

Online travel agencies (OTAs) e-service quality, brand image, customer satisfaction and loyalty

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Abstract

This research aims to analyse the influence of e-service quality and brand image on customer satisfaction and customer loyalty of using online travel agencies (OTAs) in Malaysia. This is a cross-sectional study, and the target population for this research includes all Malaysian customers that use OTA for travel bookings. Structural equation modelling (SEM) procedures were conducted to confirm the research framework and test the research hypotheses. This study confirms that e-service quality positively enhances customer satisfaction and loyalty. However, this study found that brand image would no influence loyalty even though brand image significantly influences customer satisfaction. The results of the study provide an explanation in regards to OTA's customer satisfaction and loyalty in Malaysia. The findings of this present would significantly contribute to both theoretical and academic aspect that is relevant to tourism and the online travel agency in general.

Keywords:

Online travel agencies (OTAs); e-service quality; brand image; customer satisfaction; loyalty

1 Introduction

Since the mid-1990s, the internet has a huge impact on businesses (Barwise & Watkins, 2018; Dlamini & Johnston, 2016; Gangeshwer, 2013; Jones, Borgman, & Ulusoy, 2015). Since then, the widespread use of the internet has become one of the major sources of tourism development. The web 2.0 website allows users to interact and collaborate in social media platforms (Facebook, Instagram, and Twitter) dialogue as creators of user-generated content in a virtual community (Jones et al., 2015). With the increasing number of internet users, it also gives a positive impact on many business owners who run their business using internet facilities (Barwise & Watkins, 2018). Consequently, travel agencies are also not left behind in providing online services in buying air tickets and hotel rooms through web and app-based applications (Kourtesopoulou, Theodorou, Kriemadis, & Papaioannou, 2019; Lee, Jeon, & Kim, 2011; Vladimirov, 2012; Xiang, Magnini, & Fesenmaier, 2015; Ye, Fu, & Law, 2016).

An OTA is online travel agency that provides travel information as well as options for products and services booking (D. J. Kim, Kim, & Han, 2007). OTA websites (such as Microsoft Expedia, Travelocity, or Priceline), search engine websites, and company-owned websites (airlines, hotels, etc.) are among the most popular types of websites used. In distributing hotel rooms, OTAs often use one or more of the following business models, either it is the merchant model, the agency model or the opaque model (Law, Chan, & Goh, 2007; Toh, Raven, & DeKay, 2011). Under the merchant model, the OTAs purchase hotel rooms at a discount and mark them up for sale at a profit (Sahli, 2010). In so doing, the OTAs accept the risk of unsold supply and earn profits when a room is booked. Under the agency model, OTAs arrange bookings for inventory held by the hotel at agreed-on prices that has been made available to the OTAs, for which they receive an agreed-on commission on each transaction (Sahli, 2010). With the change in tourism technology, it gives more options to customers and has led to a much competitive environment among OTA providers. Since then, every OTAs tried to ensure a high level of customer satisfaction with online reservation systems (Al-dweeri, Obeidat, Al-dwiry, Alshurideh, & Alhorani, 2017; Kassim & Abdullah, 2010; Kourtesopoulou et al., 2019).

However, the OTAs are generally ambiguous and have numerous obscure elements. The previous study shows various online reservation system attributes that may affect customer satisfaction and customer loyalty. They are e-trust, e-service quality, securities, brand image, price etc. (J. V. Chen, Yen, Pornpriphet, & Widjaja, 2015; Hahn, Sparks, Wilkins, & Jin, 2017; King, Schilhavy, Chowa, & Chin, 2016; Octavia & Tamerlane, 2017; Sigala, 2009; Sobihah, Mohamad, Ali, & Ismail, 2015). Even though the use of online travel reservation systems by e-consumers has been growing steadily, no frameworks or standards for OTAs and companies use customer satisfaction or serviceability as their only framework for website evaluation still creates challenges in the travel industry (Barwise & Watkins, 2018; Komalasari & Budiman, 2018; Tandon, Sharma, & Aggarwal, 2019). Therefore, online travel agencies need to enhance their competitiveness further and to ensure better consumer satisfaction in response to the strong future demand expected for Internet usage.

Many researchers have examined the importance of customer satisfaction in a service area that can lead to customer loyalty (C.-F. Chen & Kao, 2010; Kassim & Abdullah, 2010; Komalasari & Budiman, 2018; Kourtesopoulou et al., 2019; Lam, Tan, & Oh, 2014; Lee et al., 2011; Sabiote, Frías, & Castañeda, 2012). E-service quality has been identified as one of the attributes that can affect customer satisfaction when they use web services (Al-dweeri et al., 2017; Fu Tsang, Lai, & Law, 2010; Hahn et al., 2017; S. H. Kim, Singh, & Yoon, 2012; Oni, Adewoye, & Eweoya, 2016; Sigala, 2009). They claimed that e-service quality is a determinant of customer satisfaction and acknowledge that high e-service quality would influence customer value perception and satisfaction of using third-party web sites. On the other note, other researchers stated that the delivery of high service quality to meet customers' needs has become an important way to succeed as competition in the service industry grows (Dai, Haried, & Salam, 2011; Jiang, Jun, & Yang, 2016; Kirillova & Chan, 2018; Sheng & Liu, 2010). Similarly, previous studies have clearly demonstrated that websites with high-quality e-services tend to attract more browsers and shoppers compared to their low-quality competitors (Octavia & Tamerlane, 2017; Tandon et al., 2019; Toh et al., 2011; Ye et al., 2016). As a result, e-service quality has been recognised as a core definitive for success of an online company (Al-dweeri et al., 2017; Hahn et al., 2017; Kim et al., 2012).

Since then, e-service quality has eventually become an important research topic as quality affects satisfaction levels, behavioural intentions, loyalty, word-of-mouth behaviour, and ultimately, e-commerce profits. Other than e-service quality, brand image is also one of the factors that drive customer satisfaction and customer loyalty in the service industry (Jalilvand & Samiei, 2012; Lien, Wen, Huang, & Wu, 2015; Richard & Zhang, 2012). Companies these days are worried that modern customers have a propensity to be less devoted to a certain brand (Chiang & Jang, 2007; Da Silva & Alwi, 2008; Kwon & Lennon, 2009). They are much focused on receiving vast choices in prices, product quality and features that they become indecisive of what to choose. Therefore, the companies must make sure that their products stand out in the market as this is where the brand image comes in. These brand image helps the companies to create a distinct place for their brands in the minds of the consumers, where brand image is believed to have an immense influence on consumer satisfaction and brand loyalty (Chiang & Jang, 2007; Da Silva & Alwi, 2008).

Brand image and customer satisfaction have been widely confirmed as influential antecedents of customer loyalty (Jamaluddin, Hanafiah, & Zulkifly, 2018; Jamaluddin & Riyadi, 2018; Mohammed & Rashid, 2018; Oktavia, Budi, & Febianti, 2018). Most of the researchers identified brand image as the key factors affecting customer satisfaction using online shopping. They also claimed that brand image might also be one of the factors that will impact on customer satisfaction when it is taken into account as an essential factor in providing an excellent image to an organisation. Others emphasised on the importance of customer satisfaction and customer loyalty (Da Silva & Alwi, 2008; Kwon & Lennon, 2009; Rahi, Yasin, & Alnaser, 2017; Richard & Zhang, 2012). Similarly, customer satisfaction and customer loyalty in the hospitality industry is a critical issue that needs to be addressed in terms of an online travel agency (Komalasari & Budiman,

2018; Lee et al., 2011; Serenko & Stach, 2009). However, there is still a lack of study that focuses on customer satisfaction and customer loyalty in terms of OTAs in Malaysia. Thus, in filling the gap and in line with the issue mentioned above, an empirical study regarding the factors that influence customer satisfaction and customer loyalty of using OTAs in Malaysia need to be conducted.

2 Literature Review

2.1 E-service quality and customer loyalty

There is a growing body of research addressing the definition, measurement, and management of e-service quality. Sigala (2009) defined e-service quality as online travel customers' overall judgment of the excellence and superior quality of e-service offerings in the virtual marketplace. Since then, many researchers explored the impact of e-service quality, customer satisfaction and loyalty on e-marketing (Al-dweeri et al., 2017; Bernardo, Marimon, & del Mar Alonso-Almeida, 2012; Hahn et al., 2017; Kim et al., 2012; Oktavia et al., 2018; Rahi & Abd Ghani, 2018). They indicated that e-service quality influence customer satisfaction and eventually generates customer loyalty. Similarly, Al-dweeri et al. (2017) claimed that positive e-service quality contributes to enhancing customer loyalty. Bernardo et al. (2012) and Oktavia et al. (2018) indicated that e-service quality, price, and brand image have a significant influence on customer loyalty. The researchers also pointed out that OTAs can cater customer loyalty if they are able to provide a positive e-service quality on their web site or app-based web (Al-dweeri et al., 2017; Chen et al., 2015; Komalasari & Budiman, 2018; Rahi et al., 2017; Sobihah et al., 2015). Based on the above arguments, a hypothesis was developed:

H₁: OTAs e-service quality positively enhances customer loyalty.

2.2 Brand image and customer loyalty

Brand image is a crucial aspect of marketing (Da Silva & Alwi, 2008; Kwon & Lennon, 2009; Lahap, Ramli, Said, Radzi, & Zain, 2016; Mohammed & Rashid, 2018). The importance on brand image, regardless of the type of the brand in question either product or service, is considered as a reflection of the fact that the consumers are lead by their own perceptions, hence the perception of consumers could be considered as a reality in marketing. Brand image is often perceived as an important driving force of customer loyalty (Da Silva & Alwi, 2008; Kwon & Lennon, 2009). Organisation realises that by forming a strong brand image, it can lead to customer loyalty as well as increasing the business profit. In addition, socially confident and special brand, as well as product image, has a positive impact on loyalty intention (Rahi et al., 2017; Richard & Zhang, 2012). Indirectly through perceived value and customer loyalty (Jiang et al., 2016; Kassim & Abdullah, 2010). Even in the OTA context, the impact of brand image on customer loyalty remains significant. If the customers favour image of the OTA website, they will develop a certain degree of loyalty (Kourtesopoulou et al., 2019; Octavia & Tamerlane, 2017; Xiang, Du, Ma, & Fan, 2017). Based on the above arguments, a hypothesis was developed:

H₂: OTAs brand image positively enhances customer loyalty.

2.3 E-service quality and customer satisfaction

Various researchers claimed that online customer satisfaction is a consequence a post expenditure evaluative judgement regarding a specific online product or service (Da Silva & Alwi, 2008; Kourtesopoulou et al., 2019; Lam et al., 2014; Oni et al., 2016). Every organisation needs to have the ability to provide customer satisfaction. As per the online business, there are numerous studies conducted to examine the attributes that travellers may find valuable regarding customer satisfaction (Al-dweeri et al., 2017; Sabiote et al., 2012; Sheng & Liu, 2010). Previous e-service quality research has proven the positive relationship between e-service quality and customer satisfaction (Al-dweeri et al., 2017; Hahn et al., 2017; Oktavia et al., 2018; Oni et al., 2016). Increasing e-service quality will make the e-business more attractive, at the same time increasing customer satisfaction and retention. Similarly, other researchers indicate that e-service quality dimension can be used to explain the overall level of customer satisfaction (Bernardo et al., 2012; Fu Tsang et al., 2010). Based on the above arguments, a hypothesis was developed:

H₃: OTAs e-service quality positively enhances customer satisfaction

2.4 Brand image and customer satisfaction

Brand image is crucial as it contribute to the consumer's decision making whether or not the brand is the one for him or her and it will then influence consumers satisfaction (Chiang & Jang, 2007; Da Silva & Alwi, 2008; Lahap et al., 2016). Numerous researchers have discovered that there is a positive relationship between brand image and customer loyalty in terms of online business (Da Silva & Alwi, 2008; Kwon & Lennon, 2009; Richard & Zhang, 2012). They claimed brand image plays an important role in predicting customer satisfaction when purchasing a hotel's room is through the website. In the online business context, a positive brand image appears to stimulate customer loyalty and, customer loyalty has excellent roles in building a strong brand image of a company (Rahi et al., 2017). Based on the above arguments, a hypothesis was developed:

H₄: OTA's brand image positively enhances customer satisfaction.

2.5 Customer satisfaction and customer loyalty

Customer satisfaction is an important driver to ensure customer loyalty and the success of businesses (Komalasari & Budiman, 2018). Numerous authors have proposed positive connection between customer satisfaction and loyalty intention (Al-dweeri et al., 2017; Kassim & Abdullah, 2010; Lee et al., 2011; Sheng & Liu, 2010; Sobihah et al., 2015). Most of them pointed out that customer satisfaction is the most researched antecedent of customer loyalty. In the context of the service industry, customer satisfaction has repeatedly and consistently been identified as a significant factor in the

determination of customer loyalty (Chen et al., 2015; Kwon & Lennon, 2009; Serenko & Stach, 2009). To obtain loyalty and to outweigh other competitors, hotel providers must be able to achieve high levels of customer satisfaction for the service supplied (Lahap et al., 2016). The significant positive relationship between satisfaction and loyalty has been widely studied in terms of online business (Chen et al., 2015; Kassim & Abdullah, 2010; Sobihah et al., 2015). (Abdullah et al., 2016; Lia et al., 2016; Rafiq et al., 2013; Bilgihan, 2016; Sugiargo, 2016). They claimed that customer satisfaction is an indicator of customer loyalty, and it is considered that if a customer is satisfied, they would be loyal to the online shopping website. Based on the above arguments, a hypothesis was developed:

H₅: OTAs customer satisfaction positively enhances customer loyalty

3 Methodology

This is a cross-sectional study as the target population for this research includes all Malaysian customers that use OTA for travel bookings. Convenient sampling was used to choose the sample due to the customers that scattered across the country, which makes it very challenging to communicate with each of them individually. The convenient sampling is a representative data from selected people as a result of the easiness of their voluntary or choosing units based on their availability or easy access using a statistical method (Kumar, Talib, & Ramayah, 2013). The item used in the survey instrument is adapted from past researchers. The survey items were adapted from previous studies (Chiang & Jang, 2007; Hahn et al., 2017; Nusair & Kandampully, 2008; Oni et al., 2016). The questions will be modified to suit the OTAs context in Malaysia and sought respondents' feelings about overall customer satisfaction and customer loyalty dimensions.

Before the large-scale study is conducted, researchers have conducted a pre-testing and pilot study to test the validity and reliability of the questionnaire that will be distributed. The pre-test is carried out for identifying problems in the language, tone, structure and design of a questionnaire. In term of sample size, according to Wolf, Harrington, Clark, and Miller (2013), the method to determine the number of samples for research using SEM for data analysis is the number of items in questionnaire times 10 cases. As this study has four variables with six items for each variable, the maximum sample size should be used is $24 \times 10 = 240$. Therefore, the 240 number of samples will be appropriate for this study. The data was collected using enumerators via face-to-face interviews.

The research data was coded, computed and processed using the Statistical Package for Social Science (SPSS 21.0). Descriptive analysis is used to describe the basic features of the data in a study. Next, the data was analysed using Version 12 of AMOS Analysis of Moment Structures. Several types of procedures for the analysis of data were conducted, namely, measurement model assessment and structural modelling.

4 Finding and Analysis

4.1 Response rate

Before explaining the demographic profiles of the respondents, it is worth to touch on the response rate of this study. Three hundred forty-five (345) questionnaires were distributed, and a total of 240 responses were successfully collected from the process, which exceeded the minimum sample size. Of the 240 total respondents, 65.0 percent (n= 156) of them were female. Respondents who aged 20 to 30 years old made up the largest group of respondents with a whopping 60 percent (n= 144). Majority of them are employed and earns around RM1001 to RM30001 per month. Over half of the respondents are married, which accounted for 51.3 percent (n=123) from the total 240 respondents.

4.2 Descriptive Analysis

This section reports the respondent perception towards the OTA's e-service quality, satisfaction. Table 1 presents the mean score and the standard deviation based on the data collected for this study.

Table 1: Descriptive analysis

| No. | Items | N | Mean | S.D |
|------------------------------|--|-----|------|-------|
| 1 | OTA booking process is easy | 240 | 5.67 | 1.115 |
| 2 | OTA offers high consistency and reliable service | 240 | 5.46 | 1.078 |
| 3 | OTA ensure customer's data properly secure | 240 | 5.16 | 1.239 |
| 4 | OTA provides an avenue that can solve the problem easily | 240 | 5.30 | 1.111 |
| 5 | OTA website has an attractive appearance | 240 | 5.62 | 1.140 |
| 6 | OTA ensures the promotion given available during the stipulated period | 240 | 5.55 | 1.167 |
| Brand Image | | | | |
| 1 | The favourable of OTA brand image increase my frequency of use | 240 | 5.65 | 1.088 |
| 2 | OTA brand image helps me to better fit into my social group | 240 | 5.45 | 1.093 |
| 3 | OTA brand image improves the way I am perceived by others | 240 | 5.38 | 1.143 |
| 4 | OTA brand image can be dependable for use | 240 | 5.54 | .989 |
| 5 | OTA brand image provides a solution to my expectations | 240 | 5.45 | 1.054 |
| 6 | OTA has a good image in the eyes of consumers | 240 | 5.55 | 1.119 |
| 7 | The OTA website design is aesthetically attractive | 240 | 5.65 | 1.096 |
| Customer Satisfaction | | | | |
| 1 | I believe that I made the right decision when I used OTA services | 240 | 5.62 | 1.107 |

| | | | | |
|-------------------------|--|-----|------|-------|
| 2 | I believe that using OTA reliable services is usually a very pleasing experience | 240 | 5.59 | 1.102 |
| 3 | The promising service offered by OTA meets my expectation | 240 | 5.43 | 1.080 |
| 4 | My choice to use OTA brand has been a wise one | 240 | 5.46 | 1.123 |
| 5 | The positive brand image of OTA has provided an excellent perception of their services | 240 | 5.62 | 1.064 |
| 6 | I am satisfied with the overall service of OTA | 240 | 5.50 | 1.079 |
| Customer Loyalty | | | | |
| 1 | I intend to continue using OTA product for a long time | 240 | 5.61 | 1.152 |
| 2 | I would like to recommend OTA to friends and colleagues | 240 | 5.66 | 1.127 |
| 3 | I am willing to say positive things about OTA to other people | 240 | 5.62 | 1.095 |
| 4 | OTA will be my first choice when I am travelling | 240 | 5.60 | 1.257 |
| 5 | I would recommend OTA to those who are planning for travel | 240 | 5.65 | 1.177 |

From Table 1, it can be suggested that most of the answers lean towards the fifth and sixth point on the scale (agreed). Majority of the respondents believed that it is easy to make a booking process using OTA (M= 5.67; S.D= 1.115) expresses their opinion that OTA website has an eye-catching design (M= 5.62; S.D= 1.140). Majority of the respondents agreed that the favourable of OTA brand image increase my frequency of use (M= 5.65; S.D= 1.088) and the OTA website design is aesthetically attractive" (M= 5.65; S.D= 1.098). In term of customer satisfaction dimension, majority of the respondents believed that they made the right decision when they used OTA services (M= 5.62; S.D= 1.107) and they have an excellent perception towards OTA services because of the positive brand image carried by OTA (M= 5.62; S.D= 1.064). Not only that, they also believe that their choice to use OTA brand has been a wise one (M=5.46; S.D= 1.123). Meanwhile, most of the respondents showed a willingness to spread the words regarding OTA services. Majority of them plan to recommend OTA to their friends and colleagues (M=5.66; S.D= 1.127) and will spread a positive word of mouth (M= 5.62; S.D= 1.095), expressing their opinion that they willing to say positive things about OTA to other people. All in all, the above results sum up that majority of the respondents had a pleasing OTA booking process experiences.

4.3 Structural Equation Modelling (SEM)

4.3.1 Measurement Model

This section, in general, is divided into two major evaluations: i) measurement model evaluation and, ii) structural model evaluation. The measurement model evaluation through the confirmatory factor analysis (CFA) output will be first discussed in the following section. In the measurement model evaluation, four (4) measurement models were initially tested based on the primary constructs of this study which are e-service quality, brand image, customer satisfaction and customer loyalty. Figure 1 presents the measurement model evaluation that specifies the relationship between the latent variables and their respective indicators. Table 2 reports the fitness index of the measurement model.

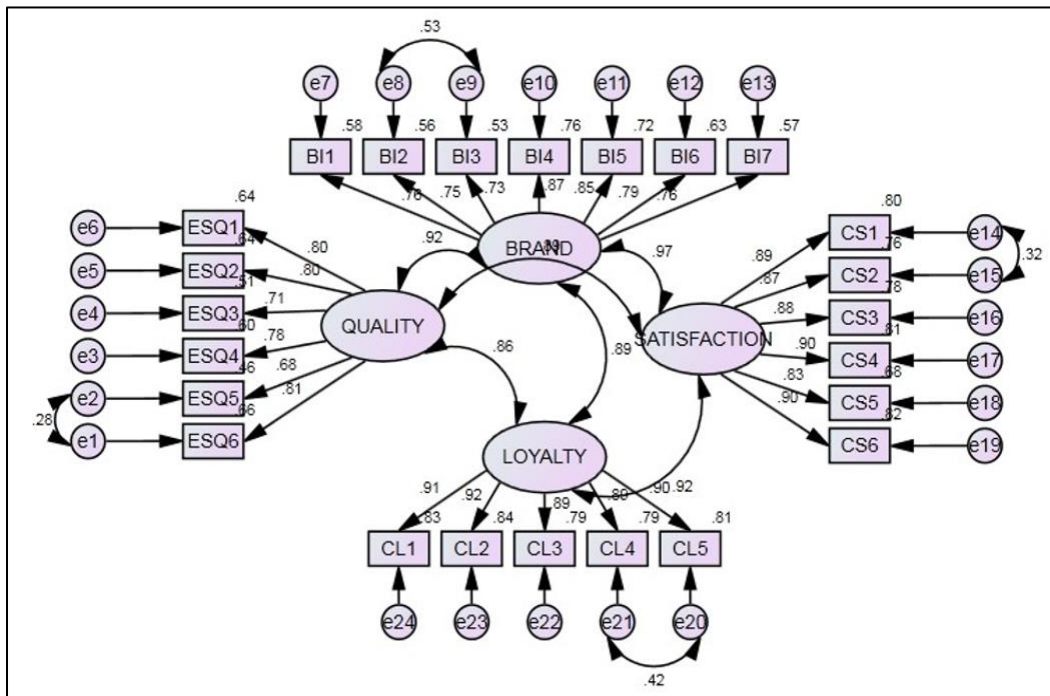


Figure 1: Measurement model

Table 2: Fitness index of modified measurement model

| Measures | Measurement model | Threshold Values |
|-------------|-------------------|-----------------------|
| p-value | .000 | <.05 |
| RMSEA | .070 | Between 0.03 and 0.08 |
| GFI | .848 | 0.900 and above |
| AGFI | .811 | 0.900 and above |
| CFI | .952 | 0.900 and above |
| TLI | .946 | 0.900 and above |
| NFI | .916 | 0.900 and above |
| χ^2/df | 2.182 | Less than 5 |

Figure 1 is the structural research model that comprises of 12 correlation path, four latent constructs, 24 measuring items. Table 2 reports the fitness index of the measurement model. Based on the structural model, the convergent validity and reliability of the construct's scale were assessed. In fulfilling the purpose, the assessment on the unidimensionality was first evaluated through factor loading and the alpha value. The parameter estimates were examined to ensure that all factor loading is high where the loadings should be at least 0.6 and ideally at 0.7 and above indicating that each measured items were accounted for 50 percent or more of the variance of the underlying latent variable (Anderson & Gerbing, 1988; Hair Jr, Babin, & Krey, 2017). The usefulness of the scale was then further evaluated regarding its reliability through composite reliability. The preciseness of this composite reliability is greater than the one measured by Cronbach Alpha, and the composite reliability was tested to indicate good reliability and internal consistency. The Average Variance Extracted (AVE) was also calculated to check on whether the convergent validity really existed. A rule of thumb was used to suggest adequate convergence where AVE should be higher than 0.50. Worth noting here that both composite reliability and AVE were calculated manually based on the output from AMOS since the software itself did not provide the values directly.

Based on the AMOS output, this study confirms that all standardised loadings in the measurement model are higher than 0.7 that indicate the confirmation for unidimensionality and convergent validity (Anderson & Gerbing, 1988; Hair et al., 2017). Additionally, all constructs incorporated in this measurement model produced high reliability in terms of composite values, with all constructs reaching values greater than 0.60, in line with the suggested score of 0.60 and higher. Reliability evaluation or summary indicators of convergent validity based on AVE meanwhile are greater than the suggested value of 0.50 (Hair et al., 2017). The above results of composite reliability and AVE tell the study that the variance captured by the construct is greater than the variance accounted for by measurement error thus further confirmed that adequate convergence is existed for all the models. It is observed that all items retained for the modified measurement model are reliable and valid for testing the structural research model.

4.3.2 Structural Model

This section discusses the structural research model where the structural model evaluation assesses all the proposed hypotheses in the hypothesised model as conducted in this study. To meet the purpose of this evaluation, the hypothesised study model with its structural paths, has been evaluated as illustrated in Figure 2.

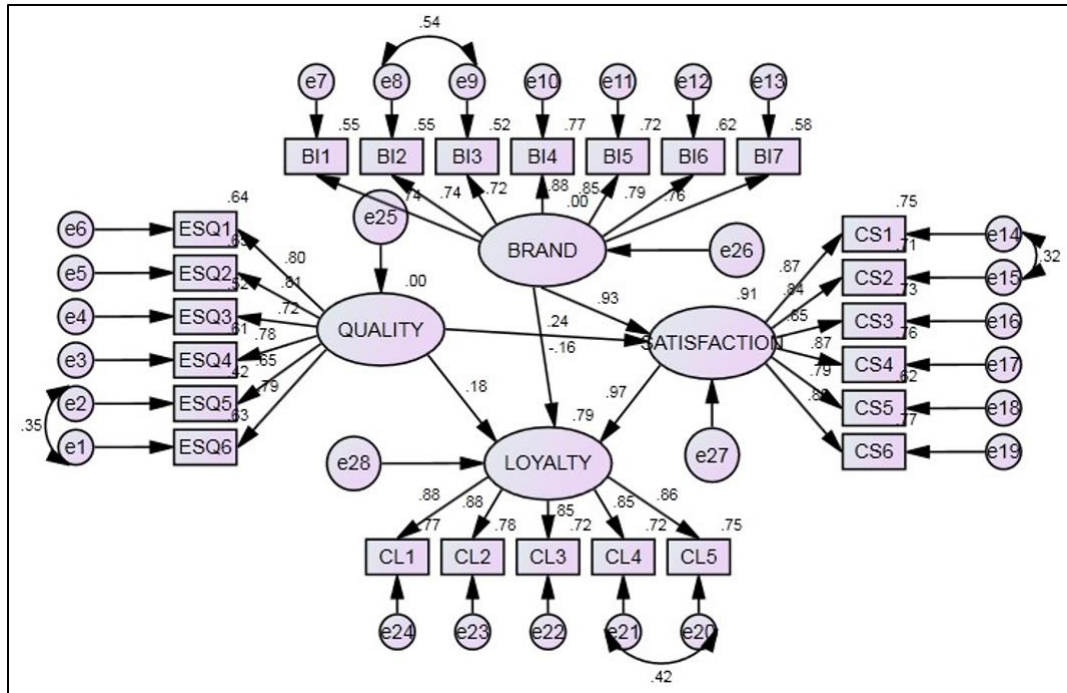


Figure 2: Structural model

The above model would only be supported when it shows a good fit and all the hypothesised paths are significant or supported. Based on Table 3, the overall fit of the model represents the data adequately.

Table 3: Fit indices of structural research model

| Measures | Measurement model | Threshold Values |
|-------------|-------------------|-----------------------|
| p-value | .000 | <.05 |
| RMSEA | .098 | Between 0.03 and 0.08 |
| GFI | .814 | 0.900 and above |
| AGFI | .772 | 0.900 and above |
| CFI | .906 | 0.900 and above |
| TLI | .913 | 0.900 and above |
| NFI | .901 | 0.900 and above |
| χ^2/df | 3.315 | Less than 5 |

All the above values were compared with their thresholds listed in the last column of the table. In general, three values met the thresholds and has an adequate good fit (CFI= .906; TLI= 913; NFI= 901) based on the suggestion by Hair et al. (2010), and two value have acceptable range of model fit (RMSEA= .098; GFI= .814). Therefore, this indicated that the structural model has an adequate good fit. The summary of the hypothesis path (except the mediating effect) for structural research model is further illustrated in the following table (Table 4) based on the value of their standardised coefficients and critical ratios.

Table 4: Hypothesis Path for Structural Research Model

| Hypothesis Path | Beta value | p-value |
|--|------------|---------|
| H ₁ E-service quality → Customer Loyalty | 3.230** | .001 |
| H ₂ Brand Image → Customer Loyalty | 4.150 | .881 |
| H ₃ E-service quality → Customer Satisfaction | 1.071*** | .000 |
| H ₄ Brand Image → Customer Satisfaction | 2.217*** | .000 |
| H ₅ Customer Satisfaction → Customer Loyalty | 2.990*** | .000 |

Note: ***Significant at $p < 0.001$; **Significant at $p < 0.05$; *Significant at $p < 0.10$

This section thoroughly discusses the relationship between OTAs' e-service quality, customer loyalty and customer satisfaction. First, this study confirms that e-service quality positively enhances customer loyalty ($\beta=3.230^{**}$). This result is consistent with the previous works by other scholars as they also claimed that high e-service quality positively improves customer loyalty (Al-dweeri et al., 2017; Dai et al., 2011; Kassim & Abdullah, 2010; Sheng & Liu, 2010; Sobihah et al., 2015). This study also confirms that e-service quality positively enhances customer satisfaction ($\beta=1.071^{***}$). The previous study conducted reveals that e-service quality has created positive impacts on customer satisfaction (Al-dweeri et al., 2017; Dai et al., 2011; Jiang et al., 2016; Kassim & Abdullah, 2010; Sheng & Liu, 2010; Sobihah et al., 2015) and claimed that the high perceived web quality and customer service would lead to higher customer satisfaction and profitability levels.

This study also confirms that brand image has a significant positive relationship with the customer satisfaction ($\beta=2.217^{***}$) and customer satisfaction positively enhances customer loyalty ($\beta=2.990^{***}$), hence complementing other scholars works in the past (Da Silva & Alwi, 2008; Lahap et al., 2016; Mohammed & Rashid, 2018; Rahi, Ghani, & Ngah, 2020). Significantly, OTAs need to establish well their brand image to guarantee the satisfaction of their customer and get a positive perception from the customer. However, this study found that the relationship between brand image and respondent's loyalty behavioural is insignificant ($\beta=4.150$). This study fails to confirm that brand image positively enhances customer loyalty, hence contrasting other scholars works in the past (Kwon & Lennon, 2009; Rahi et al., 2017; Richard & Zhang, 2012). This proves that high brand image would not ensure OTAs users to turn into loyal customers.

5 Conclusion

The results of the study explain the relationship between OTAs e-service quality, customer satisfaction and loyalty. The findings of this present would significantly contribute to both theoretical aspects which are of interest to the industrial and academic point of view that is relevant to tourism and the online travel agency in general. In terms of industrial perspective, this research can provide a more comprehensive picture of the manager on issues that will affect customer satisfaction and customer loyalty. This allows them to be ahead of their competitors. Besides, this research also helps the organisation to maintain and even improve the quality of their online services. The results through this questionnaire can help OTAs to improve their

operational decisions. The acceptable positive view can be used for long term improvements to increase the customer further and maintain the company business goals and benefit. The developed instrument is reliable and can serve as an essential evaluation tool for OTAs. In terms of academic perspective, hypotheses testing and further relating the findings to empirical evidence drawn from existing literature of this study will contribute to the significant additions to the existing body of knowledge. It will give more information about the factors that will affect customer satisfaction and enable other researchers to publish subsequent research. This research will also be helpful as one of the new reading materials and reference material that other researchers can use in their future studies.

Although the results have contributed further in understanding the role of e-service quality and brand image in OTAs, there are a few limitations faced by the researcher in completing this study. The first and the most important one is regarding the unidentified population number of OTAs users in Malaysia. Therefore, the researcher has difficulties in determining the correct sample size for use in this study. The researcher is probably using small sample size and not sufficient for this study. The effects of small sample size, reducing the confidence level of the study and decreasing the sample size also increases the margin of error. Thus, future research needs to use a larger sample size that covers a range of demographic environment.

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