USE OF SMART TECHNOLOGIES AND INDIVIDUAL RE-CONSIDERATION OF TOURISM DESTINATION

USO DE TECNOLOGIAS INTELIGENTES E RECONSIDERAÇÃO INDIVIDUAL DO DESTINO TURÍSTICO*

Heyam Abdulrahman Al Mousa Department of Marketing, College of Business Administration, King Saud University, Riyadh, Saudi Arabia healmousa@ksu.edu.sa

Abstract: The impact of smart tourism application (STA) on tourist satisfaction (TS) and tourist re-consideration (TRC) has attracted the interest of researchers around the world. The present study investigated the impact of STA and preferred experience (PE) on TS and TRC. Besides, the role of PE in mediating the relationship between STA and TS, TRC was examined. In addition, the moderation role of technology orientation (TO) on the relationship between STA and PE was also tested. Convenient sampling technique was applied to 263 participants from Targeted population as the research context. Therefore, the researchers utilized the structural equation model (SEM) to analyse the data collected using SPSS.v25 and SmartPLS.v.3. The results show the STA has a positive connection to PE while PE also have a significant connection on TS and TRC. On the other hand, TS also reported a positive connection on TRC. The mediating role of PE was positively applied on the relationship between STA and TS, while no mediating role found on the relationship between STA and TRC. Moreover, no enough evidence was reported to support the moderation effect of TO on the relationship between STA and PE. As a result, the study offered academics, targeted population, and policymakers' useful information and guidance on the impact of developing STA and PE on improving TS and TRC, particularly in the study context. The study was grounded theory. Total of 263 responded were considered, respondents were choosing random basis.

Keywords: Smart Tourism Application. Preferred Experience. Tourist Satisfaction. Tourist Re-consideration. Technology Orientation.

Resumo: O impacto da aplicação do turismo inteligente (STA) na satisfação do turista (TS) e na reconsideração turística (TRC) tem atraído o interesse de pesquisadores em todo o mundo. O presente estudo investigou o impacto da STA e da experiência preferida (PE) na TS e na TRC. Além disso, foi examinado o papel do PE na mediação da relação entre o STA e o TS, o TRC. Além disso, o papel de moderação da orientação tecnológica (TO) na relação entre o STA e o PE também foi testado. A técnica de amostragem conveniente foi aplicada a 263 participantes da população-alvo como o contexto da pesquisa. Portanto, os pesquisadores utilizaram o modelo de equação estrutural (SEM) para analisar os dados coletados usando SPSS.v25 e SmartPLS.v.3. Os resultados mostram que o STA tem uma conexão positiva com o PE enquanto o PE também tem uma conexão significativa no TS e no TRC. Por outro lado, o TS também relatou uma conexão positiva no TRC. O papel mediador do PE foi aplicado positivamente no relacionamento entre STA e TS, enquanto que nenhum papel mediador foi encontrado no relacionamento entre STA e o PE. Como resultados, o estudo ofereceu aos acadêmicos, à população alvo e aos formuladores de políticas informações e orientações úteis sobre o impacto do desenvolvimento de STA e PE na melhoria da TS e TRC, particularmente no contexto do estudo. O estudo foi fundamentado em teoria. No total de 263 respostas foram consideradas, os respondentes estavam escolhendo uma base aleatória.

Palavras-chave: Aplicação de Turismo Inteligente. Experiência Preferida. Satisfação do turista. Re-consideração turística. Orientação Tecnológica.

^{*} Artigo recebido em 02/04/2022 e aprovado para publicação pelo Conselho Editorial em 29/06/2022.

1. INTRODUCTION

Innovative technology plays tremendous role in tourism industry. According to (Yoo et al., 2017) it took more attention after revealing and introduction of smart tourism. Based on this statement the latest and smart technology that is used for tourism become an important element of tourism industry (Azis et al., 2020), since its mixed the resources of tourists and innovative technology (Buhalis, 2019; Gretzel et al., 2015c; Johnson and Samakovlis, 2019). Thus the concept of smart tourism technology has become the critical element of tourism industry. It critical because it integrates the resources and advanced information of tourist, and thus able to provide fruitful, on time data and connectivity among the stake holders of tourism industry (Buhalis, 2019; Johnson and Samakovlis, 2019). Through utilizing the advance communication technologies in smart tourism, several industries are playing a tremendous role to enhance and endeavor the experiences of tourists to achieve the advantages of market competition. For instance, different services introduce smart tourism applications, where tourists can use their smart phones to manage their trips and plans in advance to receive the feedback and reviews (Lee et al., 2018).

2. LITERATURE REVIEW

Smart Tourism Applications with Preferred Experience

Bringing intelligence for tourism purposes meaning that tourism destination need to interconnect different interested partners through a dynamic platform by using Intelligent Computing Technology ICT to facilitate and exchange tourism information effectively related to tourism activities by using intelligent system of machine-to-machine that support decision making process Buhalis and Amaranggana 2015). Different interests of stakeholders represent the main challenges that face tourism industry that make intelligent technique is essential to overcoming these challenges Zhu et al. (2014). Advancement of Smart Tourism Destinations provide tourism industry with many benefits by establish beneficial centralized and integrated platform. In addition, intelligent Tourism Destinations are providing the technology core by establish unified framework to facilitate multiple visualizations in a shared directions and objectives (Buhalis and Amaranggana 2014). To set up open access system for data in Smart Tourism Destinations, authorities in tourism industry ought to guarantee that information produce for each advancement of new application should be created it free access to their business and legitimate agreements without outlandish extra expense (Neirotti et al. 2014).

Clients could utilize this information to determine issues, and possible solutions to solve problems that may existed (Buhalis and Amaranggana 2014). It is fundamental to tolerate as a primary concern the way that in respect with ICT framework there is no suitable size fits all. Local setting would trigger various designs of ICT utilization (Schaffers et al. 2011). So, to achieve this objective, tourism destinations should use simple bottom up methodologies for technological platforms that adapt local context needs. For example, customers have been referenced as a significant source of innovation, therefore, they display their smartness when creative individuals share their insight to a system that supported by respectable learning climate. Continuous feedback circle is fundamental in the hospitability industry to provide a suitable follow-up while visitors are still at the area to solve any problem promptly and avoid guests posting offensive comments on the webs (Schaffers et al. 2011).

Controlled operation systems functions should not control their people only, but to involve human resources as well (Buhalis and Amaranggana 2014). In this situation, Smart Tourism Destinations should utilize Living Lab philosophy to achieve mentioned system's tasks through getting sufficient information related to customers' preferences and needs. In addition, cooperation among tourists and providers of tourism services should be motivated to keep sustainability of creative product that present to tourists that match their needs and preferences (Buhalis and Amaranggana 2014). Using Mobile Living Lab is proposed to Smart Tourism Destinations to catch tourists' needs and favorites in actual context. Advantage of applying this technique is the traits of smart phones that could go on 24 hours that let users to examine model features in its actual setting with effective time frame when they use it and provide supportive feedback on how it could find a way into their substantial utilization setting. The interactive method among various stakeholders i.e. government, organizations and scientists is fundamental in implementing this manner (Sta 'hlbro''st et al. 2009).

Preferred Experience with Individual Satisfaction

In order to lead service sector to success, customer satisfaction and values should be achieved by allocate required resources and infrastructure (Holbrook, 1996; Shanka & Taylor, 2005). Some significant concern of food retailers and providers involve the customer's' way to build their relationship with retailer or provider, how costumer's appraise this relationship; and the most significant, customers' satisfaction, impression and the value they are getting by providers and retailers (Cottet, Lichtlé, & Plichon, 2006). In this research, values can be divided into two types are: hedonic that related to emotional experiences of customer, and other type which is utilitarian value that indicates to the manner of how customers' needs of product or services have been efficiently achieved (Shanka & Taylor, 2005).

Research studied costumer's satisfaction and value as a basic component needed by customer driven organizations and markers because the existing relationships between customers' satisfaction, value and back behavior (Cottet et al., 2006). For instance, knowledge and experience of service, benefits, and understanding way are characteristics of connection with customers' expectation toward services' quality services that give indicators whether customers satisfaction will be achieved or not (Cottet et al., 2006). Accordingly, the customer's perception is influenced by the manner that he/she looks at product quality that reflect customers' satisfaction. So, customers' perception will be better if they received satisfactory or great value from purchased product that matches expected level of satisfaction (Cottet et al., 2006; Shanka & Taylor, 2005). Therefore, the study aimed to determine whether customers' value influences customers' satisfaction or not. In addition, it conducted to identify whether supermarkets' traits have impact on customers' value or not.

Preferred Experience with Individuals Re-consideration

Loyalty can be maintained if customers are sure about good quality and productivity. Therefore, by placing loyalty in the top strategies, service providers thus can increase the level of value that is offered through their productivity and services (Delgado-Ballester & Munuera-Alemán, 2001; Oliver, 1999). In order to create more loyal customers, the service providers are using several ways and not a single way. Loyal customer tending to more spent and representing him/herself as brand advocate, that is more helping to spread the positive word of mouth (Russell-Bennett, McColl-Kennedy, & Coote, 2007). Thus, imperatively there is no doubt about the relationship of loyalty and customer satisfaction, which further strengthen the relationship between consumer considered value and satisfaction (Delgado-Ballester & Munuera-Alemán, 2001). Customer loyalty according to (Delgado-Ballester & Munuera-Alemán, 2001; Oliver, 1999), is the commitment and intentions of the customer who purchase regularly the same brand products over the time, and satisfaction has been maintained with the brands/products and services. Oliver (1999), considered as the pioneer who defined customer loyalty and most of the studies are cited Oliver's definition as a base definition, Oliver divided customer loyalty in four phases namely; cognitive, affective, conative and action. Cognitive loyalty is the information about product/services that is available to the customer by using his past and present experience. By utilizing this information customer make his/her decision based on experience. Second after cognitive is affective loyalty, in this type of loyalty consumers make and establish specific and certain attitude towards services and products. Satisfaction level is experienced through utilizing the service and products that determine the developed attitude and mostly directed towards purchase behavior in future (Oliver, 1999; Russell-Bennett et al., 2007). Next after cognitive is conative loyalty or behavioral loyalty, this type of loyalty influenced the positive effects of consumer towards services and products, that implies or increased the consumer commitments in the future to purchase items from the same place. Action loyalty is the last transition in this phase, it is when the intentions of consumers are transformed into a real purchasing or actual purchasing.

Customers however are prepared to act and overcome with any obstacles faced during purchasing (Oliver, 1999). Several studies have been conducted to identify the antecedents of loyalty in order to examine the association between behavioral loyalty and attitudinal loyalty in small business environment, to determine the key components of loyalty in a business setting (Russell-Bennett et al., 2007). In study of (Russell-Bennett et al., 2007), it was revealed that there is a positive relation between behavioral and attitudinal loyalty, in addition it indicates and also suggest the higher attitude will lead the higher behavior loyalty, and certain purchase satisfaction is considered behind the loyalty of customer. Satisfaction in many studies are proven and considered a greater influence on attitudinal loyalty than involvement, that includes the service and product importance in customer perspectives, which further demonstrates commitments and repurchase intention. That is generally and most directly influenced by satisfaction over the purchase importance (Russell-Bennett et al., 2007).

Individuals Satisfaction with Individuals Re-consideration

Numerous studies have tried to identify the core variables for the formation of customer loyalty, both theoretical and empirical marketing research agree that customer satisfaction is a major loyalty driver (e.g. Fornell, Johnson, Anderson, Cha, & Bryant, 1996; Gustafsson, Johnson, & Roos, 2005; Hallowell, 1996; Heskett et al., 1994; Szymanski & Henard, 2001), including in the context of team sports (e.g. Bodet & Bernache-Assollant, 2011; Gray & Wert-Gray, 2012). Based on past recommendations present study incorporate the positive influence of customer satisfaction on customer loyalty in this study. Based on the individual experience with a product/service such as (destination experience) would lead to witness the future behavior that effected by the satisfaction level with the consumed experience (Gounaris, Dimitriadis, & Stathakopoulos, 2010; Srivastava & Sharma, 2013). Therefore, present study considered the match between these two variables to examine the satisfaction role as antecedent for the loyalty towards destination. In perspectives of tourism the term satisfaction can be defined as "individual tourist cognitive-affective state which derived from one's past experience is considered as a behavioral variable which plays main role in formatting the set the destination loyalty (Rodríguez & San Martín, 2008). Quality satisfaction and its relationship can be based on the past arguing of Lazarus (1991) and Oliver (1997). Grounded on their arguments initially consumers are in position to develop their sequential behaviors that is initiated through cognition phase, and lead to follow by emotional phase. To summarize, customer satisfaction has a critical role to predict and understand the consumed experience, based on this prediction and understanding customer satisfaction and customer loyalty has been widely explored (Miguel-Dávila, Cabeza-García, Valdunciel, & Flórez, 2010).

Technology Orientation as Moderator

Present study considered technology orientation as moderator between preferred experience and smart tourism applications. This basically shows the interest that develop through digital media and people get involved in it. Furthermore, this represents how people are attached with technology and became more technology oriented. Commonly speaking, being oriented of something leads more involvement, using more, and exploring more will result high out-put. Thus, using smart mobile application will lead more satisfaction and reconsideration for the specified purpose. Almost technology dig in every sector and phase, and offering their services online and motivating to use their online services. Thus we suggested that individuals who are oriented to use technology more frequently, will be more preferred to use technology that moderates between smart tourism and preferred experience.

Previous studies considered technology orientations as a moderator but context could may be different. For instance, (Tamoor et. al., 2019) considered technology orientation as moderator between organizational learning capabilities and SME'S performance, the parallel context with the contemporary research is absolutely different. Similarly, another study that is conducted by (Saqib al., 2017), where technology orientation is considered as moderating between knowledge management and performance SME's. Comparatively, both the studies are

considered as conceptual and discussed mainly on the past recommendations and suggestions. Keeping in mind both the studies recommended different perspectives for the prospective researchers. We thus consider technology orientation in different context and developed the following hypotheses.

H5. Technology orientations moderate the relationship between smart tourism application and preferred experience

Mediation Role of Preferred Experience

Study thus suggested and concluded the mediating role of preferred experience that mediates the relationship between smart tourism application and tourist satisfaction. In addition, study also suggested that mediating role of preferred experience relationship between smart tourism application and preferred experience. Study thus concluded and suggested the following hypotheses.

H6. Preferred experience mediates the relationship between smart tourism application and tourist satisfaction
H7. Preferred experience mediates the relationship between smart tourism application and tourist re-consideration



Figure 1. The Study Framework

3. METHODOLOGY

Questionnaire development

The operational definitions of smart tourism application (STA) were developed using the definitions of Jeong and Shin (2019) and Lee et al. (2018) consisting of (7). Preferred experience (PE) construct consisting of four (4) items was adapted using the unidimensional concept developed by Kim et al. (2018) and Jeong and Shin (2019). Three items on tourist satisfaction and three (3) items on tourist destination loyalty were adapted from Kim et al. (2018) and Jeong and Shin (2019). The questionnaire was written both Arabic and English languages. Three academic experts from public universities assessed both the facial and content validity, and minor modifications were made to follow the context of the study. A seven-point Likert scale from "strongly disagree" (1) to "strongly agree" (7) was used to measure the smart tourism Applications, memorable tourism experiences and tourist destination loyalty constructs. In addition, the tourist satisfaction construct was measured.

Data Collection and Response Rate

Method	Distribution	Frequency	Percentage
	Questionnaires distributed	277	100%
Survey Questionnaire	Questionnaires received	277	100%
	Excluded Questionnaires	14	5.05%
	Usable questionnaires	263	94.95

Table 1. Response rate obtained from the collected data through survey questionnaires.

4. **RESULTS**

Data Analysis Tools

The present study used the Statistical Package for the Social Sciences (SPSS 24) and PLS-SEM to examine the research model. The purpose of this study was to explain the amount of variance in endogenous components, PLS-SEM was a perfect match. SmartPls3.2.8 was used to assess the reliability and validity of the measurement model. It used also to test the direct and indirect relationships among constructs.

Normality Test

The skewness and kurtosis measurements were used to determine the dataset's normality. The degree to which a variable's distribution is symmetrical is measured by its skewness. Kurtosis, on the other hand, measures the distribution's peakedness or peak intensity (Hair et al., 2017). The data distribution is considered normal if the skewness and kurtosis values are within the range of ± 1 , according to the rule of thumb of (Hair et al., 2017). The results show that the skewness values ranged from (-.088 to -.594), while the kurtosis values ranged from (-.076 to -.455). As a result, the data distribution in this study can be classified as normal. In contrast, the mean and standard deviation values were in the range of 4.220 to 4.610 and 1.143 to 1.243, respectively. Table 2 presents the computed skewness, kurtosis, mean, and standard deviation values of all the variables

Variables	Ν	Mean	Std. Deviation	Skewness	Kurtosis
STA	263	4.610	1.143	594	076
PE	263	4.420	1.154	565	077
TS	263	4.300	1.243	344	123
TRS	263	4.410	1.174	475	132
TO	263	4.220	1.166	088	455

Table 2	Data	Normality
---------	------	-----------

Demographic Profile of Respondents

The descriptive statistic was used to provide an overview of the respondents' background. The male represents the highest percentage of respondents (n=173, 65.8%), followed by the female (n=90, 34.2%). Moreover, the highest age group were (31-40 years) and were (46.4%) followed by the age group of (26-30 years) and were (n=98, 37.3%), while the lowest percentage was (n=17, 6.4%) for the age group of (40 years and above). Obtained

results can be seen in detailed table 3.

Demographics	Options	Frequency	Percent
	Saudi Nationality	173	65.78
Nationality	Other than Saudi's	90	34.22
	Male	155	58.94
Gender	Female	108	41.06
	Less than 18	9	3.42
	18-27	63	23.95
	28-37	55	20.91
	38-47	56	21.29
Age Group	hics Options Saudi Nationality Other than Saudi's Male Female Less than 18 18-27 28-37 38-47 48-57 More than 58 Diploma (college) degree Bachelor degree Master degree PhD degree Less than 5,000 SR 5,000 -9,999 SR 10,000-14,999 SR More than 20,000 SR	41	15.59
	More than 58	39	14.83
	Diploma (college) degree	57	21.67
	Bachelor degree	162	61.6
	Master degree	31	11.79
Education	PhD degree	13	4.94
	Less than 5,000 SR	97	36.88
	5,000 -9,999 SR	63	23.95
	10,000-14,999 SR	43	16.35
Income(monthly)	15,000 -19,999 SR	33	12.55
	More than 20,000 SR	27	10.27

Table 3. Demographical Profile of the Respondents

Assessment of Measurement Model

Constructs Reliability and Validity

We measured the values of factors loading (FLs), Cronbach Alpha (CAs;), and Composite Reliability (CR) to see whether the latent constructs and items utilized in the survey were reliable and valid. FLs are used to assess the items' reliability. We also used AVE to determine the constructs' validity. Discriminate validity was further assessed using the Fornell-Larcker Criterion and the Heterotrait-Monotrait Ratio (HTMT).

Past study indicated that, for indicator to be reliable, the loading should be greater than 0.7 (Hair et al., 2011). Thus, in the resent study, all the item's loadings were above the cut value of 0.7 except for (STA4) which scored 0.486, hence the researcher dropped the item as shown in Figure2. For the STA with seven (7) items remaining range from 0.599 to 0.876. Similarly, the items loading for PE range from 0.719 to 0.893, while TS measured with three (3) items which their lading range from 0.853 to 0.921. Furthermore, TRC items loading were range from 0.823 to 0.869 and lastly, the TO loadings range from 0.767 to 0.908. As shown in Table 4, all the items loading were above the cut of values as recommended by (Ramayah et al., 2018), who stated that, only items are considered with the loading of 0.7, 0.6, and 0.5 only if the AVE were above 0.5. Hence, all the constructs of the study ensured convergent validity since the values of AVE were greater than the 0.50 threshold (Fornell & Larcker, 1981).

Table 4. Construct Reliability and Validity						
Constructs	Item	FLS	CAs	(CR)	(AVE)	
	STA 1	0.851				
	STA 2	0.788				
Smart Tourism	STA 3	0.814	0.872	0.005	0.617	
Applications	STA 5	0.599	0.075	0.903	0.017	
	STA 6	0.876				
	STA 7	0.754				
	PE 1	0.893				
Droforred Experience	PE 2	0.733	0.808	0.875	0.637	
Preferred Experience	PE 3	0.719	0.000			
	PE 4	0.835				
	TS 1	0.919		0.926	0.807	
Tourism Satisfaction	TS 2	0.921	0.88			
	TS 3	0.853				
Torraison De Consideration	IR 1	0.869				
Tourism Re-Consideration	IR 2	0.834	0.797	0.88	0.709	
	IR3	0.823				
	TO1	0.908				
	TO2	0.904				
Technology Orientation	TO3	0.891	0.912	0.931	0.729	
	TO4	0.767				
	TO5	0.789				



Figure 2. Measurement Model

Discriminant validities were measured in the present study for its constructs. However, discriminant validity represents the distinctiveness of the construct from the rest of the constructs in the model. Fornell-Larcker Criterion (Table 5) which represent the degree to which items distinguish across conceptions or measure distinct

concepts is referred to as discriminant validity. Based on past study's recommendation, if the square root of the AVE displayed in the diagonals is larger than the values in the row and columns on that specific construct, the measures are discriminant (Fornell & Larcker, 1981). Hence, the diagonal values are higher than the values in their corresponding row and column, as seen in Table 5. thus, indicating the measures used in this study are distinct, thus demonstrate adequate discriminant validity. The present research also measured the discriminant validity through HTMT which based on past studies, the closer the scored is to 1 the more possibility of the occurrence of discriminant validity, hence, the value below 0.9 is accepted (Henseler et al. (2015). All values were below 0.9 as shown in Table 6.

Table 5.1 Official and Earcher Official						
	PE	STA	ТО	TRC	TS	
PE	0.798					
STA	0.22	0.785				
ТО	0.142	0.046	0.854			
TRC	-0.062	0.136	0.226	0.842		
TS	0.199	0.085	0.268	0.343	0.898	

Table 5. Fornell and Larcker Criteria

	PE	STA	ТО	TRC	TS
PE					
STA	0.259				
ТО	0.14	0.095			
TRC	0.105	0.181	0.257		
TS	0.23	0.106	0.279	0.403	

Assessment of Structural Equation Modeling

The structural model's evaluation provides an estimate of the hypothesized link between variables of interest. Path coefficients (β), for both direct and indirect relationships, are the structural model measurements in PLS-SEM. The path coefficient (β), which shows the significance and strength of the relationship among constructs, was obtained using bootstrapping (5000 subsamples, one-tail test). The results of the structural model's path-coefficient are provided in Table 7 and Figure 3. The findings revealed that the path-coefficient between SAT and PE was significant ($\beta = 0.214$, t = 2.980, p = 0.050), thus H1 was supported. However, the path-coefficient between PE and TS was positively significant ($\beta = 0.199$, t = 3.319, p= 0.000), providing support for H2. However, for H3, a significant relationship exists between PE and TRC ($\beta = -0.135$, t = 2.134, p= 0.017), hence H3 was supported. H4, which shows the relationship between TS and TRC, was significant and positive ($\beta = 0.37$, t = 6.249, p= 0.000).

Hypothesized Path	β - Value	T- Value	P-Value	Decision		
PE > TRC	-0.135	2.134	0.017	Supported		
PE > TS	0.199	3.319	0	Supported		
STA > PE	0.214	2.980	0.002	Supported		
TS > TRC	0.37	6.249	0	Supported		

 Table 7. Structural Model Results (Direct Relationship)



Figure 3. Assessment of Structural Model

For the assessment of the mediating effect of PE and the moderation role of TO as shown in Table 8. The mediating effect of PE on the relationship between STA and TS and TRC. Preacher and Hayes procedure was used. The result revealed that STA had an indirect effect on TS via PE ($\beta = 0.043$, t = 2.039, p= 0.042), thus providing support for the full mediation of PE between STA and TS. On the other hand, the mediation role of PE was not supported on the relationship between STA and TRC ($\beta = -0.029$, t = 1.765, p= 0.078). Regarding the moderation effect of TO on the relationship between STA and PE, the results shows that the t-value were lower than the minimum required criteria, which equal to 0.901 as shown in Figure 4. Hence, H5 was not supported.

Hypothesized Path	β - Value	T- Value	P-Value	Decision
STA > PE > TRC	-0.029	1.765	0.078	Not Supported
STA > PE > TS	0.043	2.039	0.042	Supported
STA * TO > PE	0.231	0.901	0.368	Not Supported

 Table 8. Structural Model Results (indirect Relationship)

Lex Humana, Petrópolis, v. 14, n. 1, p. 471-485, 2022, ISSN 2175-0947 © Universidade Católica de Petrópolis, Petrópolis, Rio de Janeiro, Brasil



Figure 4. Assessment of Structural Model (Moderation effect)

5. DISCUSSION

Study framework had operationalized where smart tourism application considered as antecedent that further impacts preferred experience of customers. Preferred experience played the mediating role among smart tourism and tourist satisfaction and tourist re-consideration. Study also considered the moderating role of technology orientation. Study developed seven (7) hypothesis, hypothesis (1) to (4) was supported based on the shows result in table 7, based on the p-values as recommended.

However, mediating role of preferred experience towards tourist experience was not supported and mediating role of preferred experience mediating role of tourist re-consideration has supported. In addition, the moderation role of technology orientation on the relationship between smart tourism applications and preferred experience was also tested and the analysis result shows not supported.

The mediating role of preferred experience was positively applied on the relationship between smart tourism and tourist satisfaction, while no mediating role found on the relationship between smart tourism application and tourism re-consideration. Moreover, no enough evidence was reported to support the moderation effect of technology orientation on the relationship between smart tourism application and preferred experience. As a result, the study offered academics, targeted population, and policymakers' useful information and guidance on the impact of developing smart tourism application and preferred experience on improving tourist satisfaction and tourism re-consideration, particularly in the study context. Present study was grounded based theory.

6. CONCLUSIONS

As discussed present study conducted in Saudi Arabia where total of 263 valid responses were considered. Study framework shows where smart tourism application considered as antecedent that further impacts preferred experience of customers. Preferred experience played the mediating role among smart tourism and tourist satisfaction and tourist re-consideration. Study also considered the moderating role of technology orientation. Study developed seven hypotheses, hypothesis one to was supported based on the shows result in table 7, based on the pvalues as recommended. However, mediating role of preferred experience towards tourist experience was not supported and mediating role of preferred experience mediating role of tourist re-consideration has supported. In addition, the moderation role of technology orientation on the relationship between smart tourism applications and preferred experience was also tested and the analysis result shows not supported. As a result, the study offered academics, targeted population, and policymakers' useful information and guidance on the impact of developing smart tourism application and preferred experience on improving tourist satisfaction and tourism re-consideration, particularly in the study context. Present study was grounded based theory.

Research in most of the cases full of flaws. Following is the case here where researcher will provide some limitation that can be filled by up-coming and emerging researchers. Present study conducted in Saudi Arabia, future studies can do the same study in other countries, where the results can be different based on demographics and different behaviors. Secondly, more data can be obtained if other channels used such as social media channels. Thirdly, present study considered technology orientation as moderator, and results shows no support for the moderation, future studies consider technology orientation as moderation between preferred experience and tourist re-consideration, or could be preferred experience and tourist satisfaction, this may could change the results of the study. Fourthly, path of hypothesis could also be changed for different and positive results.

REFERENCES

Afzal, A., Tamoor, T., & Hassan, T. (2019). Comment on "Dual-Band Perfect Metamaterial Absorber Based on an Asymmetric H-Shaped Structure for Terahertz Waves [Materials](2018)[2193; https://doi. org/10.3390/ma11112193]". *Materials*, *12*(23), 3914.

Azis, N., Amin, M., Chan, S., & Aprilia, C. (2020). How smart tourism technologies affect tourist destination loyalty. *Journal of Hospitality and Tourism Technology*.

Bodet, G., & Bernache-Assollant, I. (2011). Consumer loyalty in sport spectatorship services: The relationships with consumer satisfaction and team identification. *Psychology & Marketing*, 28(8), 781-802.

Buhalis, D. (2019). Technology in tourism-from information communication technologies to eTourism and smart tourism towards ambient intelligence tourism: a perspective article. *Tourism Review*.

Buhalis, D., & Amaranggana, A. (2015). Smart tourism destinations enhancing tourism experience through personalisation of services. In *Information and communication technologies in tourism 2015* (pp. 377-389). Springer, Cham.

Cottet, P., Lichtlé, M. C., & Plichon, V. (2006). The role of value in services: a study in a retail environment. *Journal of consumer marketing*.

Delgado-Ballester, E., Munuera-Aleman, J. L., & Yague-Guillen, M. J. (2001). Development and validation of a brand trust scale. *International journal of market research*, 45(1), 35-54.

destinations and their behavior intentions", Journal of Travel Research, p. 0047287519883034.

Fornell, C., Johnson, M. D., Anderson, E. W., Cha, J., & Bryant, B. E. (1996). The American customer satisfaction index: nature, purpose, and findings. *Journal of marketing*, 60(4), 7-18.

Gounaris, S., Dimitriadis, S., & Stathakopoulos, V. (2010). An examination of the effects of service quality and satisfaction on customers' behavioral intentions in eshopping. *Journal of services marketing*.

Gray, G. T., & Wert Gray, S. (2012). Customer retention in sports organization marketing: examining the impact of team identification and satisfaction with team performance. *International Journal of Consumer Studies*, *36*(3), 275-281.

Gretzel, U., Sigala, M., Xiang, Z., & Koo, C. (2015). Smart tourism: foundations and developments. *Electronic* markets, 25(3), 179-188.

Gustafsson, A., Johnson, M. D., & Roos, I. (2005). The effects of customer satisfaction, relationship commitment dimensions, and triggers on customer retention. *Journal of marketing*, 69(4), 210-218.

Hair Jr, J. F., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: updated guidelines on which method to use. *International Journal of Multivariate Data Analysis*, 1(2), 107-123.

Hair, J.F.; Ringle, C.M.; Sarstedt, M. PLS-SEM: Indeed a Silver Bullet. J. Mark. Theory Pract. 2011, 19, 139-152. [CrossRef]

Hallowell, R. (1996). The relationships of customer satisfaction, customer loyalty, and profitability: an empirical study. *International journal of service industry management*.

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variancebased structural equation modeling. *Journal of the academy of marketing science*, 43(1), 115-135.

Heskett, J. L., Jones, T. O., Loveman, G. W., Sasser, W. E., & Schlesinger, L. A. (1994). Putting the service-profit chain to work. *Harvard business review*, 72(2), 164-174.

Holbrook, T. (1996). Do campaigns matter? (Vol. 1). Sage publications.

Jeong, M. and Shin, H.H. (2019), "Tourists' experiences with smart tourism technology at smart

Johnson, A. G., & Samakovlis, I. (2019). A bibliometric analysis of knowledge development in smart tourism research. *Journal of Hospitality and Tourism Technology*.

Kim, J.-H. (2018), "The impact of memorable tourism experiences on loyalty behaviors: the mediating effects of destination image and satisfaction", Journal of Travel Research, Vol. 57 No. 7, pp. 856-870.

Lazarus, R. S. (1991). Cognition and motivation in emotion. American psychologist, 46(4), 352.

Lee, H., Lee, J., Chung, N. and Koo, C. (2018), "Tourists' happiness: are there smart tourism technology effects?", Asia Pacific Journal of Tourism Research, Vol. 23 No. 5, pp. 486-501.

Miguel-Dávila, J. Á., Cabeza-García, L., Valdunciel, L., & Flórez, M. (2010). Operations in banking: The service quality and effects on satisfaction and loyalty. *The Service Industries Journal*, *30*(13), 2163-2182.

Morales, L., Anduiza, E., Rodríguez, E., & San Martín, J. (2008). Capital social, pautas identitarias y actitudes hacia "los otros": la incorporación cívica de la población de origen inmigrante en Barcelona y Madrid". *Panorama social*, 8(2), 119-142.

Neirotti, P., De Marco, A., Cagliano, A. C., Mangano, G., & Scorrano, F. (2014). Current trends in Smart City initiatives: Some stylised facts. *Cities*, 38, 25-36.

Oliver, R. L. (1999). Whence consumer loyalty? Journal of marketing, 63(4_suppl1), 33-44.

Ramayah, T., Cheah, J., Chuah, F., Ting, H., & Memon, M. A. (2018). Partial least squares structural equation modeling (PLS-SEM) using smartPLS 3.0.

Russell-Bennett, R., McColl-Kennedy, J. R., & Coote, L. V. (2007). Involvement, satisfaction, and brand loyalty in a small business services setting. *Journal of Business Research*, 60(12), 1253-1260.

Saqib, M., Baluch, N. H., & Mohamed Udin, Z. (2017). Moderating role of technology orientation on the relationship between knowledge management and SMEs' performance in Oman: a conceptual study. *International Journal of Economic Perspectives*, 11(1), 433-441.

Schaffers, H., Komninos, N., Pallot, M., Trousse, B., Nilsson, M., & Oliveira, A. (2011, May). Smart cities and the future internet: Towards cooperation frameworks for open innovation. In *The future internet assembly* (pp. 431-446). Springer, Berlin, Heidelberg.

Shanka, T., & Taylor, R. (2005). Assessment of university campus café service: The students' perceptions. *Asia Pacific Journal of Tourism Research*, 10(3), 329-340.

Srivastava, K., & Sharma, N. K. (2013). Service quality, corporate brand image, and switching behavior: The mediating role of customer satisfaction and repurchase intention. *Services Marketing Quarterly*, *34*(4), 274-291.

Szymanski, D. M., & Henard, D. H. (2001). Customer satisfaction: A meta-analysis of the empirical evidence. *Journal* of the academy of marketing science, 29(1), 16-35.

Yoo, C.W., Goo, J., Huang, C.D., Nam, K. and Woo, M. (2017), "Improving travel decision support satisfaction with smart tourism technologies: a framework of tourist elaboration likelihood and self-efficacy", Technological Forecasting and Social Change, Vol. 123, pp. 330-341.

Zhu, X., Kiritchenko, S., & Mohammad, S. (2014, August). NRC-Canada-2014: Recent improvements in the sentiment analysis of tweets. In *Proceedings of the 8th international workshop on semantic evaluation (SemEval 2014)* (pp. 443-447).