

INNOVATIVE MARKETING STRATEGIES IN HOTEL BOOKING APPS TO INCREASE USER'S ENGAGEMENT AND USER'S LOYALTY

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ABSTRACT

The purpose of this research was to measure the effect of Innovative marketing strategies in hotel booking apps towards user's engagement and user's loyalty which was mediating role of user's engagement also examined. The data collection was done by a simple random sampling, It was done by distributing questionnaires among hotel booking apps users in Iran. The returned and valid questionnaire results were 384 samples. The data processing used was the SEM method with SmartPLS 3.0 software. The results of this research concluded that Innovative marketing strategies in hotel booking apps has a positive and significant impact on user's engagement to these apps. On the other hand, Innovative marketing strategies in hotel booking apps has a positive and significant impact on user's loyalty to these apps, both directly and through the user's engagement. This new research proposed a model for increasing the user's engagement and user's loyalty through creative Innovative marketing strategies in hotel booking apps. This research can pave the way to Performance improvements in hotel booking apps.

Keywords: Innovative marketing strategies, hotel booking apps, user's' engagement, user's loyalty

INTRODUCTION

Online distribution of services, including hotel rooms, flights, travel packages, attraction tickets, cruises, and car rentals has been on the rise due to the benefits that both travelers and companies perceive (Bilgihan & Bujisic, 2015). The Internet is amongst the most important channels for hotel room distribution. Therefore, adopting an effective e-commerce strategy is a key matter for the lodging industry (Law, Buhalis, & Cobanoglu, 2014).

Technical innovations in the tourism industry profoundly influence the production, distribution, and consumption of hospitality and tourism products and services (Buhalis & Amaranggana, 2015).

With the increasing popularity of mobile devices, mobile commerce provides consumers with the ability to search for hotel and travel information from any location at any time. The service providers in the hospitality and tourism industries also utilize mobile technology to enhance brand awareness (Kim & Adler, 2011), enrich tourist experience and overall tourist satisfaction (Lee, Lee, & Ham, 2013), and increase customer loyalty (Kim, Park, & Morrison, 2008). Hospitality and tourism businesses have begun to develop smartphone phone applications

(apps) to communicate marketing messages to consumers that influence travel decision-making and consuming behavior (Eden & Gretzel, 2012).

In current era smart cell phones have become the most important thing in daily life as 90% of the people who have a smartphones use it daily (Okumus et al. 2016). So, e-commerce has been shifting towards m-commerce (mobile commerce) as most of the consumers are using smartphones for online buying. If we talk about the hospitality industry, online diffusion of latest hospitality trends and availability of services like flights, travel packages, travel tickets, car rentals and especially hotel bookings has been rising because of perceived mutual benefits for consumers and companies (Bilgihan and Bujisic 2015). The Internet has become an important tool for hotel booking. Thus, the adoption of a compelling m-commerce strategy is the key thing for the hospitality industry (Law et al. 2014). The high usage of smartphones is changing the business of the hotel industry (Xiang et al. 2015). A big advantage for smartphone users is that they can book a hotel room easily from anywhere (Ozturk et al. 2016). Researchers see that soon hotel booking through mobile phone will become the most dominant source of hotel industry (Tode 2014).

To remain competitive and to enhance the booking income, industry professionals are required to focus on m-commerce strategies (Wang and Wang 2010) and also ensure the user's loyalty to m-commerce (Kandampully et al. 2015). Now, hotel mobile apps not only provide information to travelers related to different services and recreational facilities but also enable them to make a real-time booking (Ozturk et al. 2016).

Travelers feel more comfortable using smartphones to book their traveling reservations for tickets and hotels. Hotels' mobile apps are the medium that the tourists are using for completing the reservation and payment process. These mobile apps are getting swift acceptability and popularity among the travelers because of their abundant benefits (Ozturk et al. 2016).

Mobile hotel booking technology could be described as "a location-based online distribution information system that enables customers worldwide to reserve hotel rooms anytime, anywhere through the use of the Internet, and global positioning system (GPS) on their mobile devices" (Wang and Wang 2010). Mobile apps have made the hotel booking process more open and simple for customers.

The current era of digital connectivity, propelling the Fourth Industrial Revolution (Deloitte Touche Tomatsu Limited, 2018), is characterized by ubiquitously connected mobile devices, enhanced computing power, abundant digital storage capacity, and easy access to digitized information. All of these contribute to exponential change and disruption to society (Schwab, 2015). This phenomenon has altered the ways by which people access information, communicate with one another, buy and sell products, and interact with businesses. This change in consumer behavior has changed customer expectations and significantly affected many industries, including the hospitality industry.

LITERATURE REVIEW AND HYPHOTHESIS

Innovative Marketing Strategies

Travel apps are common information sources for people researching travel destinations. There is an array of city travel apps available to foreign visitors that are specific to large metropolitan areas. English is the international language typically used for these travel apps; however, there are many travelers for whom English is not their native language and their ability to understand English is limited. To address this language barrier and to allow for better accessibility to application functions, the design of the icons on the travel apps should be readily recognized and understood on a universal level. They need to speak to international travelers who represent a variety of languages and cultural backgrounds by being more easily recognized and acceptable worldwide, and ultimately useful in mitigating cultural barriers and misunderstanding (Shi. 2019).

In the era of e-commerce, consumers gradually started to make purchases online and to express their satisfaction and complaints through online reviews and ratings (Mauri and Minazzi, 2013; Sun, 2012). Product and service providers can benefit greatly from online reviews since they can now conveniently manage consumers' comments, and positive reviews can help them significantly in developing a positive reputation (Chen and Xie, 2008; Goh et al., 2013; Zhao et al., 2015).

Related to consumer-relationship management and response management, domestic hotels first need to treat consumers with richer prior experience posting reviews as loyal consumers (Lin and Lekhawipat, 2014). By contrast, hotels with international brand origins need to pay more attention to such "expert" consumers since they are better able to identify unsatisfactory points based on comparison with past experiences. Hotel managers of both groups should focus more on responding to potential consumers with less prior experience posting reviews (Schuckert et al. 2019).

Traditional TAM¹ factors—perceived usefulness and perceived ease of use are identified as effective factors in influencing both business and leisure travelers to adopt mobile technology in their hotel stays. However, business travelers are more influenced by reliability and privacy factors of the technology than are the leisure counterparts when deciding to use mobile hotel apps. Leisure travelers are more influenced by "fun" features of the mobile technology and if they are innovative in the nature, they tend to use mobile apps for hotel services (Zhang et al. 2019).

brand signature involves (i) endorsement of consistent consumer attitude toward diffusion of a brand name and brand logo (consists of typeface, design, and color); (ii) the expression and pursuit of a distinct message and the quality of the organization to consumers as well as consistency in communication; and (iii) the implementation, support, and maintenance of hotel brand signature systems based on the use of online/offline media. brand signature includes

dissemination of its dimensions; brand attitude with two components (brand association and brand belief); brand awareness consists of brand familiarity, and brand recognize ability; and consistency in brand reputation and prefaced by hotel brand performance implementation. Brand signature is recommended as a tool useful for the service industry to manage their global hotel brand reputation and performance (Foroudi.2019).

The growing popularity of mobile technologies and applications, lead many companies to develop relations with consumers through mobile applications. Therefore, it is important to understand how to design applications based on consumer preferences. perception of such features as design solutions and information quality will result in higher engagement leading to continuous usage of mobile applications. Moreover, consumer engagement positively influenced users' intention to continuous usage of mobile applications. Inconsistent with expectation, consumer interaction and functionality features are not found to be positively related to consumer engagement with mobile applications (Tarute et al. 2017).

Understanding how and why consumers engage with mobile apps is critical to the success of ubiquitous mobile marketing. time convenience, interactivity, and compatibility positively influenced mobile app engagement, in turn leading to strong relationship commitment and self-brand connections (Kim & Baek. 2018). Therefore, based on the arguments above we posit the following hypothesis:

H1: Innovative marketing strategies in hotel booking apps directly affect toward user's engagement to these apps.

User's Engagement

Social commerce platforms have gained prominence in e commerce, as social media has become an integral part of user's online activities. Therefore, firms have been either developing or utilizing social commerce platforms to increase user engagement by adding social shopping facility onto their electronic commerce platforms. However, managing user engagement and user interaction becomes complex when e-commerce platforms are transformed into social commerce platforms (Kumar et al., 2019).

Customer engagement is heralded as having numerous benefits such as positive attitudes and commitment towards the brand, increased purchase and loyalty (Evanschitzky et al., 2012). Previous research has conceptualized engagement as focused attention (Chapman, Sanjeebhan, & Webster, 1999), curiosity (Jacques, Preece, & Carey, 1995) and appeal (Jennings, 2000). Customer engagement is thought to share similar characteristics with the concept of interactivity and use (Quesenbery, 2003). The verb 'to engage' has several meanings including: to employ and hire, to bind by contract and to take part (Oxford Dictionary, 2010), affirming a behavioral focus. Thus, while no universally agreed definition or set of attributes pertaining to engagement exist (Cheung, Lee, & Jin, 2011), generally, engagement embraces cognitive, affective and behavioral elements of individuals' experiences (Brodie, Hollebeek, Juric, & Ilic, 2011) and thus considered a multidimensional construct. Hollebeek, Glynn, Brodie (2014, p. 154) conceptualize consumer engagement as "a consumer's positively valence cognitive, emotional and behavioral brand related activity during, or related to, specific consumer/brand interactions". Hollebeek et al. (2014) conceptualization of consumer engagement highlights the multidimensionality of the

construct. Therefore, customer engagement behavior can be considered as ‘behavioral manifestations that have a brand or firm focus, resulting from motivational drivers’ (Van Doorn et al., 2010, p.254). As a result, such manifestations may either be positive or negative resulting in either approach or avoidance behavior towards the brand. Therefore, despite being subject to varying interpretations, consumer brand engagement is often considered a motivational construct, with unpredictable intensity. It involves firstly an object (i.e. branded app), secondly a subject (i.e. the consumer) and thirdly it has valence (i.e. either positive or negative) (Dessart, Veloutsou, & Morgan-Thomas, 2015).

As said before, given the proliferation of mobile devices and the growing attention paid to social media marketing for facilitating customer engagement with brands, research concerning mobile apps’ customer engagement and its consequence still awaits to be developed (Ho & Chung, 2020).

Seismic shift in both digitalization via mobile apps and customer engagement through varied social media platforms have created compelling channels for companies to offer effective marketing communication, as a result of better and easier acquisition of user/ customer data, and increased efficiency in customer service, virtual teamwork and online transaction processing. Mobile apps are defined as end-user software applications that are designed for a smartphone operating system in which the apps extend the phone’s capabilities by enabling users to perform particular tasks, such as information search and social networking (Kim, Lin, & Sung, 2013; Purcell, Entner & Henderson, 2010). Mobile apps trump traditional advertisements in part because customers do not perceive them as advertising; customers value them for their functionality and, therefore, do not find them intrusive (Gupta, 2013).

Customer engagement refers to “customers’ behavioral manifestation towards a brand or firm, beyond purchase, resulting from their motivational drivers” (Van Doorn et al., 2010, p. 253). A customer’s value equity, on the other hand, denotes the customer’s objective assessment of the utility (quality, price and convenience) of a brand/firm, based on the perception of what is given up for what is received (Lemon et al., 2001). According to the service dominant logic conceptualization, customer value is created by the nature and level of customer engagement with the service organization. Customer engagement consists of a vast array of online and offline activities which may influence customers’ consumption intention (Balaji, Jha, Sengupta, & Krishnan, 2018; Viswanathan, Malthouse, Maslowska, Hoornaert, & Den Poel, 2018).

In the mobile technology, successful mobile technologies should engage users (Tarute, Nikou, & Gatautis, 2017). though It is important to understand how customers perceive the mobile technology to promote customer behavior, When branded apps promote customer engagement and provide an environment that fosters customer engagement, companies are more likely to gain competitive advantages in their business (Kim et al., 2013). When customers are engaged with the brand, they tend to develop relationships with the brand by learning about the brand. Previous research identified outcomes of customer engagement, such as trust (Hollebeek, 2011), commitment (Lim, Hwang, Kim, & Biocca, 2015), and brand loyalty (So, King, Sparks, & Wang, 2016).

Using mobile hotel apps will have a positive effect on the brand awareness, customer engagement and brand commitment, which in turn positively influences the brand loyalty (Kim, 2011).

Therefore, based on the arguments above we posit the following hypothesis:

H2: user's engagement to the hotel booking apps directly affect toward user's loyalty to these apps.

User's Loyalty

In general, loyalty can be defined as customer's favorable attitude towards a brand, which results in consistent purchases over time (Keller 1993). Heskett et al. (1997) suggested that when customers are not only displaying repeat purchasing behavior but also recommending the product to other customers without any benefits, loyalty exists. The measurement of customer loyalty has been considered from two different aspects, including the behavioral dimension that focuses on a customer's actual loyalty behaviors, such as repeat purchases and recommending the product to other customers, and the attitudinal dimension that describes the consumer's intention to be involved in such loyalty behaviors (Chaudhuri and Holbrook 2001; Kandampully and Suhartanto 2003; Kandampully et al. 2015; Yang and Lau 2015).

The concept of e-loyalty, which is based on online consumer experience in the context of e-commerce, has been defined as consumer's intention to revisit a website or purchase again from an online vendor (Reichheld and Schetter 2000; Flavian, et al. 2006). In alignment with the studies in the context of ecommerce, mobile loyalty (m-loyalty) also depends on consumer's intention to revisit a mobile website or mobile app, resulting in repeat purchasing behavior (Cyr et al. 2006). As mentioned previously, with the increased popularity of mobile apps in the hotel industry, customers are now able to book their hotel rooms not only through mobile websites but also through mobile apps.

Brand loyalty plays an important role that leads to marketing success of hospitality and tourism services (So et al., 2016). Brand loyalty refers to a customer's deeply held commitment toward a preferred brand (Oliver, 1999). Regardless of situational influences or other companies' marketing efforts that might cause customer's switching behaviors, a loyal customer is strongly committed to using the same brand over time (Lee et al., 2015). When customers are loyal to a brand, they view the brand as an interactive partner, maintaining an enduring relationship with the brand (Peng et al., 2014) figure1.

Influence of visual aesthetics in product design, service environments and websites are well explored but increasing usage of mobile interfaces and the different use context demand investigation of influence of visual aesthetics of mobile app interfaces – 'apps capes' on mobile app adoption and m-loyalty. Results of PLS structural equation modelling reveal positive linkages between holistic visual aesthetic dimensions and outcomes of m-loyalty (Kumar et al. 2018). Therefore, based on the arguments above we posit the following hypothesis:

H3: Innovative marketing strategies in hotel booking apps effect toward user's loyalty to these apps.

According to the above hypotheses, the fourth hypothesis is as follows:

H4: Innovative marketing strategies in hotel booking apps effect towards user's loyalty through the user's engagement mediation.

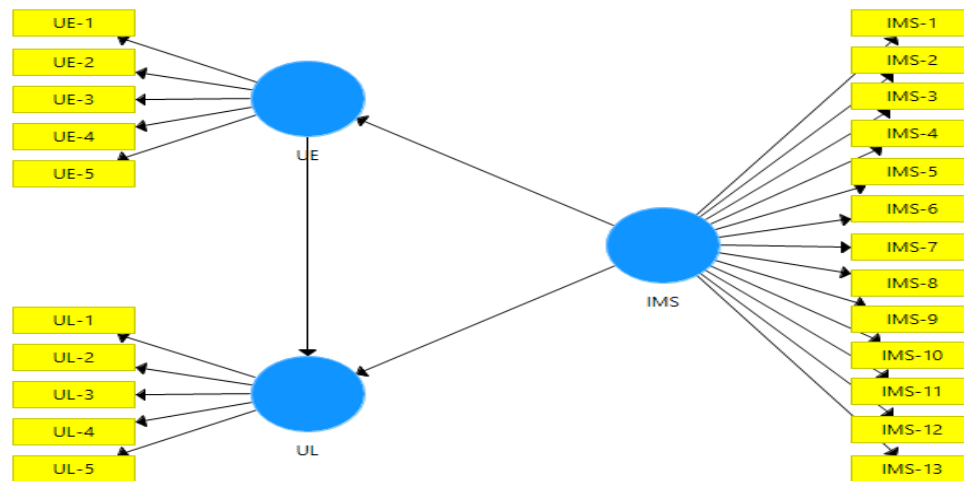


FIGURE 1
RESEARCH MODEL

RESEARCH METHODOLOGY

Definition of Operational Variables and Indicators

This study is applied in terms of purpose and in terms of information and data collection, it is a quantitative and descriptive-survey research. In this research, in order to complete the literature and theoretical foundations of the research, a review of previous studies and library resources including: books, articles, journals and scientific resources in universities and scientific centers has been used. After that, in the survey part of the research, tools such as interviews with experts in the marketing industry, hotel management, mobile applications, etc., as well as to collect the required data by designing and presenting a questionnaire to the statistical sample has been used.

The statistical population of this study is people who have installed the hotel reservation app on their mobile phones. Therefore, the statistical population in this study is considered unlimited and for sampling in the present study using Cochran's formula, 384 of these people were selected and a questionnaire was distributed amongst them. The research questionnaire consisted of 130 questions in which the answers were divided according to the five-point Likert scale. The method for processing data was by PLS and using SmartPLS software version 3.0 as a tool see Table 1.

Table 1		
VARIABLES RESEARCH		
Variables		Reference
IMS-1	Design icons in travel apps so that they are easily recognized and understood globally	Shi. 2019
IMS-2	consumer-relationship management and response management	Schuckert et al, 2019
IMS-3		
IMS-4	perceived usefulness	Zhang et al, 2019
IMS-5	perceived ease	
IMS-6	reliability	
IMS-7	privacy	
IMS-8	fun features	
IMS-9	brand signature	Foroudi, 2019
IMS-10	consumer preferences	Tarute et al. 2017
IMS-11	time convenience	Kim & Baek. 2018
IMS-12	interactivity	
IMS-13	compatibility	
UE-1	cognitive	Brodie, Hollebeek, Juric, & Ilic, 2011
UE-2	affective	
UE-3	behavioral elements	
UE-4	trust	Hollebeek, 2011
UE-5	commitment	Lim, Hwang, Kim, & Biocca, 2015
UL-1	repeat purchasing	Heskett et al, 1997
UL-2	recommending the product to other	
UL-3	Consumer's intention to revisit a website or purchase again from an online vendor	Reichheld and Schetter 2000; Flavian, et al. 2006
UL-4		
UL-5	Consumer's intention to revisit a mobile website or mobile app & repeat purchasing behavior	Cyr et al. 2006

RESULTS AND DISCUSSION

Sample Description

	Criteria	Amount	Percentage
Gender	Male	271	70.57%
	Female	113	29.43%
Age	20-24 years old	47	12.24%
	25-29 years old	108	28.13%
	30-34 years old	94	24.48%
	35-40 years old	83	21.61%
	> 40 years old	52	13.54%
Education	< S1 (bachelor degree)	70	18.22%
	S1 (bachelor degree)	229	59.63%
	> S1 (bachelor degree)	85	22.13%

Validity and Reliability Test Result of Research Indicator

The testing phase of the measurement model includes convergent validity, discriminant validity and composite reliability testing. The results of the PLS analysis can be used to test the research hypothesis if all the indicators in the PLS model have met the requirements of convergent validity, discriminant validity and reliability testing Table 2.

Convergent Validity Test

Convergent validity test is done by looking at the loading factor value of each indicator to the construct. For most references, a factor weight of 0.5 or more is considered to have validation that is strong enough to explain latent constructs (Chin, 1998; Hair et al, 2010; Ghozali, 2014). In this research the minimum limit on the size of the loading factor received was 0.5, with the requirement that the AVE value of each construct > 0.5 (Ghozali, 2014).

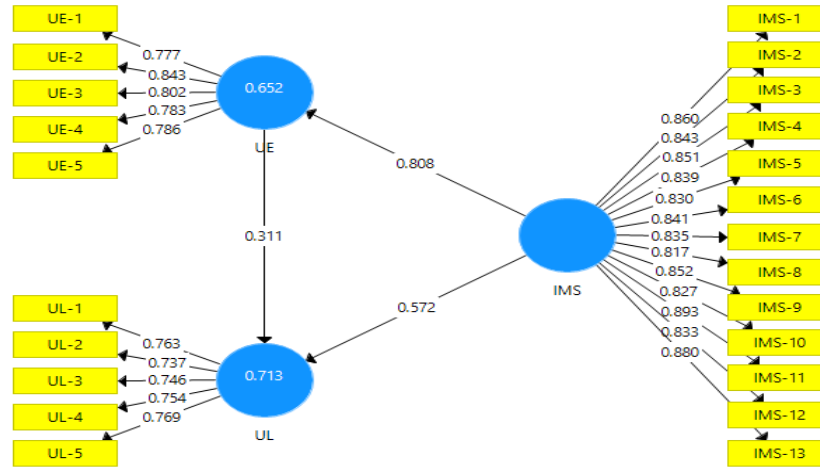


FIGURE 2
ESTIMATION VALID MODEL

Based on the estimation results of the PLS model in the picture above, all indicators have a loading factor value above 0.5 so that the model meets the convergent validity requirements. Apart from looking at the loading factor value of each indicator, convergent validity is also assessed from the AVE value of each construct. AVE value for each construct of this research is above 0.5. So the convergent validity of this research model meets the requirements. The value of loadings, cronbach's alpha, composite reliability, rho_A and AVE of each construct can be seen in Figure 2 and Table 3 below:

Variables	Items	Loadings	Cronbach's Alpha	rho_A	Composite Reliability	AVE
Innovative Marketing Strategies (IMS)	IMS-1	0.86	0.967	0.968	0.97	0.717
	IMS-2	0.843				
	IMS-3	0.851				
	IMS-4	0.839				
	IMS-5	0.83				
	IMS-6	0.841				
	IMS-7	0.835				
	IMS-8	0.817				
	IMS-9	0.852				
	IMS-10	0.827				
	IMS-11	0.893				
	IMS-12	0.833				
	IMS-13	0.88				
User's Engagement (UE)	UE-1	0.777	0.858	0.861	0.898	0.638
	UE-2	0.843				

	UE-3	0.802				
	UE-4	0.783				
	UE-5	0.786				
User's Loyalty (UL)	UL-1	0.763	0.811	0.813	0.868	0.568
	UL-2	0.737				
	UL-3	0.746				
	UL-4	0.754				
	UL-5	0.769				

Construct Reliability Test

Construct reliability can be assessed from the value of Cronbach's alpha and composite reliability of each construct. The recommended composite reliability and Cronbach's alpha values are more than 0.7 (Ghozali, 2014). The reliability test results in table 3 above, show that all constructs have composite reliability and Cronbach's alpha values greater than 0.7 (> 0.7). In conclusion, all constructs have met the required reliability.

Discriminant Validity Test

Discriminant validity is carried out to ensure that each concept of each latent variable is different from the other variables. The model has good discriminant validity if the AVE squared value of each exogenous construct (the value on the diagonal) > 0.7 or the value exceeds the correlation between construct and the other construct (values below the diagonal) (Ghozali, 2014). The discriminant validity test results are obtained as follows:

Variables	IMS	UE	UL
IMS	0.847		
UE	0.808	0.799	
UL	0.824	0.774	0.754

The results of the discriminant validity test in table 4 above, show that all constructs have AVE square root values above the correlation value with other latent constructs (through the Fornell-Larcker criteria) so that it can be concluded that the model meets the discriminant validity.

Hypothesis Test

Hypothesis test in PLS is also called the inner model test. This test includes a test of the significance of direct and indirect effects and measurement of the magnitude of the effect of

exogenous variables on endogenous variables. To determine the effect of tacit and hard skills sharing on the organizational learning and teachers' innovation capability, it takes a direct effect test. The direct effect test is performed using the t-statistic test in the partial least squared (PLS) analysis model using the help of SmartPLS 3.0 software. With the bootstrapping technique, R Square values and significance test values are obtained as the table below:

	R Square	R Square Adjusted
UE	0.652	0.649
UL	0.713	0.707

Based on table 5 above, the R Square UE value of 0.652 means that user's engagement can be explained by Innovative Marketing Strategies variable by 65.2%, while remaining 34.8% is explained by other variables not discussed in this study. Meanwhile, R Square UL value of 0.713 which means that user's loyalty can be explained by Innovative Marketing Strategies and user's engagement variable by 71.3%, while remaining 28.7% is explained by other variables not discussed in this research.

Hypothesis	Relationship	Beta	SE	T Statistics	P-Values	Decision
H1	IMS -> UE	0.808	0.034	23.73	0	Accepted
H2	UE -> UL	0.311	0.084	3.706	0	Accepted
H3	IMS -> UL	0.572	0.084	6.821	0	Accepted
H4	IMS -> UE -> UL	0.252	0.072	3.502	0.001	Accepted

Table 6 above the T Statistics and P-Values which show the effect between the research variables that have been mentioned.

DISCUSSION

Based on the results of the research, it can be concluded that Innovative marketing strategies in hotel booking apps has a positive and significant impact on user's engagement to these apps. This means that the better the innovative marketing strategies in hotel booking apps, increase the user's engagement to these apps. This finding is in line with previous research on Innovative marketing strategies in hotel booking apps and user's engagement, Tarute et al (2017), Kim & Baek (2018).

The results of this research also concluded that users' engagement to the hotel booking apps had a positive and significant effect on the user's loyalty to these apps. This means that the increase user's engagement to the hotel booking apps, the causes an increase user's loyalty to these apps. This is in line with the conclusions of Evanschitzky et al (2012), Kim (2011), research on user's engagement and user's loyalty.

Based on the results of the research, it can be concluded that Innovative marketing strategies in hotel booking apps has a positive and significant impact on user's loyalty to these apps, both directly and through the user's engagement. This means that the better the innovative marketing strategies in hotel booking apps, increase the user's loyalty to these apps. This finding is in line with previous research on Innovative marketing strategies in hotel booking apps and user's loyalty, Kumar et al (2018).

CONCLUSION

Innovative marketing strategies in hotel booking apps has a positive and significant impact on user's engagement to these apps. On the other hand, Innovative marketing strategies in hotel booking apps has a positive and significant impact on user's loyalty to these apps, both directly and through the user's engagement. Therefore, hotel industry activists can use more and better innovative marketing strategies in their hotel booking apps to increase user's engagement and user's loyalty to these apps. It is also necessary to regularly measure the user's engagement and user's loyalty to know the correctness of the Innovative marketing strategies.

REFERENCES

- Albers, M. J., & Mazur, M. B. (Eds.). (2014). Content and complexity: information design in technical communication. Routledge.
- Balaji, M. S., Jha, S., Sengupta, A. S., & Krishnan, B. C. (2018). Are cynical customers satisfied differently? Role of negative inferred motive and customer participation in service recovery. *Journal of Business Research*, 86, 109-118.
- Bilgihan, A., & Bujisic, M. (2015). The effect of website features in online relationship marketing: a case of online hotel booking. *Electronic Commerce Research and Applications*, 14(4), 222–232.
- Brodie, R. J., Hollebeek, L. D., Jurić, B., & Ilić, A. (2011). Customer engagement: Conceptual domain, fundamental propositions, and implications for research. *Journal of service research*, 14(3), 252-271.
- Buhalis, D., & Amaranggana, A. (2015). Smart tourism destinations enhancing tourism experience through personalisation of services. In *Information and Communication Technologies in Tourism 2015: Proceedings of the International Conference in Lugano, Switzerland*, February 3-6, 2015 (pp. 377-389). Springer International Publishing.
- Chapman, P., Selvarajah, S., & Webster, J. (1999, January). Engagement in multimedia training systems. In *Proceedings of the 32nd Annual Hawaii International Conference on Systems Sciences*. 1999. HICSS-32. Abstracts and CD-ROM of Full Papers (pp. 9-pp). IEEE.
- Cheung, C., Lee, M., & Jin, X. (2011). Customer engagement in an online social platform: A conceptual model and scale development.
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern methods for business research*, 295(2), 295-336.
- Cyr, D., Head, M., & Ivanov, A. (2006). Design aesthetics leading to m-loyalty in mobile commerce. *Information & management*, 43(8), 950-963.
- Deloitte Touche Tomatsu Limited, 2018. The Fourth Industrial Revolution Is Here – Are You Ready?
- Dessart, L., Veloutsou, C., & Morgan-Thomas, A. (2015). Consumer engagement in online brand communities: a social media perspective. *Journal of Product & Brand Management*, 24(1), 28-42.
- Evanschitzky, H., Ramaseshan, B., Woisetschläger, D. M., Richelsen, V., Blut, M., & Backhaus, C. (2012). Consequences of customer loyalty to the loyalty program and to the company. *Journal of the academy of marketing science*, 40, 625-638.

- Flavián, C., Guinalú, M., & Gurrea, R. (2006). The role played by perceived usability, satisfaction and consumer trust on website loyalty. *Information & management*, 43(1), 1-14.
- Foroudi, P. (2019). Influence of brand signature, brand awareness, brand attitude, brand reputation on hotel industry's brand performance. *International journal of hospitality management*, 76, 271- 285.
- Ghozali, I. Structural Equation Modeling, Metode Alternatif dengan Partial Least Square (PLS), Edisi 4. Semarang: Badan Penerbit Universitas Diponegoro. 2014.
- Gupta, A. (2013). For mobile devices, think apps, not ads. *Harvard Business Review*, 91(3), 70–75.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (2010). *Multivariate Data Analysis* New Jersey.
- Ho, M. H. W., & Chung, H. F. (2020). Customer engagement, customer equity and repurchase intention in mobile apps. *Journal of business research*, 121, 13-21.
- Hollebeek, L. (2011). Demystifying customer brand engagement: Exploring the loyalty nexus. *Journal of Marketing Management*, 27(7–8), 785–807.
- Hollebeek, L. D., & Chen, T. (2014). Exploring positively-versus negatively-valenced brand engagement: a conceptual model. *Journal of Product & Brand Management*, 23(1), 62-74.
- Hollebeek, L. D., Glynn, M. S., & Brodie, R. J. (2014). Consumer brand engagement in social media: Conceptualization, scale development and validation. *Journal of interactive marketing*, 28(2), 149-165.
- Jacques, R. (1995). Engagement as a design concept for multimedia. *Canadian Journal of Educational Communication*, 24(1), 49-59.
- Jennings, M. (2000, April). Theory and models for creating engaging and immersive ecommerce websites. In *Proceedings of the 2000 ACM SIGCPR conference on Computer personnel research* (pp. 77-85).
- Kandampully, J., & Suhartanto, D. (2003). The role of customer satisfaction and image in gaining customer loyalty in the hotel industry. *Journal of Hospitality and Leisure Marketing*, 10(1/2), 3–25.
- Kandampully, J., Zhang, T., & Bilgihan, A. (2015). Customer loyalty: a review and future directions with a special focus on the hospitality industry. *International Journal of Contemporary Hospitality Management*, 27(3), 379–414.
- Keller, K. (1993). Conceptualizing, measuring, and managing customer based equity. *Journal of Marketing*, 57(1), 1–22.
- Kennedy-Eden, H., & Gretzel, U. (2012). A taxonomy of mobile applications in tourism.
- Kim, D. (2011). Student's use of hotel mobile apps: Their effect on brand loyalty.
- Kim, D. Y., Park, J., & Morrison, A. M. (2008). A model of traveller acceptance of mobile technology. *International Journal of Tourism Research*, 10(5), 393-407.
- Kim, D., & Adler, H. (2011). Students' use of hotel mobile apps: Their effect on brand loyalty. Paper presented at the 16th Graduate Students Research Conference, Houston, TX.
- Kim, E., Lin, J., & Sung, Y. (2013). To app or not to app: Engaging consumers via branded mobile apps. *Journal of Interactive Advertising*, 13(1), 53–65.
- Kim, S., & Baek, T. H. (2018). Examining the antecedents and consequences of mobile app engagement. *Telematics and Informatics*, 35(1), 148-158.
- Kumar, A., Salo, J., & Li, H. (2019). Stages of user engagement on social commerce platforms: Analysis with the navigational clickstream data. *International journal of electronic commerce*, 23(2), 179-211.
- Kumar, D. S., Purani, K., & Viswanathan, S. A. (2018). Influences of 'appscape' on mobile app adoption and loyalty. *Journal of Retailing and Consumer Services*, 45, 132-141.
- Law, R., Buhalis, D., & Cobanoglu, C. (2014). Progress on information and communication technologies in hospitality and tourism. *International journal of contemporary hospitality management*, 26(5), 727-750.
- Lee, D., Moon, J., Kim, Y., & Yi, M. (2015). Antecedents and consequences of mobile phone utility: Linking simplicity and interactivity to satisfaction, trust, and brand loyalty. *Information & Management*, 52(3), 295–304.
- Lee, K., Lee, H. R., & Ham, S. (2013). The effects of presence induced by smartphone applications on tourism: Application to cultural heritage attractions. In X. Xiang & I. Tussyadiah (Eds), *Information and communication technologies in tourism 2014* (pp. 59–72). Vienna: Springer.
- Lim, J., Hwang, Y., Kim, S., & Biocca, F. (2015). How social media engagement leads to sports channel loyalty: Mediating roles of social presence and channel commitment. *Computers in Human Behavior*, 46, 158–167.

- Lin, C., Lekhawipat, W., 2014. Factors affecting online repurchase intention. *Ind. Manag. Data Syst.* 114 (4), 597–611.
- Morris, B. (1998). The Service Profit Chain:: How Leading Companies Link Profit and Growth to Loyalty, Satisfaction, and Value. *International Journal of Service Industry Management*, 9(3), 312-313.
- Okumus, B., Bilgihan, A., & Ozturk, A. B. (2016). Factors affecting the acceptance of smartphone diet applications. *Journal of Hospitality Marketing & Management*, 25(6), 726-747.
- Oliver, R. L. (1999). Whence consumer loyalty?. *Journal of marketing*, 63(4_suppl1), 33-44.
- Oxford Dictionary. (2010). Oxford dictionary of english (3rd ed.). OUP Oxford.
- Ozturk, A. B., Bilgihan, A., Nusair, K., & Okumus, F. (2016). What keeps the mobile hotel booking users loyal? Investigating the roles of self-efficacy, compatibility, perceived ease of use, and perceived convenience. *International Journal of Information Management*, 36(6), 1350-1359.
- Peng, K., Chen, Y., & Wen, K. (2014). Brand relationships, consumption values and branded app adoption. *Industrial Management & Data*, 114(8), 1131–1143.
- Purcell, K., Entner, R., & Henderson, N. (2010). The rise of apps culture.
- Reichheld, F. F., & Scheffer, P. (2000). E-loyalty: your secret weapon on the web. *Harvard business review*, 78(4), 105-113.
- Schuckert, M., Liang, S., Law, R., & Sun, W. (2019). How do domestic and international high-end hotel brands receive and manage customer feedback?. *International Journal of Hospitality Management*, 77, 528-537.
- Schwab, K., 2015. The Fourth Industrial Revolution. Retrieved August 22, 2016.
- Shi, H. (2019). Exploring universal icon design for international travel apps.
- So, K. K. F., King, C., Sparks, B. A., & Wang, Y. (2016). The role of customer engagement in building consumer loyalty to tourism brands. *Journal of Travel Research*, 55(1), 64-78.
- Tarute, A., Nikou, S., & Gatautis, R. (2017). Mobile application driven consumer engagement. *Telematics and Informatics*, 34(4), 145-156.
- Tode, C. (2014). Mobile bookings demand skyrockets despite lack of optimized experiences.
- Van Doorn, J., Lemon, K. N., Mittal, V., Nass, S., Pick, D., Pirner, P., & Verhoef, P. C. (2010). Customer engagement behavior: Theoretical foundations and research directions. *Journal of service research*, 13(3), 253-266.
- Viswanathan, V., Malthouse, E. C., Maslowska, E., Hoornaert, S., & Den Poel, D. V. (2018). Dynamics between social media engagement, firm-generated content, and live and time-shifted TV viewing. *Journal of Service Management*, 29(3), 378–398.
- Wang, H. Y., & Wang, S. H. (2010). Predicting mobile hotel reservation adoption: Insight from a perceived value standpoint. *International Journal of Hospitality Management*, 29(4), 598-608.
- Xiang, Z., Tussyadiah, I., & Buhalis, D. (2015). Smart destinations: Foundations, analytics, and applications. *Journal of Destination Marketing and Management*, 4(3), 143-144.
- Yang, F. X., & Lau, V. M. (2015). “LuXurY” hotel loyalty—a comparison of Chinese Gen X and Y tourists to Macau. *International Journal of Contemporary Hospitality Management*, 27(7), 1685-1706.

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