

ASSESSMENT OF SERVICE QUALITY OF PASURUAN E-SAMBAT APPLICATION WITH E-GOVQUAL DIMENSION APPROACH

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Abstract: Public services are government mediators in providing services to the needs of the community. The development of technology makes it easier for state and regional apparatuses to provide public services through an application called E-Government. Similarly, the Pasuruan City Communication and Information Agency has tried to organize the E-Sambat application. This study aims to provide an understanding of the quality of E-Sambat services based on the E-GovQual dimension approach, the gap between E-Sambat performance and public expectations for the E-Sambat application, and knowing which items will be prioritized to be immediately improved in the E-Sambat application. To analyze the feasibility of the application using GAP and the Important Performance Analysis (IPA) method is used to analyze items that are prioritized for improvement. Respondents in this study were 445 respondents. Based on the results of the analysis conducted, the quality of E-Sambat application services is very feasible with a feasibility percentage value of 100%, application performance GAP and public expectations for the Ease of Use variable of 0.08, Trust variable of -0.04, Functionality of the Interaction Environment variable of 0.02, Reliability variable of -0.03, Content and Information Display variable of 0.01, and the Community Support variable of 0.00. The overall average gap is 0.01 which means that people are satisfied with the E-Sambat application service. There are six items that are prioritized for improvement, namely TR 1 (security of personal data of E-Sambat users), TR 6 (access control of E-Sambat users), RLB 1 (speed in downloading E-Sambat forms), CAI 7 (use of colors in the E-Sambat application), CAI 8 (graphics in the E-Sambat application), and CS 5 (User questions answered quickly).

Keywords: Service Quality, E-Sambat, E-Govqual

1. Introduction

Public services are government mediators in providing services to the needs of the community, where government employees become public servants as mentioned in the fourth paragraph of the 1945 Constitution and affirmed by Law of the Republic of Indonesia No. 25 of 2009 related to public services which describes the duties and functions of public services (Sahri, 2022). In accordance with Ratminto and Atik Septi Winarsih (Suryantoro & Kusdyana, 2020), the definition of public services and public services can be interpreted into various patterns of service services, both in the form of public goods and public services which in principle become obligations and are carried out by government agencies at the central, regional, and

environmental State-Owned Enterprises or Regional-Owned Enterprises, in an effort to achieve the needs of the people or in the realm of applying the provisions of the rules legislation.

The development of technology makes it easier for state and regional apparatuses to provide public services through an application, either by using a web application or an application for smartphones called E-Government. The development of electronic-based government systems is not the same for each region because of the characteristics, development conditions, prosperity, economic profile, skilled human resources, technological literacy among the population, bureaucratic efficiency, and overall policy capacity of these cities (Tan & Taihagh, 2020).

The purpose of implementing E-Government is so that government institutions can provide the best public services. In this regard, the strength of commitment from the government is needed to pioneer and start new things in the bureaucracy (Nugraha, 2018). As well as the Pasuruan City Communication and Information Office, it has tried to organize E-Government, which is in the form of the E-Sambat application. Pasuruan Mayor Saifullah Yusuf, revealed that Pasuruan City has an E-Sambat program as a way to make complaints digitally (Seruji, 2021).



Figure 1. Aplikasi E-Sambat
Source : googleplay

The E-Sambat application was launched at the end of April 2021. As of December 2021, the E-Sambat application has been downloaded by more than 1,000 downloaders based on the playstore application in 2021. The most complaints against Pasuruan City are related to the city's infrastructure. However, there are also complaints about the E-Sambat application where the application has not run well and is still difficult to access by the public. Based on comments from users who have downloaded the application, the quality of E-Sambat services is still considered to be insufficient to meet public expectations, while the quality of service has a crucial role because it can influence users to use the services provided (Napitupulu, 2016). Thus, the quality of E-Sambat services needs to be measured, whether the services provided by the government have been said to be good or not, acceptable or not by citizens, making it easier or even more difficult, and others. The assessment given by the community is certainly a suggestion so that the government will develop better and closer to the people.

Service quality measurement can be known from various methods of measuring service quality. Service quality focuses more on customer terms, service, quality, and level (Wahono, 2018). To find out what the quality value of a service is, of course, a method or method is needed that can be used to measure the level of service quality itself. One example of a method of measuring service quality is E-Government Quality (E-GovQual). E-GovQual is a concept of measuring service quality in terms of electronic services that focus on government sites and portals. Research conducted by Fuad (2013) on assigning value to the quality of E-Government services using the EGovqual dimension (Case study of the East Java Provincial Government) divides the E-GovQual measurement scale into six dimensions, namely: Ease of Use, Trust,

Functionality of the Interaction Environment, Reliability, Content and Appearance of Information, and Citizen Support.

2. Literature Review

Previous Research

The method of assessing the quality of E-Sambat services in this study uses the GAP and IPA methods. The gap in service quality can be known based on the difference between the average value of perception and desire of users (Parasuraman, 2001). Research conducted by Saputra et al. (2018) concluded that the results of the gap value can determine the level of user satisfaction with E-Government services, in this research it is known that the gap level value has a GAP value of ≤ 0 , which is -0.61, meaning that the performance of the E-Government service has not been able to meet consumer desires.

The Importance Performance Analysis (IPA) method is a simple technique used to identify services and products to be more focused by a company in order to achieve customer satisfaction (Wilujeng et al., 2019). Research conducted by Nautami & Wahid (2019) using the Importance Performance Analysis (IPA) method concluded that there are 6 items that are made top priorities to be improved in the E-Filling application.

Definition of Quality of Service

Quality is one of the keys in winning the competition with the market. When the company has been able to provide quality products, it has built one of the foundations to create customer satisfaction. According to Goetsch and Davis (1994) cited by Tjiptono (2016), quality can be interpreted as dynamic conditions related to products, services, human resources, processes, and environments that meet or exceed expectations.

Based on this definition, quality is the relationship between a product and a service or service provided to consumers that can meet consumer expectations and satisfaction. Quality is conformity to market or consumer needs (Abubakar, 2010). According to (Lewis, 1983) in (Tjiptono, 2016). Service quality as a measure of how good the level of service quality provided is able to match customer expectations. Based on this definition, service quality can be realized through meeting customer needs and desires, as well as the accuracy of delivery to keep pace with customer expectations.

From this definition, it can be concluded that service quality is the company's ability to meet customer expectations by providing service to customers when interacting directly with customers.

E-Govqual

E-Government Service Quality Analysis using the E-Govqual Method is a dimensional framework for service quality assessment which is the result of several studies on e-government quality. From this research, several e-government quality attributes were included in six main criteria known as the e-government service quality dimension (Papadomichelaki & Mentzas, 2011).

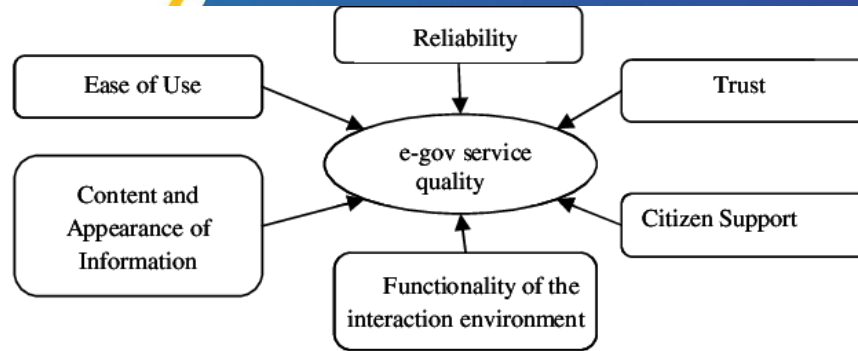


Figure 2. E-GovQual Conceptual Model
Source : Papadomichelaki & Mentzas (2009)

E-Govqual has six dimensions, including: Ease of Use, how easy is this e-government for people to interact. Trust, public trust in e-government regarding freedom from risk of harm or doubt during the online service process. Functionality of the Interaction Environment, an integral role in e-government in allowing users to communicate, which allows the collection of necessary information, the primary medium for transmitting information online. Reability, as public trust in e-government regarding correct and timely delivery services. Terms include correct technical functions (accessibility and availability) and services whose accuracy is very promising. Content and Appearance of Information, the quality of the information itself as well as its presentation and layout, such as the proper use of colors, graphics, and web page sizes. Citizen Support, assistance provided by the government to assist the public in finding information or transacting.

3. Method

Population and Sample

The method used is a quantitative method with a descriptive approach that aims to explain events that have taken place in the form of numbers that have meaning. This study uses research instruments in the form of questionnaires and books as well as relevant previous research results as secondary sources of this research. According to (Nasution, 2008) states that researchers are more specific in focusing quantitative research on certain things and often show relationships between variables. The population of this study is the people of Pasuruan City who have a minimum age of 17 and have used the E-Sambat application. In the form distributed online, the community will be displayed email columns, name, gender, gender, occupation, age, domicile district, last education, frequency of use of the E-Sambat application, screen shoot proof of use of the E-Sambat application. The method of sampling through a non-probability sampling approach with purposive sampling techniques. The criteria for respondents needed are the people of Pasuruan City, have smartphones, users of the e-sambat application. The determination of the number of samples is based on a table developed by Isaac & Michael with an error rate of 1%. Based on the Isaac & Michael table with a population of 1000 downloaders and an error rate of 1%, the minimum sample needed is 399 respondents, while in this study the number of samples was 445 respondents.

Gap Analysis

GAP analysis is a strategy plan that helps companies to plan all actions from what potential the company currently has, to go to the vision of what the company expects. Practically to help understand, where the company is currently located, where the vision is expected by the company, and how the process to achieve the goals of the vision. Gap analysis can be interpreted as a comparison between current performance / perception (perception) with expected performance (expectation). Perception itself is related to the interpretation of the

picture of the service that is actually presented. While expectation is a prediction made by users about what will happen later. In service quality expectations can also be seen as the desire or desire of consumers, i.e. what they feel the provider should provide rather than what the provider will provide (Parasuraman, 2001). The process for determining the gap value can be calculated by looking at the difference in value between the actual / current service quality (perception) and the expected service quality (expectation).

$$Q = P - E \text{ (Parasuraman, 2001)}$$

Where ,

Q = Gap level

P = current perceived quality value

E = expected quality value

If the result of the gap value shows that the current quality value is equal to or greater than the expected quality value ($P \geq E$), or the gap value is equal to or greater than 0, then this indicates that the service provided is in accordance with expectations, this indicates that user satisfaction is very high with the service provided.

Importance Performance Analysis (IPA)

Importance-Performance Analysis is a simple technique used to identify services or products to be more focused by a company in order to achieve customer satisfaction (Fuji, Glisina, Dicky and Hendi, 2019). The IPA technique is used by companies to measure the level of quality of which products/services should be focused on and which need improvement for the convenience of consumers who use these products/services. The science technique is very easy to apply to various fields because the display of the analysis results makes it easier to propose performance improvements for quality improvement. In IPA, there is a combination of measuring the level of importance and level of satisfaction in a two-dimensional graph to facilitate the explanation of data and proposals.

Importance-Performance Analysis is a simple technique used to identify services or products to be more focused by a company in order to achieve customer satisfaction (Fuji, Glisina, Dicky and Hendi, 2019). In the IPA analysis, the results will be in the form of graphs where the Y axis is the user's expectations and the x axis is the performance of the website. The chart will be divided into 4 quadrants,

- 1) Quadrant I is an item that must be repaired immediately
- 2) Quadrant II is an item that must be maintained in performance
- 3) Quadrant III is an item that affects the user less
- 4) Quadrant IV is an item that affects the user less but has excellent performance.

4. Result and Discussion

The questionnaire distributed to Pasuruan E-Sambat users has six dimensions in accordance with the E-Govqual theory, for the instruments on the questionnaire based on Fuad's research (2013) and the results of interviews with Diskominfo Pasuruan. The following are the dimensions and instruments used.

Table 1. Dimention and Indicator E-Govqual

Dimention	Code	Indicator	Ket
Ease of Use	EU 1	The structure of the E-Sambat application is clear and easy to follow	*
	EU 2	The E-Sambat application is easy to use	*
	EU 3	The tools provided in the E-Sambat application are well organized	*
	EU 4	E-Sambat is tailored to user needs	*

Dimension	Code	Indicator	Ket
Trust	EU 5	The information that goes live is always detailed	*
	EU 6	The information displayed is always up to date	**
	EU 7	Sufficient service information	**
	TR 1	Personal data of E-Sambat users is safe	*
	TR 2	Protect the anonymity of E-Sambat users	*
	TR 3	Secure the archiving of personal data of E-Sambat users	*
	TR 4	Provide written consent for E-Sambat users	*
Functionality of the Interaction Environment	TR 5	The procedure of obtaining E-Sambat user username and password is easy	**
	TR 6	E-Sambat user access control is good	**
	FIE 1	There is assistance in the E-Sambat application	*
	FIE 2	The process of submitting the form is clear	*
	FIE 3	Adequate response format	*
	Reliability	RLB 1	Forms in the E-Sambat application can be downloaded in a short time
RLB 2		The E-Sambat application is available and can be accessed whenever you need it	*
RLB 3		The E-Sambat application successfully performs services on the first request	*
RLB 4		E-Sambat application provides timely service	*
RLB 5		The E-Sambat application page can be downloaded in a short period	*
RLB 6		The E-Sambat app works great on any smartphone	*
Content and Appearance of Information	CAI 1	Complete E-Sambat data and information	*
	CAI 2	E-Sambat data and information are accurate and concise	*
	CAI 3	E-Sambat information is clear	*
	CAI 4	E-Sambat information is updated regularly	*
	CAI 5	All E-Sambat tools can work properly	*
	CAI 6	E-Sambat information is easy to understand	*
	CAI 7	Attractive E-Sambat colors	*
	CAI 8	Attractive E-Sambat graphics	*
	CAI 9	Interesting E-Sambat animation	*
	CAI 10	E-Sambat page size accordingly	**
Citizen Support	CS 1	User friendly guidelines	*
	CS 2	There is a help page	*
	CS 3	The application displays frequently asked questions by users	*
	CS 4	There is contact details information that can be contacted	*
	CS 5	User questions are answered quickly	*

(source : *(Fuad, 2013),**(diskominfo)

GAP Analysis Test Results

Based on the results of the calculation of the gap between performance and community expectations, there are 16 items where users are not satisfied with the service, in these items with the lowest value in TR 1 items of -0.17 which means that the community is not satisfied with the security of archiving personal data of E-Sambat users, and there are 21 items where users are satisfied with the service of these items with the highest value in EU item 3 of 0.09 which means that the community is satisfied with the tools provided on a well-organized E-Sambat application. Overall, the gap value for the E-Sambat application is 0.01, which means that users are satisfied with the services in the E-Sambat application.

Table 2. GAP Analysis Result

Variabel	Item	Performance	Expectations	GAP	Category
<i>Ease of Use</i>	EU1	4.28	4.17	0.11	satisfied
	EU2	4.23	4.13	0.09	satisfied
	EU3	4.31	4.14	0.17	satisfied
	EU4	4.26	4.21	0.05	satisfied
	EU5	4.27	4.24	0.03	satisfied
	EU6	4.31	4.24	0.07	satisfied
	EU7	4.17	4.16	0.01	satisfied
Average		4.26	4.19	0.08	satisfied
<i>Trust</i>	TR1	4.07	4.23	-0.17	dissatisfied
	TR2	4.02	4.08	-0.06	dissatisfied
	TR3	4.13	4.07	0.06	satisfied
	TR4	4.18	4.15	0.03	satisfied
	TR5	4.17	4.16	0.01	satisfied
	TR6	4.17	4.26	-0.09	Tidak Puas
Average		4.12	4.16	-0.04	dissatisfied
<i>Functionality of the Interaction Environment</i>	FIE1	4.24	4.22	0.02	satisfied
	FIE2	4.11	4.09	0.01	satisfied
	FIE3	4.12	4.10	0.02	satisfied
Average		4.16	4.14	0.02	satisfied
<i>Reliability</i>	RLB1	4.18	4.20	-0.02	dissatisfied
	RLB2	4.03	4.11	-0.08	dissatisfied
	RLB3	4.11	4.17	-0.06	dissatisfied
	RLB4	4.20	4.18	0.02	satisfied
	RLB5	4.20	4.22	-0.02	dissatisfied
	RLB6	4.10	4.14	-0.04	dissatisfied
Average		4.14	4.17	-0.03	dissatisfied
<i>Content and Appearance of Information</i>	CAI1	4.26	4.29	-0.03	dissatisfied
	CAI2	4.11	4.04	0.07	satisfied
	CAI3	4.20	4.14	0.06	satisfied
	CAI4	4.21	4.22	-0.02	dissatisfied
	CAI5	4.20	4.18	0.02	satisfied
	CAI6	4.24	4.26	-0.02	dissatisfied
	CAI7	4.13	4.18	-0.04	dissatisfied
	CAI8	4.16	4.20	-0.05	dissatisfied
	CAI9	4.26	4.21	0.05	satisfied
	CAI10	4.24	4.22	0.02	satisfied
Average		4.20	4.19	0.01	satisfied
<i>Citizen Support</i>	CS1	4.21	4.25	-0.04	dissatisfied
	CS2	4.10	4.11	-0.01	dissatisfied
	CS3	4.17	4.10	0.07	satisfied
	CS4	4.29	4.22	0.07	satisfied
	CS5	4.08	4.19	-0.11	dissatisfied
Average		4.17	4.17	0.00	satisfied
Total Average		4.18	4.18	0.01	satisfied

Sources: Processed Data, 2023

IPA Analysis Test Results

Based on the results of the IPA analysis, there are six items that are made a top priority in improving the E-Sambat application, namely item TR 1 (Personal data of E-Sambat users is safe) which means that the E-Sambat application must be able to guarantee the security of user personal data, TR 6 (Access control of E-Sambat users is good) where the E-Sambat application

can provide better and more convenient access control when accessing the E-Sambat application, RLB 1 (Forms in the E-Sambat application can be downloaded in a short time) which means that the developer must find a solution so that the download of forms in the E-Sambat application can be faster, CAI 7 (E-Sambat colors are attractive) which means that the coloring in the E-Sambat application must be improved, and finally CAI 8 (Attractive E-Sambat graphics) where the developer must improve the graphics in the E-Sambat application.

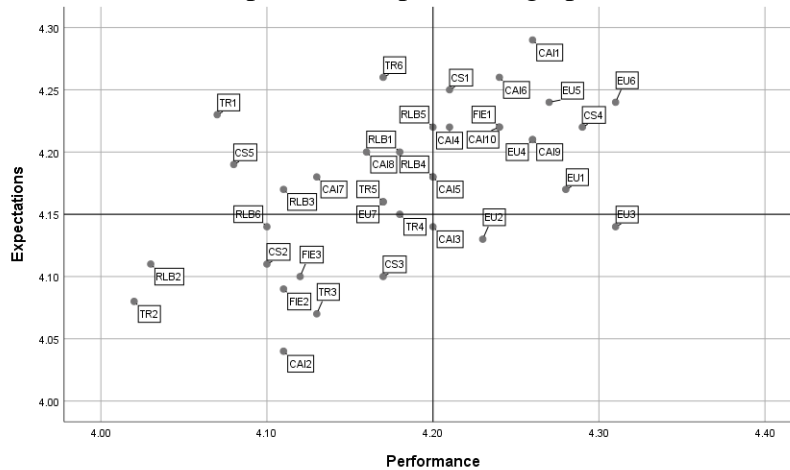


Figure 3. IPA Analysis Test Results
Sources : Processed Data, 2023

5. Conclusions

Based on the results of the analysis that has been carried out in this study, it can be concluded that:

- 1) The service quality of the E-Sambat application is very decent with a feasibility percentage value of 100%.
- 2) The GAP of application performance and public expectations of 0.01 which means that people are satisfied with the E-Sambat application service.
- 3) There are six items that are prioritized for improvement, namely TR 1 (security of personal data of E-Sambat users), TR 6 (access control of E-Sambat users), RLB 1 (speed in downloading E-Sambat forms), CAI 7 (use of colors in the E-Sambat application), and CAI 8 (graphics in the E-Sambat application).

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