

The Impact of Hotel Service Innovation on Guest's Perceived Value and Return Intention

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Abstract

In hospitality industry several elements could positively affect return intention, such as hotel service innovation and guest's perceived value. Hotel service innovation consists of in many forms such as innovative hotel types, customization of service, use of information technology, process innovation, marketing-focused innovation, brand differentiation and pricing innovation. Guest's perceived value is classified into: emotional value, social value, price value, and quality value. Using data gathered from in-house guests in a sample of five-star hotels, the current study investigated the impact of hotel service innovation on guest's perceived value and return intention. A survey questionnaire was adopted in this study. The questionnaire consisted of 79 items divided into nine groups as innovative hotel types (IHT), customization of service (CS), use of information technology (UIT), process innovation (POI), marketing-focused innovation (MFI), brand differentiation (BD), pricing innovation (PI), guest's perceived value (GPV), and return intention (RI). The hypothesized conceptual model was tested using structural equation modelling (SEM). Findings revealed that hotel service innovation through innovative hotel types, use of information technology, process innovation, marketing-focused innovation, brand differentiation, and pricing innovation significantly impact guest's perceived value. Also, guest's perceived value significantly impacts return intention. In addition, hotel service innovation through innovative hotel types significantly impact return intention.

Keywords: Service innovation, Perceived value, Return intention, Structural Equation Modelling (SEM).

Introduction

In hospitality industry several elements could positively affect return intention, such as hotel service innovation (Wang *et al.*, 2013) and guest's perceived value (Mahmoud *et al.*, 2018). Accordingly, many researchers

(Hsu & Fang, 2009; Kanten & yaşlıoğlu, 2012; Ordanini & Parasuraman, 2011) discussed that service innovation affects perceived value through creating new ideas for services to access the value. Also, several authors (Dixon *et al.*, 2009; Khuong & Giang, 2014; Norazah & Norbayah, 2015) pointed that service innovation positively impact on guest's return intention. The concept of service innovation has been adopted to obtain guest's perceived value, customer satisfaction, increase willing to intention to return to the hotel and to increase the competitive advantage in a global and growing market (Beesley & Davidson, 2013; Grobelna & Marciszewska, 2013; Kallmuenzer, 2018; Lu & Tseng, 2010; Wu *et al.*, 2010; Zehrer *et al.*, 2015). Previous studies that linked hotel service innovation, guest's perceived value and return intention were limited (Kessler *et al.*, 2015; Luoh *et al.*, 2014; Nieves *et al.*, 2014; Nieves & SegarraCiprés, 2015; Thomas & Wood, 2014; Tigu *et al.*, 2013). Moreover, previous studies about guest's perceived value was a very few, which ignores other important aspects (El-Adly & Eid, 2015; Sweeney & Soutar, 2001). Therefore, the main aim of the study is to investigate the impacts of service innovation factors on guests' perceived value and their return intention in a sample of international five-star hotels in Cairo.

Ltteraturereview

Service innovation

Service innovation strengthens the growth of the global economy (O'Cass *et al.*, 2013). As that service innovation not only transacts with the company, but is influenced by the human factor and innovative culture and the integration of processes and tools that help the company to create a new innovation to achieve the needs and wants of customers and ultimately benefit the company (Nagy, 2013). Toivonen and Tuominen (2009, p.893) defined service innovation as “a new service or such a renewal of an existing service which is put into practice and which provides benefit to the organization that has developed it; the benefit usually derives from the added value that the renewal provides the customers. In addition, to be an innovation the renewal must be new not only to its developer, but in a broader context”.

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Service innovation is the best way to know the needs and thus increases the likelihood of market success (Lusch *et al.*, 2007). Also, it increases production, reducing costs, increases quality, increases customer satisfaction and availability, and makes customers feel comfortable (Abdallah & Phan, 2007; Dixon *et al.*, 2009); provides for competitive advantage (Hogan *et al.*, 2011). Service innovation is a central theme of hospitality industry and researches academic about return intention.

Guest's perceived value

El-Adly (2019, p.2) defined the value as “All factors, qualitative and quantitative, subjective and objective, that make up the complete consumption experience”. Also, Forozia *et al.* (2013) mentioned that the perceived value is the feature that customers receive against the total costs they repay thus the perceived value measure by time and price together through the benefit resulting from the trade-off between benefits and costs (Kotler, 2003; Parasuraman *et al.*, 1988). Moreover, the perceived value is a criterion for the development of management strategies to communicate and provide value to the customer (Kotler & Keller, 2011). Also, Stollery and Jun (2017) added that the researchers used the concept of perceived value to understand the purchasing behavior of customers when deciding. As for the guest, they used the perceived value to know the alternatives offered by the market rather than rely on quality (Petrick, 2002).

In addition, Chiang and Lee (2013) noted that perceived value is a factor which has a great effect on the customer's decisions making process of both hotel choice and booking intention (Chiang & Jang, 2007). Also, perceived value of the customer plays an important role in determining customer satisfaction, decision making and purchase behaviours (Chen, 2012). Wherefore, guest's perceived value is an important theme of hotels about return intention.

Return intention

Hanai *et al.* (2008) mentioned that in the light of the competition between different companies, there are many choices available to customers, therefore the company must take many steps to attract customers return again in addition to attracting new customers. Also, Razak *et al.* (2014, p. 578)

defined return intentions as “the individual’s judgment about buying again a designated service from the same company.”

Whereas Khuong and Giang (2014) pointed out that one of the factors that successful companies are interested in is maintaining their customers and increasing their desire to return. In addition, several researchers (Barros *et al.*, 2010; Kozak, 2001; Kozak & Rimmington, 2000; Woodside & MacDonald, 1994) identified that there are several factors affecting the desire to repetition of the visit, which is the reputation or quality of services provided. Also, several authors (Alegre & Cladera, 2009; Barros & Assaf, 2012) explained that the intention to return by customers is affected by the number of times the previous visits or comfort, and the probability of return is repeated infrequent customers and therefore should be retained because the cost is much less than trying to attract new customers (Um *et al.*, 2006).

The Research Hypotheses

Hotel Service Innovation and Guest's Perceived Value

Mahmoud *et al.* (2018) indicated that there is a correlation between service innovations and perceived value for guests as service innovation is as an activity affecting the perceived value to guests. Moreover, the services industry covers a large scale of activities, and there are many studies that support the types that affect innovation services, namely innovative hotel types, customization of service, use of information technology, process innovation, marketing-focused innovation, brand differentiation and pricing innovation (Khuong & Giang, 2014).

Relationship between innovative hotel types and perceived value

Hsu and Lee (2009) identified that green hotels are one of the forms of service innovation in hotel. These hotels cater for and provide forms of perceived value to customers, which include: emotional value, social value, the value of price and value quality (Teng *et al.*, 2018). Also, Chahal and Kumari (2012) indicated that successful health care services serve to satisfy the perceived values of customers from emotional value through self-satisfaction and social value through social interaction and price value through treatment and quality value through efficiency. Thus, first hypothesis is suggested:

H1: Innovative Hotel Types positively influences Guest's Perceived Value.

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Relationship between customization of service and guest's perceived value

Benedict *et al.* (2004) also mentioned that customization of service is of great importance as it increases the value to customers. As the customization positively affects the value because this customization in the service makes it perceived as having a high value (Scholl-Grissemann & Schnurr, 2016). Hence, this study hypothesizes that:

H2: Customization of Service positively influences Guest's Perceived Value.

Relationship between use of information technology and guest's perceived value

Komulainen *et al.* (2004) stated that use of information technology affects the perceived value of the guest, although the customer perceived value is largely customer expected value, customers still distinguish certain elements of value that they look for it. Also, increasing the use of technology innovations increases the perceived value of customers (Dixon *et al.*, 2009). Thus, this study hypothesizes that:

H3: Use of Information Technology positively influences Guest's Perceived Value.

Relationship between process of innovation and guest's perceived value

Mahmoud *et al.* (2018) stated that process innovation positively influences on the guest's perceived value. Moreover, Anthonisz (2014) pointed out that the process of innovation is to append new things to increase the value offered to customers. Therefore, fourth hypothesis is suggested:

H4: Process Innovation positively influences Guest's Perceived Value.

Relationship between marketing-focused innovation and guest's perceived value

Chuah *et al.* (2016) stated that the marketing innovation improve customers' quality and price perceptions (functional and monetary values) that will in turn, enhance perceived emotional value. Moreover, marketing innovation positively impacts to guest's perceived value (Khuong & Giang, 2014). Thus, helps to increase the number of customers. Also, marketing innovation

contributes to achieving the perceived value through increasing competitive advantage (Chuah *et al.*, 2016). Hence, the following hypothesis can be formulated:

H5: Marketing-Focused Innovation positively influences Guest's Perceived Value

Relationship between brand differentiation and guest's perceived value

Kim *et al.* (2015) indicated that there are many benefits of the brand that contribute to increase the perceived value to customers. As the brand that provides the needs and desires of customers provides price value and quality value. Thus, the brand innovation implementation has mediating influence on customer value. The brand innovation implementation significantly, directly and positively affects the customer value. Hence, this study hypothesizes that:

H6: Brand Differentiation positively influences Guest's Perceived Value

Relationship between pricing innovation and guest's perceived value

Shanahan and Hyman (2007) explained that the price can realize the perceived value of the service when the price of services appropriates to the value obtained and thus the customer has been convinced that what he deserves what he got. In addition, pricing innovation affects the perceived value of the guest (Khuong & Giang, 2014). Thus, this study hypothesizes that:

H7: Pricing Innovation positively influences Guest's Perceived Value

Guest's Perceived Value and Return Intention

Ryu *et al.* (2010) indicated that recent studies have proved that the behavioral intentions of customers are influenced by perceived value. Also, cronin *et al.* (2000) explained that the perceived value of customers is one of the best indicators of repurchase intention as it has a positive impact revisit intention (Lien *et al.*, 2011; Rasoolimanesh *et al.*, 2016) because customers are evaluating the intentions to repurchase based on the value obtained previously (Olaru, 2008). Therefore, this study hypothesizes that:

H8: Guest's Perceived Value positively influences Return Intention

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Hotel Service Innovation and Return Intention

Relationship between innovative hotel types return intention

Wang et al. (2013) noted that the innovative hotel types offer high quality and distinctive services (Goh, 2015) and offered a comfortable atmosphere and a positive feeling of customers and satisfy their desires. All these features make customers repeat visit these hotels more than once (Norazah & Norbayah, 2015). Thus, this study hypothesizes that:

H9: Innovative Hotel Types positively influences Guest's Return Intention

Relationship between use of information technology and return intention

In the hospitality industry, technological innovation is one of the things that contributes to increasing in the frequency of a customer's desire to return to visit again (Dixon *et al.*, 2009). Therefore, this study hypothesizes that:

H10: Use of Information Technology positively influences Guest's Return Intention

Relationship between marketing-focused innovation and return intention

Marketing-focused innovation has a positive impact on the intention of guests to return once again (Khuong & Giang, 2014). Thus, this study hypothesizes that:

H11: Marketing-focused Innovation positively influences Guest's Return Intention

Relationship between brand differentiation and return intention

Palacios-Marques *et al.* (2016) explained that the company's brand of assets that contribute to customer retention. Also increasing the brand in the minds of customers will increase their intention to repeat the visit (Zhou, 2011). Therefore, this study hypothesizes that:

H12: Brand Differentiation positively influences Guest's Return Intention

Relationship between pricing innovation and return intention

Lockyer (2005) identified that the price is one of the most important elements of the hotel's test and therefore the pricing innovation is very important in influencing the intention of returning guests to hotels again (Khuong & Giang, 2014). Hence, this study hypothesizes that:

H13: Pricing Innovation positively influences Guest's Return Intention

The given hypotheses are expressed in the proposed research model in Figure

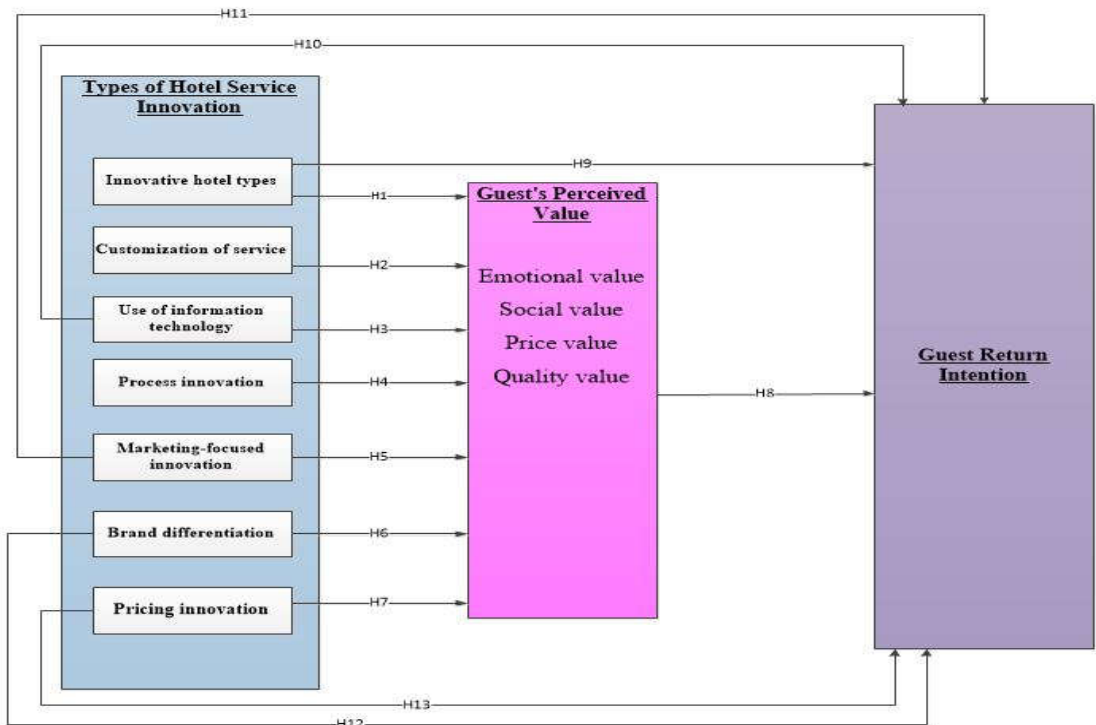


Fig. 1: The proposed conceptual research model

Methodology

A survey questionnaire was used to collect the required data needed to test the research hypotheses against the proposed model (Figure 1). The target population for this study was all guest in five-star hotels in Cairo. A total of 280 questionnaires were randomly distributed to a sample of guests who stayed in the hotels were surveyed. Among the questionnaires returned, 220 were useable ones, representing a response rate of 78.6.%

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Structural Equation Modelling (SEM)

Structural Equation Modeling (SEM) is a multivariate statistical framework used to analyze structural relationships. SEM is a general framework that includes the simultaneous solution of linear equation systems and includes other techniques such as regression, factor analysis, path analysis and modeling of the underlying growth curve (Elston *et al.*, 2012). This method is preferred by the researcher because it estimates the multiple and interrelated dependence in a single analysis. In this analysis, two types of variables were used; independent and dependent variables (Hair *et al.*, 2010). SEM includes multiple ways of analysis of which confirmatory factor analysis was adopted. A two-step approach for structural equation modeling (SEM) was utilized.

The use of SEM increases the statistical efficiency of the results of this study in several ways. Firstly, it allows the analyses of multiple structural relationships at the same time, which results in more exact modelling than the utilization of the SPSS method (Hair *et al.*, 2006). Secondly, the direct and indirect effects of all the independent variables on guest's perceived value and return intention can be assessed easily at once. Finally, the SEM technique reduces the measurement error problem related to the test of the mediating effects. This is because SEM method provides explicit estimates of the measurement errors and consequently considered to be a more superior method (Tarka, 2018).

In the first step, a confirmatory factor analysis (CFA) was used to test the measurement model. CFA is a special form to verify the validity of the data and also considered a very sophisticated statistical procedure for testing complex theoretical models of data (Prudon, 2015). It is used to test whether measures of a construct are consistent with a researcher's understanding of the nature of that constructing. As such, the objective of confirmatory factor analysis is to test whether the data fit a hypothesized measurement model. In the second step, goodness-of-fit measures were utilized to assess the structural fit of the hypothesized model. Theory suggests that if the chi-square (χ^2) is not significant the model is regarded as acceptable, nevertheless many disregards this since chi-square (χ^2) is often reported as significant mainly due to sample size restrictions and its sensitivity to the likelihood test ratio.

Analysis of Moment Structures (AMOS), which is a software program that is a part of the SPSS software suite, was used for CFA and SEM. Composite reliability and Cronbach's alpha for each latent variable were used to test the construct reliability, and average variance extracted was used to test the construct convergent and discriminant validity (Arbuckle, 2011).

Results

Structural Equation Modeling

The Confirmatory factor analysis (CFA)

Confirmatory factor analysis (CFA) was used to measure the reliability and validity of the hotel service innovation, guest's perceived value and return intention scales. The initial model was not a satisfactory fit and so some modification indices were suggested to improve the model fit. More specifically, some items were removed from control scale. As a result, a good model fit was achieved for the measurement model: ($\chi^2=278.803$, $df=129$, $p>0.001$) ($\chi^2/df=2.16$, comparative fit index (CFI) = .979, goodness-of-fit index GFI) = .929, Tucker–Lewis index (TLI) were greater than the recommended level of 0.90 (Hu & Bentler, 1999; Byrne, 2010)., root mean square error of approximation (RMSEA) was lower than the cutoff value of 0.05 (Arbuckle, 2011).

The results of CFA (see Table 1) shows that the lowest value of CR and Cronbach's α for all of the constructs was 0.71, which exceeded the minimum acceptable value of 0.70, indicating a good reliability level. Additionally, the values of AVE for all constructs exceeded the minimum acceptable value of 0.50 indicating good convergent validity (Hair, *et al.*, 2010). Furthermore, the results of CFA (see Table 2) show that the AVE of each construct was greater than the squared correlation for each pair of constructs, indicating good discriminant validity (Hair, *et al.*, 2010).

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Table 1: Hotel Service Innovation, Perceived Value and Return Intention
Confirmatory Factor Analysis Results

Constructs	Factor loadings	t-Value	P	β	CR	α	AVE
Customization of service (CS)					.746	.712	.573
CS 1	1.000			.551			
CS 2	1.073	3.847	***	.595			
Use of information technology (UIT)					.701	.796	.500
UIT1	1.000			.517			
UIT2	.640	4.687	***	.485			
UIT3	.805	4.854	***	.498			
process innovation (POI)					.868	.847	.689
POI 1	1.000			.752			
POI 2	1.090	8.856	***	.754			
POI 3	.701	5.793	***	.552			
marketing-focused innovation (MFI)					.832	.813	.619
MFI 1	1.000			.518			
MFI 2	1.810	5.378	***	.756			
MFI 3	1.335	5.350	***	.583			
brand differentiation (BD)					.847	.837	.649
BD 1	1.000			.679			
BD 2	.918	8.090	***	.710			
BD 3	.707	5.570	***	.550			
pricing innovation (PI)					.843	.833	.655
PI 1	1.000			.795			
PI 2	.853	7.989	***	.720			
PI 3	.435	4.494	***	.450			
perceived value (GPV)					.815	.805	.672
GPV 1	1.000			.655			
GPV 2	1.053	7.322	***	.734			
GPV 3	1.125	8.030	***	.628			
return intentions (RI)					.638	.828	.501
RI 1	1.000			.481			
RI 2	1.136	4.524	***	.621			
RI 3	.817	3.779	***	.437			
RI 4	1.064	4.199	***	.513			
RI 5	1.001	4.173	***	.496			
RI 6	.614	3.164	.002	.486			
RI 7	.791	3.603	***	.474			

Note: All factor loadings were significant at $\leq .001$; CR = Composite reliability; α = Alpha reliability;
AVE = average variance extracted.

Table 2: Validity Assessment Criteria and Correlation Matrix

Construct	CS	UIT	POI	MKI	BD	PI	GPV	RI
CS	.573							
UIT	.457	.500						
POI	.355	.390	.689					
MKI	.171	.298	.213	.619				
BD	.351	.479	.289	.008	.649			
PI	.254	.353	.321	.141	.236	.655		
GPV	.297	.480	.378	.024	.416	.266	.464	
RI	.089	.181	.084	.083	.092	.155	.181	.501

Note: Diagonal entries (in bold) are the square root of AVE; sub-diagonal entries are the latent construct inter-correlations.

Study Structural Model

The purpose of this section is to empirically examine and test the hypothesized relations among the study variables presented in using structural equation modeling (SEM). Upon achieving a good measurement model fitness with valid and reliable constructs. The model can now be tested utilizing SEM for hypotheses testing. Current study proposed a structural model which is consisted of nine major latent constructs, of which seven are exogenous (innovative hotel types, customization of service, use of information technology, process innovation, marketing-focused innovation, brand differentiation and pricing innovation) and two are endogenous (guest's perceived value and return intentions). Figure (2) presents the proposed structural model and the initial proposed relationships among constructs.

The overall model fitness of the proposed structural model was examined. After modifying model fit indices, the modified alternative model indicated an excellent fit of the model to the observed data, see (table 3) below. ($\chi^2=278.803$, $df= 129$, $p>0.001$) ($\chi^2/df=2.16$, comparative fit index (CFI) = .979, goodness-of-fit index GFI) = .929, Tucker–Lewis index (TLI) were greater than the recommended level of 0.90 (Hu & Bentler, 1999; Byrne, 2010)., root mean square error of approximation (RMSEA) was lower than the cutoff value of 0.05 (Arbuckle, 2011). Table (3) depicts the overall fitness of the modified study structural model compared to cut-off values. The analysis of SEM on the modified model has generated results which are illustrated in table (3) below.

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Table 3: Overall fitness of Modified Study Structural Model Compared to cut-off Values

Model	Goodness of fit results					
	χ^2	χ^2/df	P	GFI	CFI	RMSEA
Modified structural model	278.803	2.16	.000	.929	.979	.047
Cut-off values	The lower the better			> 0.90	> 0.90	< 0.05 with CFI of 0.90 or higher

Note: CFI–comparative fit index– GFI–goodness-of-fit index–; RMSEA – Root Mean Square of Approximation (model fit indices indicate good fit to the data)

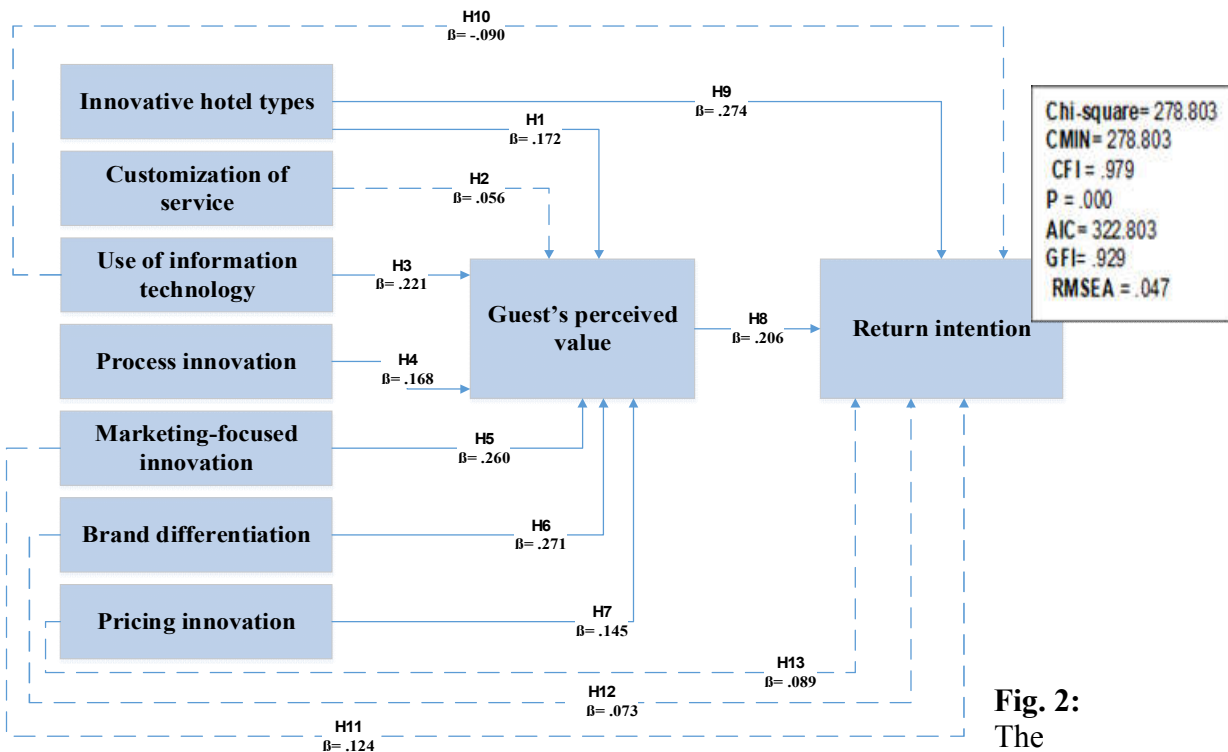


Fig. 2: The Modified Final Structural Model of the Study

Hypotheses Testing

Table (4) below presents standardized coefficient (β) to test the postulated direct paths between study independent, moderating, and dependent variables. Return intention was used as dependent variables, guest's perceived value was used as moderating variables, and hotel service innovation included innovative hotel types, customization of service, use of information technology, process innovation, marketing-focused innovation, brand

differentiation and pricing innovation. Results of hypotheses testing are discussed in the following sections.

Table 4: Standardized parameter estimates of the structural model

Hypotheses	Path	Beta coefficients (B)	t-values	P	Results
H1	Innovative hotel types → guest's perceived value	.172	2.702	.007	Supported
H2	Customization of service → guest's perceived value	.056	.889	.374	Rejected
H3	Use of information technology → guest's perceived value	.221	3.668	***	Supported
H4	Process innovation → guest's perceived value	.168	2.882	.004	Supported
H5	Marketing-focused innovation → guest's perceived value	.260	4.763	***	Supported
H6	Brand differentiation → guest's perceived value	.271	4.346	***	Supported
H7	Pricing innovation → guest's perceived value	.145	2.518	.012	Supported
H8	Guest's perceived value → return intention	.206	2.536	.011	Supported
H9	Innovative hotel types → return intention	.274	3.821	***	Supported
H10	Use of information technology → return intention	-.090	-1.357	.175	Rejected
H11	Marketing-focused innovation → return intention	.124	1.886	.059	Rejected
H12	Brand differentiation → return intention	.073	1.018	.309	Rejected
H13	Pricing innovation → return intention	.089	1.377	.169	Rejected

Absolute t -value > 1.96 , $p < 0.05$; **Absolute t -value > 2.58 , $p < 0.01$; ***Absolute t -value > 4.76 , $p < 0.001$.

The Association between Innovative hotel types and guest's perceived value

The paths that connects innovative hotel types with guest's perceived value yields a significant coefficient value of $\beta = .172$ (P significant at 0.007). Hence a significant positive coefficient for innovative hotel types, suggesting that innovative hotel types is positively associated with guest's perceived value, as predicted, thereby confirming H1. In other words, the result supports H1.

The Association between customization of service and guest's perceived value

It can be seen from the modified final study structural model that a no direct relationship between customization of service and guest's perceived value was found. Initial study model revealed a weak positive relation between the two constructs; however, the initial model didn't yield a good fit to the data, the model fit indices suggested removing the direct paths between customization of service and guest's perceived value, upon removing this

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path, the final modified model showed an excellent fit. So, it was found that customization of service is not directly associated with guest's perceived value, thus rejecting the H2.

The Association between use of information technology and guest's perceived value

The paths that connects use of information technology with guest's perceived value yields a significant coefficient value of $\beta = .221$ (P significant at 0.001). Hence a significant positive coefficient for use of information technology, suggesting that use of information technology is positively associated with guest's perceived value, as predicted, thereby confirming H3. In other words, the result supports H3.

The Association between process innovation and guest's perceived value

The paths that connects process innovation with guest's perceived value yields a significant coefficient value of $\beta = .168$ (P significant at 0.004). Hence a significant positive coefficient for process innovation, suggesting that process innovation is positively associated with guest's perceived value, as predicted, thereby confirming H4. In other words, the result supports H4.

The Association between marketing-focused innovation and guest's perceived value

The paths that connects marketing-focused innovation with guest's perceived value yields a significant coefficient value of $\beta = .260$ (P significant at 0.001). Hence a significant positive coefficient for marketing-focused innovation, suggesting that marketing-focused innovation is positively associated with guest's perceived value, as predicted, thereby confirming H5. In other words, the result supports H5.

The Association between brand differentiation and guest's perceived value

The paths that connects brand differentiation with guest's perceived value yields a significant coefficient value of $\beta = .271$ (P significant at 0.001). Hence a significant positive coefficient for brand differentiation, suggesting that brand differentiation is positively associated with guest's perceived

value, as predicted, thereby confirming H6. In other words, the result supports H6.

The Association between pricing innovation and guest's perceived value

The paths that connects pricing innovation with guest's perceived value yields a significant coefficient value of $\beta = .145$ (P significant at 0.012). Hence a significant positive coefficient for pricing innovation, suggesting that pricing innovation is positively associated with guest's perceived value, as predicted, thereby confirming H7. In other words, the result supports H7.

The Association between guest's perceived value and return intention

The paths that connects guest's perceived value with return intention yields a significant coefficient value of $\beta = .206$ (P significant at 0.011). Hence a significant positive coefficient for guest's perceived value, suggesting that guest's perceived value is positively associated with return intention, as predicted, thereby confirming H8. In other words, the result supports H8.

The Association between Innovative hotel types and return intention

The paths that connects innovative hotel types with return intention yields a significant coefficient value of $\beta = .274$ (P significant at 0.001). Hence a significant positive coefficient for innovative hotel types, suggesting that innovative hotel types is positively associated with return intention, as predicted, thereby confirming H9. In other words, the result supports H9.

The Association between use of information technology and return intention

It can be seen from the modified final study structural model that a no direct relationship between use of information technology and return intention was found. Initial study model revealed a weak positive relation between the two constructs; however, the initial model didn't yield a good fit to the data, the model fit indices suggested removing the direct paths between use of information technology and return intention, upon removing this path, the final modified model showed an excellent fit. So, it was found that use of information technology is not directly associated with return intention, thus rejecting the H10.

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The Association between marketing-focused innovation and return intention

It can be seen from the modified final study structural model that a no direct relationship between marketing-focused innovation and return intention was found. Initial study model revealed a weak positive relation between the two constructs; however, the initial model didn't yield a good fit to the data, the model fit indices suggested removing the direct paths between marketing-focused innovation and return intention, upon removing this path, the final modified model showed an excellent fit. So, it was found that marketing-focused innovation is not directly associated with return intention, thus rejecting the H11.

The Association between brand differentiation and return intention

It can be seen from the modified final study structural model that a no direct relationship between brand differentiation and return intention was found. Initial study model revealed a weak positive relation between the two constructs; however, the initial model didn't yield a good fit to the data, the model fit indices suggested removing the direct paths between brand differentiation and return intention, upon removing this path, the final modified model showed an excellent fit. So, it was found that brand differentiation is not directly associated with return intention, thus rejecting the H12.

The Association between pricing innovation and return intention

It can be seen from the modified final study structural model that a no direct relationship between pricing innovation and return intention was found. Initial study model revealed a weak positive relation between the two constructs; however, the initial model didn't yield a good fit to the data, the model fit indices suggested removing the direct paths between pricing innovation and return intention, upon removing this path, the final modified model showed an excellent fit. So, it was found that pricing innovation is not directly associated with return intention, thus rejecting the H13.

Discussion and Implications

The current study tested impact of hotel service innovation on guest's perceived value and return intention. The results showed that hotel service

innovation had significant effect on guest's perceived value and return intention. These findings agree with all previous studies findings, as a direct significant path between innovative hotel types and guest's perceived value was identified $\beta = .172$, supporting that innovative hotel types positively influence guest's perceived value in hotels. These findings indicate the huge importance of boutique hotels, green hotels and healthcare hotels cater for and provide forms of perceived value to customers, which include: emotional value, social value, the value of price and value quality (Chahal & Kumari, 2012; Hsu & Lee, 2009; Teng *et al.*, 2018). Therefore, five-star hotels should pay more attention to innovative hotel types due to benefits that achieve, as it increases market share, increases competitive advantages, increases production, increases quality, increases guest satisfaction and the desire to intention to return again. In addition, there is a direct significant path between use of information technology and guest's perceived value was identified $\beta = .221$, supporting that use of information technology positively influence guest's perceived value in hotels. These findings indicate the huge importance of use of information technology because it increases the perceived value of guests (Dixon *et al.*, 2009; Komulainen *et al.*, 2004). Thus, five-star hotels should pay extra care for new trends of use of information technology (e.g., using guest room lock access via guest's mobile phone and offers touch screen for guest use with all information about the city). Furthermore, there is a direct significant path between process innovation and guest's perceived value was identified $\beta = .168$, supporting that process innovation positively influence guest's perceived value in hotels. These findings indicate the huge importance of process innovation because it is to append new things to increase the value offered to guests (Anthonisz, 2014; Mahmoud *et al.*, 2018). Therefore, five-star hotels should pay more attention to process innovation (e.g., offer new or improve ideas and services).

Moreover, there is a direct significant path between marketing-focused innovation and guest's perceived value was identified $\beta = .260$, supporting that marketing-focused innovation positively influence guest's perceived value in hotels. These findings indicate the huge importance of marketing-focused innovation because it achieves the perceived value through increasing competitive advantage (Chuah *et al.*, 2016; Khuong & Giang, 2014). Thus, five-star hotels should pay more attention to the marketing-focused innovation (e.g., social media marketing, mobile marketing, loyalty programs, and discount cards). As well as, there is a direct significant path between brand differentiation and guest's perceived value was identified $\beta = .271$, supporting that brand differentiation positively influence guest's

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perceived value in hotels. These findings indicate the huge importance of brand differentiation because it provides the needs and desires of customers provides price value and quality value (Kim *et al.*, 2015). Thus, five-star hotels should pay extra care the brand differentiation. Also, there is a direct significant path between pricing innovation and guest's perceived value was identified $\beta = .145$, supporting that pricing innovation positively influence guest's perceived value in hotels. These findings indicate the huge importance of pricing innovation (Khuong & Giang, 2014; Shanahan & Hyman, 2007).

Therefore, five-star hotels should pay more attention to the pricing innovation because it can realize the perceived value of the service when the price of services appropriates to the value obtained and thus the customer has been convinced that what he deserves what he got.

In addition, there is a direct significant path between guest's perceived value and return intention was identified $\beta = .206$, supporting that guest's perceived value positively influence return intention in hotels. These findings indicate the huge importance of guest's perceived value because it is one of the best indicators of repurchase intention as it has a positive impact revisit intention (cronin *et al.*, 2000; Lien *et al.*, 2011; Rasoolimanesh *et al.*, 2016; Ryu *et al.*, 2010). Therefore, five-star hotels should seek to provide the perceived value to guests as a mean of influencing return intention. Finally, there is a direct significant path between innovative hotel types and return intention was identified $\beta = .274$, supporting that innovative hotel types positively influence return intention in hotels. These findings indicate the huge play an important role of innovative hotel types because it provides high quality and distinctive services to influence the client's intention to return again (Goh, 2015; Han ,2013; Wang *et al.*, 2013).

Limttaions and Future Research

The study possesses some limitations; it examined the impact of hotel service innovation on guest's perceived value and return intention. In that sense, it is worthwhile for further studies to focus on different sectors within the hospitality industry (for instance, restaurants, bars, cruise ships, resorts, hostels, ...etc.). Furthermore, this study investigated the hotel service innovation using a sample of five-star hotels in Greater Cairo, Egypt. Thus, in the further studies, it is worthwhile to focus on hotel service innovation in

other cities such as Sharm El-Sheikh or Luxor. In addition, the sample used for this study was a small proportion of the entire hotels' guests' population; thus, further researches with a bigger sample size would be required to ensure appropriate generalization of study findings. However, despite these limitations, this study has useful implications both for hospitality scholars and industry practitioners.

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الملخص العربي

تأثير الابتكار في الخدمات الفندقية على القيمة المدركة للنزلاء والرغبة في تكرار الزيارة

في صناعة الضيافة، يمكن أن تؤثر العديد من العناصر بشكل إيجابي على نية العودة، مثل الابتكار في خدمة الفنادق والقيمة المتصورة للضيف. يتألف ابتكار خدمة الفندق من عدة أشكال مثل أنواع الفنادق المبتكرة، وتخصيص الخدمة، واستخدام تكنولوجيا المعلومات، وابتكار العمليات، والابتكار الذي يركز على التسويق، وتمييز العلامات التجارية، وابتكار التسعير. يتم تصنيف القيمة المدركة للضيف في: القيمة العاطفية والقيمة الاجتماعية وقيمة السعر وقيمة الجودة. وعن طريق البيانات التي جمعها من عينة من النزلاء من الفنادق. بحثت الدراسة الحالية تأثير ابتكار خدمة الفندق على القيمة المدركة للضيف ونية العودة. تم اعتماد استبيان الدراسة الاستقصائية في هذه الدراسة. يتكون الاستبيان من ٧٩ عنصراً مقسمة إلى تسع مجموعات كأنواع فنادق مبتكرة (IHT) ، وتخصيص الخدمة (CS) ، واستخدام تكنولوجيا المعلومات (UIT) ، وابتكار العمليات (POI) ، والابتكار الذي يركز على التسويق (MFI) ، وتماييز العلامة التجارية (BD) ، ابتكار التسعير (PI) ، القيمة المدركة للضيف (GPV)، ونية العود (RI). تم اختبار النموذج النظري المفترض باستخدام نمذجة المعادلة الهيكلية (SEM). كشفت النتائج أن ابتكار خدمات الفنادق من خلال أنواع الفنادق المبتكرة، واستخدام تكنولوجيا المعلومات، وابتكار العمليات، والابتكار الذي يركز على التسويق، وتمييز العلامات التجارية، وابتكار التسعير يؤثر بشكل كبير على القيمة المدركة للضيف. أيضاً، تؤثر القيمة المدركة للضيف بشكل كبير على نية الإرجاع. بالإضافة إلى ذلك، يؤثر ابتكار خدمات الفنادق من خلال أنواع الفنادق المبتكرة بشكل كبير على نية العودة.