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.

**Literature review**

**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.
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 1:

![Fig. 1: The proposed conceptual research model](image)

**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 guests 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 usable ones, representing a response rate of 78.6%
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 ($\chi^2$) is not significant the model is regarded as acceptable, nevertheless many disregards this since chi-square ($\chi^2$) 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) show that the lowest value of CR and Cronbach’s $\alpha$ 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).
## Table 1: Hotel Service Innovation, Perceived Value and Return Intention
Confirmatory Factor Analysis Results

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Factor loadings</th>
<th>t-Value</th>
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<th>CR</th>
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<th>AVE</th>
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**Note:** All factor loadings were significant at ≤ .001; CR = Composite reliability; α = Alpha reliability; AVE = average variance extracted.
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) (X2/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.
Table 3: Overall fitness of Modified Study Structural Model Compared to cut-off Values

<table>
<thead>
<tr>
<th>Model</th>
<th>Goodness of fit results</th>
<th>H1</th>
<th>H2</th>
<th>H3</th>
<th>H4</th>
<th>H5</th>
<th>H6</th>
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<td>.929</td>
<td>.979</td>
<td>.047</td>
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</tbody>
</table>

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

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

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

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 $\beta = 0.221$ (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 $\beta = 0.168$ (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 $\beta = 0.260$ (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 $\beta = 0.271$ (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.
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.
The Impact of Hotel Service Innovation on Guest's Perceived Value and Return Intention

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
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).

Limitations 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 المدرجة للنزلاء والرغبة في تكرار الزيارة

في صناعة الضيافة، يمكن أن تؤثر العديد من العوامل بشكل إيجابي على نية العودة، مثل الابتكار في خدمة الفندق والقيمة المتصورة للضيف. يتألف ابتكار خدمات الفندق من عدة أشكال مثل أنواع الفندق المبتكرة، وتخصيص الخدمة، واستخدام تكنولوجيا المعلومات، وابتكار الخدمات، والابتكار الذي يركز على التسويق، وتميز العلامات التجارية، وابتكار التسعير. يتم تصنيف القيمة المدرجة 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 الابتكار خدمة الفندق على القيمة المدرجة للضيف ونسبة العودة. تم اعتماد استبيان الدراسة الاستقصائية في هذه الدراسة. يتكون الاستبيان من 79 عنصر مقسم إلى ستة مجموعات كأنواع فنادق مبتكرة (IHT)، وتخصيص الخدمة (CS)، واستخدام تكنولوجيا المعلومات (UIT)، وأبتكار الخدمات (POI)، وابتكار التسعير (PI)، والميزان التجارية (BD)، وقيمة المدرجة (MFI)، ونسبة العودة (RI). تم اختيار النموذج النظري المفترض باستخدام نمذجة المعادلة الهيكلية (SEM). كشف النتائج أن الابتكار خدمات الفنادق من خلال أنواع الفندق المبتكرة، واستخدام تكنولوجيا المعلومات، وابتكار الخدمات، والابتكار الذي يركز على التسويق، وتميز العلامات التجارية، وابتكار التسعير يؤثر بشكل كبير على القيمة المدرجة للضيف. أيضاً، تؤثر القيمة المدرجة للضيف بشكل كبير على نية الارتداد. بالإضافة إلى ذلك، يؤثر ابتكار خدمات الفنادق من خلال أنواع الفندق المبتكرة بشكل كبير على نية العودة.