Effects of Service Quality, Hotel Technology, and Price Fairness on Customer Loyalty mediated by Customer Satisfaction in Hotel Industry in Cambodia

Sokun Prum¹, Dr. Sovang Long², Dr. Bunteng Long³
¹sokun.pr@gmail.com, ²longsovang@gmail.com, ³longbunteng@gmail.com
¹Royal University of Law and Economics, ²,³Western University

*Corresponding Author: Sokun Prum
Email: sokun.pr@gmail.com

ABSTRACT

The hospitality industry plays a crucial role in contributing the country’s economy growth and, meanwhile, customer loyalty is widely regarded as important driving force for the hotel success. This study intends to discover the direct and indirect impacts of service quality, hotel technology and price fairness on customer loyalty via customer satisfaction for hotels in Cambodia. The study applies a quantitative method and conducts a non-probability survey of 500 customers accommodated in hotels located in five different selected city/provinces in Cambodia. With utilization of SPSS Amos version 23, all data are analyzed by structural equation modeling (SEM). The findings indicate that there are significantly positive relationships between service quality and price fairness on satisfaction as well as on customer loyalty, while price fairness acts as the most influencing factor and satisfaction itself has proven to be significant with customer loyalty. Furthermore, satisfaction partially mediates between service quality, price fairness and customer loyalty. However, hotel technology significantly influences on customer loyalty, yet does not on satisfaction. The research contributes to enriching the theoretical framework of customer loyalty in the hotel industry by its empirical insights. Practically, this study can assist hotel managers developing strategies for their customers retention by enhancing service quality, hotel technology and price fairness. Additionally, the government receives information from this study about the degree of customer loyalty in Cambodian hotels, which may be utilized to improve the government’s human capital training program and raise hotel performance.

Keywords: Customer Loyalty, Customer Satisfaction, Hotel Technology, Price Fairness, Service Quality
INTRODUCTION

Nowadays, the tourism sector is one of the fastest expanding economic sectors in the world. It is a substantial source of income for developing countries, whose market share has expanded significantly in recent decades. Before the COVID-19 pandemic, tourism was a major economic engine in Cambodia. Tourism and hospitality were significant pillars of the Cambodian economy and poverty alleviation drivers. Over 13% of Cambodians employed in tourism in 2017, with 30% working in related companies (Centre, 2018). Yet since the outbreak began in early 2020, the lack of foreign tourists and the curfews and lockdowns that had restricted domestic travel have negatively impacted tourism-related businesses, especially tiny and unofficial ones. COVID-19 has had a noteworthy impact on the economy of Cambodia. Before the virus spreading to Cambodia in February 2020, the GDP growth rate of the nation was predicted to be roughly 6.5% in 2020; nevertheless, real GDP growth fell to 3.1% in 2020, primarily as a result of steep losses in three important economic sectors: construction, tourism, and apparel (OECD, 2021). By 2020, the tourism industry would have lost almost 51,000 jobs due to the closure of over 3,000 tourism-related businesses, either temporarily or permanently, according to the Ministry of Tourism (MOT) (Times, 2020). Over the course of the previous ten years, hotel occupancy rates in Cambodia have remained quite stable at 65–70%. The only reason for a slight decrease in 2019 was likely the unexpected increase in hotel room supply in 2018. The occupancy rate decreased by 25% and 15%, respectively, following the closure of international borders in 2020 and 2021 (GARDE Corporate Offices, 2022).

However, service quality acts very crucial to building client satisfaction and loyalty. Yuliantoro et al (2020) indicated a link between perceived food quality and customer satisfaction. Service quality significantly affected customer satisfaction in the service sector (Chayomchai, 2021). This was in accordance with Khoi & Cuong (2019) and Setiawan & Sayuti (2017), which discovered that service quality significantly impacted on customer satisfaction. Moreover, Boakye & Meng (2019) conducted a research in the banking sector found that service quality and customer satisfaction have a significant impact on customer loyalty. Besides, hotel technology and price fairness are also built to increase both of client satisfaction and loyalty. According to Kangu (2017) showed that the hotel industry had an efficient technological infrastructure and technological facilities were key factors to determine guest loyalty. In fact, competitive or acceptable prices had a significant effect on repurchase intention and consumer satisfaction (Kotler & Keller, 2015). Malik et al (2020) also discovered a positive link between price fairness and hotel consumer satisfaction. In addition, Boakye & Meng (2019), in the service industry, consumer loyalty was significantly impacted by customer satisfaction.
Loyalty was the behavior of customers who liked a company and its products and were willing to make repeated purchases in the future (Ran, 2019; Rosadi et al., 2020). Loyalty was one of the key factors leading to business success, as loyalty positively influenced the marketing activities of a service business and, further, customer loyalty also allowed the company to generate profits (Boakye & Meng, 2019). Loyal customers affected an organization’s profits and overall success in three different ways: (1) repeated purchases of products or services that generate revenue for the organization, (2) reduced marketing costs, advertising and exploitation, and (3) providing news and recommending services to others (Liat et al., 2014). On the other hand, it is very little of information about the studies of service quality and loyalty of guests in the hospitality industry in Cambodia. Veasna (2013) searched the influence of service quality dimensions on guest satisfaction in Phnom Penh and two other provinces, Sihanouk and Siem Reap in Cambodia. The researcher mentioned two limitations, one of which is the geographical tourist zones, and recommended that other attractive places should be considered for further research.

As mentioned above, loyalty is one of the crucial factors leading to business success, and allowing the company to generate profits and, further, the Cambodia hotel industry has extremely hit by COVID-19. Moreover, the empirical findings related to the guest loyalty in hospitality industry in Cambodia has very limited. Therefore, these are the crucial reasons to conducting this current study which has specific objectives as following: (1) to discover the significant influence of service quality, hotel technology and price fairness on guest loyalty; (2) to investigate the significant impact of service quality and other two exogenous variables on guest satisfaction; (3) to examine the significant impact of guest satisfaction on loyalty; and (4) to analyze the mediational effect of guest satisfaction between the mentioned exogenous variables and guest loyalty in hotel industry in Cambodia.

LITERATURE REVIEW

Underpinned Theories

The Stimulus-Organism-Response (SOR) Theory

SOR theory was first put forth by (Mehrabian & Russell, 1980), who contended that environmental factors, or stimuli, were what formed individual psychology, or the organism, and that these factors might subsequently influence reactionary behavior, or stimulus-organism-response. Due to its intuitive and potent exploratory qualities in the study of human behavior, S-O-R has garnered a great deal of interest over the past few decades in a variety of research domains (Kim et al., 2020). A recent study in the setting of luxury hotels used S-O-R modeling to examine the impact of atmosphere on customer engagement through customer satisfaction (Choi & Kandampully, 2019). Chang et al (2014) argued
that the SOR model is one of the most appropriate frameworks for studying tourist behavior; Given the immaterial nature of tourism, S-O-R theory’s emphasis on the emotional or affective qualities of the environment provides insight into the study of tourism experiences. Similarly, a positive relationship between value perception (Stimulus), emotional disposition (Organism), and tourist intent (Response) amongst cultural heritage tourists was proposed and confirmed by (Qiu et al., 2019).

Marketing Mix Theory

According to Madeira (2019), a corporation uses a set of marketing techniques called the marketing mix to generate the desired response from its target market. The marketing mix is a key tool used by businesses to convince customers to buy the goods or services they are offering (Hilal, 2019). All marketing initiatives are built upon the classical marketing mix model, also referred to as the 4P. Rohana (2019), a corporation employs the marketing mix, which is a collection of marketing tactics, to consistently meet its objectives in its target market. Marketing was the foundation of business through which a company could generate sales and profits from marketing activities (Irmana, 2023). The marketing mix, according to Wahab et al (2016), is a collection of manageable marketing strategies that a business uses to elicit a desired response in a target market. These strategies include the 4P, that is, Product, Price, Promotion, and Place, all of which work together to boost customer satisfaction and loyalty. These characteristics are considered more significant for accommodation companies, tourism organizations and other tourism-related businesses, which resulted in the development of an enlarged marketing mix that included the physical evidence, people, process, and the original 4P.

RESEARCH METHODOLOGY

Sample Sizes and Sampling Techniques

According to Setyadi et al (2023), the Structural Equation Model (SEM) may be used to predict interpretation if the sample size was between 100 and 200 respondents, or five to ten times the estimated number of indicators. In this research, there are 42 of observed variables. Therefore, the researcher collected 500 hotel guests who stayed with the price ranging from 20-100 dollars per day in Phnom Penh (150), Siem Reap (150), Sihanouk (100), Mondulkiri (50), and Ratanakiri (50) provinces in Cambodia. Non-probability, convenience and purposive, was used in this research. Purposive sampling was a method of finding and selecting situations that would make optimal use of limited research resources (Palinkas et al., 2015). Purposive sampling, on the other hand, researcher makes personal interview with or send mails to his friends and family members who ever stayed at hotels in five different provinces with price ranging from $20 to $100 per night. Convenience sampling is the collecting of information from members of
Effects of Service Quality, Hotel Technology, and Price Fairness on the population who have simple access to information (Sekaran & Bougie, 2010). Throughout this sampling technique, researcher makes personal interview with or mail to his students at Royal University of Law and Economics (RULE), who arrive the class early and experienced in hotels in five different provinces with price ranging from $20 to $100 per day. Furthermore, asking RULE volunteered students to deliver questionnaires to their convenience participants.

**Questionnaire Design and Variable Measurement**

For the adopted questions for the present study, it consists of three different parts. Part A depends on a nominal scale, while part B and C are based on a five-point Likert scale, ranging from “strongly dissatisfied” (1) to “strongly satisfied” (5). The questionnaire attempts to solicit the opinions of customers staying the hotels on the satisfied or dissatisfied of the various key relationships presented in the conceptual model. Part A: Demographics: Ten items pertaining to the respondents’ socioeconomic data make up this part such as age, gender, nationality, occupation, education, room price per day, place and purpose of stay which cited from Veasna, (2013) and researcher himself. Part B: Service quality, hotel technology and price fairness: Based on the SERVQUAL model, there are 27 items of service quality derived from (Kanyama et al., 2022). Hotel technology comprises of 3 items adapted from Veasna, (2013) and Kangu (2017). Furthermore, there are 4 items of price fairness quoted from (Bassey, 2014). Part C: Customer satisfaction and loyalty: There are four items each and the concept of guest satisfaction and loyalty are based on the study of Phi et al (2018).

Prior to answering the questionnaire to collect data, the researcher must check the quality of the questionnaire for validity and reliability. Firstly, it was essential to assess item validity used in any research project, especially when information was collected through questionnaires. For content validity, the researcher asked three experts, who have who have managed hotels in Cambodia over 20 years, to evaluate questions in the questionnaire by using an Objective Index of Concordance (IOC) scoring between from -1 to 1. Since the result after judgments from the three experts, IOC of each item valued from 0.67 to 1.00 were greater than 0.50, thus, 41 items in the questionnaire were validated and approved (Rovinelli & Hambleton, 1976). Secondly, all items in the questionnaire were tested to determine their reliability compared to the questions asked Hair et al (2017), an indicator is reliable when the Cronbach’s alpha is bigger than 0.70. Fifty respondents were asked to complete the questionnaire as part of the researcher’s pilot testing. A statistical tool called SPSS 22 was used to examine the responses. The reliability scores, which were higher than 0.70 and ranged from 0.848 to 0.978, verified the internal consistency of the items in the questionnaire.
Research Model

Referring to the underpinned theories consisting of stimulus-organism-response (SOR), marketing mix and, furthermore, previous empirical studies as Veasna, (2013), Kean (2018) and Myo et al (2019), researchers have developed the conceptual framework to explain the impacts of hotel service quality, technology and price fairness on customer loyalty in the role of customer satisfaction as mediator in Phnom Penh, Sihanouk, Siem Reap, Mondulkiri, and Ratanakiri provinces in Cambodia. Therefore, the conceptual framework has three exogenous variables namely service quality, hotel technology and price fairness, while customer loyalty is the endogenous and customer satisfaction plays as mediator.

![Proposed Research Model for This Research](source: Processed Data by Researchers)

Development of Hypotheses

Service Quality and Customer Loyalty

Fida et al (2020) defined service quality as the fundamental ability of a particular company or industry to meet desired customer expectations. Service quality was the discrepancy between customer expectations of a service provider and service evaluation (Saleh et al., 2021). According to Özkan et al (2019), consumer loyalty meant a supplier’s success in establishing long-term relationships with customers. The link between service quality and guest loyalty has been demonstrated (Sudigdo et al., 2019). If the hotel’s service quality was inconsistent or substandard, sooner or later customers would be dissatisfied and will not buy again, leading to a huge loss of hotel revenue (Sudigdo et al., 2019). Finding client loyalty to support a business’s performance and sustainability is crucial to its success Özkan et al (2019), indicating that the company works to raise the caliber of its services. Service quality is directly connected to client loyalty (Izogo, 2017). Thus, the hypothesis can be formulated as follow:
H₁: Service quality has a significant influence on customer loyalty

Hotel Technology and Customer Loyalty

Kangu (2017) indicated that the hotel industry had an efficient technological infrastructure and that technological facilities were a determinant of guest loyalty. Therefore, the study showed that the technological infrastructure of the hotel sub-sector in Kenya was a key influencing factor of customer loyalty. Besides, in order to enhance guest loyalty in Jordan’s five-star hotels, Alshammare et al. (2022) investigated technology-enabled online booking services. They discovered a good correlation between e-trust and customer satisfaction as well as a positive connection between website quality and customer loyalty. Accordingly, the formulation of the research’s hypothesis is as following:

H₂: Hotel technology has a significant influence on customer loyalty

Price Fairness and Customer Loyalty

Brkanlić et al. (2020) defined price as the amount of money the customer has to spend in order to acquire the product. According to Othman et al. (2021), the price variable consists of numerous elements such as price levels, discounts, and payment terms. Hidayat et al. (2019) indicated a positive relationship between price affordability and consumer loyalty in restaurant client loyalty in Indonesia. On the other hand, found a strong correlation between price affordability and customer loyalty in a survey among Kenyan restaurant customers (Githiri, 2018). When Opata et al. (2021) examined the automotive sector in an effort to better understand customer behavior, they discovered that while price perception was viewed as a crucial component of individual purchasing decisions, it had a significant effect on customer satisfaction and product loyalty. Hence, the hypothesis is as follows:

H₃: Price fairness has a significant influence on customer loyalty

Service Quality and Customer Satisfaction

Customer satisfaction was the result of people experiencing hotel operations that met their expectations. Many researchers have demonstrated a strong correlation between service quality and customer satisfaction (Ali et al., 2021). In order to ensure customer satisfaction, companies sought to enhance service quality. Some empirical studies showed that service quality has a positive and significant influence on customer satisfaction (Boonlertvanich, 2019). The topic of service quality was important for any research, as most companies strive to improve their service quality to raise customer satisfaction (Ganeshkumar et al., 2019). Multi-attribute approaches allow us to conceptualize service quality touchpoints as possessing a symmetric or direct linear relationship with customer satisfaction. This symmetrical relationship suggests that alterations in service qualities, whether positive or negative, will directly result in an equivalent degree
of variation in customer satisfaction (Bi et al., 2020). Consequently, the research hypothesis has made as follow:

\[ H_4 : \text{Service quality influences on customer satisfaction significantly} \]

**Hotel Technology and Customer Satisfaction**

In hotels, technology was the primary determinant of guest satisfaction. Hotels frequently employed technology as a convenience that added value and helped them stand out from the competition. Huy et al (2019) examined the relationship between technological preparedness and visitor happiness in Vietnam’s upscale hotels. The result found that technology readiness positively effects on satisfaction of customers. In the bank sector, self-service technology has an impact on customer satisfaction and loyalty in the Indonesian banking sector (Novaria et al., 2023). Customers that demand quick service at a low cost will appreciate the use of technology-based services or self-service technology. Consequently, it is established that:

\[ H_5 : \text{Hotel technology influences on customer satisfaction significantly} \]

**Price Fairness and Customer Satisfaction**

Ing et al (2019) states that customer satisfaction with full-service restaurants was significantly predicted by price perception. In a research of restaurants, Konuk (2019) found that price fairness improved and positively influenced restaurant consumer satisfaction and perceived meal value. Price fairness was important to measure customer satisfaction with a service, because customers considered price as a criterion to evaluate the provided service (Severt et al., 2020). Additionally, Malik et al (2020) indicated a strong relationship between price fairness and hotel customer satisfaction. So, the researcher can draw the following hypothesis:

\[ H_6 : \text{Price fairness influences on customer satisfaction significantly} \]

**Customer Satisfaction on Customer Loyalty**

Customers’ opinions about a product or service could be used to gauge their level of satisfaction (Opata et al., 2021). When customers were satisfied with a company’s products or services, they would return, make purchases, and refer friends through word-of-mouth advertising (Tanford & Jung, 2017). Accordingly, there was a strong and positive correlation between customer satisfaction and customer loyalty (Chandra et al., 2019). In order to better understand the variables influencing patron loyalty at five-star hotels in Bangkok (Wangchan & Worapishet, 2019). The survey was given to 700 visitors staying at upscale hotels in Bangkok, Thailand, and the finding revealed that guest satisfaction had an impact on patron loyalty. In short, researcher can hypothesize that:
Effects of Service Quality, Hotel Technology, and Price Fairness on...
and that reasonable prices aid in keeping satisfied customers, which in turn results in a greater number of loyal customers (Han & Hyun, 2015). After reviewing the previous research studies, the following recommendation is proposed:

\[ H_{10}: \text{Price fairness significantly affects customer loyalty mediated by customer satisfaction} \]

**RESULT AND DISCUSSION**

**Research Result**

**Demographics of Respondents**

In terms of number of staying times, there were 138(27.60%) stayed at this hotel once or twice, 251(50.20%) stayed three or four times, 83(16.60%) stayed five or six times, and 28(5.60%) stayed more than six times. The number of males was 262(52.40%) while Cambodians were 228(87.02%) and foreigners were 34(12.98%), and the number of females was 238(47.60%) while Cambodians were 221 (92.86%) and foreigners were 17(7.14%). Among the 500 hotel guests, 150(30.00%) including Cambodians were 134(89.33%) and foreigners were 16(10.67%) visited Phnom Penh, 150(30.00%) including Cambodians were 138(92.00%) and foreigners were 12(8.00%) visited Siem Reap, 100(20.00%) consisting of Cambodians were 95(95.00%) and foreigners were 5(5.00%) visited Sihanouk, 50(10.00%) comprising of Cambodians were 44(88.00%) and foreigners were 6(12.00%) visited Mondulkiri, and 50(10.00%) namely Cambodians were 38(76.00%) and foreigners were 12(24.00%) visited Ratanakiri.

**Exploratory Factor Analysis (EFA)**

To assess the convergent and discriminant validity of the constructs, an exploratory factor analysis (EFA) was carried out initially, followed by a confirmation factor analysis (CFA) in the second stage. The fit model and the research hypotheses were then tested using the structural equation model (SEM) with AMOS 23. Before the two-step analysis, the researcher analyzes the service quality by using exploratory factor analysis. EFA analysis was firstly performed by principal component method with VARIMAX rotation using SPSS 22. Jr. (2019) stated that each item’s factor loading needs to be more than 0.60, the eigenvalue needs to be more than 1, the cumulative percentage needs to be more than 0.60, and the Kaiser-Meyer-Olkin (KMO) value needs to be more than 0.50.

After performing EFA, there are new four observed variables which its each factor loading is greater than 0.60 and eigenvalue is greater than 1. Based on the results from Table 1, KMO measure of sampling adequacy is equal to 0.95, which is greater than 0.50, and Bartlett’s statistic shows that data set is significant at 0.00, and cumulative percent of explained variance is 69.28% of total variance. As indicated in Table 1, there are only new four key factors of service quality in the
hotel industry in this current study. The next step is to find an average mean of each variable, named SQ1-SQ4 and, thereafter, SQ1, SQ2, SQ3 and SQ4 are used for performing the Measurement model and SEM.

**Assessment of Measurement Model**

After performing confirmatory factor analysis, all of 18 items were kept for after-modification CFA and SEM, except the item SQ3 of service quality was deleted due to its standardized loading was 0.18, which is less than threshold of 0.60 (J. F. Hair et al., 2010).

![Figure 2. Measurement Model](image)

Source: Processed Data by Researchers

Considering the statistical findings, the model is very good fit where 8 criteria have been fulfilled (The ratio of the chi-square value to degree of freedom CMIN/DF = 1.47, Goodness-of-fit index GFI=0.96, Adjusted goodness-of-fit index AGFI= 0.95, Normalized fit index NFI=0.96, Incremental Fit Index IFI= 0.99, Tucker-Lewis index TLI= 0.98, Comparative fit index CFI= 0.99, and root mean square error of approximation RMSEA=0.03) (Table 1). Hair (2010) asserted that verifying construct validity and reliability is crucial prior to undertaking hypothesis testing. For current study reliability is defined by Cronbach’s Alpha and composite reliability, whereas construct validity is determined by convergent and discriminant validity.
Table 1. Goodness of Fit for Measurement Model

<table>
<thead>
<tr>
<th>Index</th>
<th>Acceptable Values</th>
<th>Statistical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMIN/DF</td>
<td>&lt; 3.00 (Jr. et al., 2006)</td>
<td>1.47</td>
</tr>
<tr>
<td>GFI</td>
<td>&gt; 0.90 (J. F. Hair et al., 2010)</td>
<td>0.96</td>
</tr>
<tr>
<td>AGFI</td>
<td>&gt; 0.90 (Jr. et al., 2006)</td>
<td>0.95</td>
</tr>
<tr>
<td>NFI</td>
<td>&gt; 0.90 (J. F. Hair et al., 2010)</td>
<td>0.96</td>
</tr>
<tr>
<td>IFI</td>
<td>&gt; 0.90 (J. F. Hair et al., 2010)</td>
<td>0.99</td>
</tr>
<tr>
<td>TLI</td>
<td>&gt; 0.90 (J. F. Hair et al., 2010)</td>
<td>0.98</td>
</tr>
<tr>
<td>CFI</td>
<td>&gt; 0.90 (J. F. Hair et al., 2010)</td>
<td>0.99</td>
</tr>
<tr>
<td>RMSEA</td>
<td>&lt; 0.05 (Schumacker &amp; Lomax, 2004)</td>
<td>0.03</td>
</tr>
</tbody>
</table>

Model Summary

Source: Processed Data by Researchers

Reliability is the consistency of measurement, while construct validity uses Cronbach’s alpha with a cut-off value above 0.70 to ensure that the survey items are measuring the correct construct. Researchers prefer composite reliability values rather than Cronbach alpha’s values (Peterson & Kim, 2013). Hair et al. (2017), composite reliability scores more than 0.70 are suitable for determining internal consistency. As seen in Table 3, the Cronbach’s alpha for all variables were from 0.79 to 0.89, as well as the composite reliability were from 0.80 to 0.89, which were greater than the cut-off value of 0.70 (Hair et al., 2017). This shows that the instrument is highly reliable and can measure the same concept.

Table 2. The Analysis Result of Confirmatory Factor, Composite Reliability (CR), and Average Variance Extracted (AVE)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Factors Loading</th>
<th>t-value</th>
<th>Cronbach’s Alpha</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Quality (SQ)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SQ1</td>
<td>0.72</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SQ2</td>
<td>0.79</td>
<td>14.99***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SQ4</td>
<td>0.75</td>
<td>14.57***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hotel Technology (TEC)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TEC1</td>
<td>0.77</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TEC2</td>
<td>0.86</td>
<td>13.83***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TEC3</td>
<td>0.62</td>
<td>12.63***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price Fairness (PRI)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRI1</td>
<td>0.74</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRI2</td>
<td>0.73</td>
<td>15.34***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRI3</td>
<td>0.76</td>
<td>15.97***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRI4</td>
<td>0.73</td>
<td>15.26***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer Satisfaction (SAT)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAT1</td>
<td>0.76</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAT2</td>
<td>0.76</td>
<td>16.82***</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Construct Validity could be defined as the degree to which a construct assesses the concept, it is intended to measure after establishing convergent and the discriminant validity (J. F. Hair et al., 2013). Convergent validity is established by the values of Average Variance Extracted (AVE). AVE can be explained as amount of variance that a latent variable can explain. From the table 3 it can clearly be seen that were between 0.55-0.66, which are greater than 0.50. Thus, convergent validity is established as all values are higher than 0.50. On the other hand, table of discriminant validity shows that the squared root of AVE is greater than all the correlations among all constructs (J. F. Hair et al., 2016). This implies that the latent variable’s variance with its block of indicators should be higher than the variance with other latent variables that it shared. Table 3 indicates the squared root of AVE appears in the diagonal cells and its correlation appears below it, then discriminant validity exists.

<table>
<thead>
<tr>
<th>SQ</th>
<th>SQ</th>
<th>TEC</th>
<th>PRI</th>
<th>SAT</th>
<th>LOY</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.57</td>
<td>0.76</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TEC</td>
<td>0.57</td>
<td>0.09</td>
<td>0.76</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRI</td>
<td>0.55</td>
<td>0.63</td>
<td>0.16</td>
<td>0.74</td>
<td></td>
</tr>
<tr>
<td>SAT</td>
<td>0.59</td>
<td>0.63</td>
<td>0.13</td>
<td>0.72</td>
<td>0.77</td>
</tr>
<tr>
<td>LOY</td>
<td>0.66</td>
<td>0.64</td>
<td>0.22</td>
<td>0.68</td>
<td>0.75</td>
</tr>
</tbody>
</table>

Source: Processed Data by Researchers

Structural Equation Modelling (SEM)

As shown above, the measurement model has completely accessed which reveals that the model is very good fit. Next, the SEM has been done to test the hypotheses. Based on figure 3, it can be seen that the fit criteria for the model are categorized as fit due to CMIN/DF (1.52), GFI (0.96), AGFI (0.95), NFI (0.96), IFI (0.99), TLI (0.98), CFI (0.99) and RMSEA (0.03). Therefore, the fit criteria do meet the recommended thresholds, so the model can be said to be very fit.
Research Discussion

This research tested hypotheses to determine the direct and indirect impacts of service quality, hotel technology, and price fairness on customer loyalty through customer satisfaction in the Cambodian hospitality industry.

Direct Effect Testing
Hypothesis 1: Service quality affects customer loyalty significantly. Since standardized $\beta = 0.221$, $t$-value $= 3.828 > 1.96$, and $p$-value $= 0.00 < 0.01$, then hypothesis 1 is accepted.

Hypothesis 2: Hotel technologies have a significant impact on customer loyalty. Since standardized $\beta = 0.122$, $t$-value $= 3.295 > 1.96$, and $p$-value $= 0.00 < 0.01$, therefore, hypothesis 2 is accepted.

Hypothesis 3: Price fairness has significant influence on customer loyalty. Since standardized $\beta = 0.205$, $t$-value $= 3.128 > 1.96$, and $p$-value $= 0.00 < 0.01$, hence, hypothesis 3 is accepted.

Hypothesis 4: Service quality impacts on customer satisfaction significantly. Since standardized $\beta = 0.298$, $t$-value $= 4.861 > 1.96$, and $p$-value $= 0.00 < 0.01$, accordingly, hypothesis 4 is accepted.

Hypothesis 5: Hotel technology has a significant effect on customer satisfaction. Since standardized $\beta = 0.027$, $t$-value $= 0.666 < 1.96$, and $p$-value $= 0.773 > 0.01$, so hypothesis 5 is rejected.

Hypothesis 6: Price fairness affects customer satisfaction significantly. With standardized $\beta = 0.532$, $t$-value $= 8.176 > 1.96$, and $p$-value $= 0.00 < 0.01$, as a result, hypothesis 6 is accepted.

Hypothesis 7: Customer satisfaction has a significant influence on customer loyalty. Since standardized $\beta = 0.452$, $t$-value $= 6.628 > 1.96$, and $p$-value $= 0.000 < 0.01$, then, hypothesis 7 is accepted.

The results of direct effects are presented in Table 4 and Table 6 as follows:
Table 4. The Hypotheses Result of Direct Effects

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Standardized Coefficient (β)</th>
<th>t-value</th>
<th>Test Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Service Quality → Customer Loyalty</td>
<td>0.221</td>
<td>3.828***</td>
<td>Supported</td>
</tr>
<tr>
<td>H2: Hotel Technology → Customer Loyalty</td>
<td>0.122</td>
<td>3.295***</td>
<td>Supported</td>
</tr>
<tr>
<td>H3: Price Fairness → Customer Loyalty</td>
<td>0.205</td>
<td>3.128***</td>
<td>Supported</td>
</tr>
<tr>
<td>H4: Service Quality → Customer Satisfaction</td>
<td>0.298</td>
<td>4.861***</td>
<td>Supported</td>
</tr>
<tr>
<td>H5: Hotel Technology → Customer Satisfaction</td>
<td>0.027</td>
<td>0.666</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H6: Price Fairness → Customer Satisfaction</td>
<td>0.532</td>
<td>8.176***</td>
<td>Supported</td>
</tr>
<tr>
<td>H7: Customer Satisfaction → Customer Loyalty</td>
<td>0.452</td>
<td>6.628***</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Note: ** significance at p-value < 0.05 and *** significance at p-value < 0.01
Source: Processed Data by Researchers

Indirect Effect Testing

Hypothesis 8: The service quality, through customer satisfaction, has a favorable impact on customer loyalty. From $β = 0.135$, there is zero between the lower bound and upper bound (0.068, 0.231) of the confidence interval, and p-value = 0.006 < 0.01, therefore, hypothesis 8 is accepted. In addition, service quality and guest loyalty are mediated by customer satisfaction.

Hypothesis 9: Hotel technology has a significant impact on customer loyalty through customer satisfaction. Since $β = 0.012$, there is zero between the lower and upper bounds (-0.017, 0.058) of the confidence interval, and p-value = 0.404 > 0.01, hypothesis 9 is rejected.

Hypothesis 10: Price fairness, through customer satisfaction, has a significant effect on customer loyalty. Since $β = 0.240$, there is zero between the lower and upper bounds (0.158, 0.373) of the confidence interval, and p-value = 0.004 < 0.01, hypothesis 10 is accepted. In addition, customer satisfaction mediates partially between price fairness and customer loyalty.
The results of indirect effects are presented in Table 5 and Table 6 as follows:

**Table 5. The Hypotheses Result of Indirect Effects**

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Direct Effect</th>
<th>Indirect Effect</th>
<th>Confidence Interval</th>
<th>p-value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
<td>Upper Bound</td>
<td></td>
</tr>
<tr>
<td>$H_8$: Service Quality $\rightarrow$ Customer Satisfaction $\rightarrow$ Customer Loyalty</td>
<td>0.221</td>
<td>0.135</td>
<td>0.068</td>
<td>0.231</td>
<td>0.006 Partial Mediation</td>
</tr>
<tr>
<td>$H_9$: Hotel Technology $\rightarrow$ Customer Satisfaction $\rightarrow$ Customer Loyalty</td>
<td>0.122</td>
<td>0.012</td>
<td>-0.017</td>
<td>0.058</td>
<td>0.404 No Mediation</td>
</tr>
<tr>
<td>$H_{10}$: Price Fairness $\rightarrow$ Customer Satisfaction $\rightarrow$ Customer Loyalty</td>
<td>0.205</td>
<td>0.240</td>
<td>0.158</td>
<td>0.373</td>
<td>0.004 Partial Mediation</td>
</tr>
</tbody>
</table>

Source: Processed Data by Researchers
Table 6. Direct (DE), Indirect (IE), and Total Effects (TE) of Relationships

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Customer Satisfaction</th>
<th></th>
<th></th>
<th></th>
<th>Customer Loyalty</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DE</td>
<td>IE</td>
<td>TE</td>
<td>R^2</td>
<td>DE</td>
<td>IE</td>
<td>TE</td>
<td>R^2</td>
</tr>
<tr>
<td>Service Quality</td>
<td>0.298***</td>
<td>0.298***</td>
<td>0.572</td>
<td></td>
<td>0.221***</td>
<td>0.135***</td>
<td>0.356***</td>
<td>0.629</td>
</tr>
<tr>
<td>Hotel Technology</td>
<td>0.027</td>
<td>0.027</td>
<td></td>
<td></td>
<td>0.122***</td>
<td>0.012</td>
<td>0.134***</td>
<td></td>
</tr>
<tr>
<td>Price Fairness</td>
<td>0.532***</td>
<td>0.532***</td>
<td></td>
<td></td>
<td>0.205***</td>
<td>0.240***</td>
<td>0.445***</td>
<td></td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.452***</td>
<td>0.452***</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: ** significance at p-value < 0.05 and *** significance at p-value < 0.01
Source: Processed Data by Researchers

In summary, the results could serve as a valuable foundation for future scholarly and empirical investigations into the effects of price fairness, hotel technology, and service quality on customer loyalty and the role that customer satisfaction plays in the hotel sector. The study found that customer satisfaction positively impacts on customer loyalty among customers who staying with the price ranging from 20-100 dollars per day in Phnom Penh, Siem Reap, Sihanouk, Mondulkiri, and Ratanakiri provinces in Cambodia, which its finding is consistent with the findings of earlier studies that demonstrate customer pleasure affects client loyalty significantly (Chandra et al., 2019; Kumar & Samtani, 2021; Priyo et al., 2019).

Besides, the study detected that service quality positively affects customer satisfaction. This finding is supported by previous studies (Myo et al., 2019; Pimić et al., 2023; Rosyad et al., 2023). The research also found that service
quality influencing the customer loyalty in hotel industry in Cambodia, which are consistent with existing empirical studies (Fatima et al., 2021; Gontur et al., 2022; Kanyama et al., 2022) which examined the impact of service quality on customer loyalty. It is explained that a positive impact of service quality on boosting customer loyalty which entails that hotels which pay their utmost attention to deliver good quality of services, can easily gain competitive advantage in the market. Along with direct relationship between service quality on customer loyalty, the study further discovered that the customer satisfaction plays as mediator between both of them. This partial mediation is supported by the previous researchers which the studied the interplay of customer satisfaction on the two mentioned variables (Ali et al., 2021; Anabilia et al., 2022; Rosyad et al., 2023; Setyadi et al., 2023). This finding contradicts with some scholars (Flores et al., 2020) who investigated the mediation effect of customer satisfaction between service quality and customer loyalty in hotels in Dili, Timor-Leste.

In addition, the finding shed light on the significant relationship between hotel technologies and customer loyalty, which is in the line with existing research results of Wahab et al (2016), yet it is proven that there is not significant impact of hotel technologies and customer satisfaction, which is compatible finding (Veasna, 2013). Moreover, price fairness buttressed its positive influence on both guest satisfaction and loyalty. When the price is provided fairly to the customers, it raises customer satisfaction (Malik et al., 2020) and builds up customers using the service again in the future (Hidayat et al., 2019; Opata et al., 2021). Furthermore, customer satisfaction partially mediates the relationship between price fairness and loyalty as previous empirical result studied by Susanti (2019) and Ahmed et al (2023).

CONCLUSION

The current study began with a thorough explanation of the variables that were put out, which included price fairness, hotel technology, and service quality. Additionally, it addressed the research questions about all predictor variables that could have an effect on guest satisfaction and loyalty for the Cambodian hotel business. The purposes of the study are to discover both of direct and indirect relationships between the mentioned exogenous variables on customer loyalty, while customer satisfaction plays as mediator. A non-probability survey was conducted to 500 hotel guests who staying in hotels with price of 20-100 dollars per day in Phnom Penh, Sihanouk, Siem Reap, Mondulkiri, and Ratanakiri provinces in Cambodia. Testing stated hypotheses, structural equation model (SEM) was used with SPSS 22 and SPSS Amos 23.

The study firstly revealed that service quality significantly influenced on customer satisfaction and also enhanced customer loyalty. Employee factors as the major contributor such as correct information of service, without any request
serving, well English communication, prompt problem solving, neat appearance and well-groomed, equally customer serving, exceeded expectation serving, willingness to perform their duty with courtesy, skillful and good abilities, fast checking-in and check-out, and adapting service and flexibility. Moreover, the other influencing factors as comfortable reservation system, attractive interior and exterior decoration, up-to-date facilities, modern and comfortable furniture and room. Secondly, the study also discovered that hotel technologies, such as computerized feedback forms, direct hotel email, voicemail, television, internet reservation, fax, international calling capabilities, Wi-fi hotspots, phones, email, wake-up systems, special promotions, and acceptance of credit and debit cards which improve customer loyalty. Thirdly, price fairness such as reasonable price and pricing plans magnifies guest satisfaction, which in turn leads to loyalty for hospitality in Cambodia. Finally, it has been demonstrated that guest satisfaction is important for loyalty. When visitors are pleased with the accommodations, they plan to return in the future.

Implication and Limitation of The Research

The empirical findings of the study contribute to the theoretical framework of customer loyalty in the hotel business. In practice, this research can assist hotel management in developing strategies to retain customers through increased service quality, hotel technologies, and price fairness. This research also gives information to the government about customer loyalty in Cambodian hotels, which may be utilized to design the government’s human capital training program in order to improve hotel performance.

There are certain limits, despite the fact that this work offers contributions for Cambodia from both an empirical theoretical and practical perspectives. First, this research was only conducted in five most attractive tourist destinations. Second, only three exogenous variables were investigated in the research model. Third, the finding of which might not apply to other service providers because this study was done for the hotel industry. Therefore, further researches should be extended the targeted tourist regions including Kep and Kampot, or included more predictor variables namely hotel brand and location, or carried out in conjunction with tourism-related businesses like restaurants and travel companies.
REFERENCES


Effects of Service Quality, Hotel Technology, and Price Fairness on...


Effects of Service Quality, Hotel Technology, and Price Fairness on...


Othman, B. A., Harun, A., De Almeida, N. M., & Sadq, Z. M. (2021). The effects on customer satisfaction and customer loyalty by integrating marketing communication and after sale service into the traditional marketing mix.
Effects of Service Quality, Hotel Technology, and Price Fairness on...


