

## **SERVICE QUALITY ANALYSIS USING SERVQUAL AND IMPORTANCE PERFORMANCE ANALYSIS (IPA) METHODS (CASE STUDY OF SIDOMULYA VILLAGE, ASTANAPURA DISTRICT)**

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### **ABSTRACT**

Public services at the village level play a crucial role in government implementation and significantly affect community satisfaction. However, gaps often exist between public expectations and their perceptions of service quality. This study aims to measure the quality of public services in Sidomulya Village, Astanajapura District, using the Service Quality (Servqual) method to identify the gap between expectations and perceptions, and to determine priority areas for improvement using Importance-Performance Analysis (IPA). Data were collected via questionnaires distributed to 30 respondents and analyzed through validity and reliability tests, followed by Servqual gap analysis and IPA quadrant mapping. The Servqual analysis revealed negative gaps across all dimensions of service quality—Tangibles (-0.39), Reliability (-0.97), Responsiveness (-0.53), Assurance (-0.40), and Empathy (-0.20)—with an average gap of -0.83, indicating that service quality does not meet public expectations. The largest gap was found in the Reliability dimension, highlighting concerns about service dependability. IPA results showed that aspects P1 and P9, related to administrative services and targeted social assistance, respectively, fall into the Top Priority quadrant, signaling urgent need for improvement. These findings suggest that the village government should prioritize enhancing these key service areas to better align with community expectations, thereby increasing public trust and satisfaction. This integrated application of Servqual and IPA provides a strategic framework for evaluating and improving village-level public services.

**Keywords:** Service Quality, Servqual Analysis, Village Government

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### **INTRODUCTION**

Public services are an important aspect in the implementation of government, especially at the village level as a government that is in direct contact with the community. The quality of services provided by the village government has a great influence on the level of community satisfaction. In reality, there is often a gap between people's perception of the services they receive and their expectations for the quality of the service. According to Hamidani et al., (2024) Service is an activity carried out by an individual or a group of people, supported by certain resources, through certain systems, procedures, and methods, with the aim of meeting the needs of other parties in accordance with the rights they have. therefore service to the community is very important, according to Agustina (2019) Public service can be interpreted as a service of goods or services whose services are for the general public, and the government is responsible for implementing and realizing it.

Service can be said to be good if a service carried out has met the needs expected by the community, but vice versa if it has not been able to meet the needs and expectations of the people, then the service can be said to be good. According to Iza et al., (2022) good governance will be achieved if the existing system and order in the government run properly, and in accordance with applicable regulations. Then according to the Decree of the Minister of State Apparatus Empowerment Number 63/Kep/M.Pan, 7 (2003) it is said that in the implementation of public services, there must be good basic principles, such as simplicity, efficient time, clarity, precision, comfort, security, politeness, friendliness, and comfort of the service environment.

According to Rahyunir (2015) Villages as an inseparable part of the government system of the Republic of Indonesia and the government system of a region, it can be said that villages are a subsystem of local government. So in the implementation of the government of a village, be it development, community development or village empowerment, it must always be based on the applicable laws. Every village government must provide optimal services to the community to increase community trust. However, at the Sidomulya Village Head Office, Astanajapura District, Cirebon Regency, currently still faces obstacles in assessing the quality of services provided to the community. This is due to the lack of a system that can facilitate the process of assessing service quality and the lack of system support in decision-making to improve the quality of the service. Without a clear evaluation, it is difficult to know the level of service optimization that has been carried out. Therefore, it is necessary to implement a system that can help overcome these obstacles and can support the improvement of the quality of public services.

Based on the description above, a method is needed to determine the quality of services in the village in order to know the gap (GAP) that occurs between the village government and the community. The method used is Service Quality (Servqual) which is commonly used to measure the level of gap (GAP) between public expectations and the current perception of the services that the public receives. There are several dimensions that are used as a reference as an assessment of service quality, namely tangibles, reliability, responsiveness, assurance, and empathy. Then to measure the priority scale, a test is carried out using the Importance-Performance Analysis (IPA) Method where this method functions to measure a level of importance and performance of various dimensions of existing services, then form 4 quadrants that show the level of priority for improving service quality.

Research using the servqual (service quality) and IPA (importance-Performance Analysis) methods is commonly carried out in various fields of work, both service and manufacturing, to measure the quality of service satisfaction levels. The following research has been conducted: 1. Increasing Customer Satisfaction in the Two Largest E-Commerce Businesses in Indonesia by Using Servqual (service quality) and IPA (importance-Performance Analysis) (Wilujeng et al., 2019), 2. Design to Improve Customer Satisfaction with the Servqual and IPA Method Approach at Underpass Cafe (Achmad Suyitno & Indung Sudarso, 2019), 3. Analysis of Improving the Quality of Workshop Services Using Servqual, Science, and Pgcv Index Methods (Nusaputra et al., 2014), 4. Analysis of user satisfaction with the quality of library services in vocational universities using servqual and importance-performance analysis methods (Rachmadita & Arninputranto, 2018). From several previous studies, it can be concluded that the servqual method is effective in measuring the gap between

customer or public expectations and perceptions of services, while the IPA method helps identify service improvement priorities that must be improved first, therefore the combination of these two methods has been proven to be used in various sectors, such as e-commerce, cafes, workshops, and even libraries. To make the service better so as to increase consumer or community satisfaction.

This study offers novelty through the integrated application of the Service Quality (Servqual) method and Importance-Performance Analysis (IPA) to assess public service quality at the village government level, an approach that is still rarely applied in Indonesian rural contexts, specifically in Sidomulya Village, Astanajapura District, Cirebon Regency. Beyond measuring the gap between community expectations and perceptions of services received, this research maps out service improvement priorities using IPA's quadrant analysis, providing a more comprehensive and strategic framework compared to prior studies that mainly focus on satisfaction measurement alone (Wilujeng et al., 2019; Achmad Suyitno & Indung Sudarso, 2019; Rachmadita & Arninputranto, 2018). Consequently, this research is expected to deliver practical contributions in the form of an evaluation system to assist village governments in data-driven decision making for service enhancement.

This study aims to: (1) measure the quality of public services in Sidomulya Village using the Servqual method to identify the gap between residents' expectations and their perceptions of services; (2) determine the priority areas for service improvement using Importance-Performance Analysis (IPA); and (3) provide strategic recommendations to the village government to improve the quality of public services, thereby increasing community satisfaction and trust.

The study provides practical benefits for the Sidomulya Village government by offering structured and objective data on the quality of public services as experienced by the community. The findings serve as a basis for making targeted policy decisions to enhance service delivery. Moreover, it benefits the community by supporting more responsive and higher-quality services. Academically, the research enriches the literature on public service quality measurement at the village level through an integrated methodological approach and can serve as a reference for future studies in public management and local governance.

## **METHOD**

In this study, an analysis of the level of service quality in the village was used, by distributing samples in the form of questionnaires, to assess the five dimensions of service quality that affect the expectations and perceptions of the people of Sidomulya Village, Astanajapura District. From the results of the research, a gap value (GAP) will be obtained. According to Sugiarto, (1999) a sample is a group of individuals taken from a population with a certain procedure, in the hope of representing the characteristics of that population.

Then to ensure that the research instrument is in accordance with the correct standard for measuring a data, then conduct a Validation Test and Reliability Test to test the consistency and stability of the measurement results carried out, a reliable instrument will provide consistent and reliable results every time it is used. According to yoel (2021), a good research instrument is a tool that meets the criteria of valid, reliable, standard, economical, and practical. Then the research instruments, both from questionnaires and interviews, before the instrument is used, it is necessary to test its validity and reliability (Sugiyono, 2014). Then

(Slamet & Wahyuningsih, 2022) also said that this validity test is important to be carried out to find out whether an instrument is said to be valid or invalid in measuring variables in research. The validation test in this study used the Pearson-product moment correlation formula (Mardesci & Mardesci, 2020). From some of the opinions above, it shows that validation and reliability tests are very important to be carried out, to determine the quality of the data.

$$r_{xy} = \frac{n \sum X_i Y_i - (\sum X_i)(\sum Y_i)}{\sqrt{[n \sum X_i^2 - (\sum X_i)^2][n \sum Y_i^2 - (\sum Y_i)^2]} \quad (1)$$

Keterangan:

$r_{xy}$	:	koefisien korelasi anatara variabel X dan Y
N	:	jumlah responden
$\sum X$	:	jumlah skor butir soal
$\sum Y$	:	jumlah skor total soal
$\sum X^2$	:	jumlah skor kuadrat butir soal
$\sum Y^2$	:	jumlah skor total kuadrat butir soal

After the validity test is carried out and all data is declared valid, it is followed by a reliability test of the research instrument, Cronbach's alpha coefficient used in this study. Here's the equation Cronbach's

$$\text{Cronbach's Alpha} = \frac{1}{1 + \frac{\sum S_i^2}{S^2}} \quad (2)$$

Servqual according to Zeithaml (1990) can be interpreted as the extent to which there is a difference between the current performance and their expectations for the services received. Then Parasuraman in Winarno (2017) said that service *quality* is an abstract concept and difficult to understand, because it is intangible, tends to be different or not uniform. Basically, customer expectations are an illustration of the ideal service that a government agency should provide to the community. Here is the servqual equation used:

$$\text{Servqual} = \text{Skor P} - \text{Skor E} \quad (3)$$

Keterangan:

P : Persepsi atau kinerja

E : Ekspektasi atau Harapan

Based on the servqual (*service quality*) model, if the score produced is negative, it shows that the service quality is not good or the customer is not satisfied with the service, then if the score is 0, then the customer is satisfied with the existing service, and if the score is positive, it shows that the service is satisfactory or above average.

According to (Martilla, 1977) *Importance-Performance analysis* is a method used to measure the priority improvement of a service or product commonly known as *quadrant analysis*. This method is widely known and easy to use to generate analysis results visually, to determine the performance priorities that need to be improved. Which is represented by the two axes X and Y, X represents performance and Y represents Importance.

While the Importance-Performance Analysis (IPA) method is introduced and its theoretical basis is explained, the actual application of IPA in this study lacks detailed

description. Specifically, the process of how the importance and performance scores were collected, analyzed, and plotted into the four-quadrant IPA matrix is not clearly elaborated. Critical steps such as the determination of scale measurement, calculation of mean values, setting the crosshair (cut-off points) for quadrant divisions, and interpretation criteria for each quadrant are missing. Without this procedural clarity, readers may find it difficult to fully understand how the IPA results guided the prioritization of service improvements in the village context. Providing a step-by-step explanation or example of the IPA application would enhance transparency and strengthen the methodological rigor of the study.

## RESULTH AND DISCUSSION

After the questionnaire which was randomly distributed to 30 respondents spread across Sidomulya village, Astanajapura District has been completed, the next step is to conduct a validation and reliability test first to ensure the validity of the data, the following are the results of the validation and reliability test:

**Table 1. Validation Test of Perception Services Based on Perception (X)**

Validity	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10
<b>r</b>	0.6318	0.5895	0.6309	0.7977	0.6717	0.6189	0.4495	0.6127	0.6952	0.4298
<b>r table</b>	0.361	0.361	0.361	0.361	0.361	0.361	0.361	0.361	0.361	0.361
<b>Decision</b>	VALID	VALID	VALID	VALID	VALID	VALID	VALID	VALID	VALID	VALID

**Table 2. Perception Based on Perception Service Reliability Test (X)**

Reliability	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10
<b>Variance</b>	1.2517	0.6540	0.6621	0.9986	0.8747	0.5161	0.7310	0.4873	1.2174	1.1966
<b>Total Variance</b>	8.5403									
<b>Total Variance Value</b>	31.2376									
<b>Decision</b>	0.7266									
	Reliable									

**Table 3. Validation Test of Perception Services Based on Expectations (Y)**

Validity	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10
<b>Correlation</b>	0.3621	0.3911	0.3932	0.5133	0.3655	0.0483	0.3993	0.2953	0.4119	0.3723
<b>r table</b>	0.361	0.361	0.361	0.361	0.361	0.361	0.361	0.361	0.361	0.361
<b>Decision</b>	VALID	VALID	VALID	VALID	VALID	INVALID	VALID	INVALID	VALID	VALID

**Table 4. Perception Service Reliability Test Based on Expectations (Y)**

Reliability	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10
<b>Variance</b>	0.2172	0.2402	0.4138	0.4782	0.4379	0.4195	0.3919	0.3862	0.4174	0.5333
<b>Total Variance</b>	3.9322									
<b>Total Variance Value</b>	10.8379									
<b>Decision</b>	0.6372									
	Reliable									

In tables 1 and 3, the validity coefficient value ranges from 0.362 to 0.796, meaning that the value shows the value of r calculated > r table with a value of 0.361, this concludes that the data is valid for use. According to Yusup, (2018) If the validity coefficient value is

higher, then the quality of the data will be better, and vice versa. Then in Tables 2 and 4 the *Cronbach's Alpha* value produced in both tables is in the range of 0.637 and 0.726, the value is above *the proper Cronbach's Alpha* value, therefore the data is declared reliable to use.

**Table 5. Results of Service Servqual Analysis in Sidamulya Village, Astanajapura District**

<b>Dimension</b>	<b>Perception (Mean)</b>	<b>Expectation (Mean)</b>	<b>GAP (P - H)</b>
<b>Tangibles</b>	3.67	4.06	-0.39
<b>Reliability</b>	3.22	4.21	-0.99
<b>Responsiveness</b>	3.57	4.10	-0.53
<b>Assurance</b>	3.97	4.37	-0.40
<b>Empathy</b>	3.97	4.17	-0.20
<b>Average GAP</b>			<b>-0.837</b>

According to Kotler in Noer, (2016) Explains that perception is a quality of service that comes from the expectations or expectations desired by the community and boils down to how the community assesses the services received, which then becomes a perception. Meanwhile, expectations or expectations according to Tjptono, (2007) are a belief held by the community in the services received from the village government, which will later be used as a reference in assessing the quality of services in the village Based on the results of Servqual's analysis of the perception and expectations of the community in the village, an average gap of -0.83 was obtained. This negative gap value shows that the quality of service felt by the community is not in accordance with their expectations. Here's an explanation per dimension:

**Tangibles (Physical Evidence) Gap score -0.39**

The community considers that the condition of the facilities and infrastructure in the village office such as the village office, health center, other supporting facilities, and the cleanliness of the village office environment are quite good, although there are some shortcomings such as the environment around the village office, there are still some that need to be improved, and the community hopes that there will be improvements in the future.

**Reliability Gap score -0.97**

This dimension has the largest gap compared to other dimensions, meaning that the village community feels that the services in the village are not reliable according to the community's expectations. There is dissatisfaction with services related to the speed of services, clarity of procedures, and the effectiveness of village programs, so this dimension needs more attention from the local government.

**Responsiveness (Responsibility) Gap score -0.53**

The village community considers that the village apparatus is quite responsive, although it is not fully in accordance with the community's expectations, the community's response to complaints is still delayed in taking action.

**Assurance Score Gap -0,40**

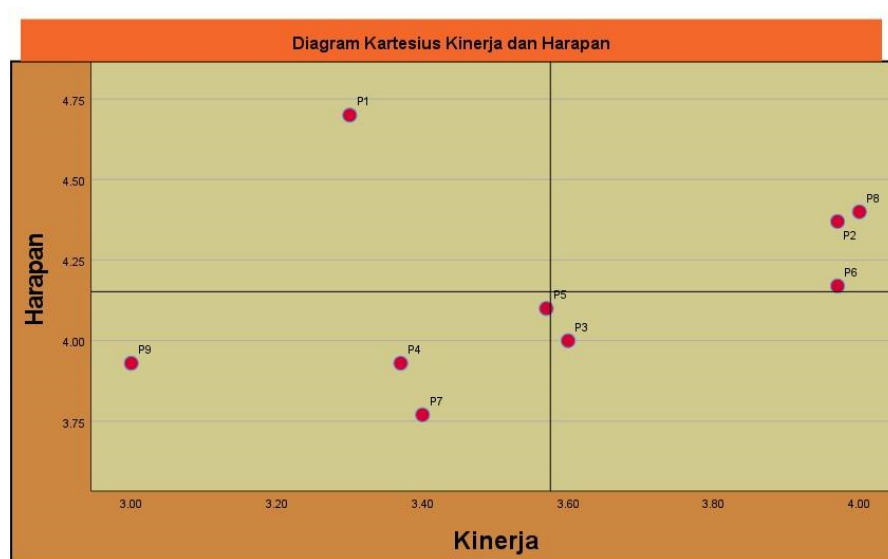
The community considers that the village apparatus is good enough in providing a sense of security and trust to the residents, even though there is still a gap, but the community considers that the village apparatus has good skills and friendliness.

**Empathy (Empathy) Gap score -0.20**

This dimension of empathy has the smallest gap when compared to other dimensions, residents consider that village officials show good attention and flexible working hours according to the needs of residents.

Then after the results of the GAP between performance and expectations are known, it is necessary to make improvements at certain points, to determine priorities, use the *Importance-Performance Analysis* (IPA) cartesian diagram to find out which points are the most priority to improve the quality of service.

The following are the results of data processing carried out using the SPSS Version of the application 27:



Gambar 3. *Importance-Performance Analysis*

From the results of data processing, a Science Cartesian Diagram and a performance-expectation table were obtained. This diagram divides the assessment attributes into four quadrants. Quadrant A, called Top Priority, contains aspects with high expectations but low performance, indicating that these aspects should be the main focus for improvement. Quadrant B, Maintain Achievement, represents aspects where both performance and expectations are high, suggesting that these aspects need to be maintained or further improved. Quadrant C, Low Priority, includes aspects where both expectations and performance are low, indicating that these areas are not urgent for improvement. Quadrant D, Excessive, covers aspects with high performance but low expectations, meaning that efforts could be redirected to other areas for improvement.

Based on the Plot Diagram, the data distribution is as follows: Quadrant A (Top Priority) includes P1 and P9, indicating that these aspects have high community expectations but low performance. Specifically, the community hopes for improvements in village administrative services and targeted social assistance. Quadrant B (Maintain Achievement) comprises P2 and P8, where residents perceive the village apparatus as friendly and professional, and the health facilities such as the health center are functioning well. Quadrant C (Low Priority) includes P4 and P7, which relate to service procedures and socialization that residents consider sufficient despite their low performance and expectations. Quadrant D

(Excessive) consists of P3, P5, and P6, where performance is high but expectations are lower compared to other aspects.

In conclusion, from the plot diagram, the main focus for improvement should be on points P1 and P9, as these fall into Quadrant A where public expectations are high but performance remains low.

## **CONCLUSION**

Based on the results and discussion of the research, this study measured the quality of services at the Sidomulya Village Office, Astanajapura District, using the Servqual and Importance-Performance Analysis (IPA) methods. The Servqual analysis revealed a negative gap across all service quality dimensions: Tangibles (-0.39), Reliability (-0.97), Responsiveness (-0.53), Assurance (-0.40), and Empathy (-0.20), with an average overall gap of -0.83, indicating that the service quality experienced by the public has not met their expectations. The largest gap was in the Reliability dimension (-0.97), suggesting that people perceive the service as less reliable than expected. The IPA results identified aspects P1 and P9 as main priorities for improvement, as they fall within Quadrant A (Top Priority). These findings imply that the village government must focus on improving the aspects represented by P1 and P9 to better align service quality with community expectations and thereby increase public trust. Specifically, the community has high expectations for efficient and timely village services (P1) and accurate, targeted distribution of social assistance from the central government (P9).

## **REFERENCES**

- Achmad Suyitno, & Sudarso, I. (2019). Desain peningkatan kepuasan pelanggan dengan pendekatan metode SERVQUAL dan IPA di Underpass Cafe. *Seminar Nasional Inovasi dan Aplikasi Teknologi di Industri 2019*, 137–141.
- Agustina, E. (2019). Pelaksanaan pelayanan publik berkualitas bagi masyarakat. *Jurnal Literasi Hukum*, 6.
- Hamidani, S., Primadasa, Y., & Setyadi, P. D. (2024). Sistem informasi pengukuran kepuasan pelayanan kantor kepala desa dengan metode SERVQUAL dan IPA. *Jurnal Pustaka Data (Pusat Akses Kajian Database, Analisa Teknologi, dan Arsitektur Komputer)*, 4(1), 27–32.
- Hom, W. C. (1997). Make customer service analyses a little easier with the PGCV index. *Quality Progress*, 30, 89.
- Iza, I. N., Habibi, M. M., & Sukriono, D. (2022). Penerapan prinsip good governance dalam pelayanan publik di Desa Tempursari Kecamatan Tempursari Kabupaten Lumajang. *Jurnal Civic Hukum*, 7(4), 88–99.
- Kementerian Pendayagunaan Aparatur Negara. (2003). Nomor 63/Kep/M. Pan, 7.
- Mardesci, H., & Mardesci, A. (2020). Pengaruh perkuliahan dengan metode dalam jaringan (daring) terhadap minat belajar mahasiswa (studi kasus pada program studi teknologi pangan Universitas Islam Indragiri). *Jurnal Pendidikan: Riset dan Konseptual*, 4(3), 357.
- Martilla, J. A., & James, J. C. (1977). Importance-performance analysis. *Journal of Marketing*, 41(1), 77–79.

- Noer, L. R. (2016). Analisis peningkatan kualitas pelayanan mahasiswa magister manajemen teknologi ITS Surabaya dengan metode SERVQUAL dan Importance Performance Analysis (IPA). *Journal of Research and Technology*, 2(1), 35–43.
- Nusaputra, N., Choiri, M., & Kusuma, L. T. W. N. (2014). Analisis peningkatan kualitas pelayanan bengkel dengan metode SERVQUAL, IPA, dan indeks PGCV (studi kasus di PT Astra International Tbk-Daihatsu Branch Office Malang). *Jurnal Rekayasa dan Manajemen Sistem Industri*, 2(6), 1239–1250.
- Rachmadita, R. N., & Arninputranto, W. (2018). Analisis kepuasan pemustaka terhadap kualitas layanan perpustakaan di perguruan tinggi vokasi dengan metode SERVQUAL dan Importance-Performance Analysis. *Berkala Ilmu Perpustakaan dan Informasi*, 14(2), 214.
- Rahyunir Raup, S. M. (2015). *Pemerintahan desa*. Nusa Media.
- Slamet, R., & Wahyuningsih, S. (2022). Validitas dan reliabilitas terhadap instrumen kepuasan kerja. *Aliansi: Jurnal Manajemen dan Bisnis*, 17(2), 51–58.
- Sugianto, E. (1999). *Psikologi pelayanan dalam industri jasa*. Gramedia Pustaka Utama.
- Sugiyono. (2014). *Statistika untuk penelitian*. Alfabeta.
- Tjptono. (2007). *Menejemen jasa*. Andi Offset.
- Wilujeng, F. R., Rembulan, G. D., Andreas, D., & Tannady, H. (2019). Meningkatkan kepuasan pelanggan pada dua bisnis e-commerce terbesar di Indonesia dengan menggunakan analisis SERVQUAL dan IPA. *Prosiding Seminar Nasional Sains dan Teknologi*, 1–9.
- Winarno, H., & Absror, T. (2017). Analisis kualitas pelayanan dengan metode service quality (SERVQUAL) dan Importance Performance Analysis (IPA) pada PT Media Purna Engineering. *Jurnal Manajemen Industri dan Logistik*, 1(2), 162.
- Yoel Octobe Purba. (2021). Teknik uji instrumen penelitian pendidikan. *Widini Bhakti Persada Bandung*, 1(2), 3–26.
- Yusup, F. (2018). Uji validitas dan reliabilitas instrumen penelitian kuantitatif. *Jurnal Tarbiyah: Jurnal Ilmiah Kependidikan*, 7.
- Zeithaml, V. A., Parasuraman, A., & Berry, L. L. (1990). *Delivering quality service: Balancing customer perceptions and expectations*. Simon & Schuster.