PROPOSED RESEARCH MODEL OF INFLUENCING FACTORS ON THE CHOICE OF HOTELS IN THANH HOA

Mai Anh Vu

Thanh Hoa University of Culture, Sports and Tourism

Email: maianhvu@dvtdt.edu.vn

The article aims at building a research model of factors affecting the choice of hotels. The results of the study are to propose a research model of factors affecting the choice of hotels in Thanh Hoa. This will be the premise for the author to test the research model and determine the influencing factors as well as their extent to the intention of choosing a hotel in Thanh Hoa.

Key words: *Research model; Influencing factors; Hotels in Thanh Hoa; PLS - Sem.*

1. Introduction

Thanh Hoa is known as one of the provinces with great tourism potential. In recent years, in order to promptly respond to the development of the tourism industry, the hotel business in Thanh Hoa has developed rapidly in both quantity and quality. According to statistics, there are 200 hotels from one to five stars listed on the website of Thanh Hoa Department of Culture, Sports and Tourism (2020). However, the business performance of hotels in Thanh Hoa has not been really effecient. One of the important reasons identified is that these hotels still quite passive in attracting and retaining tourists. Therefore, it is essential for hotels in Thanh Hoa to understand the hotel choice of tourists. In addition, according to behavioral theory, the measurement of choice intention has been proven to be the key factor, the most accurate predictor of customer choice decisions (Ajzen, 1991). Therefore, in the current context, it is necessary to conduct a study to explore the factors affecting the intention to choose a hotel of tourists when visiting Thanh Hoa.

2. Research overview

The foreign pioneering authors in this field of research have different views on determining the factors affecting the intention to choose a hotel of tourists.

Atkinson (1988) determined that consumers' hotel choice are based on cleanliness, safety and security, price, the politeness and helpfulness of the staff.

A study by Ananth, De Micco et al (1992) surveyed 510 travelers, asking them to rate the importance of 57 hotel attributes affecting their decision to choose a hotel. As a result, price and quality are the most important attributes, followed by "security" and "convenience of location".

Chu & Choi (2000) pointed out six factors affecting the decision to choose a hotel in Hong Kong for both of these tourists, including: "service quality", "room quality and frontline staff", "values", "facilities", "food and entertainment", and "security".

A study by Choosrichom (2011) identified the factors that influence the decision to choose a hotel/resort in Thailand's Lanta Yai island of international tourists, including: "security and safety", "value", "quality of service staff", "location", "quality of bedrooms and facilities".

The research by Barsky (2013), through surveying 40,000 American, European and Asian tourists, has shown the factors affecting the hotel choice of tourists in the world, including: "location", "price", "past experience", "friends' recommendation", "brand reputation", "promotions", "loyalty programs", and "Internet customer reviews"

Besides, Sohrabi et al. (2012) demonstrated in their study that the factors influencing hotel choice in Tehran include comfort, safety and security, network services, satisfaction, service attitude, infotainment, cleanliness, room amenities, price, and parking.

Domestically, Thanh, Le Thi (2013) also had a study on a sample of 200 survey questionnaires responded by domestic tourists staying at Yasaka hotel. After conducting a regression analysis, there are two factors determined to influence on domestic tourists' decision to choose Yasaka hotel including "Quality of service" with Beta = 0.312 and "Reputation of the hotel" with Beta = 0.271.

Another domestic study by Ly, Phan Thi Minh and Thu, Hoang Thi Anh (2015) also studied the factors affecting the intention to choose a 2-star hotel of domestic tourists to Hue. The proposed research model is based on qualitative research results (study of secondary documents and discussions with experts and tourists). The reliability and validity of the scale were tested by Cronbach's Alpha coefficient and exploratory factor analysis (EFA). The results of multiple regression analysis show that the factors affecting the intention to choose a 2-star hotel of domestic tourists when coming to Hue, ranked in descending order of importance are: (1) price (Beta = 0.242), (2) product (Beta = 0.225), (3) location (Beta = 0.210), (4) security (Beta = 0.187), (5) service staff (Beta = 0.167), (6) social influence (Beta = 0.154), and (7) promotion (Beta = 0.147).

Recently, according to Goral (2020), by the Analytical Hierarchy Process (AHP) method on 12 experts, including 6 men and 6 women. Research results have shown the priority order of factors affecting the choice of hotels of tourists, specifically as follows: (1) Safety and security; (2) Satisfaction; (3) Room amenities; (4) Cleanliness; (5) Expenditure prices; (6) Location; (7) Hotel staff and services; (8) Image and brand; (9) Information; (10) Parking lot; (11) Network service.

Most recently, Giang, Nguyen Hong (2021) proposed 9 hypotheses about intention to use hotel services with 9 factors, measured by 31 observed variables. Research and analysis by SPSS, Amos on data including 368 questionnaires for domestic guests and 190 questionnaires for international guests. It is shown in the final results of the study that there are 6 positive factors and 1 negative factor on the intention to use hotel services: (1) Innovation (Beta = 0.353), Benefits (Beta = 0.403), Convenience (Beta = 0.083), Incentives (Beta = 0.095), Habit (Beta = 0.110) and Social Impact (Beta = 0.113) all have positive figures indicating that these variables positively affect the intention to use hotel services. Specifically, these variables significantly affect the intention to use hotel services in Kien Giang. One negative factor of online negative word of mouth with (Beta = -0.161) shows that this variable has a negative impact on intention to use hotel services.

It can be seen that the previous studies all have certain advantages and limitations. Some studies focus on domestic guests while other studies only study 2-star hotels. The results of a number of studies indicate that the factors affecting the intention to choose a hotel can be expressed in the following equation:

Intention to choose hotel = $\beta_1 X_1 + \beta_2 X_2 + \ldots + \beta_n X_n$

In which: X_n represents the nth influencing factor;

   β_n are the parameters

3. Research method

In this study, the author used qualitative research methods and quantitative research methods to deal with the proposed research objectives.

Qualitative research: This is the research step that is done after the research model is proposed. The authors conducts in-depth interviews with experts to investigate the suitability of the proposed research theory and model, to design scales for each influencing factor, and collect opinions from experts to adjust indicator questions and move on to quantitative research.

Quantitative Research: This is a formal research step carried out by collecting data through survey forms. Based on the study of Höck & Ringle (2006) the expected sample size is proposed. Accordingly, the minimum sample size is 5 times the total number of observed variables. This is the appropriate sample size for the study using Comrey factor analysis (1973):

N = 5*m, noting that m is the number of questions in the survey. Therefore, the authors will survey the number of questionnaires with N>5*m (questionnaires).

Collected data is processed using SPSS, Smart PLS software. Besides, the study uses some analytical techniques as follows:

Cronbach's Alpha Reliability analysis: The reliability coefficient Cronbach's Alpha only indicates whether the measures are related or not. It does not indicate which observable variables should be removed and which observed variables should be kept. Then, the calculation of the correlation coefficient between the total variable will help to exclude those observed variables that do not contribute much to the description of the concept to be measured.

- The value levels of Cronbach's Alpha: From 0.7 to 0.8 are usable; from 0.8 to under 1 is a very good scale; from 0.6 and above can be used in case the research concept is new in the research context (Trong, Hoang & Ngoc, Chu Nguyen Mong, 2008).

Exploratory Factor Analysis - EFA: to determine the validity of the measures of factors affecting the choice of hotels in Thanh Hoa.

- KMO coefficient (Kaiser - Meyer - Olkin): is the index used to consider the suitability of factor analysis ($0.5 \leq KMO \leq 1$). KMO < 0.05 is not acceptable.

- Bartlett test has statistical significance (Sig. < 0.05): This is a statistical quantity used to consider the hypothesis that the variables are not correlated in the population. If this test is statistically significant (Sig. < 0.05), the observed variables are correlated with each other in the population.

- Percentage of variance > 50%: shows the variation percentage of the observed variables.

Partial least squares structural equation analysis: to determine the degree of influence of factors affecting hotel choice in Thanh Hoa.

- Model Loading: According to Henseler et al. (2012), in principle, the closer the load factor is to 1, the more reliable the latent variable is. Model loading ≥ 0.7 is considered acceptable.

- Composite Reliability: This coefficient indicates the reliability of the scale when used with PLS - SEM technique. Composite Reliability coefficient varies from 0 to 1, the closer the value is to 1, the higher the reliability in the PLS - SEM model is. According to Höck & Ringle (2006), in an exploratory model, if this coefficient ≥ 0.6 is acceptable. According to Henseler et al. (2012), in the case of a positive model, the coefficient ≥ 0.7 is appropriate.

- Average Variance Extracted **(AVE):** According to Höck & Ringle (2006), this coefficient measures the convergence and dispersion of the model. A good model should have AVE coefficient ≥ 0.5.

116

- Standardized Root Mean Square Residual (**SRMR**): This index indicates the appropriateness of the research model. According to Hu & Bentler (1998), normally a suitable model will have an SRMR value less than 0.08.

- Cross loading và intended loading: These are two indicators that indicate the loading coefficient of the factor in the model and its correlation with other factors. Accordingly, the Intended Loading of a factor should be greater than 0.7 and the Cross loading should be less than 0.3.

- Variance Inflation Factor (**VIF**): According to Hair et al., 2016, the index indicates the possibility of multicollinearity in the model. VIF index < 10 is acceptable; however, to ensure reliability, VIF should not be greater than 5.

- Coefficient of determination ($\mathbf{R^2}$) is an indicator to measure the suitability of the model with the data (the explainability of the model). According to Chin (1998), the R2 values of 0.67, 0.33 and 0.19 in the PLS models are strong, moderate and weak, respectively. According to Hair et al. (2011), R2 value at 0.75, 0.50 or 0.25 levels are strong, medium and weak level, respectively.

- Effect size $\mathbf{f^2}$: Effect size f^2 represents the level of influence of the structure (factor) when removed from the model. According to Cohen (1998), the f^2 values of 0.02, 0.15, and 0.35 correspond to the small, medium and large effect values of the exogenous variable. If $f^2 < 0.02$, it is considered to have no effect.

- Discriminant validity: heterotrait - monotrait – HTMT is proposed. HTMT is the average of all correlations of the observed variables of each research variable with other research variables. The coefficient of HTMT greater than 0.9 shows that the two research variables lack discriminant value, and the threshold for acceptance must be lower than 0.85 (according to Anh, Nguyen Quang).

- PLS Bootstrapping: Bootstrapping analysis is used to remove standard errors and verify the significance of the PLS model at 5% significance level. At the exploratory level, Bootstrapping times can be as high as 500x. But in the complete analysis phase, the number of Bootstrapping times needs to be increased.

- Inner Model p-value (T - Value) và Outer Model p-value (T - Value): T-Value value is greater than 1.96, p-value must be less than 0.05.

4. Proposed research model

After taking the reference from previous research models on factors affecting hotel choice intention, the author proposes a group of factors affecting hotel choice in Thanh Hoa specifically as follows:

(1) Geographical location: A good location always has high requirements for convenience, traffic and security, equipment requirements; especially, it must be close to the places where tourism resources are located. The location of the hotel is very important, it greatly affects the ability to attract guests and save costs. For tourists, a hotel with a good location, close to entertainment venues, shopping centers and tourist attractions will encourage them to choose. Therefore, it can be seen that the location of the hotel is a factor for tourists to consider to choose a hotel.

Hypothesis H_1: The more favorable the geographical location of the hotel is, the higher possibility of tourists' choice will be.

(2) Price: In general, customers have the feeling that they can take risks when buying any kind of service because service is an intangible product. Customers cannot evaluate and know in advance the results they will receive until they have paid for the service themselves. Customers need something "tangible" to feel secure about the service. Therefore, they are very interested in price because this is a "tangible" factor, which can be evaluated, measured and compared with other services. Similarly, before entering the hotel, visitors cannot assess the quality of the hotel's services; therefore, tourists often judge the quality of the hotel through the price. As a result, it can be seen that price is a factor for tourists to consider in their decision-making of hotel.

Hypothesis H_2: The more suitable the price of the hotel is, the higher possibility of tourists' choice will be.

(3) Hotel Reputation and Brand: A hotel's reputation and brand may or may not encourage customers to purchase its own products or services. To protect their rights, tourists want to buy products and services from famous hotels. Reputation and brand also affect the confidence of tourists when making purchasing decisions and it also increases customer satisfaction with the experience of using that product or service. Therefore, the reputation and brand of the hotel affect the decision to choose a hotel of tourists.

Hypothesis H_3: The greater the reputation and brand of the hotel is, the higher possibility of tourists' choice will be.

(4) Hotel service quality: Service quality is what customers perceive. Service quality is determined based on the perception of customers in relation to their individual needs. In the service business, service quality is a very important factor affecting customer satisfaction. Service quality in the hotel business is the level of service that the hotel chooses to satisfy its target customers. The service quality evaluation criteria in the hotel business include: quality of service staff, quality of equipment and facilities, variety of products and services. Good service quality will satisfy the increasing demands of customers. They will feel secure when

using good service and value for money they spend. If tourists feel that the service quality of the hotel is good, they will trust the hotel to come back next time and can convince more new guests. Therefore, it can be seen that service quality is a factor for tourists to consider when making a decision to choose a hotel.

Hypothesis H_4: The better the quality of hotel services is, the higher possibility of tourists' choice will be.

(5) Hotel's safety and security: Safety is the state of being free from danger or in the absence of the possibility of danger. Security is the implementation of measures to prevent espionage, sabotage, crime, attack or escape. When there is a security problem, it leads to increased danger, and reduced security. Mar-shall (1993), Chu & Choi (2000) all affirmed that safety is one of the most important criteria when choosing a hotel.

Hypothesis H_5: The more secure the hotel is, the higher possibility of tourists' choice will be.

(6) Tourist's reviews on the Internet: With its useful features, the Internet has become the main source of information for a large number of tourists to use in the hotel selection decision-making process. The use of Internet applications has significantly changed the consumption behavior of customers. The Internet allows customers to share their opinions about their experiences about products and services with other consumers. It is clear that there is a relationship between the elements of online reviews and consumer decisions. It is easy to see that the internet reviews of a product/service, positive or negative, is directly proportional to the customer's choice.

Hypothesis H_6: The more positive the reviews of tourists on the Internet, the higher possibility of tourists' choice will be.

5. Discussion

After researching the overview of domestic and foreign researches on factors affecting hotel choice. The results of the study have proposed a research model consisting of 6 factors affecting the choice of hotels in Thanh Hoa: 1) Location; (2) Price; (3) Hotel's reputation and brand; (4) Quality of hotel services; (5) Hotel's security; (6) Tourist's reviews on the Internet.
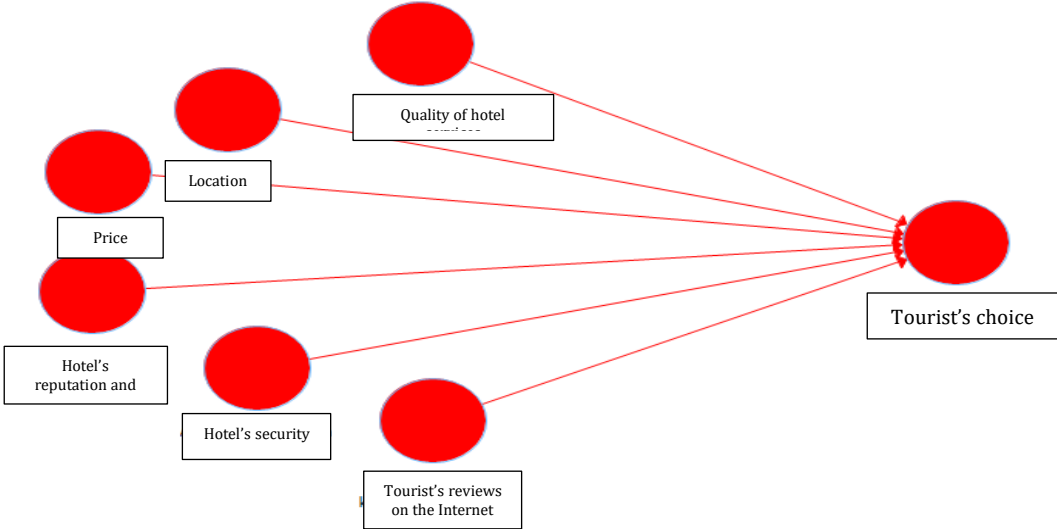
Two research methods are identified including: qualitative research and quantitative research. In quantitative research, in-depth interviews with experts are conducted in order to survey the suitability of the proposed research model and theory, and design the scales. In quantitative research, data is collected and analytical techniques are applied; specifically, Cronbach's Alpha reliability analysis; Exploratory Factor Analysis (EFA); Partial least squares structural equation modeling technique (PLS - Sem).

6. Conclusion

Thanh Hoa is a locality with rich and diverse natural resources, strongly developed tourism activities, especially sea tourism. However, the length of stay of tourists in Thanh Hoa is relatively short. According to Vu, Mai Anh (2021), the length of stay in the period 2015 - 2019 is only about 1.78 - 185 days/guest. In addition, there are other limitations such as low hotel performance, seasonality, and unstable frequency of room use, etc. Therefore, it is necessary to conduct the study identifying groups of influencing factors on hotel choice in Thanh Hoa. The above results of the study bring both theoretical and practical value, which is a premise for the next research step.

In the next research direction, the author will conduct qualitative and quantitative research steps from which to accurately determine the group of influencing factors and the degree of influence of these factors on the choice of hotels in Thanh Hoa. Accordingly, some managerial implications and recommendations for hotels in Thanh Hoa are pointed out.

References

[1]. Ajzen, I. (1991), 'The theory of planned behavior', Organizational Behavior and Human Decision Process, Vol.50, pp. 179 - 211.

[2]. Ananth, M., DeMicco, F.J., Moreo, P.J., & Howey, R. M. (1992), 'Marketplace lodging needs of mature travellers', The Cornell Hotel and Restaurant Administration Quarterly, 33(4), pp. 12 - 24.

[3]. Choosrichom, Jammaree (2011), 'Factors influencing the Selection of Hotels/Resorts in Lanta Yai Island, Krabi, Thailand by international Travelers', Veridian E-Journal, SU Vol.4 No.2, September - December, 125 - 148.

[4]. Sohrabi, B., Vanani, I. R., Tahmasebipur, K., & Fazli, S. (2012). An exploratory analysis of hotel selection factors: A comprehensive survey of Tehran hotels. International Journal of Hospitality Management, 31(1), 96 - 106. Available at: https://doi.org/10.1016/j.ijhm.2011.06.002.

[5]. Atkinson, A. (1988). Answering the eternal question: what does the customer want. Cornell Hotel and Restaurant Administration Quarterly, 29(2), 12 - 14. Available at: https://doi.org/10.1177/001088048802900209.

[6]. Cohen, J. (1988). *Statistical Power Analysis for the Behavioural Sciences* (2nd ed.). Hillsdale, New Jersey: Lawrence Erlbaum Associates.

[7]. Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS - SEM)*. California: Sage Publications.

[8]. Hair, J. F., Hult, G., Tomas, M., Ringle, C. M., & Sarstedt, M. (2013). *A primer on partial least squares structural equation modeling (PLS - SEM)*: SAGE Publications, Incorporated.

[9]. Hart, C.W.L., Heskett, J.L. & Sasser, W.E. 1990, *The Profitable Art of Service Recovery*, Harvard Business Review, vol. 68, no. 4, pp. 148 - 156.

[10]. Hu, L. and Bentler, P. (1998) *Fit Indices in Covariance Structure modeling: Sensitivity to underparameterized model misspecification*. Psychological Methods, 3, 424 -453. http://dx.doi.org/10.1037/1082 - 989X.3.4.424.

[11]. Anh, Nguyen Quang translated (2018). *Advanced problems in partial least squares structural equation modeling* - Josephe F.Hair, JR. Marko Sarstedt Christian M. Ringle, Siegfried P. Gudergan. Finance Publishing House.

[12]. Oliver (1993), R. *cognitive, affective, and attribute bases of the satisfaction response*. Journal of consumer research, 20(3), 418 - 430.

[13]. Parasuraman, A., Zeithaml, V. and Berry, L. (1985), *A conceptual model of service quality and its implications for future research,* Journal of Marketing, Vol. 49, Fall, pp. 41 - 50.

[14]. Parasuraman, A., Zeithaml, V. and Berry, L. (1988), *SERVQUAL: A multiple -item scale for measuring consumer perceptions of service quality*, Journal of Retailing, Vol. 64, Spring, pp. 12 - 40.

[15]. Giao, Ha Nam Khanh (2018), Monograph of *Service Quality Measurement - Customer's perspective*, Financial Publishing House, Hanoi. DOI: 10.31219/osf.io/cqh68.

[16]. Marshall, A. (1993), 'Safety top guest's priority list; sell security as no.1 amenity', Hotel and Motel Management, 208(11), June, 21.

[17]. Giang, Nguyen Hong (2021), *Factors affecting customers' intention to use hotel services: A case study in Kien Giang*, Industry and Trade Journal - Results of scientific research and technology application, volumne 19, 8/2021 .

[18]. Vu, Mai Anh (2021), *Sustainable tourism development in Thanh Hoa,* PhD's thesis, Hanoi University of Business and Technology.

[19]. Trong, Hoang & Ngoc, Chu Nguyen Mong (2008), *Analysis of research data with SPSS*, volumes 1, 2, Ho Chi Minh City University of Economics, Hong Duc Publishing House.

[20]. Henseler, J., Ringle, C., & Sarstedt, M. (2012). *Using Partial Least Squares Path Modeling in International Advertising Research: Basic Concepts and Recent Issues* (pp. 252 - 276).