The GAP Model of e-Government Service in Thailand e-Tourism

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\textbf{ABSTRACT}

The objectives of this research were to develop service quality factors for Thailand’s e-Tourism provided by the government. This was done using Thai tourists as the samples who have used Thailand’s e-Tourism service to find out service quality using a total of 385 samples and determining the confidence level at 95 percent. The tool used for data collection was a service quality questionnaire for Thailand’s e-Tourism provided by the government. The confidence level for the whole research effort was 0.856 and the confidence level for each question was in the range 0.824-0.926. The statistics used in the data analysis included confidence test, frequency distribution, percentage, mean, standard deviation, coefficient of dispersion, skewness, kurtosis, exploratory factor analysis (EFA), and confirmatory factor analysis (CFA).

The results of the study showed that the exploratory factor analysis of the expectations and actual service received gave five factors (KMO = 0.789). Those indicators were not different from the theoretical models obtained from the confirmatory factor analysis. The five factors included 1) Tangibles, 2) Reliability, 3) Responsiveness, 4) Assurance, and 5) Empathy. The factors’ indicators are not different from the theoretical models. The researchers have modified the component of the second confirmatory factor analysis (S-CFA) model to check the construct validity of the scale after modifying the component and found Chi Square = 220.734, df = 165, P = 0.002, Chi Square/df = 1.338, GFI = 0.913, AGFI = 0.878, CFI = 0.980, (RMR) = 0.018, and RMSEA = 0.040. This indicates that expectation for service, and actual service received, which affect user satisfaction, can create users’ loyalty. This results in the analytical model for the service quality component for Thailand’s e-Tourism provided by the government matching the empirical data.

\textbf{Keywords:} Service Quality, Gap Model, e-Tourism

1. \textbf{INTRODUCTION}

Tourism is a service industry that plays a vital role in the economy. From the report on the economic conditions in 2019, it was found that the Thai economy’s strengths and advantages mainly come from revenues from the tourism industry, and the industry has driven many related businesses such as hotels, accommodation, restaurants, souvenir shops, transportation and logistics, etc. Thailand’s tourism industry generates the highest revenue in ASEAN. In 2019, the sector’s income to GDP grew by 6.0 percent [1].

Today, many countries have focused on the development of e-Tourism, which leads to a service quality improvement that is unique compared to the global market. This has resulted in economic and social development which is one of the main goals, policies, and strategies of various countries. Developing countries whose main revenue stream is from tourism seek benefits from the application of information technology and e-Commerce in operations and services in order to increase revenue and reduce costs, especially by using the Internet. The Internet has the ability to support searching and provide information, create a network, and connect people with the global society. This ability is important since the tourism industry is highly connected with information and services that can be delivered to tourists in digital form [2]. Using technology and information networks to create value in the tourism business is essential in the digital age. This will enhance business potential and competitiveness on the global stage as well as contribute to the country’s sustainable development [3].

Thus, the objectives of this paper are threefold. First, to study the model of Thailand’s e-Tourism service provided by the government. Second, to survey and analyse the quality of Thailand’s e-Tourism service provided by the government. Finally, to develop service quality factors for Thailand’s e-Tourism provided by using exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). By doing so, this research will open up new directions for future research in evaluating e-government services.

2. \textbf{LITERATURE REVIEW}

A study of the use of information technology for tourism services for cultural heritage in Italy [4] found that the provision of digital services that comes from a variety of sources is unable to meet all the needs
of tourists, either in real time or on demand. Therefore, the research has studied the use of the Smart Context-Aware Browsing for Cultural Environments (SCRABS) prototype system to improve digital services.

The study of Thailand’s conditions and problems in e-Government development [5] revealed that important and urgent issues to be considered and improved consisted of 1) Policy and direction for Thailand’s development of e-Government; 2) Leadership; 3) Infrastructure in information and communication technology; 4) Financial support from the government; 5) Information integration and information exchange between government agencies; 6) Laws and regulations; 7) Government personnel; and 8) Citizens’ use of e-Government services.

By studying research reports, it has been found that there is still a clear issue in the use of e-Services by the government sector and the quality of e-Services should be immediately improved, especially by studying and developing e-Tourism related cultural tourism. That will lead to the development of the tourism industry and still needs to be improved continuously to achieve efficiency and quality and meet the needs of citizens as well as business sectors. Today, the development of the quality of Thailand’s e-Tourism service provided by the government must consider various factors. However, currently, the key factors affecting the quality of Thailand’s e-Tourism service provided by the government remain unclear, and there have not been any research findings in this regard using exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) methods. Therefore, the researchers are interested in developing factors for the quality of Thailand’s e-Tourism service provided by the government initially using exploratory factor analysis (EFA) method and then analyzing to identify the factors of latent variables using confirmatory factor analysis (CFA). This was done by choosing the alternative relationship model that is most consistent and compatible with empirical data used in the data analysis. Then, we conducted a data analysis using the alternative relationship model and checked the construct validity using the CFA method in order to let it be used as a conceptual framework for the development of the government’s e-Tourism or to be used in further studies for future relevant research.

2.1 Concepts and Theories of Service Quality

Martin [6] discussed service quality, which is a very important factor due to the following four reasons:

1. The advancement of the service industry - Today, business owners have paid more attention to services. Therefore, business operations have to incorporate services into their work which significantly affects business development or service organisations.

2. Increased business competition - Service is one of the strategies that are used to compete with business rivals. If any company or business can provide excellent quality services, it will gain a competitive advantage for the company or organisation.

3. Increasing consumer demand - This is due to the fact that at this time, consumers around the world have more knowledge, can quickly contact and communicate with each other, and have become more demanding. Therefore, reasonable pricing is no longer enough, since consumers already think that it is something that has to be offered. But what consumers desire is service quality, and this is what makes consumers repurchase or become loyal to the organisation.

4. Service quality reflects economic conditions. This is because good service quality will lead to repeated purchases which is what every company owner wants. Good service quality is something that can retain existing customers as well as attract new ones.

Parasuraman, Zeithaml and Berry [7] conducted research to assess service quality by allowing users or customers to answer questionnaires and then using the scores to calculate service quality as follows:

Service Quality (SQ) = Perception Score (PS) - Expectation Score (ES)

If the perception score is greater than the expectation score (PS > ES), this indicates that the service quality is excellent. If the perception score is less than the expectation score (PS < ES), the service quality is very poor. If the perception score is equal to the expectation score (PS == ES), the service quality is sufficient. Parasuraman, Zeithaml & Berry [7] conducted a study on the measurement of service quality of various organisations such as educational institutions, banks, restaurants, garages, hospitals, hotels, and tourism industries based on the gaps between the expectations and perceptions of customers who receive the services. They called this form of measurement the “Gap Model” which consists of five gaps including:

Gap 1 is a gap that occurs between customer opinion about the expected service and the concept of the service provider that is related to the customer’s expectation. This gap affects service quality evaluations and reasons that impact the gap.

Gap 2 is the gap between the opinion of the service provider in terms of customer expectations and quality requirements. This gap affects service quality in the customer’s perspective.

Gap 3 is the gap between the quality requirements and actual services provided to customers which will affect service quality from the customer’s standpoint.

Gap 4 is the gap that occurs from the actual service provided to customers and communications to customers about the service. External communication will affect the expectations of customers for the ser-
services received. This gap affects service quality from the customer’s standpoint.

Gap 5 is the difference between the services that customers expected and actual service received. The service quality gap will be eliminated when the four gaps are reduced, driven by internal management. Customer decisions, both positive and negative, will indicate high or low service quality. In measuring service quality and when applying this model, the focus is on the services that are customer expected and perceived. The quality of service that customers receive depends on the size and direction of Gap 5. In other words, it depends on the nature of the gap which has a relationship as shown in the service quality model in Fig. 1, which leads to the indication of service quality.

In summary, today a business must emphasize and strive for service diversity. The service must also have quality. If service can ever be included in any area of work, it must be included. Not only the service industry, but also other industries that offer products must incorporate services into their business since consumers no longer care only about the products. On top of this, businesses are facing fierce competition. Therefore, they must do whatever they can to create a shield to fight and survive in the future by using all five factors to create and develop services in order to increase their business advantage and strengthen their business or organization. However, each type of business gives unequal weight to the five factors. As a result, businesses should carefully and thoroughly analyse service quality in order to deliver beyond customer’s expectations and increase the likelihood that consumers will repeat their purchases or choose the service again in the future.

2.2 Concepts and theories of quality perception

Mattsson [8] divided the factors that influence service quality perception into six aspects consisting of reliability, timeliness, accessibility, humane (pleasure to use), appropriateness of choices, and cost. Parasuraman [9] suggested that the quality of service based on perceived service quality of consumers is the evaluation of or opinion about the overall service excellence as a result of consumers’ comparison between their expectations of the service quality and the service they actually receive.

Gronroos [10] discussed the Perceived Quality model. He was the first researcher to use the Customer Satisfaction / Dissatisfaction or CS / D Model to find out whether customers are satisfied with the service quality by comparing expectations to the actual service received. Moreover, he created a quality model consisting of two parts as follows:

1. Function Quality means the service method. Measuring this type of quality is difficult since the duty quality can change and vary. This quality is related to the psychological response which is perceived by the mind.

2. Technical quality means things that can clearly be measured about the service that customers receive. The model has been adjusted and divided into three parts including corporate image, function quality, and technical quality. The image is the result that the customers perceive, which comes from the overall quality combined with the technical quality. The Total Perceived Quality model shows that the perception of overall quality equals the difference between quality from experience and expected quality. If what the customer expects is not the actual service received, perception of quality will be low, even if there are other acceptable components such as positive reference, customer needs, overview, and marketing com-

![Fig.1: GAP Model of Service Quality.](image1)

![Fig.2: GAP Model of Service Quality (SERVQUAL Dimensions).](image2)
munication. Since most of the service work is a combination of main services and convenience or support provision, the quality that customers can perceive is different from the actual quality received as it is more difficult to perceive. In other words, it is an overall assessment. For example, in some cases, the perception may be the attitude and judgment of the customers themselves.

Fig. 3: Total Perceived Service Quality Model.

Quality perception is important to the service industry. Usually, customers' perception process starts from comparing their expectations with the actual service received. If the actual service received is more than what the customer expected, customer's perceived quality will be high. This is what all businesses desire. However, if the service is less than what the customers expected, customers' perceived quality will be low. This will definitely produce a negative impact on business performance and operating results. Therefore, service providers, business owners, and executives should focus on bringing in technical quality, duty quality, and image quality to ensure that customers' perceived quality is higher than customers' expectations and to create a good impression for the service received.

3. RESEARCH METHODOLOGY

The study of service quality is an important strategy which will be used as a tool to create satisfaction for users. Therefore, many researchers have applied the SERVQUAL Model as a service quality measurement tool for organisations. The model should be properly applied to meet specific needs [11]. Many researchers have considered this model to be useful for evaluating the quality of services provided by both public and private agencies. Therefore, the researchers have used the SERVQUAL model [7, 11] as a conceptual framework for research and establishing the research hypothesis and have studied the conceptual theory as well as research findings related to the perception of e-Tourism service quality with the perception factors which consist of quality factors from the SERVQUAL model including 1) Reliability, 2) Assurance, 3) Tangibles, 4) Empathy, and 5) Responsiveness.

3.1 Quality factor hypothesis model

The quality factor hypothesis model for e-Tourism service provided by the public sector used to examine the consistency between the model and the empirical data is shown in Fig. 3.

Fig. 4: Proposed conceptual model.

3.2 Research hypothesis

1. The variables studied can be categorised using exploratory factor analysis of the quality of Thailand’s e-Tourism service provided by the government.
2. The second order confirmatory factor model of the quality of Thailand’s e-Tourism service provided by the government which has been developed is accurate.

3.3 Research method

The population used in the research study is Thai tourists. The sample used in the research study is Thai tourists who have used e-Tourism services in Thailand provided by the government in order to find out the service quality by using purposive sampling method with a total of 385 samples. This number was obtained by using the Yamane Finished Table and setting the confidence level at 95 percent.

3.4 Research tools

The research tool used to collect data for this research was a questionnaire which consisted of three parts with details and steps as follows:

Questions in Part 1 concern the general information of the studied samples in four aspects including gender, age, highest education level, and occupation. The questionnaire includes multiple choice and short answer questions. Questions in Part 2 are for evaluating the quality of service which use a five-point rating scale. Questions in Section 3 allow suggestions and additional comments to be provided in open-ended questions.

After finding the quality of content validity of the questionnaire, the measurement of the questionnaire’s content validity shows an IOC value between 0.60 - 1.00 and a try-out was conducted on 30 Thai tourists who were not in the sample set and the data was analysed to identify the reliability of the questionnaire using the Cronbach’s alpha coefficient. The analysis showed that the reliability of the questionnaire is equal to 0.856 and the factors affecting the reliability are shown in Table 1 below:
Table 1: Questionnaire reliability from the try-out.

<table>
<thead>
<tr>
<th>Service Quality Factors - SERVQUAL Model</th>
<th>Number of Questions</th>
<th>Reliability Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Reliability</td>
<td>4</td>
<td>0.839</td>
</tr>
<tr>
<td>2) Assurance</td>
<td>4</td>
<td>0.848</td>
</tr>
<tr>
<td>3) Tangibles</td>
<td>6</td>
<td>0.824</td>
</tr>
<tr>
<td>4) Empathy</td>
<td>4</td>
<td>0.859</td>
</tr>
<tr>
<td>5) Responsiveness</td>
<td>4</td>
<td>0.859</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>e-Tourism service use</th>
<th>Number of Questions</th>
<th>Reliability Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) e-Tourism satisfaction</td>
<td>5</td>
<td>0.929</td>
</tr>
<tr>
<td>2) Loyalty of tourists</td>
<td>5</td>
<td>0.915</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td>0.867</td>
</tr>
</tbody>
</table>

3.5 Data analysis

Data analysis of the data collected from the service quality factor questionnaire for e-Tourism from SERVQUAL questions, which allowed the respondents to evaluate service quality based on differences between expectations and perceptions (GAP Model), was performed by setting evaluation criteria for service quality [11] by calculating the SERVQUAL tool score as follows:

Perception score - positive (+) expectation score means high service quality, customers are very satisfied with the quality of service.

Perception score - zero (0) expectation score means moderate service quality, customers are satisfied with the quality of service.

Perception score - negative (-) expectation score means low service quality, customers are unsatisfied with the quality of service.

Two types of Statistics were used in the analysis. They are:

1) Descriptive statistics - In analysing descriptive data, percentage is used to describe demographics by using frequency and presenting results in percentages. The researchers have determined the statistics used to analyse information from the questionnaire to explain data in the questionnaire. In Part 1, they were generated from personal information of the respondents, and in Part 2, they were generated from the quality of service. The statistics are used to calculate the mean and standard deviation. In Part 3, they were generated from the opinions of the users.

2) Inferential statistics - Service quality evaluation will analyse the level of expectations and perceptions by analysing the mean and standard deviations and then calculate the score using SERVQUAL tools. The data analysis to test the hypotheses used statistics in the Structural Equation Modeling (SEM) analysis to test the difference between the level of expectations for service quality received and the perception of service quality actually received.

4. EXPERIMENTAL RESULTS

For Exploratory Factor Analysis (EFA) for the quality of Thailand’s e-Tourism service provided by the government, the researchers used data from the questionnaires only in the variables that need to be grouped consisting of 1) perception variables and tourists’ service expectations of e-Tourism service, and 2) variables of the quality of Thailand’s e-Tourism service provided by the government. In terms of satisfaction and loyalty, there is a theory that can clearly confirm the grouping of certain variables.

A sample of 385 people was used to calculate the basic statistics of perception variables and tourists’ service expectation of e-Tourism service with five factors: 1) Reliability, 2) Assurance, (3) Tangible, 4) Empathy, and 5) Responsiveness. The results consist of mean (x̄) and standard deviation (SD) as shown in Table 2.

Table 2: Basic statistics of perception variables and tourists’ service expectation for e-Tourism service divided into five factors.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Indicator</th>
<th>x̄</th>
<th>S.D</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1 Reliability</td>
<td>4</td>
<td>4.29</td>
<td>0.607</td>
<td>High</td>
</tr>
<tr>
<td>Factor 2 Assurance</td>
<td>4</td>
<td>4.24</td>
<td>0.621</td>
<td>High</td>
</tr>
<tr>
<td>Factor 3 Tangible</td>
<td>6</td>
<td>3.98</td>
<td>0.704</td>
<td>High</td>
</tr>
<tr>
<td>Factor 4 Empathy</td>
<td>4</td>
<td>4.21</td>
<td>0.573</td>
<td>High</td>
</tr>
<tr>
<td>Factor 5 Responsiveness</td>
<td>4</td>
<td>4.14</td>
<td>0.351</td>
<td>High</td>
</tr>
</tbody>
</table>

By extracting the process components using the Principle Component Analysis method and adjusting, and then rotating the core components using the Vari-max method, and finally checking the sample data to determine the appropriateness of the initial data in the component analysis (Kaiser-Meyer-Olkin; KMO), we obtained the Bartlett’s Test value as shown in Table 3. It can be seen that KMO is equal to 0.789, which is higher than 0.5 and close to 1. The Bartlett’s Test value has an estimated Chi-square distribution of 2923.821 with a significance value of 0.000 which is less than 0.05, indicating that all five variables have a sufficient relationship to be analysed in the factor analysis.

Table 3: Number of parameters of each model and computation time to train each model per epoch.

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy | 0.789 |
| Adequacy. | Bartlett’s Test of Sphericity |
| Approx. Chi-Square | 2923.821 |
| Df | 703 |
| Sig | 0.000 |

The results of the analysis consider the weight of the factors, the number of variables identified, and the variance of each factor according to the criteria of the perceived variables and the tourists’ service.
expectation of e-Tourism service which are 1) Reliability, 2) Assurance, 3) Tangible, 4) Empathy, and 5) Responsiveness. In summary, the results of the exploratory factor analysis (EFA) of the perceived variables and the tourists’ service expectation of Thailand’s e-Tourism service provided by the government gave five factors and we determined the names of each factor by considering the characteristics that those variables identify according to the concepts and theories mentioned earlier.

The results of the exploratory factor analysis (EFA) of the quality of Thailand’s e-Tourism service provided by the government gave four factors and determined the names of each factor by considering the characteristics that those variables identify according to the concepts and theories mentioned earlier.

The results of the Confirmatory Factor Analysis (CFA) of the tourists’ perception of Thailand’s e-Tourism service provided by the government had positive weight values from 0.70 to 0.98 as shown in Fig. 5.

The Chi Square = 44.232, df = 35, \( P = 0.136 \), and Chi Square / df = 1.264, which is less than 2.00. This empirical data is considered in line with the structural model of the researchers. The Goodness-of-Fit Index (GFI) = 0.970, and Adjusted Goodness-of-Fit Index (AGFI) = 0.922. The GFI and AGFI values are greater than .90 and close to 1.00. The Comparative Fit Index (CFI) = 1.000, which is greater than 0.95. The root mean square residual (RMR) = 0.034, which is less than 0.08. The root mean square error of approximation (RMSEA) = 0.035, which is less than 0.05. These show that the model of the factors of the tourists’ perception of Thailand’s e-Tourism service provided by the government is consistent with empirical data. There were five variables with significant weight for identifying service quality. They can be arranged in a descending order: Empathy equals 0.98, Responsiveness equals 0.98, Assurance equals 0.87, Reliability equals 0.70, and Tangible equals 0.64.

The results of the Confirmatory Factor Analysis (CFA) show the tourists’ expectation for Thailand’s e-Tourism service provided by the government had positive weight values from 0.56 to 0.65 which were calculated by analysing the five variables as shown in Fig. 6.

The Chi Square = 5.960, df = 7, \( P = 0.544 \), and Chi Square / df = 0.851, which is less than 2.00. These empirical data are considered in line with the structural model of the researchers. The Goodness-of-Fit Index (GFI) = 0.991, and Adjusted Goodness-of-Fit Index (AGFI) = 0.972. The GFI and AGFI values are greater than 0.90 and close to 1.00. The Comparative Fit Index (CFI) = 1.000, which is greater than 0.95. The root mean square residual (RMR) = 0.009, which is less than 0.08. The root mean square error of approximation (RMSEA) = 0.000, which is less than 0.05. These show that the model of the factors of the tourists’ expectation of Thailand’s e-Tourism service provided by the government is consistent with empirical data. There were five variables with significant weight for identifying service quality. They can be arranged in a descending order: Empathy equals 0.67, Responsiveness equals 0.65, Assurance equals 0.62, Reliability equals 0.57, and Tangible equals 0.56.

The results of the Confirmatory Factor Analysis (CFA) show the satisfaction for Thailand’s e-Tourism service provided by the government had positive weight values from 0.68 to 0.84 which were calculated by analysing the five indicators as shown in Fig. 7.

The Chi Square = 9.607, df = 12, \( P = 0.650 \), and Chi Square / df = 0.801, which is less than 2.00. These empirical data are considered in line with the structural model of the researchers. The Goodness-of-Fit Index (GFI) = 0.987, and Adjusted Goodness-of-Fit Index (AGFI) = 0.970. The GFI and AGFI values are greater than 0.90 and close to 1.00. The Comparative Fit Index (CFI) = 1.000, which is greater than 0.95. The root mean square residual (RMR) = 0.009, which is less than 0.08. The root mean square error of approximation (RMSEA) = 0.000, which is less than 0.05. These show that the model of the factors of the tourists’ satisfaction of Thailand’s e-Tourism service provided by the government is consistent with empirical data. There were five variables with significant weight for identifying service quality. They can be arranged in a descending order: Empathy equals 0.67, Responsiveness equals 0.65, Assurance equals 0.62, Reliability equals 0.57, and Tangible equals 0.56.

The results of the Confirmatory Factor Analysis (CFA) show the satisfaction for Thailand’s e-Tourism service provided by the government had positive weight values from 0.68 to 0.84 which were calculated by analysing the five indicators as shown in Fig. 7.

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The results of the Confirmatory Factor Analysis (CFA) of the satisfaction for Thailand’s e-Tourism service provided by the government.

![Fig.7: Results of the Confirmatory Factor Analysis (CFA) of the satisfaction for Thailand’s e-Tourism service provided by the government.](image)

The root mean square residual (RMR) = 0.007, which is less than 0.08. The root mean square error of approximation (RMSEA) = 0.000, which is less than 0.05. These show that the model of the factors of the satisfaction for Thailand’s e-Tourism service provided by the government is consistent with empirical data. There were five variables with significant weight for identifying service quality. They can be arranged in a descending order: quick email response and 24-hours access to information equals 0.84, readiness of message space for customers’ queries and feedback equals 0.82, and convenience of application use equals 0.68.

The results of the Confirmatory Factor Analysis (CFA) show the loyalty for using Thailand’s e-Tourism service provided by the government had positive weight values from 0.68 to 0.84 as shown in Fig. 8.

![Fig.8: Results of the Confirmatory Factor Analysis (CFA) of the loyalty for using Thailand’s e-Tourism service provided by the government.](image)

The Chi Square = 7.676, df = 8, P = 0.466, and Chi Square / df = 0.959, which is less than 2.00. This empirical data is considered in line with the structural model of the researchers. The Goodness-of-Fit Index (GFI) = 0.989, and Adjusted Goodness-of-Fit Index (AGFI) = 0.970. The GFI and AGFI values are greater than 0.90 and close to 1.00. The Comparative Fit Index (CFI) = 1.000, which is greater than 0.95. The root mean square residual (RMR) = 0.009, which is less than 0.08. The root mean square error of approximation (RMSEA) = 0.000, which is less than 0.05. These show that the model of the factors of the loyalty for using Thailand’s e-Tourism service provided by the government is consistent with empirical data. There were five variables with significant weight for identifying service quality, which can be arranged in a descending order: if you have another opportunity,

- you will choose e-Tourism to help with your travel, which equals 0.82.
- you will first consider choosing e-Tourism if you have a holiday, which equals 0.81.
- you are impressed with the e-Tourism system, which equals 0.74.
- you feel that traveling using e-Tourism provides benefits for your trip, which equals 0.71.
- when there is an opportunity, you will recommend e-Tourism to a person close to you, which equals 0.67.

The second order Confirmatory Factor Analysis (S-CFA) of the overall quality of Thailand’s e-Tourism service provided by the government had positive weight values from 0.80 to 0.92 using the Gap 5 Model Theory analysis method. The difference between the service that customers expect and the actual service received has an influence on the service quality (SERVQUAL) model through five factors including 1) Tangible, 2) Reliability, 3) Responsiveness, 4) Assurance, and 5) Empathy which influences the service satisfaction and loyalty for using Thailand’s e-Tourism service provided by the government as shown in Fig. 9.

![Fig.9: Results of the Second Order Confirmatory Factor Analysis (S-CFA) of the overall quality of Thailand’s e-Tourism service provided by the government.](image)

In the Second Order Confirmation Factor Analysis (S-CFA), the researchers modified the components of the result model of the second-order confirmatory factor analysis (S-CFA) to verify the structural validity of the scale. After adjusting the components, the Chi Square = 220.734, df = 165, P = 0.002, and Chi Square / df = 1.338, which is less than 2.00. This empirical data is considered in line with the structural model of the researcher. The Goodness-of-Fit Index (GFI) = 0.913, and Adjusted Goodness-of-Fit Index (AGFI) = 0.878. The GFI and AGFI values are greater than 0.90 and close to 1.00. The Compar-
ative Fit Index (CFI) = 0.980, which is greater than 0.95. The root mean square residual (RMR) = 0.018, which is less than 0.08. The root mean square error of approximation (RMSEA) = 0.040, which is less than 0.05. These show that the model of the factors of the quality of Thailand’s e-Tourism service provided by the government is consistent with empirical data.

5. DISCUSSION

The researchers found that the results meet the research’s objectives and fully support the hypotheses. From the study of the model of Thailand’s e-Tourism service provided by the government, it was found that in terms of service model, the users pay special attention to impressions. This can be seen from the study’s results on the model of tourists’ awareness and expectations. From the survey and analysis of the quality of Thailand’s e-Tourism service provided by the government, it was found that Thailand’s e-Tourism service is a high quality service. This can be seen the comparison between what the users received and their expectations, which shows that the two are aligned. By considering the survey results, if public agencies plan to improve the e-Tourism service, this can be done by focusing on physical appearances such as by enhancing the tangibles or the obvious elements. For example, people, tools, equipment, and service facilities could be updated with an aim to increase users’ satisfaction.

The improvement of service quality factors of Thailand’s e-Tourism provided by the government by conducting Exploratory Factor Analysis (EFA) of the expectations and actual service received gave five factors and Confirmatory Factor Analysis (CFA). The research results have answered the hypotheses as follows:

First hypothesis: The variables studied can be categorized as exploratory factors of the quality of Thailand’s e-Tourism service provided by the government. The research found that there are two exploratory factors including: 1) Factors of tourists’ awareness and expectations of the service comprise five service quality factors from the factors that determine service quality in SERVQUAL in using Thailand’s e-Tourism service provided by the government. This was measured by comparing expectations with service actually received. The factors include physical appearances, reliability, responsiveness, confidence, and impression. All components of the factors can be categorized as exploratory factors following what the research has studied.

Second Hypothesis: The model for the second confirmatory factor analysis of the quality of Thailand’s e-Tourism service provided by the government which was developed is accurate. The research proved that the models of the confirmatory factor analysis (CFA) and the second confirmatory factor analysis (S-CFA) which were developed were accurate by considering the statistics involved. The models were also consistent with the Fifth Gap Model Theory, the difference between customer’s expectation and actual service received, and the service quality model (SERVQUAL), in which influence service satisfaction as well as create loyalty for the use of Thailand’s e-Tourism service provided by the government.

6. CONCLUSION AND RECOMMENDATION

The results of the study found five variables with significant weight in identifying service quality. Empathy and Responsiveness for the use of Thailand’s e-Tourism service have the highest weight, indicating that the user receives care and already has provided excellent feedback. However, Assurance, Reliability, and Tangible for the use of e-Tourism service can be improved to increase trust, reliability, and physical appearance in order to better serve tourists in an effort to reinforce the quality and service mind for e-Tourism users. Government agencies that are involved can also use data from the e-Tourism service to analyse tourism behaviour in order to facilitate tourism services between tourists and create a better image in the future.

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References


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