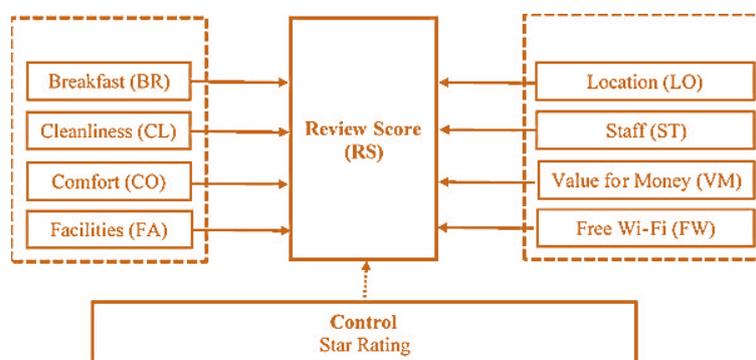


Figure 1: Conceptual Model of the Research.

Eight factors were identified in the literature review as influencing hotel ratings. They are used to develop the research's eight hypotheses. The following are the hypotheses:

- H1: The hotel's breakfast has a positive and statistically significant effect on the review score.
- H2: The hotel's cleanliness has a positive and statistically significant effect on the review score.
- H3: The hotel's level of comfort has a positive and significant impact on the review score.
- H4: Hotel facilities have a positive and significant impact on the review score.
- H5: The hotel's location has a positive and statistically significant effect on the review score.
- H6: The hotel's staff has a positive and statistically significant effect on the review score.
- H7: The hotel's value for money has a positive and significant impact on the review score.
- H8: The hotel's complimentary Wi-Fi has a positive and significant effect on the review score.

4 Research Methodology

In this research, we obtained the online review scores from the popular website of Booking.com. The website Booking.com provides overall ratings for the properties listed on its platform. In this research, we consider overall ratings as the dependent variable.

The online consumer review of www.booking.com is based on cleanliness, comfort, location, facilities, staff, value for money, breakfast, and free Wi-Fi. So, we collected the numerical aggregate ratings given by consumers to these eight factors. We consider these eight factors as independent variables in our research. We consider the star rating of the hotel as the control variable.

4.1 Data Preparation

We created the dataset for this research to test the hypotheses. The data for the overall rating and the eight factors are listed in the form of unambiguous numerical ratings. Accordingly, aggregate numerical rating data was collected from Booking.com for 172 hotels in Makkah. The 172 hotels included in the study were rated as follows: 1-star, 2-star, 3-star, 4-star, and 5-star. We designated symbol 1 as a one-star hotel, 2 as a two-star hotel, 3 as a three-star hotel, 4 as a four-star hotel, and 5 as a five-star hotel.

4.2 Variables

Eight independent, one dependent, and one control variable comprise the dataset generated in Microsoft Excel. The variables of the study are explained in Table 1.

Table 1: Variables of the Study

Variable Name	Definition
Dependent Variable	
Review Score (RS)	Consumers online overall numerical rating of the hotels
Independent Variables	
Breakfast (BR)	Consumers online aggregated numerical rating of the breakfast of the hotels
Cleanliness (CL)	Consumers online aggregated numerical ratings of the cleanliness of the hotels
Comfort (CO)	Consumers online aggregated numerical ratings of the comfort of the hotels
Facilities (FA)	Consumers online aggregated numerical rating of the facilities of the hotels
Location (LO)	Consumers online aggregated numerical rating of the location of the hotels
Staff (ST)	Consumers online aggregated numerical rating of the staff of the hotels
Value for Money (VM)	Consumers online aggregated numerical rating of the VM of the hotels
Free Wi-Fi (FW)	Consumers online aggregated numerical rating of the free Wi-Fi of the hotels
Control Variable	
Star Rating (SR)	The number of stars of the hotel

5 Estimation Results

5.1 Statistics and Correlations

With the Stata software to conduct our analyses, the descriptive statistics and correlations are shown in Table 2. The results show breakfast receives an average rating of 1.85, cleanliness 7.55, comfort 7.85, facilities 7.92, location 7.01, staff 7.25, value for money 6.75, free Wi-Fi 5.98, and review score 7.40, respectively.

The correlation coefficient (r) between independent variables is determined and interpreted with criteria that the value of r between 0.0-0.19 as a very weak correlation, 0.2-0.39 as weak correlation, 0.4-0.59 as a moderate correlation, 0.6-0.79 as strong correlation, and 0.8 or above as a very strong correlation. Table 2 displays the correlation coefficient between different variables. The correlation coefficients between variables are cleanliness and breakfast 0.31 (weak correlation), comfort and cleanliness 0.39 (weak correlation), facilities and comfort 0.47 (moderate correlation), location and facilities 0.57 (moderate correlation), staff and location 0.51 (moderate correlation), value for money and facilities 0.59 (moderate correlation), and free Wi-Fi and staff 0.21 (weak correlation). These results demonstrate that there is no issue of multicollinearity between independent variables. Also, the correlation coefficient between star rating (control variable) and breakfast is 0.52 (moderate correlation).

Table 2: Descriptive Statistics and Correlations

Variable	Mean	BR	CL	CO	FA	LO	ST	VM	FW	SR	RS
Breakfast (BR)	1.85	1									
Cleanliness (CL)	7.55	0.31	1								
Comfort (CO)	7.85	0.28	0.39	1							
Facilities (FA)	7.92	0.33	0.44	0.47	1						
Location (LO)	7.01	0.25	0.48	0.53	0.57	1					
Staff (ST)	7.25	0.32	0.48	0.44	0.49	0.51	1				
Value for money (VM)	6.75	0.06	0.59	0.52	0.59	0.33	0.53	1			
Free Wi-Fi (FW)	5.98	0.12	-0.04	0.09	0.09	-0.09	0.21	-0.07	1		
Star Rating (SR)	0.71	0.52	0.19	0.17	0.14	-0.15	0.08	-0.14	0.05	1	
Review Score (RS)	7.40	0.36	0.94	0.88	0.94	0.75	0.92	0.87	0.04	0.14	1

5.2 Multicollinearity and Heteroscedasticity

We built the regression model using dependent, control, and independent variables and checked for Variance Inflation Factor (VIF) to check for multicollinearity.

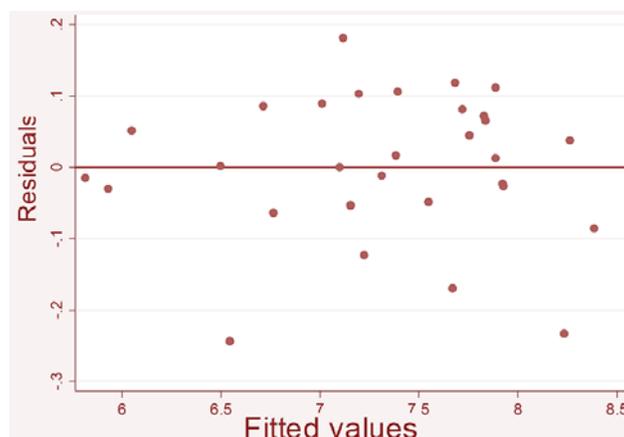


Figure 2: Residual Values Fit Plot

The highest mean value of VIF for the model was 1.55. Thus, the model shows the absence of multicollinearity concerns (Daoud, 2017). We also conducted heteroscedasticity diagnostics in Stata. We developed the residual values fit plot in Stata to check for heteroscedasticity (Figure 2). The residual values fit plot does not reveal any pattern. As a result, we can consider the data for the variables to be homoscedastic. Additionally, we perform the Breusch-Pagan / Cook-Weisberg test to determine heteroscedasticity. Table 3 summarizes the findings.

Table 3: Heteroscedasticity Diagnostics

Ho: Constant Variance	
chi2(1)	0.18
Prob > chi2 (P-value)	0.656

The null hypothesis in Table 3 is constant variance. This implies that the test presupposes the absence of heteroscedasticity in the data for the variables. The p-value is greater than 0.05, at 0.656. As a result, the null hypothesis of constant variance cannot be rejected. As a result, our data is free from heteroscedasticity.

5.3 Regression Analysis

Table 4 demonstrates the results of the regression analysis.

Table 4: Regression Results

Regression Statistics		ANOVA				
Observations	172		SS	df	MS	
F (13, 17)	56.65	Model	14.12	13	1.03	
Prob > F	0.0000	Residual	0.3	17	0.03	
Root MSE	0.14	Total	13.69	30	0.49	
	Coefficients	Std. Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	0.48	0.56	0.77	0.43	-0.76	1.8
Breakfast	0.01	0.01	0.26	0.88	-0.02	0.06
Cleanliness	0.34	0.04	5.12	0.01*	0.27	0.58
Comfort	0.38	0.05	6.88	0.01*	0.29	0.53
Facilities	0.48	0.06	2.87	0.01**	0.28	0.57
Location	0.23	0.05	3.42	0.04*	0.09	0.38
Staff	0.31	0.08	5.32	0.02*	0.25	0.54
Value for Money	0.18	0.16	2.12	0.06	-0.16	0.63
Free Wi-Fi	-0.03	0.03	-0.73	0.46	-0.07	0.04
Star Rating (SR)	-0.05	0.05	-0.95	0.38	-0.14	0.05

** p<0.01, * p<0.05

5.4 Hypotheses Testing

H1: The p-value of 0.88 (Table 4) indicates that the hotel's breakfast does not significantly affect the online review score. As a result, hypothesis **H1 is unsupported**.

H2: The p-value of 0.01 and coefficient of 0.34 in Table 4 indicate that the cleanliness of the hotel has a statistically significant positive effect on the review score. As a result, hypothesis **H2 is supported**.

H3: The p-value of 0.01 and coefficient of 0.38 (Table 4) indicate that the level of comfort at the hotel has a significant positive effect on the review score. As a result, hypothesis **H3 is supported**.

H4: The 0.01 p-value and coefficient of 0.48 (Table 4) indicate that hotel facilities significantly positively affect the review score. As a result, hypothesis **H4 is supported**.

H5: The p-value of 0.04 and coefficient of 0.23 (Table 4) indicate that the hotel's location has a significant positive effect on the review score. As a result, hypothesis **H5 is supported**.

H6: The p-value of 0.02 and coefficient of 0.31 (Table 4) indicate that the hotel staff has a significant positive effect on the review score. As a result, hypothesis **H6 is supported**.

H7: With a p-value of 0.06 (Table 4), the hotel's value for money has no significant influence on the review score. As a result, hypothesis **H7 is unsupported**.

H8: The p-value of 0.46 indicates that the hotel's complimentary Wi-Fi does not affect the review score in a significant way. As a result, hypothesis **H8 is unsupported**.

6 Discussion

This study decodes the factors that significantly and trivially influence online hotel ratings. We discover that the facilities, comfort, cleanliness, location, and personnel of hotels significantly influence their online ratings. These findings corroborate those of O'Connor (2008), Li et al. (2012), and Kim et al. (2016). The current study's findings also extend Alhamad & Singh's (2021) Makkah study, as they identified these factors as consideration and choice sets under the consideration set theory, whereas the current study identifies them as significant to influence online ratings.

Additionally, the research identifies factors that have a negligible effect on online hotel ratings. These are breakfast, complimentary Wi-Fi, and value for money. These findings corroborate Alhamad & Singh's (2021) assertion that free Wi-Fi and value for money are less relevant to tourists visiting religious destinations like Makkah. This research findings also extend Alhamad & Singh's (2021) findings, as they did not include breakfast. However, unlike O'Connor's (2008) research, ours found no evidence that breakfast has a significant effect on hotel online ratings in religious destinations like Makkah.

7 Conclusion

In summary, this research establishes the importance of online consumer reviews to enhance customers' satisfaction. Hotels can use the research findings to boost consumer trust and confidence (Singh & Agarwal, 2011; Singh & Grover, 2011a; Singh et al., 2011; Singh, 2018c) and enhance their satisfaction (Singh, 2011; Singh et al., 2011b; Singh, 2013; Singh et al., 2015; Singh, 2016). Therefore, the research findings create significant value for a religious heritage destination like Saudi Arabia to promote its hospitality and tourism industries and boost non-oil revenues as part of its Vision 2030.

This research deciphers tacit knowledge from online consumer reviews data using statistical methods. Using a dataset of 172 hotels in the Hail City of Saudi Arabia from the popular booking website of Booking.com, this research identifies key factors that influence online ratings of hotels. The findings of the empirical analysis informed two tenets:

(1) Factors of facilities, comfort, cleanliness, location, and staff significantly influence hotels' online ratings.

(2) Factors of breakfast, complimentary Wi-Fi, and value for money have a minor influence on hotels' online ratings.

This groundbreaking study unearths previously unknown information about the significant and trivial factors affecting hotel ratings. This is the first study of its kind in Saudi Arabia, deciphering the significant and trivial factors affecting hotel ratings using Makkah's most important religious heritage site as a case study.

The study findings can be applied in the following ways.

- The hotels in tourism destinations could use the study's findings to improve the critical factors contributing to their online rating.
- Hotels in religious destinations such as Makkah could use the information gleaned from this study to position their service offerings to survive and succeed strategically.
- Government agencies such as the Saudi Commission for Tourism and National Heritage could effectively use the study findings to promote the hotel industry and fulfill Vision 2030 goals.

8 Availability of Data and Materials

The corresponding author can provide access to the data and materials used in this study upon request.

9 Acknowledgements

This research is a part of the fourth session's approved research project for 2018-19 (S.No. 53/161147) titled "Predicting Key Factors Impacting Online Hotel Ratings Using Data Mining Approach: A Case Study of Makkah, KSA." The authors would like to express their gratitude for the Deanship of Scientific Research at the University of Ha'il for funding this research.

10 Contributions of Authors

Each author contributed equally to this study. The authors' contribution is acknowledged as follows:

Ibrahim Abdullah Alhamad: Conceptualization, funding acquisition, project management, resource management, supervision, substantiation, and writing - review & editing.

Harman Preet Singh: Collection, curation, and analysis of data, investigation, methodology, modeling, evaluation, validation, and roles/writing - original draft.

11 References

- Akehurst, G. (2008). User-generated content: the use of blogs for tourism organisations and tourism consumers. *Service Business*, 3(1), 51-61. DOI: 10.1007/s11628-008-0054-2
- Alhamad, I. A., & Singh, H. P. (2021). Predicting Key Factors Impacting Online Hotel Ratings Using Data Mining Approach: A Case Study of the Makkah City of Saudi Arabia. *International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies*, 12(2), 12A2N, 1-12. <http://doi.org/10.14456/ITJEMAST.2021.35>
- Alshammari, T. S., & Singh, H. P. (2018). Preparedness of Saudi Arabia to Defend Against Cyber Crimes: An Assessment with Reference to Anti-Cyber Crime Law and GCI Index. *Archives of Business Research*, 6(12), 131-146. DOI: 10.14738/abr.612.5771
- Archak, N., Ghose, A., & Ipeiritis, P. G. (2011). Deriving the Pricing Power of Product Features by Mining Consumer Reviews. *Management Science*, 57(8), 1485-1509. DOI: 10.1287/mnsc.1110.1370
- Ayeh, J. K., Leung, D., Au, N., & Law, R. (2012). Perceptions and Strategies of Hospitality and Tourism Practitioners on Social Media: An Exploratory Study. In M. Fuchs, F. Ricci, & L. Cantoni (Eds.),

- Information and Communication Technologies in Tourism 2012* (pp. 1-12). Springer, Vienna. DOI: 10.1007/978-3-7091-1142-0_1
- Barros, C. P. (2005). Measuring efficiency in the hotel sector. *Annals of Tourism Research*, 32(2), 456-477. DOI: 10.1016/j.annals.2004.07.011
- Chalkiti, K., & Sigala, M. (2008). Information Sharing and Knowledge Creation in Online Forums: The Case of the Greek Online Forum 'DIALOGOI.' *Current Issues in Tourism*, 11(5), 381-406. DOI: 10.1080/13683500802316006
- Daoud, J. I. (2017). Multicollinearity and Regression Analysis. *Journal of Physics: Conference Series*, 949, 1-6. DOI: 10.1088/1742-6596/949/1/012009
- Faullant, R., Matzler, K., & Füller, J. (2008). The impact of satisfaction and image on loyalty: the case of Alpine ski resorts. *Managing Service Quality: An International Journal*, 18(2), 163-178. DOI: 10.1108/09604520810859210
- Flanagin, A. J., & Metzger, M. J. (2013). Trusting expert- versus user-generated ratings online: The role of information volume, valence, and consumer characteristics. *Computers in Human Behavior*, 29(4), 1626-1634. DOI: 10.1016/j.chb.2013.02.001
- Go, F., Pine, R., & Yu, R. (1994). Hong Kong: Sustaining competitive advantage in Asia's hotel industry. *Cornell Hotel and Restaurant Administration Quarterly*, 35(5), 50-61. DOI: 10.1177/001088049403500515
- Gretzel, U., & Yoo, K.H. (2008) Use and Impact of Online Travel Reviews. In: P. O'Connor, W. Höpken, U. Gretzel (Eds.) *Information and Communication Technologies in Tourism 2008* (pp 35-46). Springer, Vienna. DOI: 10.1007/978-3-211-77280-5_4
- Gu, H., & Ryan, C. (2008). Place attachment, identity and community impacts of tourism—The case of a Beijing hutong. *Tourism Management*, 29(4), 637-647. DOI: 10.1016/j.tourman.2007.06.006
- Gueux V. (2010) A Sociological View of the Cybertourists. In: U. Gretzel, R. Law, M. Fuchs (Eds.) *Information and Communication Technologies in Tourism 2010*. pp 417-428, Springer, Vienna. DOI: 10.1007/978-3-211-99407-8_35
- Guo, Y., Barnes, S. J., & Jia, Q. (2017). Mining meaning from online ratings and reviews: Tourist satisfaction analysis using latent dirichlet allocation. *Tourism Management*, 59, 467-483. DOI: 10.1016/j.tourman.2016.09.009
- Harper, D. (2008). *Valuation of Hotels for Investors*. United Kingdom: Taylor & Francis.
- Kang, M., & Schuett, M. A. (2013). Determinants of Sharing Travel Experiences in Social Media. *Journal of Travel & Tourism Marketing*, 30(1-2), 93-107. DOI: 10.1080/10548408.2013.751237
- Kim, B., Kim, S., & Heo, C. Y. (2016). Analysis of satisfiers and dissatisfiers in online hotel reviews on social media. *International Journal of Contemporary Hospitality Management*, 28(9), 1915-1936. DOI: 10.1108/ijchm-04-2015-0177
- Kim, J., & Hardin, A. (2010). The Impact of Virtual Worlds on Word-of-Mouth: Improving Social Networking and Servicescape in the Hospitality Industry. *Journal of Hospitality Marketing & Management*, 19(7), 735-753. DOI: 10.1080/19368623.2010.508005
- Larose, D. T., & Larose, C. D. (2014). *Discovering Knowledge in Data: An Introduction to Data Mining (2nd ed., Methods and Applications in Data Mining)*. Hoboken, NJ: John Wiley & Sons.
- Li, H., Ye, Q., & Law, R. (2012). Determinants of customer satisfaction in the hotel industry: An application of online review analysis. *Asia Pacific Journal of Tourism Research*, 18(7), 784-802. DOI: 10.1080/10941665.2012.708351
- Lipsman, A. (2007). *Online Consumer-Generated Reviews Have Significant Impact on Offline Purchase Behavior*. <https://www.comscore.com/Insights/Press-Releases/2007/11/Online-Consumer-Reviews-Impact-Offline-Purchasing-Behavior> Retrieved Dec 2020,

- Lu, W., & Stepchenkova, S. (2012). Ecotourism experiences reported online: Classification of satisfaction attributes. *Tourism Management*, 33(3), 702-712. DOI: 10.1016/j.tourman.2011.08.003
- Ministry of Tourism. (2017). Saudi Arabia, Muslim's Destination for Tourism After Umrah. <https://mt.gov.sa/en/Programs-Activities/Programs/Pages/AfterUmrahTourPro.aspx> Retrieved Nov 2020,
- Munar, A. M., & Jacobsen, J. K. S. (2013). Trust and Involvement in Tourism Social Media and Web-Based Travel Information Sources. *Scandinavian Journal of Hospitality and Tourism*, 13(1), 1-19. DOI: 10.1080/15022250.2013.764511
- O'Connor, P. (2008). User-Generated Content and Travel: A Case Study on Tripadvisor.Com. In P. O'Connor, W. Höpken, & U. Gretzel (Eds.), *Information and Communication Technologies in Tourism 2008: Proceedings of the International Conference in Innsbruck, Austria, 2008*. Vienna, Austria: Springer. DOI: 10.1007/978-3-211-77280-5_5
- Park, D.-H., & Kim, S. (2008). The effects of consumer knowledge on message processing of electronic word-of-mouth via online consumer reviews. *Electronic Commerce Research and Applications*, 7(4), 399-410. DOI: 10.1016/j.elerap.2007.12.001
- Radojevic, T., Stanisic, N., & Stanic, N. (2017). Inside the Rating Scores: A Multilevel Analysis of the Factors Influencing Customer Satisfaction in the Hotel Industry. *Cornell Hospitality Quarterly*, 58(2), 134-164. DOI: 10.1177/1938965516686114
- Schlosser, A. E. (2011). Can including pros and cons increase the helpfulness and persuasiveness of online reviews? The interactive effects of ratings and arguments. *Journal of Consumer Psychology*, 21(3), 226-239. DOI: 10.1016/j.jcps.2011.04.002
- Senders, A., Govers, R., & Neuts, B. (2013). Social Media Affecting Tour Operators' Customer Loyalty. *Journal of Travel & Tourism Marketing*, 30(1-2), 41-57.
- Singh, H. P. (2011). Channel Financing: The Transformational Paradigm in Supply Chain Management. In *Proceedings of the 2011 International Conference on e-Learning, e-Business, Enterprise Information Systems, and e-Government* (pp. 323-329). Las Vegas, Nevada, USA; 2011 World Congress in Computer Science, Computer Engineering and Applied Computing.
- Singh, H. P. (2013). Innovative ICT Through Cloud Computing. *The IUP Journal of Computer Sciences*, 7(1), 37-52.
- Singh, H. P. (2016). E-Commerce Security: Legal and Policy Aspects of Technology Solutions in India. *Mumukshu Journal of Humanities*, 8(1), 1-7.
- Singh, H. P. (2017). Strategic Analysis and Security Issues of Social Media Services: A Study of Facebook. *International Journal of Information Movement*, II(V), 134-139.
- Singh, H. P. (2018a). Domain Name Disputes and Their Resolution under UDRP Route: A Review. *Archives of Business Research*, 6(12), 147-156. doi:10.14738/abr.612.5786
- Singh, H. P. (2018b). Cybersquatting and the Role of Indian Courts: A Review. *Amity Journal of Computational Sciences*, 2(2), 18-23.
- Singh, H. P. (2018c). Data Protection and Privacy Legal-Policy Framework in India: A Comparative Study vis-à-vis China and Australia. *Amity Journal of Computational Sciences*, 2(2), 24-29.
- Singh, H. P., & Agarwal, A. (2011). Espousal of E-Learning in Adult Education. In *Proceedings of the International Conference on Computational Techniques and Artificial Intelligence* (pp. 28-31). Pattaya, Thailand: ISEM-Planetary Scientific Research Centre.
- Singh, H. P., & Alshammari, T. S. (2020). An Institutional Theory Perspective on Developing a Cyber Security Legal Framework: A Case of Saudi Arabia. *Beijing Law Review*, 11(03), 637-650. DOI: 10.4236/blr.2020.113039

- Singh, H. P., & Grover, S. T. (2011). Marketing of E-banking Services: A Critical Analysis on Lifecycle Demographics, Enabling and Disabling Factors. *Zenith International Journal of Multidisciplinary Research*, 1(7), 20-38.
- Singh, H. P., Jindal, S., & Samim, S. A. (2011). Role of Human Resource Information System in Banking industry of developing countries. *International Journal of the Computer, the Internet and Management*, 19(SP1), 44.1-44.4.
- Singh, H. P., Jindal, S., & Samim, S. A. (2011a). Business Ethics: Relevance, Influence, Issues and Practices in *International Business Scenario*. *International Journal of the Computer, the Internet and Management*, 10(SP1), 59.159.5.
- Singh, H. P., Kumar, V., & Agrawal, A. (2015). Demystifying Information Technology Projects Success and Failure Factors: The Cases of California DMV and BancoItamarati Bank. *Mumukshu Journal of Humanities*, 7(1), 493-499.
- Sun, T., Youn, S., Wu, G., & Kuntaraporn, M. (2006). Online Word-of-Mouth (or Mouse): An Exploration of Its Antecedents and Consequences. *Journal of Computer-Mediated Communication*, 11(4), 1104-1127. DOI: 10.1111/j.1083-6101.2006.00310.x
- Vision 2030. (2016). Governance Model for Achieving Saudi Arabia's Vision 2030. <https://vision2030.gov.sa/en/governance> Retrieved Oct 2020.
- Xiang, Z., & Gretzel, U. (2010). Role of social media in online travel information search. *Tourism Management*, 31(2), 179-188. DOI: 10.1016/j.tourman.2009.02.016
-



Dr. Ibrahim Abdullah Alhamad is Dean of the College of Business Administration. His published research comprises the paper titled "Professional or interactive: CEOs' image strategies in the microblogging context" in the prestigious *Journal of Computers in Human Behavior*. His research interests include Consumer Behavior, Micro-Blogging, Marketing Management, and Online Product Reviews.



Dr. Harman Preet Singh has served as a faculty/research member at the University of Delhi, India; Fayetteville State University, U.S.A.; University of Warwick, U.K.; University of Warsaw, Poland; Debre Berhan University, Ethiopia, and the University of Ha'il, Saudi Arabia. His research interests include Data Mining, Cybersecurity, IT Governance, e-Learning, Strategic Management, and Supply Chain Management.
