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Comparative Analysis of Pegipegi.com and Tiket.com website quality using the Webqual 4.0 Method for End User Satisfaction

Muhammad Furqon Rahawarin ST, Dr. Ravi Ahmad Salim

¹Department Of Business Information System Management Master Program, Gunadarma University, Jakarta, Indonesia; ²Faculty Of Economic, Gunadarma University, Jakarta, Indonesia. Email: furqon.rahawarin27@gmail.com, ravi@staff.gunadarma.ac.id

ABSTRACT

Businesses based on start up online travel agencies (OTA) are one of the areas that are quite a lot in the lyrics by business actors in the country, the diversity of the emergence of online travel agency businesses provides an option for consumers to choose which sites benefit them most. Research This is trying to measure the quality of the Tiket.com and PegiPegi websites. The researcher took the object of PegiPegi's research with the phenomenon of the number of visitors being smaller than its competitors, and Tiket.com as a reference for PegiPegi in developing its business in the e-commerce field. The purpose of this study was to determine the differences in the quality of Pegipegi.com website and Tiket.com website. Using a quantitative approach, this study uses the WebQual 4.0 Method. to analyze the differences between the two websites. Data collection for this study was carried out with an online questionnaire from users and users of websites in Jakarta, Indonesia. The results of this study indicate that Tiket.com has better quality than Pegipegi.com and shows what variables need to be improved because they have high expectations but the reality is still low.

Keywords: Webqual 4.0 Method, Online Travel Agencies, Website Comparison, Tiket.com, Pegipegi.com.

1 INTRODUCTION

Based on data published by [2] among 171 million internet users in Indonesia, more than 1.8% do online shopping and purchase travel tickets. online travel agencies (OTA) is one of the most widely spoken domains of business actors in the country, the diversity of the emergence of online travel agency businesses provides an option for consumers to choose which sites benefit them most. From various start up online travel agencies (OTA), the writer chooses Tiket.com and PegiPegi as research objects. In a survey conducted by [3] in 2011, Traveloka was ranked first, followed by Tiket.com as runner up and Pegipegi in third position.

Previous research has been conducted related to the use of Webqual 4.0 method. Mulyono [5] The results of the study found that the performance of both websites is in the good category, Lazada's website scores an average of 75% and Elevenia's website scores a 71% average. Hypothesis testing results using mann whitney show that there are differences on these two websites. Aulia [14] The results showed that the Blibli.com website with an average score of 73.6% and Blanja.com with an average score of 71.1% can be said to be in a good category. From this study there is a significant difference between Blibli.com and Blanja.com website quality on the usability and information quality dimensions where Blibli.com website is superior to its three dimensions, namely Usability, Infor-

mation Quality and Service Interaction. Data sources were obtained by distributing questionnaires to 200 respondents with a population of Blibli.com and Blanja.com website users in the city of Jakarta. The data analysis technique in this study is the Mann-Whitney Test.

The analysis in this study will use the Webqual 4.0 Method and the importance of performance analysis. Based on previous research, the study will test the quality of the website based on 3 dimensions usability, information quality and service quality on the Tiket.com website and Pegipegi.com.

2. LITERATURE REVIEW

2.1 Website

Website is a number of information that can be accessed at any time via the internet network. The website is an in-ternet facility that connects documents both locally and long distances. Documents on the website are called web pages, while the links on the website allow users to move from one page to another (hyper text), both between pages stored on the same server, and servers around the world. Pages are accessed and read via browsers such as Netscape navigator, Internet Explorer, Mozilla Firefox, Google Chrome and other browser applications [8].

2.2 WebQual 4.0

Webqual is a measurement based on the quality function deployment [1]. Webqual is a measurement used to measure the quality of a website based on research instruments that can be categorized into three variables, namely, usability, information quality, and service interaction. From these three variables, the quality of customer or user satisfaction of a website can be measured. Webqual is based on research consisting of three dimensions:

1. Usability

Usability is related to the design of the website, for example, the appearance of the website, ease of use, navigation and image of the website that reaches the user [12]. Usability includes, easy to learn, easy to understand, easy to navigate, for example is the appearance of the website, the ease of using the website, and the website image that reaches the user. The design of a website must be in accordance with user needs and also must ensure users are satisfied when completing a task using the website without facing one difficulty [13].

2. Quality Information

Information quality is the quality of the content contained on the website, whether or not the information deserves to be presented to its users [12]. This dimension focuses on the quality of the content that is on the website and the suitability of the content with user needs.

Information quality is often measured based on information relevance, timeliness, and accuracy [7]. Relevance of information includes information that is presented in a format that is relevant to the topic and easy to understand. While timeliness is related to up to date information. And information accuracy is related to accurate and trustworthy information.

3. Service Interaction Quality

Service Interaction Quality or service interaction quality is the service interaction felt by users when they explore the website deeper [6]. The quality of interaction services is usually related to trust and empathy, for example transactions and information security issues when accessing the website, as well as website personalization and communication with the website manager [6].

2.3 Importance Performance Analysis (IPA)

Opinion [9] that "Importance Performance Analysis (IPA) is an evaluation tool used to determine priority attributes that must be improved and can be used as guidelines in strategic development". In addition, it was also explained that the two-dimensional IPA model was divided into 4 quadrants with importance on x axis and performance on axis. The results of the analysis of the 4 quadrants can be used as a basis for giving advice to the managerial side. The results of the importance performance matrix are mapped into four quadrants, namely Concentrate Here, Keep up the Good Work, Low Priority, and Possible Overkill. The following explanation:

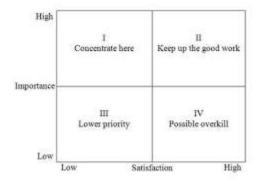


Figure 2.1 Frame Work Importance Performance Analysis (IPA)

3 METHODOLOGY

3.1 Types of Research

According to [11], descriptive method is a method used to analyze data by describing or describing data that has been collected as it is without intending to make conclusions that apply to the public or generalization. In this study the authors used a quantitative method. According to [11] quantitative research methods are research methods based on the philosophy of positivism that will be used to examine populations or samples that have been determined, in general the sampling technique is done randomly, data collection using research instruments.

This quantitative descriptive research aims to determine the quality of the Tiket.com and Pegipegi.com websites based on the opinions of users and visitors of the Tiket.com and Pegipegi.com websites in Jakarta.

3.2 Operational Variables

According to [11], variables are everything in the form of whatever is determined by researchers to be studied so that information is obtained about it, then conclusions are drawn. According to Hatch and Farhady in Sugiyono [11] defining variables theoretically are, "As an attribute of a person, or object, which has a" variation "between one person with another or one object with another object". Based on some of the above notions, it can be formulated that the research variable is an attribute or value value of people, objects, organizations or activities that have certain variations determined by researchers to be studied and then conclusions drawn.

3.3 Measurement Scale

According to [11], the Likert scale is used to measure the attitudes, opinions, and perceptions of a person or group of people about social phenomena. In research, this social phenomenon has been specifically determined by the researcher, hereinafter referred to as the research variable. For the purposes of quantitative analysis, answers can be given a score of 1 to 5.

3.4 Population

Population Population is the area of generalization, objects / subjects that have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions [11]. The population in this study is the website users Tiket.com and Pegipegi.com which number is 130.

3.5 Technical Samples

Researchers used the non-probability sampling method as a sampling technique that is the Jakarta millennial community who have used both ticket and hotel booking websites that were analyzed. Non-probability sampling method used is quota sampling.

3.6 Validity test

States that the item validity test is a data instrument test to find out how carefully an item is measuring what it wants to measure. Items can be said to be valid if there is a significant correlation with the total score, this indicates the support of these items in revealing something that wants to be revealed [10].

3.7 Reliability Test

According to [10] the reliability test is used to find out the consistency of measuring instruments that usually use questionnaires. That is whether the measuring instrument will get a measurement that remains consistent if the measurement is repeated. Reliability test is a continuation of the validity test, where the items that enter the test are valid items only.

4 RESEARCH RESULT AND DISCUSSION

4.1 Demographic Information

This stage is carried out by analyzing the respondent's answers specifically to the questions in the respondent profile section and Pegipegi.com and Tiket.com websites in the questionnaire to produce demographic information related to the characteristics of the respondent on the quality of the Pegipegi.com and Tiket.com websites. Respondent data obtained by researchers is as many as 130 respondents. The demographic information includes gender, age and occupation.

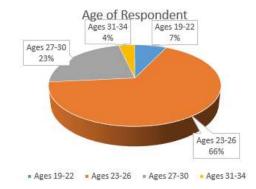


Figure 4.1 Age Chart of Respondents

Based on the age circle diagram of the respondents as shown in Figure 4.1, respondents were dominated by ages 23-26 years as many as 334 people (68%), both ages 27-30 years as many as 116 people (24%), third ages 19-22 years as many as 36 people (7%) and finally aged 31-34 as many as 18 people (1%).

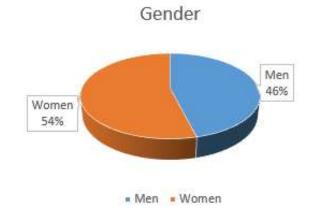


Figure 4.2 Respondent Gender Circle Diagram

Based on the gender circle diagram as shown in Figure 4.2, respondents were dominated by 272 women (52%) and the rest were 232 people (48%).

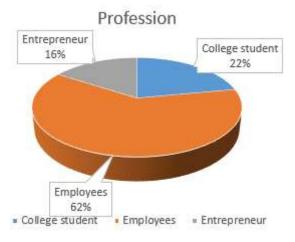


Figure 4.3 Respondent Occupational Work Diagram

Based on the respondent's work circle diagram as shown in Figure 4.3, respondents were dominated by 313 employees (62%), both students were 111 people (22%) and finally 80 people were entrepreneurs (16%).

4.2 Webqual Index (WQI)

Table 4.7 provides information about the weighted score and WQI for the two websites analyzed. The Tiket.com website is superior with a total weighted score of 418.87 and an average value of WQI of 0.86 compared to the total weighted score of Pegipegi.com which is 383.37 and an average value of WQI of 0.79.

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Object	Max Scroce	Weighted Score	WQI
Tiket.com	485.35	418.87	0.86
Pegipegi.com	485.35	383.37	0.79

4.3 Question Dimension Analysis

Table 4.28 shows descriptive analysis data that has been summarized into three question dimensions, namely usability, information quality, and service quality interaction. Descriptive statistical values that have been processed in the previous section are then grouped into three dimensions, namely usability, information quality, and service quality interaction. The Tiket.com website excels in all dimensions. The biggest difference is in the dimension of information quality, Tiket.com website is superior with 0.49 points. As for the usability dimension, the Tiket.com website excels with 0.33 points and the service quality dimension of Tiket.com Website is 0.31.

Dimension	Tiket.com	Pegipegi.com
Usability	4.33	3.94
Information Quality	4.30	3.81
Service Interaction Ouality	4.26	3.95

Table 4.2 Descriptive Analysis Based on 3 Dimensions

4.4 Gap Analysis

Table 4.9 shows the comparison of the gap values of each website seen from the three Webqual 4.0 variables. When seen from the usability variable, Pegipegi.com has a value of -0.47. This shows that compared to Tiket.com in terms of the use of the Pegipegi.com website that is least in line with the expectations of its users. This shows that the quality of Tiket.com website in terms of usability is the closest to the user's expectations.

When viewed from the variable information quality (information quality), which has the largest gap / gap is still occupied by Pegipegi.com with a value of -0.53. This shows that compared to the four other tertiary institutions in terms of the quality of information on the Pegipegi.com website that is least in line with the expectations of its users.

If seen from the service interaction quality variable, Pegipegi.com has a value of -0.40 which has the largest gap. This shows that Tiket.com in terms of the quality of interaction services is the closest to the expectations of its users.

Table 4.3	Value	of each	variable	gap
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Variable	Tiket.com	Pegipegi.com
Usability	-0.08	-0.47
Information Quality	-0.14	-0.53
Service Interaction Quality	-0.09	-0.40
Average Gap Overall Indicator	-0.10	-0.47

4.5 Importance Performance Analysis (IPA)

Importance performance analysis (IPA) is used to answer the problem formulation "What is the quality condition of each of the Tiket.com and Elevenia website indicators using the quadrant of importance performance analysis (IPA)?". It can be seen from the indicators which website quality has been according to desire and which indicators are the focus of improvement. The results of the importance performance analysis (IPA) show the location of each indicator in the matrix (IPA) consisting of 4 quadrants.

a. Tiket.com

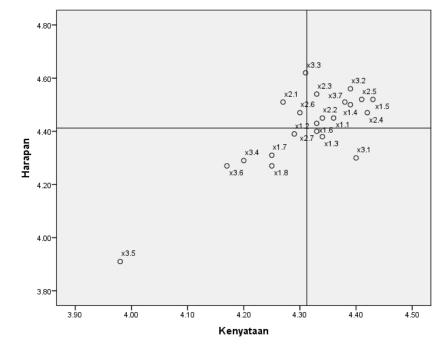


Figure 4.4 Quadrant Importance Performance Analysis Tiket.com

The following is an explanation of Figure 4.4 regarding Tiket.com's IPA matrix chart:

- 1. Quadrant I (Main Priority) In quadrant I, there are attributes or statements that are the focus of improving the Tiket.com. The statements in this quadrant are the statements X2.1, X2.6 and X3.3.
- Quadrant II (Maintain Achievement) In quadrant II, there are statements that match expectations and must be maintained on the Tiket.com. The statements in this quadrant are the statements X1.1, X1.4, X1.5, X2.2, X2.3, X2.4, X2.5, X2.7, X3.2 and X3.7.
- 3. Quadrant III (Low Priority) In quadrant III there is a statement with a relatively low level of importance and it is considered that the performance is not too special on the Tiket.com, so improvements to this quadrant have a low priority. The statements in this quadrant are the numbers X1.2, X1.7, X1.8, X3.4, X3.5 and X3.6.
- 4. Quadrant IV (Excessive) In quadrant IV, there are attributes or statements that are considered relatively low in importance by users of the Tiket.com, but their performance is good and considered excessive. The statements in this quadrant must be managed again so as not to cost too much. The statements in this quadrant are the numbers X1.3, X1.6 and X3.1.

b. Pegipegi.com

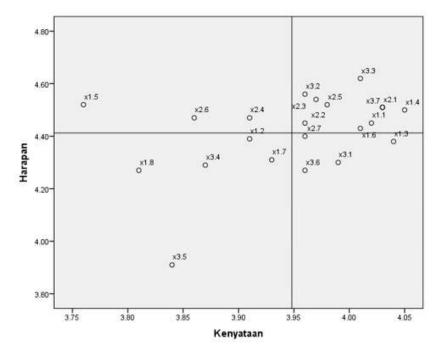


Figure 4.5 Quadrant Importance Performance Analysis Pegipegi.com

The following is an explanation of Figure 4.5 regarding Pegipegi.com's IPA matrix chart:

- 1. Quadrant I (Main Priority) In quadrant I there are attributes or statements that are the focus of improving the Pegipegi.com. The statements in this quadrant are the statements X1.5, X2.4 and X2.6.
- Quadrant II (Maintain Achievement) In quadrant II, there are statements that match expectations and must be maintained on the Pegipegi.com. The statements in this quadrant are statements number X1.1, X1.4, X1.6, X2.1, X2.2, X2.3, X2.5, X3.2, X3.3 and X3.7.
- 3. Quadrant III (Low Priority) In quadrant III, there is a statement with a relatively low level of importance and it is considered that the performance is not too special on the Pegipegi.com, so repairs to this quadrant have a low priority. The statements in this quadrant are the numbers X1.2, X1.7, X1.8, X3.4 and X3.5.
- 4. Quadrant IV (Excessive) In quadrant IV there are attributes or statements that are considered relatively low in importance by users of the Pegipegi.com but their performance is good and considered excessive. The statements in this quadrant must be managed again so as not to cost too much. The statements in this quadrant are the numbers X1.3, X2.7, X3.1 and X3.6.

5 CONCLUSIONS AND LIMITATIONS

Based on the results of the overall analysis with research into interests and performance based on the perspective of the user, the following conclusions can be obtained:

1. The calculation of the Webqual Index (WQI) shows that the Tiket.com website has a total score of 419.29, higher than the Pegipegi.com website with a total score of 382.12. Of all the variables namely usability, information quality and the quality of Tiket.com interaction services are superior to Pegipegi.com.

- 2. Based on the results of the analysis of the dimensions of the questions and subcategories of questions it can be seen that Tiket.com has an average value above Pegipegi.com of all the dimensions of the questions namely 4.33 (Usability), 4.30 (Information Quality), 4.26 (Service Interaction Quality). Whereas in excellence, Tiket.com has five trust subcategories with an average value of 0.87 (Usability), 0.86 (Design), 0.87 (Information), 0.88 (Trust) and 0.82 (Empathy).
- 3. Based on the results of the gap analysis it shows that Tiket.com has 3 positive values namely regarding the design according to having a good reputation (0.10) and creating a nuance of communication (0.06). Shows that the quality of the website is not yet fully in line with the expectations of its users and there must still be improvements.
- 4. Based on the results of the gap analysis shows that Pegipegi.com has a negative value on all indicators. This shows that the quality of the Pegipegi.om website is not in line with the expectations of its users. The average value of the gap for the usability dimension is -0.47. While the average value for the information quality variable is -0.54 and the average service interaction quality gap is -0.41.
- 5. The Importance Performance Analysis (IPA) analysis shows that Tiket.com has 2 priorities for improvement and Pegipegi.com has 4 priorities for improvement. Tiket.com has 2 indicators in quadrant I, namely accurate information and detailed information. Meanwhile, Pegipegi.com has 4 indicators in quadrant I, namely attractive appearance, appropriate design, providing relevant information and detailed information.

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AUTHORS PROFILE



Muhammad Furqon Rahawarin S.T received a Bachelor Degree in Informatics Engineering from Gunadarma University, Depok in 2016. Currently continuing his master degree in Gunadarma University at Department of Information System Management focusing on Business System Information.



Dr. Ravi Ahmad Salim is a lecturer at the Faculty of Computer Science and Information Technology, Department of Information Systems, Faculty of Industrial Technology, Department of Informatics, Master of Information Systems Management, Department of Business Information Systems and Information Systems Software, Gunadarma University, Depok.