


**PLAN-DO-CHECK-ACT CYCLE: A METHOD TO IMPROVE CUSTOMER SATISFACTION  
AT A MUNICIPAL COUNCIL IN MALAYSIA**

**Qistina Noraliesha Nor Zailani<sup>A</sup>, Veera Pandiyan Kaliani Sundram<sup>B</sup>, Irwan Ibrahim<sup>C</sup>, Abdul Rahman S Senathirajah<sup>D</sup>**



ARTICLE INFO	ABSTRACT
<p><b>Article history:</b></p> <p><b>Received</b> 31 January 2023</p> <p><b>Accepted</b> 18 April 2023</p>	<p><b>Purpose:</b> This study aimed to determine the use of PDCA methods in improving customer satisfaction at SP MUNICIPAL COUNCIL. Maintaining customer satisfaction is the main responsibility of my department as we are in charge of receiving complaints from the public and providing the best solution to the public. Since the major operation for SP MUNICIPAL COUNCIL is providing services to the public, it is crucial to solving any related issue regarding poor customer services and management by SP MUNICIPAL COUNCIL, long delays in solving issues from the public and others. Hence, using appropriate tools such as the PDCA method is one of the ways to achieve a continuous improvement process and improve the service quality for SP MUNICIPAL COUNCIL. The aim of this study is to overcome this issue and improve customer satisfaction, the quality of our services and reduce complaints from the public towards the management of SP MUNICIPAL COUNCIL by using the PDCA method.</p>
<p><b>Keywords:</b></p> <p>Customer Satisfaction; Municipal Council; Plan-do-Act-Check (PDCA).</p>	<p><b>Theoretical framework:</b> Problem identification needs to be done to find the causes of customer complaints. From the findings, the factors that potentially cause the problem are customer services, workers, administration, and management system issues. Then, the next step is a repair process where the result after improvement, implementation and evaluation will be measured.</p>
	<p><b>Design/methodology/approach:</b> The method used for this study is the PDCA method in the literature review. The data of this study are compiled, analyzed and concluded, to obtain the results for the method in the literature review. The literature review compares several research papers that implement PDCA methods.</p> <p><b>Findings:</b> The findings show that Plan-Do-Act-Check method can give a positive impact on increasing service quality for SP MUNICIPAL COUNCIL. There are several solution and recommendation have been achieved after the discussion of the result. These solutions will help in overcome the issue faced by SP MUNICIPAL COUNCIL.</p> <p><b>Research limitation/implication:</b> This research only focuses on improving customer satisfaction at SP MUNICIPAL COUNCIL and only applies to departments that focus on customer services.</p>

<sup>A</sup> Training Officer, Department of Training, SP Municipal Council, Kedah, Malaysia.

E-mail: [aliesha.qistina.aq@gmail.com](mailto:aliesha.qistina.aq@gmail.com)

<sup>B</sup> Lecturer, Department of Operations Management, Faculty of Business and Management, Universiti Teknologi Mara, Cawangan Selangor, Kampus Puncak Alam, Malaysia. E-mail: [veera692@uitm.edu.my](mailto:veera692@uitm.edu.my)

Orcid: <https://orcid.org/0000-0002-2996-6381>

<sup>C</sup> Lecturer, Faculty of Business and Management, Department of Operations Management, Universiti Teknologi Mara, Cawangan Selangor, Kampus Puncak Alam, Malaysia. E-mail: [irwan623@uitm.edu.my](mailto:irwan623@uitm.edu.my)

Orcid: <https://orcid.org/0000-0002-0887-2394>

<sup>D</sup> Lecturer, Department of Business and Communications, Faculty of Business and Communications, Inti International University, Malaysia. E-mail: [arahman.senathirajah@newinti.edu.my](mailto:arahman.senathirajah@newinti.edu.my)

Orcid : <https://orcid.org/0000-0001-6044-9051>

**Originality/value:** This research contributes to existing literature and use new findings to overcome problem using PDCA method and fishbone analysis to identify the cause and effect of the problem.

Doi: <https://doi.org/10.26668/businessreview/2023.v8i4.931>

## CICLO PLAN-DO-CHECK-ACT: UM MÉTODO PARA MELHORAR A SATISFAÇÃO DO CLIENTE EM UM CONSELHO MUNICIPAL NA MALÁSIA

### RESUMO

**Objetivo:** Este estudo teve como objetivo determinar o uso de métodos PDCA na melhoria da satisfação do cliente na PREFEITURA MUNICIPAL de SP. Manter a satisfação do cliente é a principal responsabilidade do meu departamento, pois somos responsáveis por receber as reclamações do público e fornecer a melhor solução ao público. Uma vez que a principal operação da PREFEITURA DE SP é a prestação de serviços ao público, é fundamental resolver qualquer problema relacionado com o mau atendimento e gestão da PREFEITURA DE SP, grandes atrasos na solução de problemas do público e outros. Assim, a utilização de ferramentas adequadas, como o método PDCA, é uma das formas de alcançar um processo de melhoria contínua e melhorar a qualidade do atendimento da PREFEITURA DE SP. O objetivo deste estudo é superar esse problema e melhorar a satisfação do cliente, a qualidade dos nossos serviços e reduzir as reclamações da população em relação à gestão da PREFEITURA DE SP por meio do método PDCA.

**Referencial teórico:** A identificação do problema precisa ser feita para encontrar as causas das reclamações dos clientes. A partir das descobertas, os fatores que potencialmente causam o problema são problemas de atendimento ao cliente, funcionários, administração e sistema de gerenciamento. Então, o próximo passo é um processo de reparo onde será medido o resultado após melhoria, implementação e avaliação.

**Desenho/metodologia/abordagem:** O método utilizado para este estudo é o método PDCA na revisão da literatura. Os dados deste estudo são compilados, analisados e concluídos, para obtenção dos resultados para o método na revisão da literatura. A revisão da literatura compara vários trabalhos de pesquisa que implementam métodos PDCA.

**Resultados:** Os resultados mostram que o método Plan-Do-Act-Check pode ter um impacto positivo no aumento da qualidade do serviço para a PREFEITURA DE SP. Existem várias soluções e recomendações que foram alcançadas após a discussão do resultado. Essas soluções ajudarão a superar o problema enfrentado pela PREFEITURA DE SP.

**Limitação/implicação da pesquisa:** Esta pesquisa foca apenas na melhoria da satisfação do cliente na PREFEITURA DE SP e se aplica apenas aos departamentos que focam no atendimento ao cliente.

**Originalidade/valor:** Esta pesquisa contribui para a literatura existente e usa novas descobertas para superar o problema usando o método PDCA e a análise de espinha de peixe para identificar a causa e o efeito do problema.

**Palavras-chave:** Satisfação do Cliente, Câmara Municipal, Plan-do-Act-Check (PDCA).

## CICLO PLANEAR-HACER-VERIFICAR-ACTUAR: UN MÉTODO PARA MEJORAR LA SATISFACCIÓN DEL CLIENTE EN UN CONCEJO MUNICIPAL EN MALASIA

### RESUMEN

**Propósito:** Este estudio tuvo como objetivo determinar el uso de los métodos PDCA en la mejora de la satisfacción del cliente en el CONSEJO MUNICIPAL de SP. Mantener la satisfacción del cliente es la principal responsabilidad de mi departamento, ya que estamos a cargo de recibir las quejas del público y brindar la mejor solución al público. Dado que la operación principal para el CONSEJO MUNICIPAL de SP es brindar servicios al público, es crucial resolver cualquier problema relacionado con los malos servicios al cliente y la gestión por parte del CONSEJO MUNICIPAL de SP, las largas demoras en resolver los problemas del público y otros. Por lo tanto, el uso de herramientas adecuadas como el método PDCA es una de las formas de lograr un proceso de mejora continua y mejorar la calidad del servicio para el CONSEJO MUNICIPAL de SP. El objetivo de este estudio es superar este problema y mejorar la satisfacción del cliente, la calidad de nuestros servicios y reducir las quejas del público hacia la gestión del CONCEJO MUNICIPAL de SP mediante el uso del método PDCA.

**Marco teórico:** Es necesario realizar una identificación del problema para encontrar las causas de las quejas de los clientes. A partir de los hallazgos, los factores que potencialmente causan el problema son los servicios al cliente, los trabajadores, la administración y los problemas del sistema de gestión. Luego, el siguiente paso es un proceso de reparación donde se medirá el resultado después de la mejora, implementación y evaluación.

**Diseño/metodología/enfoque:** El método utilizado para este estudio es el método PDCA en la revisión de la literatura. Los datos de este estudio son recopilados, analizados y concluidos, para obtener los resultados del

método en la revisión de la literatura. La revisión de la literatura compara varios trabajos de investigación que implementan métodos PDCA.

**Hallazgos:** Los hallazgos muestran que el método Planificar-Hacer-Actuar-Verificar puede tener un impacto positivo en el aumento de la calidad del servicio para el CONCEJO MUNICIPAL de SP. Hay varias soluciones y recomendaciones que se han logrado después de la discusión del resultado. Estas soluciones ayudarán a superar el problema que enfrenta el CONCEJO MUNICIPAL de SP.

**Limitación/implicación de la investigación:** Esta investigación solo se enfoca en mejorar la satisfacción del cliente en el CONCEJO MUNICIPAL de SP y solo aplica a los departamentos que se enfocan en el servicio al cliente.

**Originalidad/valor:** esta investigación contribuye a la literatura existente y utiliza nuevos hallazgos para superar el problema utilizando el método PDCA y el análisis de espina de pescado para identificar la causa y el efecto del problema.

**Palabras clave:** Satisfacción del Cliente, Concejo Municipal, Planificar-Hacer-Actuar-Verificar (PDCA).

## INTRODUCTION

SP Municipal Council is a state owned organisation which their major activities are handling and providing services to the public. Providing the best facilities to the public is one of the responsibilities of SP Municipal Council. The responsibility of my department is to receive issues and complaints from the public related to the infrastructure or any public facilities issues. Providing good service quality will result in customer satisfaction, thus increasing customer retention and loyalty (Sucipwati, Paramita & Aristayasa, 2019). To conclude, solving the issue within the allocated time will increase the service quality and also will ensure the customer is satisfied with the services provided by SP Municipal Council.

Due to the increase of the household population at Sungai Petani area, the complaints received by SP Municipal Council also increased which caused several issues occur within SP Municipal Council management. These issues have caused SP Municipal Council received many complaints related to customer dissatisfaction towards the services provided by SP Municipal Council, such as poor customer service management, poor customer service quality, long delays from SP Municipal Council to solve any complaints and others. Customer complaints are caused by customer dissatisfaction (Nimako & Mensah, 2013). Thus, these issues caused a bad reputation for Sp Municipal Council and also led to an increasing number of unsolved complaints from the public.

Hence, the main purpose of this research is to apply the PDCA method to SP Municipal Council management to solve these issues such as increasing customer satisfaction, reducing the number of unsolved complaints and improving the management of SP Municipal Council.

## **LITERATURE REVIEW**

### **Overview of PDCA method**

The principle of Plan-Do-Check-Act (PDCA) is a quality management system in manufacturing, offshore, services and others, popularized by. Edwards Deming, the American quality management expert in 1950 (Isniah, Purba & Debora, 2020). This method is for continuous improvements that are flexible, logical, and more future-oriented. Besides this method is a four-step interactive problem-solving process commonly used in quality control and problem-solving (Damayanti & Nugroho, 2020).

The four-step interactive processes are plan, do, check and act (Isniah, Purba & Debora, 2020). Firstly, plan is for setting goals or target processes for the organization to achieve the results. It is also a step where the organization will identify on what needs to be done to achieve their goals. Secondly, do is for executing the first step according to their goals. Thirdly, check is the inspection process in which the organization evaluates and monitors the previous step according to the specification or target. Lastly, the action step is for the improvement, which action will be taken if the specification does not meet the target specification.

### **Quality of Services**

Churchill, Surprenant, and Asubonteng popularized the theorem of customer satisfaction by measuring the service delivery from the firm with the customer expectation (Fida, Ahmed, Al-Balushi & Singh, 2020). Other than that, service quality is closely related to services, products, processes, and human resources. Besides, service quality is to satisfy customers by meeting the criteria set by them and meeting their expectations (Damayanti & Nugroho, 2020).

### **Customer Satisfaction**

Customer satisfaction Shanmugam, R. ., & Chandran, M. . (2022). is one of the most important factors to achieve the continuous success of the firm. When a company exceeds customer expectations, it will lead to customer satisfaction (Fida, Ahmed, Al-Balushi & Singh, 2020). Next, customer satisfaction is the level of fulfilment for the customer after the service delivery process is completed (Zygiaris, Hameed, Alsubaie & Rehman, 2022). Hence, customer satisfaction is an important part of an organization aiming for customer retention.

## **Customer Complaints**

The meaning of customer complaints are the feedback received from the customer in which it is addressed towards companies or organizations that consist of negative nature feedback (Damayanti & Nugroho, 2020). Then, the feedback from the customer can be received in the form of writing or verbally.

## **Framework**

Problem identification needs to be done to find the causes of customer complaints. From the findings, the factors that potentially cause the problem are customer services, Haraisa., (2022) workers, administration, and management system issues. Then, the next step is a repair process where the result after improvement, implementation and evaluation will be measured. The framework will use a flow chart to describe the main concept of PDCA method (Damayanti & Nugroho, 2020).

## **MATERIAL AND METHODOLOGY**

### **Introduction**

The study was conducted at SP Municipal Council. This study primarily utilized sampling with 200 questionnaires and was distributed equally to SP Municipal Council customers. The use of questionnaires was carried out to access the feedback from customers for research purposes.

The research method that will be used in this research is the descriptive research method. The data analysis is qualitative data analysis, where data collection uses observation and documentation.

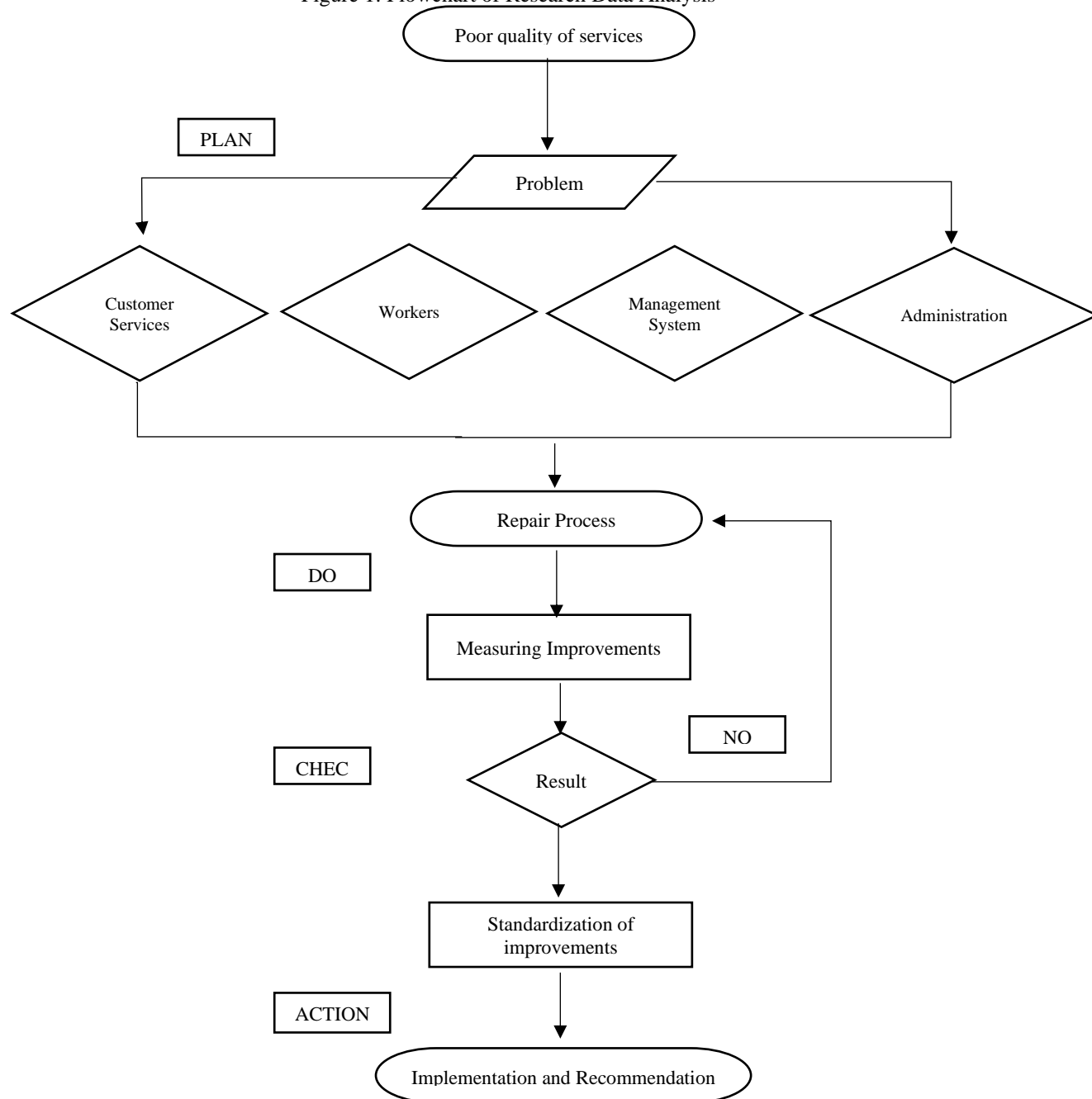
### **The implementation of PDCA in problem-solving**

The problem-solving methodology used in this study is a qualitative model problem-solving method with an analytical approach based on the plan, do, check, act and with optimal services analysis method starting from the survey stage to find primary data. The analysis technique needed in this study are as follows:

- Plan
  - Collecting data from the customer complaints against SP Municipal Council through survey

- Analysis of the causes for this problem is needed to find the main problem in detail using fishbone diagram.
- Determine the problem that will be repaired to improve service quality of SP municipal council.
- Arranging steps to fix the problem in do step.
- Do
  - Implement corrective measure and action need to be taken such as a new procedure for the staff to interact with the customer
  - Improve the current management systems such as creating new processes by sorting the case received based on priority and urgency.
- Check
  - Do a deep check on the response time for each of the cases received
  - Set a maximum time to solve the case for example need to solve any case within 5-6 business days
  - Maintain target response & complete time for any case
- Act
  - Schedule meetings to discuss any unsolved issue to determine the next corrective plan based on the previous step (check).

Figure 1: Flowchart of Research Data Analysis



Source: Prepared by the authors (2022).

### Research Instrument

In this study, the survey questionnaire is separated into four parts. Part 1 consists of the respondent's demographic profile, such as gender, age, occupation and others. Part 2 consists of feedback regarding the service provided by SP Municipal Council. Next, part 3 consists of feedback regarding customer satisfaction with services provided by SP Municipal Council. Lastly, part 4 consists of feedback regarding the customer complaint platform.

## RESULTS AND DISCUSSION

### Introduction

The problems are being chosen based on the priorities that have been done on the result of the analysis. The analysis focuses on 4 factors that directly impact the service provided by SP Municipal Council which are customer services, workers, administration and management factors.

### Data Analysis

The data collected from the sample were analyzed using descriptive statistics. This section shows the data analysis and interpretation of the data collected from the survey. Each of the survey were analyse as below:

#### I. Part 1: Demographic Profile

##### a. Age of Respondent

The customer that participated in the survey is as below:

Table 1: Age of Respondents

AGE	NUMBER OF CUSTOMER	PERCENTAGE
20 years and below	1	0.49%
21-29 years	33	16.26%
30-39 years	101	49.75%
40-49 years	45	22.17%
50-59 years	21	10.34%
60 and above	2	0.99%
<b>Grand Total</b>	<b>203</b>	<b>100.00%</b>

Source: Prepared by the authors (2022).

Table 1 shows the classification of the respondent according to age. The majority of the respondent age is between 30 to 39 years old which is 101 respondents (49.75%).

##### b. Department or section visited by customer



Table 2: Department or section visited by customer

DEPARTMENT/SECTION VISITED BY CUSTOMER	FREQUENCY	PERCENTAGE
BANGUNAN	2	0.99%
KEJURUTERAAN	5	2.46%
KESIHATAN PERSEKITARAN	45	22.17%
KEWANGAN	40	19.70%
KHIDMAT PENGURUSAN	5	2.46%
LANDSKAP DAN REKREASI	9	4.43%
OSC	1	0.49%
PENGUATKUASAAN	39	19.21%
PENGURUSAN SP PLAZA	2	0.99%
PENILAIAN DAN PENGURUSAN HARTA	4	1.97%
PERANCANGAN BANDAR	3	1.48%
PERHUBUNGAN AWAM DAN KORPORAT	45	22.17%
TEKNOLOGI MAKLUMAT	1	0.49%
UNDANG-UNDANG	2	0.99%
<b>Grand Total</b>	<b>203</b>	<b>100.00%</b>

Source: Prepared by the authors (2022).

Table 2 shows the department visited by the customers and the survey taken was based on the department. The majority of this survey are taken from ‘Kesihatan Persekitaran’ which is 45 respondents (22.17%).

ii. Data analysis and interpretation of customer feedback from the survey

The result obtained from part 2, part 3 and part 4 of the survey use five Likert-type scale to analyse the response from customer with numerical equivalent and interpretation (Fida, Ahmed, Al-Balushi & Singh, 2020): 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree. According to Sözen & Güven (2019) , the Likert scale scoring range are as below:

Table 3: Scoring range of Likert scale

	Value	Range
Strongly Disagree	1	1.00-1.80
Disagree	2	1.81-2.60
Neutral	3	2.61-3.40
Agree	4	3.41-4.20
Strongly Agree	5	4.21-5.00

Source: Prepared by the authors (2022).

The result from the survey will be identified using mean rating by following the Likert scale scoring. The interpretation of the feedback for each of the question are as below:

Table 4: Service provided by SP MUNICIPAL COUNCIL

Question	Mean	Standard Deviation	Interpretation
1. Providing public facilities that meet the needs of the public including the person with disabilities / elderly / pregnant women	3.62	0.79	Agree
2. A landscape that is attractive and enlivens the city and has aesthetic value. (Example: trees, monuments, signs, decorative lights, recreational parks, etc.)	3.40	0.80	Neutral
3. Very satisfactory SP MUNICIPAL COUNCILK maintenance. (Example: playgrounds, recreation places and tourist places)	3.36	0.84	Neutral
4. Maintenance of public infrastructure such as street lights, bus shelters, drains and ditches, road repairs, humps etc. which is very satisfactory	3.35	0.97	Neutral
5. Cleanliness of the City in terms of garbage collection, cleanliness of stalls / markets / food complexes, roads / drains / ditches, bus shelters or public toilets that are very satisfactory.	3.41	0.81	Agree

Source: Prepared by the authors (2022).

Table 5: Customer satisfaction from the services provided

Question	Mean	Standard Deviation	Interpretation
1. Knowledgeable, skilled and efficient staff in carrying out tasks.	3.50	0.83	Agree
2. The staff strives to make it easy for customers.	3.48	0.83	Agree
3. Provide necessary information such as flyers, brochures, etc.	3.15	0.86	Neutral
4. Customer-friendly staff service.	3.47	0.79	Agree
5. Staff are courteous/prudent when dealing.	3.58	0.86	Agree
6. The professional attitude of the staff who is wise to control emotions.	3.47	0.83	Agree
7. Staff are seen as confident in communicating with the customer	3.50	0.86	Agree
8. Staff always work together with customers to solve problems.	3.52	0.84	Agree
9. Processes and procedures of the current service counter.	3.49	0.85	Agree
10. The level of knowledge, skills and credibility of staff in providing accurate explanations related to customer affairs.	3.49	0.86	Agree
11. Very satisfactory waiting time.	3.46	0.83	Agree

12. Completing the cases according to the promised period.	3.40	0.85	Neutral
13. The skills of the cleaning staff are maintained when serving customers.	3.52	0.85	Agree
14. Conducive and comfortable waiting room.	3.50	0.79	Agree
15. Customers receive prompt action on appeals.	3.46	0.91	Agree

Source: Prepared by the authors (2022).

Table 6: Customer complaint platform (e-Aduan)

Question	Mean	Standard Deviation	Interpretation
1. A user-friendly e-Aduan system that makes it easier for customers to see the status of their complaints.	3.53	0.85	Agree
2. Reported complaints receive immediate attention and action.	3.37	0.90	Neutral
3. The complaint channels provided meet the needs of the customer. (Example: Whatsapp, Email, e-Complaint System, Complaint Line, Facebook, Letter and Counter)	3.40	0.88	Neutral

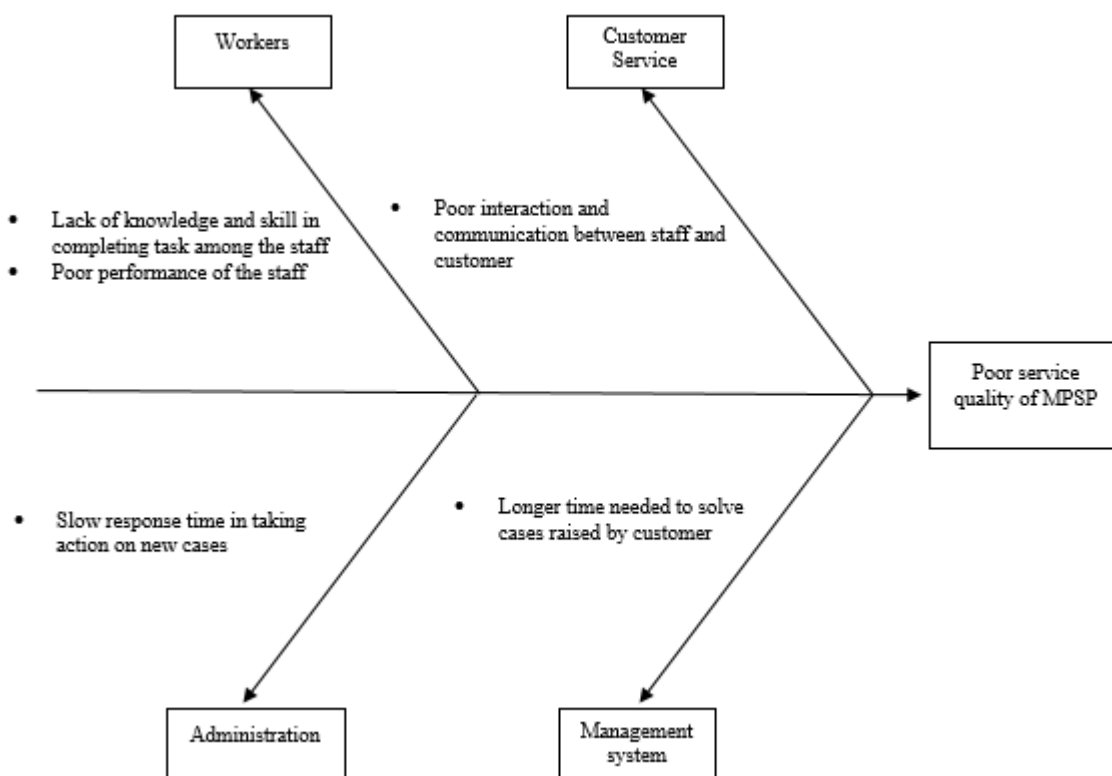
Source: Prepared by the authors (2022).

### 4.3 Analysis of cause and effect

The factors that affect the services provided by SP Municipal Council are classified as below:

- Customer service
  - Department in charge of receiving cases from the customer
- Workers
  - Person in charge for daily interaction with the customer
- Administration
  - The process or activity to manage the cases.
- Management system
  - The system or flow to solve cases starting from cases received until the completion

Figure 2: Fishbone Diagrams



Source: Prepared by the authors (2022).

Diagram above shows the lack of quality at SP Municipal Council, the cause of the complaints from the customers is due following factors:

- Customer Services Factor
  - Lack of response from the staff towards customer's complaints and questions that caused by poor interaction and communication between them.
- Workers Factor
  - Lack of knowledge and skill among the staff make them difficult to respond on any complaints and completing tasks.
  - Poor performance of the staff affects the quality of service provided to the customers.
- Management Factor
  - The time needed for SP Municipal Council management to solve cases exceed the expected time given to the customer.
- Administration Factor
  - Slow response time from SP Municipal Council management to act whenever a new complaint is received.

## **Discussion & Recommendation**

The company improvement plan needs to be carried out to improve the quality of customer services quality, workers quality, administration quality and management system quality. This method is to increase customer satisfaction and reduce customer complaints about the services provided by SP Municipal Council.

### **Proposed corrective action for the service quality of SP municipal council**

The company improvement plan needs to be carried out to improve the quality of services at SP MUNICIPAL COUNCIL. This method is to increase customer satisfaction and reduce customer complaints about the services provided by SP MUNICIPAL COUNCIL.

#### **i.Customer Service Interaction Procedure and Guidelines**

There is no proper procedure and guideline for customer service to interact with the customer. A proper procedure and guidelines must be implemented so that customer services can refer and follow. A good service quality provided to the customer will positively impact customer satisfaction (Tjahjaningsih, Maskur, Widyasari & Kusuma, 2020).

#### **ii.Lack of knowledge and skills among the staff**

Training and development need to be implemented to reduce customer complaints due to lack of skill and knowledge among the staff. Training and developing the staff's skills and knowledge will increase the quality of service of SP Municipal Council. This is because training and development are the main factors contributing to organizational effectiveness (Jehanzeb & Bashir 2013).

#### **iii.Poor performance of the staff**

To increase the performance of the staff, the management needs to do an annual evaluation of their staff and give bonuses for their achievement. This will encourage the staff to put their commitment to their job. This is because the staff that has a good performance will positively impact customer service quality (Mustafa & Okeyo, 2018).

#### **iv.Poor management for customer-reported cases**

The cases received did not have a clear priority in place. For example, severity or extent of the cases. Priorities that include the resolution times help to understand the importance of the problem (Mallali, Gopalkrishna & Prasad, 2019). Therefore, the solution for this is to implement an incident management system. According to Bashir & Soomro, incident management can assist to determine the priority of the cases (Bashir & Soomro, 2012). If the cases exceed the resolution time given, the cases will be escalated to higher management to

find a proper and effective solution. Hence, this will increase the quality of the management for SP Municipal Council.

#### **v. Pending cases due to slow responsiveness**

There is no specific person in charge for coordinating cases received from the customer. This have caused a lot of cases are in pending state due to no specific person being in charge to coordinate the cases. Person in charge of the cases is needed in order to monitor, coordinate and escalating, and follow-up with the pending cases. According to Osifo, coordinated management will positively impact the long-term performance of the company (Osifo, 2013). Hence, it is important to have a specific person to coordinate the management of the cases in order to improve the administration quality thus increasing the quality of services at SP Municipal Council.

### **CONCLUSION**

Based on the discussion and analysis results, SP Municipal Council needs to take action to improve customer satisfaction and service quality. Four significant improvements are required: customer services quality, workers quality, administration quality and management system quality.

Firstly, to increase customer service quality, new procedures and guideline need to be implemented. By implementing new procedures and guidelines, the staff will follow the policies to help them interact with the customer better and prevent them from interacting based on their emotion.

Secondly, to increase workers quality, training and development for staff, and evaluation of the staff performance needs to be implemented. Firstly, training and development will help in improving staff skills and knowledge. This will help in improving the quality of the customer services department. Next, annual evaluation and giving bonuses can increase the motivation of the staff. Motivated staff will tend to provide the best performance and commitment on their job.

Thirdly, to increase management quality, an incident management system needs to be implemented. This system can help in prioritizing cases and assist in escalating cases.

Lastly, to increase administration quality, SP Municipal Council need to assign a person in charge to coordinate and manage the case. Having a person that manages and coordinates cases will help to ease the escalation process of the case received from the customer and improve the flow of the case coordination.

To conclude, the objective of the PDCA method is to help in increasing productivity and improving the service quality at SP Municipal Council. This method will continuously assist SP Municipal Council in providing the best services in the future

## REFERENCES

Bashir, A., & Soomro, T. R. (2012). Comparative Study on Incident Management. *International Journal of Applied Information Systems (IJ AIS)*, 3.

Damayanti, N., & Nugroho, R. E. (2020). Improving Service Quality Creative Advertising Industry with the PDCA Method (Case of PT Kharisma Advertising). *International Journal of Innovative Science and Research Technology*, 5 (4).

Fida, B. A., Ahmed, U., Al-Balushi, Y., & Singh, D. (2020). Impact of Service Quality on Customer Loyalty and Customer Satisfaction in Islamic Banks in the Sultanate of Oman. *SAGE Open*, 10 (2),

Haraisa , Y. E. A. (2022). The Impact of Open-Book Management on Customer Satisfaction: the Mediating Role of Trust. *International Journal of Professional Business Review*, 7(4), e0453. <https://doi.org/10.26668/businessreview/2022.v7i4.e453>

Isniah, S., Purba, H. H., & Debora, F. (2020). Plan do check action (PDCA) method: literature review and research issues. *Jurnal Sistem Dan Manajemen Industri*, 4 (1), 72–81.

Jehanzeb, K., & Bashir, N. A. (2013). Training and Development Program and its Benefits to Employee and Organization: A Conceptual Study. *European Journal of Business and Management*, 5.

Mallali, D. P., Gopalkrishna, B., & Prasad H C, S. (2019). Six Sigma Approach for Reducing the SLA's Resolution Time: A Case in IT Services Enable Industry. *International Journal of Mechanical Engineering and Technology (IJMET)*, 10 (01).

Mustafa, A. S., & Okeyo, W. (2018). Relationship Between Employee Performance and Customer Service Quality in Kenya Bureau Of Standards. *Researchjournali's Journal of Human Resource*, 6.

Nimako, S. G., & Mensah, A. F. (2014). Exploring Customer Dissatisfaction/Satisfaction and Complaining Responses among Bank Customers in Ghana. *International Journal of Marketing Studies*, 6 (2).

Nor Zailani, Q. N. (2022). Research analysis To Improve Customer Satisfaction At A Municipal Council In Malaysia.

Osifo, O. C. (2013). The Effects of Coordination on Organizational Performance: An Intra and Inter Perspective. *Asian Journal of Business and Management*, 01 (04).

Shanmugam, R. ., & Chandran, M. . (2022). A relationship between service quality and customer satisfaction in e-banking services- a study with reference to commercial banks in Chennai City. *International Journal of Professional Business Review*, 7(3), e0490.

<https://doi.org/10.26668/businessreview/2022.v7i3.0490>

Sözen, E., & Güven, U. (2019). The Effect of Online Assessments on Students' Attitudes Towards Undergraduate-Level Geography Courses. *International Education Studies*, 12 (10).

Suciptawati, N. L. P., Paramita, N. L. P. S. P., & Aristayasa, I. P. (2019). Customer satisfaction analysis based on service quality: case of local credit provider in Bali. *Journal of Physics: Conference Series*, 1321 (2),

Tjahjaningsih, E., Maskur, A., Widyasari, S., & Kusuma, L. (2020). The Effect of Customer Experience and Service Quality on Satisfaction in Increasing Loyalty. *Advances in Economics, Business and Management Research*, 169.

Zygiaris, S., Hameed, Z., Ayidh Alsubaie, M., & Ur Rehman, S. (2022). Service Quality and Customer Satisfaction in the Post Pandemic World: A Study of Saudi Auto Care Industry. *Frontiers in Psychology*, 13.