



THE ANALYSIS OF WEBSITE SERVICE QUALITY OF PRABUMULIH REGIONAL GENERAL HOSPITAL USING WEBQUAL 4.0 METHOD

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Abstract:

This research was conducted to find out how big the contribution of Prabumulih Regional General Hospital's website was by using Webqual 4.0 Method in which three indicators were involved, namely usability, information quality, and service interaction based on responses of the respondents, the employees of Prabumulih Regional General Hospital. The overall result was that users' satisfaction was above the average of 1.00. Thus, service quality of Prabumulih Regional General Hospital's website met the satisfaction of the respondents or considered good. The highest score was usability indicator with a value of 1.095. It was due to an interesting display and ease of interaction of the website. As for the indicator of information quality, the value was 1.090 because according to the respondents, information quality of the website was good. The last indicator with the lowest value was service interaction with a value of 1.085. The reason was due to low transaction security and poor communication.

Keywords: Webqual 4.0; Usability; Information Quality; Service Interaction.

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1. Introduction

The improvement of e-Government is a way to improve governmental arrangement through the use of electronic to expand public quality service. With the improvement of e-Government, system arrangement and work process in government environment need to be conducted by using information technology. The use of information technology consists of two directly related activities (Inpres No.3, 2003):

- 1) Data processing, information processing, management system, and electronic work process.
- 2) The use of advanced technology for an easy and cheap access of public service for the citizens across the country.

E-government is a "forefront" of government plan to assist and provide the information and increase the service for the citizens, businesses, government workers, other government units, and the third sector. Hospital is a public sector organization engaged in the field of health services that has a task of carrying out a health effort in an efficient and effective manner by prioritizing healing and recovery that have been carried out in a harmonious and integrated way by hospital authorities

in improvement effort (Keputusan Menteri Kesehatan Republik Indonesia NOMOR: 436 / MENKES / SK / VI / 1993). Analysis is an act of thinking to separate the whole thing into smaller components to be easily understood. Komarudin (2010). Analysis is a way of observing something in detail by breaking the nature of its components. Jogiyanto (2010).

Quality needs to be thorough, whether it is the product or the process. Product quality consists of the quality of raw material and finished goods. On the other hand, process quality involves anything related to the process quality of manufacturing company and process of service providers. Dorothea (2004). "A service is a statement of behavior, a relationship resulted in a comparison between expectation and performance". Usmara (2003). "A service is any act or performance one party can offer to another that is essentially intangible and does not result in the ownership of anything" Kotler (2011). Service quality consists of some items; cite reputation, transaction safety, personal information security, personal taste, a sense of community, communication with the company, and the confidence of goods/services delivery. Barnes dan Vidgen (2002). "It is a system with universally accepted standards for storing, retrieving, formatting, and displaying information using a client/server architecture". Laudon (2005). Website can be referred as site or portal which has a collection of web pages connecting one to another. The first page of a website is a home page, while from page to page independently called as web page. In other words, website is a site which can be connected and seen by the internet users all around the world. Wahidin (2013).

2. Research Method

2.1. Research Design

This research was a quantitative descriptive. Descriptive research is broad and does include any types of research except historical and experimental, or usually referred as survey research (Suryabrata, 2004). On the other hand, data analysis is a quantitative one. Quantitative is not only in the form of number, because "quantitative research is also concerned with the value of a measurement as well as data in a form of frequency, percentage or ratio." (Y. Slamet, 2007).

2.2. Wequal Method

The findings of the research showed that website quality analysis is categorized into three different areas which are site quality, information quality, and interaction quality offered by the service. This result is known as Webqual 3.0. resulting in Webqual 4.0 in which the first dimension is changed from site quality to usability.

2.3. Data Collection Techniques

In collecting the data, three techniques were applied:

- 1) Documentation

To find out source of information related to the research, for instance: Photo documentation.

- 2) Library Research

To use some archives found by the researchers acquired at the place where the research was conducted. They could be in the form of documents or other references.

- 3) Questionnaire

In which the respondents were required to answer a set of questions or statements.

2.4. Sample

Sample is a small part of the whole population. Sugiyono (2011). Sampling technique used in this research was saturation sampling in which the sample was the population of Prabumulih Regional General Hospital consisting of 418 people.

Slovin's Formula:

$$n = \frac{N}{1 + ne}$$

Ket:

n = Number of samples

N = Total population

e = Error tolerance

Hence, the sample of this research is:

$$n = \frac{N}{1 + Ne} = n = \frac{418}{1 + 418(0.01)} = \frac{418}{5,18} = 80,69 = 81 \text{ Sample}$$

2.5. Validity Test

Validity test used in this research was content validity, to which extent a measure represents the aspects of a construct.

Hypothesis of the validity of questionnaire items:

- 1) If r is positive and r-obtained > r-table (0.235), variable is valid
- 2) If r is negative and r-obtained < r-table (0.235), variable is not valid.

2.6. Reliability Test

Reliability test was conducted only to the valid items in which the valid items were acquired through validity test. To calculate the reliability, Cronbach Alpha was used.

3. Results and Discussion

3.1. The Result of Validity Test

After the data was collected, validity test was performed by conducting a correlation between score items of the instruments. The result is as follows

Table 5.20: The Result of Validity of All Respondents

| NO | Statements | R-Table | R-obtained | Description |
|----|---|---------|------------|-------------|
| 1. | Prabumulih Regional General Hospital's website has an attractive appearance | 0,235 | 0,540 | Valid |

| | | | | |
|-----|---|-------|-------|-------|
| 2. | The interaction between users and website is clear and comprehensible | 0,235 | 0,250 | Valid |
| 3. | Prabumulih Regional General Hospital's website is easy to learn to operate | 0,235 | 0,398 | Valid |
| 4. | Prabumulih Regional General Hospital's website is easy to browse | 0,235 | 0,362 | Valid |
| 5. | The design is appropriate for Prabumulih Regional General Hospital's website | 0,235 | 0,478 | Valid |
| 6. | Prabumulih Regional General Hospital's website | 0,235 | 0,475 | Valid |
| 7. | Prabumulih Regional General Hospital's website has a good reputation | 0,235 | 0,568 | Valid |
| 8. | Prabumulih Regional General Hospital's website creates a positive experience | 0,235 | 0,322 | Valid |
| 9. | Users have purpose when browsing Prabumulih Regional General Hospital's website | 0,235 | 0,264 | Valid |
| 10. | Prabumulih Regional General Hospital's website has an interesting design and image | 0,235 | 0,330 | Valid |
| 11. | Users feel safe towards the information on Prabumulih Regional General Hospital's website | 0,235 | 0,327 | Valid |
| 12. | Users feel safe to complete the transaction on the website | 0,235 | 0,256 | Valid |
| 13. | Prabumulih Regional General Hospital's website provides a sense of personalization and community | 0,235 | 0,290 | Valid |
| 14. | Prabumulih Regional General Hospital's website makes it easier to communicate with the organization | 0,235 | 0,310 | Valid |
| 15. | Prabumulih Regional General Hospital's website provides an adequate communication for the users | 0,235 | 0,314 | Valid |

3.2. The Result of Reliability Test

Reliability test was conducted only to the valid items in which the valid items were acquired through validity test. To calculate the reliability, Cronbach Alpha was applied by using SPSS for Windows Version 22.

Table 5.21: The Results of Reliability of All Respondents

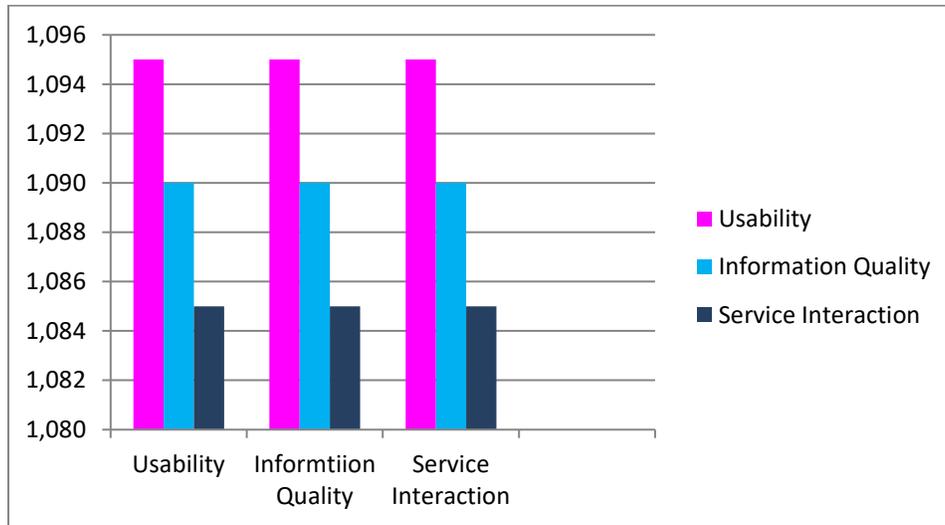
| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|---|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| Prabumulih Regional General Hospital's website has an attractive appearance | 60.10 | 5.090 | .462 | -.294 ^a |

| | | | | |
|---|-------|-------|------|--------------------|
| The interaction between users and website is clear and comprehensible | 60.11 | 4.950 | .520 | -.328 ^a |
| Prabumulih Regional General Hospital's website is easy to learn to operate | 60.10 | 4.515 | .329 | -.456 ^a |
| Prabumulih Regional General Hospital's website is easy to browse | 60.10 | 4.615 | .380 | -.417 ^a |
| The design is appropriate for Prabumulih Regional General Hospital's website | 60.07 | 5.544 | .521 | -.185 ^a |
| Prabumulih Regional General Hospital's website | 60.21 | 5.018 | .480 | -.306 ^a |
| Prabumulih Regional General Hospital's website has a good reputation | 60.10 | 5.390 | .473 | -.212 ^a |
| Prabumulih Regional General Hospital's website creates a positive experience | 60.05 | 4.748 | .590 | -.390 ^a |
| Users have purpose when browsing Prabumulih Regional General Hospital's website | 60.21 | 4.918 | .453 | -.312 ^a |
| Prabumulih Regional General Hospital's website has an interesting design and image | 60.26 | 5.244 | .433 | -.226 ^a |
| Users feel safe towards the information on Prabumulih Regional General Hospital's website | 60.20 | 5.460 | .309 | -.168 ^a |
| Users feel safe to complete the transaction on the website | 60.27 | 4.950 | .464 | -.294 ^a |
| Prabumulih Regional General Hospital's website provides a sense of personalization and community | 60.25 | 4.838 | .274 | -.323 ^a |
| Prabumulih Regional General Hospital's website makes it easier to communicate with the organization | 60.19 | 5.403 | .499 | -.171 ^a |

| | | | | |
|---|-------|-------|------|--------------------|
| Prabumulih Regional General Hospital’s website provides an adequate communication for the users | 60.36 | 4.758 | .517 | -.341 ^a |
|---|-------|-------|------|--------------------|

3.3. The Result of Discussion of Three Indicators of Webqual 4.0

Based on the research data collected through the responses of the respondents, the results are shown in the Picture 4.23.



Source: Primary Data after being Processed

Picture 4.23 Graphic of All Indicators

As shown in the picture above, usability was the indicator with the highest value, 1.095 followed by information quality, 1.090. The lowest one is service interaction with the value of 1.085.

4. Conclusion

This research was conducted with the purpose of finding out website service quality of Prabumulih Regional General Hospital by using Webqual 4.0 consisted of three indicators; usability, information quality, and service interaction. The data was collected through the responses of the questionnaire given to the respondents, the employees at Prabumulih Regional General Hospital. The result was that the respondents were overall satisfied, thus the service quality of Prabumulih Regional General Hospital’s website met the satisfaction of the respondents. The result of the research using Webqual method 4.0 was that most of the respondents chose usability indicator in which the value was 1.095. It was due to an interesting display and ease of interaction of the website. Then, they chose information quality (1.090) because according to the respondents, website information quality was good. The last indicator with the lowest score was service interaction with a value of 1.085. According to the respondents, the website was not safe yet for any transactions and the communication was still poor.

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References

- [1] Usmara 2003, *New Marketing Management Strategy*. Yogyakarta: Amoro Book.
- [2] Abbas, Wahidin. (2013). *Student Satisfaction Analysis on Yogyakarta State University Website (UNY)*.
- [3] Barnes, S. J., dan Vidgen, R.T. (2002). *Assessing e-commerce quality with WebQual: An evaluation of the usability, informaton quality, and interaction quality on Internet bookstores*. *Journal of Electronic Cormerce Research*.
- [4] Ariani, Dorothea Wahyu 2004, *Statistical Quality Control (Quantitative Approach in Quality Management)*. Yogyakarta. Andi Offset.
- [5] <http://repository.unika.ac.id/14237/8/05.93.0062%20H.%20Maksoem%20Hadi%20Sapoetra%20LAMPIRAN.pdf>
- [6] *Presidential Instruction Number 3 of 2003 concerning National Policy and Strategy for E-Government Development*
- [7] Jogiyanto. 2010. *Information Systems and System Analysis*. Yogyakarta : Andi Offset.
- [8] Komarudin . 2010. *System Analysis and Design Jakarta : PT Gramedia*.
- [9] Kotler, Philip. 2011. *Marketing Management in Indonesia: Analysis, Planning, Implementation and Control*. Jakarta:Salemba Empat.
- [10] Laudon, Kenneth & P. Laudon, Jane. 2005. *Management Information Systems Managing Digital Companies*. Issue 8. Andi Offset. Yogyakarta.
- [11] St. Y. Slamet & Suwanto. 2007. *The Basics of Qualitative Research Methodology* Surakarta: UNS PRESS
- [12] Sugiyono. 2011. *Quantitative, Qualitative and R & D Research Methods*. Bandung: Afabeta
- [13] Suryabrata, S. (2004). *Development of Psychological Measuring Instruments*. Yogyakarta : Andi Offset