Combining Webqual 4.0, CSI, and IPA to Evaluate and Improve Website Quality: Case Study Luwu Timur Local Government

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1.   Introduction

Background

The development of ICT has had a huge impact on many sectors of human life, including the government sector. Governments realize that it is important to have a website as a tool to communicate and provide public services to their communities [1]. In addition, government websites can also be used to involve the public in the decision-making process, such as holding online consultations or allowing the public to comment on proposed legislation [2]. One of the websites managed by the government is Wartalutim. This website is managed directly by Luwu Timur Local Government which is used to provide information related to developments and services to the community, which can be accsessed at https://warta.luwutimurkab.go.id/. However, the average website managed by the local government is still at the preparation level and only a few websites have reached the maturation level [3].

Based on the development guidelines of the Web Content Accessibility Guidelines (WCAG), a high-quality website should have good accessibility, attractive, have a responsive design, and provides relevant and high-quality content/information [4]. However, after conducting an initial survey to users of the Wartalutim website to find out their views on the website, it was found that there were several problems faced by users that made the website not reach the standards of good website quality. Based on the survey results, there is a problem with the website's outdated appearance and displaying all the information together, which fills the screen. This causes difficulties for users in learning and searching for appropriate information, thus interfering with the user experience. Figure 1 shows the problems expressed by the respondents. Regarding the website information, respondents revealed that the popular section of the website features news that is no longer relevant, and some categories have not been updated in recent years. Figure 2 illustrates these issues.

Figure 1. Homepage of Wartalutim Website

Figure 2. Irrelevant Information

This problem shows that the Wartalutim website still does not meet the quality standards of a good website. This problem can occur one of them because the website has never been evaluated, besides that this problem can affect user satisfaction and the reputation of the government as the website owner. There are several methods to evaluate the quality of a website, such as WebQual 4.0, WebUse, and WebQEM. This research chose Webqual 4.0 because its dimensions are in accordance with the problems faced on the Wartalutim website, such as measuring the quality of information and the quality of service interaction which are important things on a news website. This research combines it with the Customer Satisfaction Index (CSI) to measure user satisfaction with certain products or services, such as websites or applications. This research also relies on Importance Performance Analysis (IPA) to help understand how the performance of an attribute can affect website quality and user satisfaction. So that the combination of these three methods can complement each other's shortcomings, such as Webqual 4.0 which can only evaluate website quality but cannot determine the level of user satisfaction, so the CSI method is used to complement this shortcoming. By combining these three methods, this research aims to comprehensively understand the quality of Wartalutim, so that it can formulate appropriate improvement recommendations to increase user satisfaction and overall website quality. This research provides the following theoretical and practical contributions:

- Combining WebQual 4.0, CSI, and IPA to obtain a more comprehensive and integrated website quality evaluation method.
- Improve the quality of the Wartalutim website and the satisfaction of its users.
- improve the quality of the website by implementing appropriate improvements based on the evaluation results.
- Illustrates the importance of maintaining the quality of the website and prioritizing the needs of its users.

Topics and Limitations

Based on the background that has been described, the problem limitation in this study is to evaluate the quality of the Wartalutim website based on end-user perceptions using the WebQual 4.0 method and the Customer Satisfaction Index (CSI), after that make recommendations for improvements to attributes that are prioritized or in quadrant I using the Importance Performance Analysis (IPA) method.

Purpose

This study aims to evaluate the quality of the Wartalutim website using a combination of Webqual 4.0, CSI, and IPA to obtain a more comprehensive and integrated website quality evaluation method and provide appropriate improvement recommendations based on the evaluation results.

Writing Organization

A literature review is explained in the second section, which contains the theory that supports this research. The third section contains the design of the system to be made. The fourth section contains an evaluation of the test, and the fifth section will contain conclusions and suggestions for further research.