

Assessing Service Satisfaction: Insights from Pasir Gudang Municipal Council

Chia-Hung Chen* Kwai-Seng Leong

Department of Distribution Management, Shu-Te University, Kaohsiung, Taiwan

* E-mail of the corresponding author: chiahung@stu.edu.tw

Abstract

In the dynamic socio-economic context, demand for high-quality government services is rising. Despite Malaysian government reforms, public dissatisfaction persists with government agency services. This study uses Parasuraman, Zeithaml, and Berry's service quality model to examine the gap between public expectations and satisfaction, specifically with Pasir Gudang Municipal Council's services. It aims to evaluate the council's service quality and public satisfaction levels. Significant findings reveal disparities between the council's services and public expectations, especially in "empathetic concerns," "dependable responses," and "physical facilities." While the council meets basic service needs, enhancing focus on the public's specific needs is crucial for improving overall satisfaction.

Keywords: Pasir Gudang Municipal Council, Service Quality, Degree of Expectation, Satisfaction

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1. Introduction

Owing to such reasons as rapid changes in the social environment, rising levels of people's education and standards of their daily living, and democratic awareness prevailing in modern politics, nowadays citizens have more and higher demands on the efficiency of their government's administration as well as the provided quality of public services (Mokhlis et al., 2011). How to increase effectiveness and efficiency of government's executive abilities and how to provide citizens with better services to satisfy their varied needs have gradually become an important issue that governments around the world have to deal with.

In the past the Malaysian government tried to promote various reforms in its administration. For example, it introduced such policies as creating convenient public services to citizens, inventing measures for anti-corruption, and enhancement of work efficiency as guidelines of its administration. It hopes that by way of those innovative measures and attentive listening to the public's as well as the professionals' opinions, the Malaysian government could satisfactorily meet its citizens' various needs. Nevertheless, even after years of continuous efforts and hard work, the Malaysian public still widely feels unsatisfied with the public services in their own experiences and contacts with government's agencies. How to make the public feel and clearly see the government's efforts and resolve in reforms becomes a critical issue that the Malaysian government must take into serious consideration.

The operation of Malaysian government is basically based upon the higher administrative levels' policies of implementing national targets, and then the lower executive levels carry out their superiors' orders by putting them into practice on the basis of the existent legal systems. However, those officials of the lower executive levels tend to have a so-called traditional "civil servants' mentality" and often fail to understand the public's genuine feelings and needs. Those officials rarely conduct any survey or research to gauge citizens' level of satisfaction towards the government, and are unable to make any adjustment in their strategy for policy execution. Therefore, how to introduce the concept of marketing-oriented services into governmental organizations, broaden officials' vision to accelerate public policy promotion, set up a corporate-like government, and actively endow citizens with good public services has become an imminent critical issue that the Malaysian government has to face. In 2008 the Malaysian housing administration and local governments introduced a "Star-Rating System" to measure local governments' performance in the public services' delivery systems, and aimed to improve weak links and points in the executive levels, with a hope of significantly raising the quality level to serve the Malaysian citizens.

This study adopts the service-quality gap model proposed by the three professors at Cambridge University, Parasuraman, Zeithaml, and Berry (1985). By way of using questionnaire surveys and quantity analysis, this study gauges the effectiveness of public services provided by the Pasir Gudang Municipal Council, and works as a reference as well as a basis for the Council's future efforts and improvement in that direction. This study develops the targeted questions and range of study, reviews the literature related to topics of service quality and models of customers' satisfaction evaluation, and then builds its model of research and reference for pre-test questionnaires. Through those results obtained from the pre-test questionnaires, this study modifies and adjusts its questions and finally gives citizens formal questionnaires. Finally, after receiving a collection of answered questionnaires, this study conducts a statistic analysis and uses the collected data to make a conclusion.

2. Literature Review

This research is a study of the public's perception of importance and satisfaction with varied services provided by the Pasir Gudang Municipal Council. At first, this research attempts to understand such aspects as services, quality, and the service quality, and then it uses the PZB model proposed by Parasuraman et al. (1985) to build its own model to measure the services, effects, and planning at the Pasir Gudang Municipal Council. The explanation is as follows:

2.1 Service Quality

Levitt (1972) regards that a definition of service quality depends on whether provided services can match customers' expected level of satisfaction. Sasser et al. (1978) see that the service level is similar to the concept of quality, the service level means that the provided services will bring about external and internal levels of benefits, and it can be divided into two types, namely the Expected Service Level and the Experienced Service Level. Crosby (1979) thinks that service quality indicates the level of customers' expectation, and service quality is a result of comparison between customers' expected services and their actually experienced services.

Lehtinen and Lehtinen (1982) suggest that service quality is produced through an interaction between customers and service providers, and that service quality can be divided into two types, namely the process and the result. Gronroos (1982) proposes such theory. Before receiving services, customers have an expected quality of services in mind and, after receiving the services, they have their experienced quality about the provided services. Through a comparison of differences found in both qualities, customers have their own total perceived quality about the services. In their comparison, if the experienced quality matches the expected quality, then the customers' total perceived quality is positive, and vice versa. Churchill and Surprenant (1982) regard that service quality means customers' level of satisfaction with the provided services and it also means those differences between the actual services and the expectation. Garvin (1984) defines service quality as a subjectively perceived quality, a level of quality that is subjectively evaluated and not objectively judged.

To gain and retain the customer it is necessary to understand what the value means to him. Interesting papers on the microeconomic concept of flexibility to assess this flexibility of the SERVQUAL gap in order to obtain important information for service providers to develop appropriate strategies in service provision can also be found in the literature. (Kumar et al., 2018). Moreover, the SERVQUAL model has seen extensive use in measurements of service quality due to its simplicity, flexibility, and adaptability, as well as its ability to detect areas in need of improvement (Beheshtinia & Azad, 2019; Liu & Hung, 2021; Shermin & Rahaman, 2021)

2.2 Basic Theories and Models Concerned with Service Quality

With the progress of time, a definition of quality nowadays is not only limited to refer to tangible "products" but is also used to apply to the invisible "services". These three professors, Parasuraman, Zeithaml, and Berry, propose a conceptual model about service quality that is briefly termed as PZB model. This PZB model explains the reasons why provided service quality constantly fails to satisfy customers' needs in the service industry. It puts an emphasis on the fact that customers are the only one to decide service quality. By way of a comparison between the expected service quality and their awareness after receiving services, customers obtain an understanding of the service quality level and make a judgment about the differences and gaps between their initial expectation and later experiences. Thus, if the service industry intends to fully satisfy customers' needs, they must seek for breakthroughs to fill up or narrow down those five gaps about service quality, as presented in this PZB model.

GAP 1: Gap between Customer Expectations and Management Perception

GAP 2: Gap between Management Perception and Service Quality Specification

GAP 3: Gap between Service Quality Specification and Service Delivery

GAP 4: Gap between Service Delivery and External Communication

GAP 5: Gap between Expected Service and Experienced Service

These three scholars Parasuraman, Zeithaml, and Berry (the PZB scholars) built their conceptual model about service quality in 1985, and also indicated ten factors that affect and construct measuring frameworks for service quality. But later on they thought that those ten factors (including 97 questions) are too many and too inconvenient for measurement, so they refined their research results made in 1985 and reduced from ten factors to five constructive dimensions, namely those factors that influence service quality as follows: Tangibles, Reliability, Responsiveness, Assurance, and Empathy. They also developed a SERVQUAL (service quality) measuring table, including 22 questions, to lay a foundation for studies about service quality.

- Tangibles: including physical facilities, appearances of the working staff, tools and equipment for offering services—namely the locations, equipment, and personnel that provide services.
- Reliability: including the level of being trustworthy, consistency, and the capability to provide reliable accuracy to carry out promised services.
- Responsiveness: including the serving staff's will and agility to provide services, namely their will to

offer speedy services for assistance to customers.

- Assurance: The serving staff has broad professional knowledge, is sincere and polite, and makes their customers feel that the staff is reliable.
- Empathy: The company is able to provide each customer with individual concerns and care.

Those five Dimensions and 22 questions are the SERVQUAL method proposed by the PZB scholars. They regard that through this SERVQUAL method researchers can discern merits and drawbacks in the service quality that is provided to customers. In its actual practice, this SERVQUAL method uses customers' subjective awareness as the focus of measurement. By way of measuring customers' expectation about the promised services as well as their realization about results of the offered services, a differentiation between these two measurement lays the basis to judge the strong points and shortcomings concerned with service quality.

This study makes use of the conceptual model about service quality proposed by Parasuraman, Zeithaml, and Berry (1985) as its theoretical basis, designs a series of questions according to the five Dimensions of service quality, and then carries out an empirical analysis of service quality provided at the Pasir Gudang Municipal Council.

3. Research Design

For this part of the study an emphasis is on the introduction for designing a research framework and the following operational process. The study is divided into three stages: setting up a research framework and a research hypothesis, questionnaire designs, as well as the analysis tools and methods. What follows is an explanation for the process and results of each stage.

3.1 Research Framework and Hypothesis

This study mainly explores GAP 1 and GAP 5 indicated in the PZB service quality model. In other words, it investigates if there is any difference between the public's expected service quality level that the Pasir Gudang Municipal Council arbitrarily perceives, and the service quality level that the public anticipates before their visits to the Council. In addition, it also investigates if there exists any difference between the dimensional factors about the importance level and the satisfaction level in citizens' minds that receive services at the Council. Besides using the five Dimensions of service quality suggested by the PZB scholars in 1988 and their modified SERVQUAL measuring table in 1999 as the reference to design a questionnaire, this study also considers varied characteristics of government agencies and service items available at the Council, and then it modifies its initial questions to make a table of measurement.

On the basis of research objectives and research frameworks, this study proposes four null hypotheses as follows:

- H1: There is no significant difference between "the public's expected level of service quality" and "the service quality level that the public perceives".
- H2: There is no significant difference between "the public's expected level of service quality" and "the public's expected level of service quality that the Council arbitrarily perceives".
- H3: "The demographic variables among citizens that visit the Council" make no significant difference to "the factors of importance for service quality of the Council".
- H4: "The demographic variables among citizens that visit the Council" make no significant difference to "the degrees of satisfaction with service quality of the Council".

3.2 Questionnaire Design

In this study the design of questionnaire reflects the SERVQUAL measuring table proposed by the PZB scholars in 1988. To make sure a degree of credibility is obtained, thirty copies of pre-test questionnaires were distributed among the public and after collecting, analyzing, and modifying the pre-test questionnaire, four questions were considered improper because of their repetitious meanings. What's more, some questions were further modified and polished to get rid of any ambiguous phrasing and make their meanings to be clearer.

The initial questionnaire consists of twenty-four questions and is built on the five Dimensions to work as the basis to measure service quality. After adjustment and deletion of four questions, twenty questions remain in total—three questions of Tangibles, four questions of Reliability, four questions of Responsiveness, four questions of Assurance, and five questions of Empathy. The questionnaire of this study includes three parts and its structure is in a form of enclosure.

Part 1: basic information about citizens that visit the Council

Part 2: those parts that the public expects the Council to enhance in its current execution and administration of duties

Part 3: the public's expectation levels and satisfaction degrees towards the service quality factors that are concerned with the Council's provided services

3.3 Analysis Tools and Methods

This study uses the statistic software SPSS 16.0 to further analyze its collected data. And this study uses those statistic methods as follows: 1). Mean and Standard Deviation, 2). Reliability Analysis, 3). Exploratory Factor Analysis, 4). t-test, 5). One-way ANOVA, 6). Independence test

4. Empirical Results and Analysis

This part focuses on the analysis of questionnaire survey results. First of all, it analyzes the structure of collected samples. Then it uses the SPSS software to carry out a factor analysis and a credibility checkup among information collected in the questionnaire survey. It also analyzes the current conditions of service quality at the Council, and the population statistic variation among citizens who visit the Council, as well as those differences in the public's evaluation of factors that influence service quality at the Council. Finally this study discusses the public's familiarity with service items provided at the Council, and some key factors that are related to citizens' satisfaction with the Council.

4.1 Sample Information Analysis

When this questionnaire was given out, it happened to be the season of annual taxation for citizens. A total of 500 copies were distributed among the public, and 285 copies of questionnaires were returned and collected. Thus the return rate of this questionnaire is 57 %. After taking out copies that are not answered completely and those that have the same answer for all questions, the total number of effective copies of the questionnaire comes up to 200 copies, a 40 % return rate.

As shown in Table 1, the collected data indicate that, when genders are concerned, there are more women (60 %) than men (40 %). On the aspect of age, citizens with the age range from 40 to 55 years old are the biggest group, with 43.5 % of the surveyed public. As for the level of education, the two groups answering "high school" and "high school and below" form the majority, as the combined groups are 87 % of all the people that answer the questionnaire. Half of the respondents answer that they visit the Council "between zero to one time" every month. What is noteworthy is the fact that 42 % of respondents visit the Council "between two and four times" each month.

Table 1. Statistics of Surveyed Citizens' Information

Basic Information	Range of Survey	Number of People	Percentage (%)
Gender	Male	80	40.0
	Female	120	60.0
Age	22 years old & below	22	11.0
	23~39 years old	60	30.0
	40~55 years old	87	43.5
	55 years old & above	31	15.5
Level of Education	High school & below	102	51.0
	High school	72	36.0
	College	8	4.0
	University	10	5.0
	Master	8	4.0
Vocation	Student	10	5.0
	Military, public & teaching personnel	22	11.0
	Information technology	38	19.0
	Service industry	80	40.0
	Finance and insurance	12	6.0
	Manufacturing	6	3.0
	Others	32	16.0
Times of Visit to the Council	0-1 time	100	50.0
	2-4 times	84	42.0
	5 times or above	16	8.0

4.2.1 Data Checkup

For a checkup of the collected questionnaire data to see if they are suitable for researches, this study adopts the Kaiser-Meyer-Olkin's measure of sampling adequacy (the KMO Test) to examine if the gathered samples are an appropriate quantity for this research. If the value of the KMO Test is smaller than 0.5, then the samples are not suitable for a factor analysis. The value of important-factor KMO Test is 0.782 and the value of satisfaction-level of KMO Test is 0.842, so both values mean that the collected data are suitable for a factor analysis. In addition, the chi-square values of Bartlett's Test of Sphericity are 5044.238 and 7572.179 respectively, both of which have reached a fairly high standard. All these facts show that there exist some common factors among the population

correlation matrices, and the collected data are suitable for a detailed factor analysis. The consequent analyses are shown in both Table 2 and Table 3.

Table 2. Important Factor: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.782
Bartlett's Test of Sphericity	Approx. Chi-square	5044.238
	df	190
	sig.	.000

Table 3. Satisfaction Level: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.842
Bartlett's Test of Sphericity	Approx. Chi-square	7572.179
	df	190
	sig.	.000

4.2.2 Extraction and Naming of Factors Related to Service Quality

This study consults the Kaiser principle and uses the scree plot to decide the number of relevant factors. The questionnaire consists of twenty questions and, after taking into account of the two above-mentioned methods, the varimax orthogonal rotation is chosen as the primary rotation for this analysis. This study extracts three factors from questions related to the expectation level and three factors from those concerned with the satisfaction level. Related information is shown in both Table 4 and Table 5.

Table 4. Expectation Level: Factor Numbers and Explanation of Variances

Factor	Eigenvalues	% of Variances	Cumulative %
1	4.185	23.927	23.927
2	4.432	21.161	45.088
3	3.423	17.117	62.205

Table 5. Satisfaction Level: Factor Numbers and Explanation of Variances

Factor	Eigenvalues	% of Variances	Cumulative %
1	3.853	25.686	25.686
2	3.031	20.206	45.892
3	2.416	16.108	62.000

For the part of naming the factors, this study consults Hair et al. (1992) and uses the factor loading that is bigger than 0.6 as the basis of naming, and uses it to decide each factor's included target items. According to the above-mentioned principle, after an analysis, this study's expectation level can be divided into three Dimensions named as Empathy, Reliability, and Tangibles, whereas its experience level Dimensions can be termed as Empathy, Reliability, and Tangibles, too. The factor loading and cumulative variance amount are shown in both Table 6 and Table 7.

Table 6. Dimensional Factors of Service Expectation Level

Factor	Variable (Question No.)	Factor Loading	Cumulative %
Empathy	1. The Council provides channels for the public to express opinions and make appeals. Q19	0.861	23.927
	2. The Council explains in detail to the public about their cases of application and the related processes of administration. Q9	0.749	
	3. The Council often shows sincerity to help solve the public's problems. Q8	0.746	
	4. The Council sets up special counters to provide individual services for seniors and handicapped citizens. Q20	0.734	
	5. The Council's services do not change because of any change of staff members, locations, or occasions. Q17	0.682	
Reliability	6. The Council staff serves the public very politely. Q14	0.739	45.088
	7. The Council can serve and satisfy the public's requirement immediately or on a single visit. Q5	0.733	
	8. The Council provides the public with brochures that give adequate accounts of their different areas of services and administration. Q2	0.714	
	9. The Council's staff members who are in charge have professional knowledge and capabilities to help resolve citizens' various problems. Q	0.704	

Factor	Variable (Question No.)	Factor Loading	Cumulative %
Tangibles	10. The Council provides a comfortable environment for the public during their visits to the Council. Q3	0.789	62.205
	11. The Council has modern equipment such as computers, fax machines, and e-mail. Q1	0.752	

Table 7 Dimensional Factors of Service Satisfaction Level

Factor	Variable (Question No.)	Factor Loading	Cumulative %
Empathy	1. The Council often shows sincerity to help solve the public's problems. Q8	0.866	25.686
	2. The Council can serve and satisfy the public's requirement immediately or on a single visit. Q5	0.840	
	3. The Council staff will deal with the public's requirements as soon as possible. Q10	0.756	
	4. The Council sets apart special parking spaces for the handicapped citizens' use. Q18	0.734	
	5. The Council staff serves the public very politely. Q14	0.630	
Reliability	6. The Council explains in detail to the public about their cases of application and the related processes of administration. Q9	0.839	45.892
	7. The Council staff listens to the public's inquiries with patience and attention. Q16	0.743	
	8. The Council's staff members who are in charge have professional knowledge and capabilities to help resolve citizens' various problems. Q13	0.687	
	9. The Council staff responds to the public's questions immediately. Q11	0.643	
Tangibles	10. The Council provides a comfortable environment for the public during their visits to the Council. Q3	0.712	62.000
	11. The Council has modern equipment such as computers, fax machines, and e-mail. Q1	0.645	
	12. The Council provides the public with brochures that give adequate accounts of their different areas of services and administration. Q2	0.612	

After an analysis of the relevant factors, this study gets a result that there are three Dimensions on the importance level—Empathy, Reliability, and Tangibles—which do not include the two Dimensions of Safety and Responsiveness as shown in the PZB Dimensions. Reasons for such exclusion of Safety and Responsiveness might be that when citizens evaluate their importance level towards varied services' quality provided at the Council, they see contents of service quality mainly are concerned with those three dimensions of Empathy, Reliability, and Tangibles. But such dimensions as Safety, Reliability, and Responsiveness could also be overlapping in definition, so citizens get confused and cannot tell them apart. When evaluating the public's satisfaction level, the same three dimensions of Empathy, Reliability, and Tangibles are obtained, too. This clearly indicates that Dimensions of Empathy, Reliability, and Tangibles play a crucial role for both aspects of the importance level and the satisfaction level.

4.2.3 Reliability Analysis

In this study the Cronbach's α coefficient is used to evaluate credibility of the tables of measurement. This study puts both citizens' expectation level and experience level as involved variables to carry out an internal consistency analysis and examine the degree of credibility of this questionnaire. As we know that if there are more question items testing the same concepts, then a higher degree of credibility exists in a questionnaire. In this study, when the expectation level is used as the involved variable, the Cronbach's α coefficient is 0.854, and when the experience level is used as the involved variable, the Cronbach's α coefficient is 0.873. Such evidence of high credibility shows that there are both consistency and stability in this questionnaire to measure any result for this research.

Table 8. Reliability Test of the Expected Service Factors

Factor	Variable (Question No.)	Item-total correlations	Cronbach α
Empathy	1. The Council often shows sincerity to help solve the public's problems. Q8	0.608	0.873
	2. The Council explains in detail to the public about their cases of application and the related processes of administration. Q9	0.518	
	3. The Council's services do not change because of any change of staff members, locations, or occasions. Q17	0.650	
	4. The Council provides channels for the public to express opinions and make appeals. Q19	0.573	
	5. The Council sets up special counters to provide individual services for seniors and handicapped citizens. Q20	0.674	
Reliability	6. The Council provides the public with brochures that give adequate accounts of their different areas of services and administration. Q2	0.741	0.800
	7. The Council can serve and satisfy the public's requirement immediately or on a single visit. Q5	0.703	
	8. The Council's staff members who are in charge have professional knowledge and capabilities to help resolve citizens' various problems. Q13	0.619	
	9. The Council staff serves the public very politely. Q14	0.665	
Tangibles	10. The Council has modern equipment such as computers, fax machines, and e-mail. Q1	0.612	0.894
	11. The Council provides a comfortable environment for the public during their visits to the Council. Q3	0.608	

Table 9. Credibility Test of the Satisfaction Service Factors

Factor	Variable (Question No.)	Item-total correlations	Cronbach α
Empathy	1. The Council can serve and satisfy the public's requirement immediately or on a single visit. Q5	0.653	0.853
	2. The Council often shows sincerity to help solve the public's problems. Q8	0.603	
	3. The Council staff will deal with the public's requirements as soon as possible. Q10	0.702	
	4. The Council staff serves the public very politely. Q14	0.565	
	5. The Council sets apart special parking spaces for the handicapped citizens' use. Q18	0.733	
Reliability	6. The Council explains in detail to the public about their cases of application and the related processes of administration. Q9	0.583	0.852
	7. The Council staff responds to the public's questions immediately. Q11	0.634	
	8. The Council's staff members who are in charge have professional knowledge and capabilities to help resolve citizens' various problems. Q13	0.656	
	9. The Council staff listens to the public's inquiries with patience and attention. Q16	0.605	
Tangibles	10. The Council has modern equipment such as computers, fax machines, and e-mail. Q1	0.712	0.795
	11. The Council provides the public with brochures that give adequate accounts of their different areas of services and administration. Q2	0.558	
	12. The Council provides a comfortable environment for the public during their visits to the Council. Q3	0.635	

4.3 Analysis of Current Conditions in the Service Quality of the Pasir Gudang Municipal Council

This study designs measuring tables to evaluate current service quality conditions at the Pasir Gudang Municipal Council. Those measuring tables include aspects that citizens feel about the importance level and the satisfaction level of various factors concerned with service quality at the Council. Those tables of measurement essentially consist of a set of 20 questions and, after a SPSS analysis, they are shown as Table 10 and Table 11 respectively. Explanations are as follows.

4.3.1 Analysis of Expectation Level

According to their averages, from high to low, this study makes a ranking for all those twenty questions listed on the questionnaire and shows what are the questions that citizens, who visit the Council, see as the most important service items in need of high quality. As shown in Table 10, among those twenty questions, the public sees these five service items as the most important ones at the Council as follows: “The Council often shows sincerity to help solve the public’s problems,” “The Council staff listens to the public’s inquiries with patience and attention,” “The Council staff members who are in charge can deal with the public’s cases of application accordingly and correctly,” “The Council sets up special counters to provide individual services for seniors and handicapped citizens,” and “The Council takes the initiative to inform the public with information about the progress of their cases of application”. All these five service items stay within the Dimensions of Empathy and Reliability, and are in accordance with the result of factor analysis in this research.

Table 10. The Public’s Expected Service Items Provided at the Pasir Gudang Municipal Council

Question No.	Service Item	Mean	Std. Deviation	Ranking
8	The Council often shows sincerity to help solve the public’s problems.	4.72	0.528	1
16	The Council staff listens to the public’s inquiries with patience and attention.	4.68	0.613	2
7	The Council staff members who are in charge can deal with the public’s cases of application accordingly and correctly.	4.65	0.524	3
20	The Council sets up special counters to provide individual services for seniors and handicapped citizens.	4.64	0.638	4
15	The Council takes the initiative to inform the public with information about the progress of their cases of application.	4.63	0.636	5
2	The Council provides the public with brochures that give adequate accounts of their different areas of services and administration.	4.58	0.659	6
13	The Council’s staff members who are in charge have professional knowledge and capabilities to help resolve citizens’ various problems.	4.57	0.546	7
10	The Council staff will deal with the public’s requirements as soon as possible.	4.56	0.579	8
17	The Council’s services do not change because of any change of staff members, locations, or occasions.	4.51	0.517	9
14	The Council staff serves the public very politely.	4.50	0.583	10
3	The Council provides a comfortable environment for the public during their visits to the Council.	4.49	0.523	11
11	The Council staff responds to the public’s questions immediately.	4.43	0.659	12
9	The Council explains in detail to the public about their cases of application and the related processes of administration.	4.42	0.553	13
4	I have absolute confidence in the execution capabilities of the Council.	4.40	0.541	14
6	The process of application can be done within a certain time limit.	4.39	0.591	15
19	The Council provides channels for the public to express opinions and make appeals.	4.38	0.613	16
5	The Council can serve and satisfy the public’s requirement immediately or on a single visit.	4.37	0.545	17
1	The Council has modern equipment such as computers, fax machines, and e-mail.	4.36	0.563	18
18	The Council sets apart special parking spaces for the handicapped citizens’ use.	4.36	0.528	19
12	The Council staff members who are in charge are trustworthy in their behavior and ways of dealing with the public’s requirements.	4.33	0.563	20

4.3.2 Analysis of Satisfaction Level

According to their high and low averages, this study also makes a ranking for all those twenty questions on the questionnaire to show what are the items that citizens regard as the most satisfactory ones with good service quality at the Council. As shown in Table 11, among those twenty questions, the public sees these five service items as the most satisfactory ones provided at the Council as follows: “The Council staff will deal with the public’s requirements as soon as possible,” “The Council provides the public with brochures that give adequate accounts of their different areas of services and administration,” “The Council often shows sincerity to help solve the public’s problems,” “The Council explains in detail to the public about their cases of application and the related processes of administration,” and “The Council’s services do not change because of any change of staff members, locations, or occasions”. Also, the public sees these five service items as the most unsatisfactory ones at the Council, as follows: “The Council has modern equipment such as computers, fax machines, and e-mail,” “The Council staff serves the public very politely,” “The Council takes the initiative to inform the public with information about the progress of their cases of application,” “The Council’s staff members who are in charge have professional knowledge and capabilities to help resolve citizens’ various problems,” and “The Council sets apart special parking spaces for the handicapped citizens’ use”. In addition, as Table 11 shows, the average for each question on the questionnaire is lower than 4, which means that citizens are not satisfied with services provided at the Council and there is still much room for their improvement.

Table 11. The Public’s Satisfied Service Items Provided at the Pasir Gudang Municipal Council

Question No.	Service Item	Mean	Std. Deviation	Ranking
10	The Council staff will deal with the public’s requirements as soon as possible.	3.91	0.538	1
2	The Council provides the public with brochures that give adequate accounts of their different areas of services and administration.	3.88	0.603	2
8	The Council often shows sincerity to help solve the public’s problems.	3.85	0.624	3
9	The Council explains in detail to the public about their cases of application and the related processes of administration.	3.84	0.638	4
17	The Council’s services do not change because of any change of staff members, locations, or occasions.	3.83	0.676	5
19	The Council provides channels for the public to express opinions and make appeals.	3.78	0.659	6
7	The Council staff members who are in charge can deal with the public’s cases of application accordingly and correctly.	3.77	0.546	7
16	The Council staff listens to the public’s inquiries with patience and attention.	3.76	0.659	8
6	The process of application can be done within a certain time limit.	3.71	0.517	9
12	The Council staff members who are in charge are trustworthy in their behavior and ways of dealing with the public’s requirements.	3.70	0.803	10
20	The Council sets up special counters to provide individual services for seniors and handicapped citizens.	3.69	0.523	11
3	The Council provides a comfortable environment for the public during their visits to the Council.	3.69	0.759	12
4	I have absolute confidence in the execution capabilities of the Council.	3.65	0.663	13
11	The Council staff responds to the public’s questions immediately.	3.60	0.641	14
5	The Council can serve and satisfy the public’s requirement immediately or on a single visit.	3.59	0.541	15
1	The Council has modern equipment such as computers, fax machines, and e-mail.	3.58	0.613	16
14	The Council staff serves the public very politely.	3.57	0.545	17
15	The Council takes the initiative to inform the public with information about the progress of their cases of application.	3.56	0.563	18
13	The Council’s staff members who are in charge have professional knowledge and capabilities to help resolve citizens’ various problems.	3.46	0.708	19
18	The Council sets apart special parking spaces for the handicapped citizens’ use.	3.43	0.654	20

4.3.3 Analysis of Deviation for Importance Level and Satisfaction Level

As shown in Table 12, the p-value for each question's mean deviation is smaller than 0.05. This indicates that there exists a clear disparity between the importance level and the satisfaction level in citizens' perceptions towards services at the Pasir Gudang Municipal Council. In addition, for all those twenty questions about services of the Council, all points on the importance level are higher than the ones on the satisfaction level. This result also indicates that there is much room for improvement to raise the public's satisfaction level about services offered at the Pasir Gudang Municipal Council.

Table 12. Deviation Checkup for the Public's Perception about Importance Level and Satisfaction Level

	Service Item	Importance level	Satisfaction level	Deviation	p-value
		Mean			
1	The Council has modern equipment such as computers, fax machines, and e-mail.	4.36	3.58	0.78	0.000
2	The Council provides the public with brochures that give adequate accounts of their different areas of services and administration.	4.58	3.43	1.15	0.000
3	The Council provides a comfortable environment for the public during their visits to the Council.	4.49	3.69	0.8	0.000
4	I have absolute confidence in the execution capabilities of the Council.	4.40	3.65	0.75	0.000
5	The Council can serve and satisfy the public's requirement immediately or on a single visit.	4.37	3.59	0.78	0.000
6	The process of application can be done within a certain time limit.	4.39	3.71	0.68	0.000
7	The Council staff members who are in charge can deal with the public's cases of application accordingly and correctly.	4.65	3.77	0.88	0.000
8	The Council often shows sincerity to help solve the public's problems.	4.72	3.85	0.87	0.000
9	The Council explains in detail to the public about their cases of application and the related processes of administration.	4.42	3.84	0.58	0.000
10	The Council staff will deal with the public's requirements as soon as possible.	4.56	3.91	0.65	0.000
11	The Council staff responds to the public's questions immediately.	4.43	3.60	0.83	0.000
12	The Council staff members who are in charge are trustworthy in their behavior and ways of dealing with the public's requirements.	4.33	3.70	0.63	0.000
13	The Council's staff members who are in charge have professional knowledge and capabilities to help resolve citizens' various problems.	4.57	3.46	1.11	0.000
14	The Council staff serves the public very politely.	4.50	3.57	0.93	0.000
15	The Council takes the initiative to inform the public with information about the progress of their cases of application.	4.63	3.56	1.07	0.000
16	The Council staff listens to the public's inquiries with patience and attention.	4.68	3.76	0.92	0.000
17	The Council's services do not change because of any change of staff members, locations, or occasions.	4.51	3.83	0.68	0.000
18	The Council sets apart special parking spaces for the handicapped citizens' use.	4.36	3.88	0.48	0.000
19	The Council provides channels for the public to express opinions and make appeals.	4.38	3.78	0.6	0.000
20	The Council sets up special counters to provide individual services for seniors and handicapped citizens.	4.64	3.69	0.95	0.000

5. Conclusion and Suggestions

The study evaluates the Pasir Gudang Municipal Council's service quality through a survey and quantitative analysis. Results affirm the questionnaire's credibility and reveal that citizens prioritize empathy, reliability, and tangibles both before and after service. Interestingly, physical facilities are rated higher than less tangible aspects. Public responses on service quality importance indicate high expectations, while satisfaction levels suggest a significant gap between current and desired standards, highlighting areas for improvement. The survey also identifies key areas for the Council's action, including sewage cleaning, road planning, and public facility maintenance, particularly in industrial zones.

The study zeroes in on three key dimensions of service quality: empathy, reliability, and tangibles. Empathy emerges as the most influential, especially in aspects like attentive staff and specialized services for vulnerable groups. Contrarily, reliability is less emphasized by the public. Tangibles, like informative brochures, receive satisfactory ratings, suggesting the Council should focus more on human interaction and concerns. Overall, the study underscores the need for the Council to align its priorities with public expectations to enhance service quality.

According to the limitations of this study, there are many opportunities for further research such as Longitudinal Studies and Comparative Analysis. Conducting longitudinal studies to track changes in public satisfaction and perceptions over time, especially following the implementation of the identified improvement areas. Comparing the Pasir Gudang Municipal Council's service quality with other municipal councils to benchmark best practices and innovative strategies in public service delivery.

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