



# Knowledge Management Implementation Impact on Increasing the Quality of Information Services and Community Complaints at the District Health Office of Tangerang City

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**Abstract.** The purpose of this study is analyzing the effect of Knowledge Management on increasing the quality of information services and community complaints at the District Health Office of Tangerang City. Knowledge Management consists of some indicators known as Knowledge Sharing, Personal Knowledge, Technology, and Learning Organization and Job Procedure. The sample of this study was 130 people. Descriptive research methods were used with a quantitative approach to explain the extent to which Knowledge Management impacted service quality District Health Office of Tangerang City. SPSS 25 is used to analyze the data. The results show those factors together affect the Quality of Service with a coefficient of Determination 74,5%. Factors that affect service quality improvement at the District Health Office of Tangerang City are Knowledge Sharing, Personal Knowledge, Job Procedure, Technology, and Learning Organization.

**Keywords:** Knowledge Sharing · Personal Knowledge · Tangerang City · Information Quality · Service Quality

## 1 Introduction

District Health Office is one of the Regional Apparatus Organizations (OPD) active in the health sector. There are quite a lot of related parties or stakeholders in the district health office organization, apart from structural/operational management where Tangerang City Health Department has a Type A organizational structure consisting of 1 Secretariat and 4 Divisions, two Sub-departments, 13 sub-coordinators, and 40 Units Technical Implementers. This is set through Tangerang Mayor Regulation Number 131 of 2021 concerning position, organizational structure, duties, and functions and working procedures of the district health office of Tangerang City) as well as other external parties such as other Regional Apparatus Organizations (OPD), other private health institutions, professional organizations, associations and institutions outside the government and of course the community. All these related parties need each other so it must be arranged in such a way that all parties can get the best service, and, in the end, it satisfies all parties.

According to Munir (2008) [1], Knowledge Management (KM) is important to gain a sustainable competitive advantage, as its implementation offers operational and service advantages that can increase the personal ability to maintain knowledge and develop innovative products (Asri, 2004) [2]. According to Prijono (2008) [4] well-implemented Knowledge Management (KM) is very beneficial for the organization among others. Explicit knowledge documents and procedures are better recorded, because sources of knowledge (experts) are easily accessible, it is best to keep records in practice, every business process will change over time to become more efficient, the same mistakes will not happen again and a culture of collaboration will be formed as the effect of a shared culture so that innovation can emerge.

The integration of various applications will allow the sharing of knowledge that is needed by the district health office. The Knowledge Management (KM) approach ensures a more effective allocation of resources and staff thereby increasing productivity without having to increase costs. Service quality is considered one of the components that organizations need to achieve because it has the effect of introducing new customers and can reduce the possibility of old customers moving to other organizations [5]. Service quality is a measure of how an organization delivers its services compared to the expectations of its customers.

The importance of public services and information disclosure for the community in the current digital era greatly affects public trust, therefore district health office is trying its best to meet the standards of information disclosure in the digital era. Usually, there are forms and systems of leadership that affect the continuity of relationships/communication activities in groups/organizations. It is expected two-way communication or two-way communication (reciprocity) is an indicator of effective communication in the communication activities of the parties. For this reason, cooperation is needed which is expected by all parties to achieve organizational goals. If the organization applied good service, the intended target will be achieved as well.

To increase services to the public, the district health office provides integrated information and complaint services that are integrated with the Tangerang City government's Communications and Information Technology. In this service, the public can submit requests for information, submit objections, and public complaints either in writing or unwritten, offline or online. Through this service, the community can make good use of it and strive to continue to improve the services available at the district health office.

Handling requests for information and public complaints is important in the current era of information disclosure, therefore increasing knowledge and management systems is very important to improve. This is evidenced using the service requesting information and complaints by the public in Tangerang City to submit complaints and aspirations for the services provided by the Tangerang City Health Department.

Table 1 shows a decrease in the number of incoming reports from 2021 to 2022. In 2021, in semester 1 the number of incoming reports reached 2,221 reports, then in semester 2, there was an increase in the number of incoming reports by 5,609 reports. This is different in 2022, which experienced a considerable decline, which in semester 1 of 2022 there were 1,187 reports submitted. It can be interpreted that the Tangerang City Health Department has experienced improvements related to the performance of

**Table 1.** Data Recapitulation of Suggestion Box Aspiration Service Report (LAKSA) Tangerang City Health Department

Year	Semester 1						Total	Semester 2						Total
	January	February	March	April	May	June		July	August	September	October	November	December	
2021	150	103	198	73	149	1548	2221	1555	1902	1217	449	263	223	5609
2022	395	285	242	107	81	77	1187	133						

service requests for information and public complaints related to the services provided to the community by the Tangerang City Health Department.

The study was conducted to verify and analyze the influence of knowledge management in the form of knowledge sharing, personal knowledge, job procedures, technology, and learning organization on the quality of information services at the District Health Office of Tangerang City.

**1.1 Theoretical Review and Hypothetical Development**

**Knowledge Management (KM).** Knowledge can be defined as various experiences, values, contextual information, expert opinion, and basic intuition that provides an environment and framework for evaluating and integrating new experiences with information [6]. In organizations, knowledge is stored in organizational routines, processes, practices, and norms beside stored in documents or repositories [3].

Knowledge management (KM) is understood as planning, collecting, leading, organizing, and controlling data and information that has been combined and analyzed by various forms of thinking and various competent sources. Therefore, the major principle of knowledge management is to recommend organizations to “know what they know” [7].

According to Alavi & Leidner (2001) [8] KM consist of knowledge creation, knowledge storage or retrieval, knowledge transfer, and knowledge application. A major challenge for government or public organizations is changes in the era of globalization. The government has autonomy and responsibility in carrying out public services. The government must carry out various innovation for public services. Setiadi, et al. (2011) [9] revealed that the application used in government organizations same as in private organizations. The difference is about the profit. Private organizations application aimed for profit, while government organizations using these for improving public services. The application that government used intended to facilitate the process of creating, collecting, storing, and knowledge transfer. It can close the knowledge gap between individuals, individuals to groups, and groups to groups within an organization. It is also improve ability to manage existing intellectual assets, knowledge, and experience.

The purpose of implementing knowledge management at the Tangerang City Health Department is to facilitate the process of creating, collecting, storing, sharing knowledge, and applying knowledge specifically related to public information services, complaints, and public aspirations. The method of implementing the application in this organization begins with conducting a literature review.

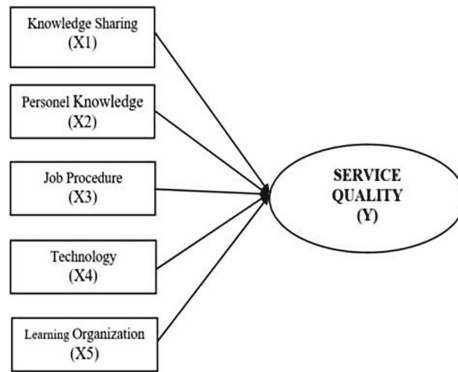
**Hypothetical Development.** One of the elements of service quality is knowledge and expertise so it can be said that knowledge is very important in service quality (Saleh, 2010) [10]. In knowledge management, there is a system as a container of knowledge assets. The knowledge management system can also assist in improving service quality because it can assist in communicating with customers without being limited by space and time. According to Tobing (2007) [11] the advantages of KM is improving quality in customer handling.

There are several previous research studies that support this research. In addition, this study will compare material related to the research model using knowledge management and service quality variables.

The independent variable refers to the SECI theory from Nonaka et al. (2009) [12] mention that in the application the knowledge creation process arises from interaction through a knowledge conversion process called SECI (socialization, externalization, combination, and internalization). SECI applied to five knowledge management processes.

Based on the above, the relationship between the variables in this study is:

1. The relationship between knowledge sharing and service quality  
Knowledge sharing by employees will trigger activities. This means that the more you do these activities, the higher the opportunity for a response to knowledge-sharing activities so that performance can be improved by service-based management. As an institution that provides services to the community, the Department of Health is trying to improve the quality of services through knowledge sharing. These services include communicating both verbally and non-verbally, such as how to welcome visitors and how respond to visitors.
2. The relationship between personal knowledge and service quality  
Personal knowledge is an individual's personal experience, and then sharing these experiences can improve employee performance. With the experience they have, they can explore more widely the potential that exists within themselves, this will make their performance even better to produce quality services. Better personal knowledge will improve the performance and ability of employees in the field of work and in terms of services performed.
3. The relationship between job procedures and service quality  
One form of job procedure is the Standard Operation Procedure (SOP), which is a basic implementation procedure designed to maintain service quality and work results. By using SOPs, tasks will be easier to do and produce better services. Assisted by the supervision carried out in the work process, the SOP can be implemented. The Health Office must be more consistent, and ensure the creation of the desired service for the users of these services.
4. The relationship between technology and service quality  
Technology is one of the main elements. It is known as a medium to simplify knowledge transmission. Technology will always develop in the form of a system that facilitates the process of spreading knowledge. The District Health Office uses telecommunications media, namely through social media such as Email, Whatsapp, and Instagram. The more sophisticated the technology used, the easier the work that impacts improving services.



**Fig. 1.** Research Concept Framework

##### 5. The relationship between learning organization and service quality

The application of learning organization in the health sector is appropriate. The Department of Health has the main function as the front line in providing the best service to the community. Organizations in the field of Health are organizations that continue to move in improving the quality of services and continue to improve organizational capabilities.

From the relationship between the variables above, hypothesis formulated as follow:

H1: There is a positive and significant influence of knowledge sharing on service quality

H2: There is a positive and significant influence of personal knowledge on service quality

H3: There is a positive and significant effect of job procedure on service quality

H4: There is a positive and significant influence of technology on service quality

H5: There is a positive and significant effect of a learning organization on service quality

(Fig. 1).

## 2 Method

This research was conducted to identify and test the independent variable and the dependent variable. The independent variable in this study is knowledge management, while the dependent variable is service quality. Descriptively, this research is quantitative research to what extent which knowledge management has impact on service quality at the Tangerang City Health Department. The sample of this research was carried out by 130 employees/staff who are responsible and involved in the service.

## 3 Results

### 3.1 Descriptive Description of the Improvement of Information Services and Public Complaints

The Tangerang City Health Department carried out improvements in the information and complaint service system as well as its human resources. Improvements in the service

system include the use of social media and websites, the use of chat group communication media, the improvement of procedures and report response times, and in terms of human resources with the formation of an implementing team.

Utilization of the media used in delivering complete information is carried out through social media, the use of social media (Instagram and/or YouTube) as well as the official website of the Tangerang City Health Department is considered as media to transfer information to the right community in the current era of digitization, with the delivery of information that is always updated. and routinely carried out, is one aspect that reduces demand for information because people get factual and real-time information.

The use of chat group communication media such as WhatsApp makes it easier for the handling team to share information, discuss and provide input in requests for information and public complaints that go to the Tangerang City Health Department. Improvements were also made to the public complaint service procedure and the response time to complaints, there are several procedures that must be carried out related to the implementation of compliant services. And these procedures are written in the form of Standard Operating Procedures (SOP) and also in several forms, such as flyers, standing banners, and in the service procedure information menu on the Tangerang City Health Department website channel.

This service improvement can also be felt by the formation of a work team through the Decree of the Head of the Tangerang City Health Department Number 440/Kep.79-Sekret/XII/Dinkes/2021 so that there is a team of personnel who have duties and functions in the public information service system and public complaints. With this team, the information delivery process carried out can be divided by team members who have skills in technical fields such as website managers and social media managers. This also allows the acceleration of response times for incoming complaints, so that incoming reports do not pile up and an answering mechanism has been designed for similar questions. However, with improvements to the things above, it is still felt that there are shortcomings in its implementation, both in terms of human resources, procedures, and other things.

Based on the phenomena found in the research, the focus of observation is on competence and knowledge management. Competence is related to the abilities possessed by employees. the acquisition of knowledge start the learning process. This knowledge is then maintained and shared so that it can be used widely, therefore knowledge transfer was chosen by the Tangerang City Health Office as one of the processes for applying knowledge management because the Tangerang City Health Office considers that providing facilities and opportunities for learning can improve employee competence.

Organizations that are supportive of knowledge management are organizations that value knowledge, the application of knowledge management has an impact in order to improve the quality of services at the Health Office so increasing good knowledge for organizations is an important thing to implement. Through knowledge management and service quality, organizations consciously seek to find out their capabilities and facilities and use them to improve service performance and produce various innovations. Organizations must recognize the importance of understanding effective knowledge management and service quality.

### 3.2 Research Result

This study was conducted to analyze the effect of knowledge management in which there are five variables, namely knowledge sharing, personal knowledge, job procedures, technology, and learning organization. This research was conducted by distributing online questionnaires to 130 employees of the District Health Office and processed using SPSS 25.

### 3.3 Description of Respondent Identity

Characteristics of respondents based on gender, most of them are women with a percentage of 57.7%, the age of the largest number of respondents is 20–40 years with a number of respondents as much as 80%, with the highest level of education is Bachelor as much as 83.8%.

### 3.4 Validity Test and Reliability Test

The results of the validity test show that all the indicators and variables have an  $r$ -count  $> 0.30$ . Thus all indicators are valid. While the variable Knowledge Management, Personal Knowledge, Job Procedure, Technology, Learning Organization on Service Quality, where all the question items have a Cronbach's alpha value  $> 0.60$ , means that it can be declared reliable.

### 3.5 Multiple Linear Regression Analysis

The regression equation is obtained based on the results of the processed regression data above as follows:  $Y = 30.272 + 0.611 + 0.576 + 0.667 + 0.712 + 0.536$ , indicating that all regression coefficients have a positive sign which means that the values of the independent variables is improved, it will encourage the improvement of service quality. And from the regression results, the technology variable (X4) is the largest variable with a beta () value of 0.712, meaning that the technology variable (X4) is the variable that most influences the improvement of service quality.

### 3.6 Hypothesis Testing

Based on the results of the Anova test, Knowledge Sharing, Personal Knowledge, Job Procedures, Technology, and Learning Organizations have a significant influence on improving service quality, as evidenced by the calculated F value of  $44,399 > F$  and a significant value of  $0.000 < 0.05$ . T-test result found that knowledge management, personal knowledge, job procedures, technology, and learning organization have a significant effect on improving the service quality.

### 3.7 Determinant Coefficient

Knowledge management (knowledge sharing, personal knowledge, job procedures, technology, learning organization) has a strong relationship to improving service quality from the value of  $R = 0.863$ . Then the quality of service is influenced by knowledge management by 74.5%, while the remaining 25.5% is influenced by other variables included in this study.

## **4 Discussion**

### **4.1 The Effect of Knowledge Sharing on Service Quality**

Multiple linear regression analyzing found significant effect to service quality by knowledge sharing. As the hypothesis statement it can be proven that there is an effect of knowledge sharing on service quality. The results of this study in line to the research conducted by Wahyuni and Kistyanto (2013) [13] studying and analyzing the Effect of Knowledge Sharing on Departmental Performance through Service/Service Innovation, stating the influence of knowledge doming and knowledge collecting on service/service innovation. So it can be concluded that the knowledge-sharing activities carried out by employees at the service management of PT. Telkomsel, Tbk in providing knowledge or information is carried out actively.

### **4.2 The Influence of Personal Knowledge on Service Quality**

Multiple linear regression analysis showed that the second hypothesis states that personal knowledge has a significantly positive effect on service quality, so this test proves that personal knowledge has a positive and significant effect on service quality. This is in accordance with the hypothesis statement and it can be proven that there is an influence of personal knowledge on service quality.

Previous research by R. Zarkowi & W. Widiartanto (2016) [14] showed that the higher the assessment of the ability to support personal knowledge owned by Patra Jasa Semarang hotel employees, the more their performance will be to continue to explore and continue to bring out high values in serving its guests in order to offer the best service to its guests. So it can be concluded that personal knowledge is one of the factors for individuals in the organization to clearly know the roles and responsibilities of each in managing knowledge because each individual has different knowledge, abilities, and experience, so the quality of performance is different.

### **4.3 The Influence of Technology on Service Quality**

Multiple linear regression analysis showed that the second hypothesis states (job procedures) have a significantly positive effect on service quality, so this test proves that job procedures have a positive and significant effect on service quality. This is in accordance with the hypothesis statement and it can be proven that there is an effect of job procedures on service quality.

The results of this study in line to Maysaroh Tanjung and Makmur (2019) [15], stating that the Job Procedure at the Rokan Hulu District Hospital has been carried out well, Hospital employees have a responsibility to provide maximum service and the best quality service to their patients, so it can be concluded that with the job procedure known as the Standard Operational Procedure (SOP) is made to maintain the quality and results of work where tasks will be easier to do.



#### 4.4 The Influence of Learning Organizations on Service Quality

Multiple linear regression analysis showed that the second hypothesis statement is that Learning Organization has a significantly positive effect on service quality, so this test proves that learning organization has a positive and significant effect on service quality. This is in accordance with the hypothesis statement, and it can be proven that there is an influence of learning organization on the quality of service at the district health office.

Continuous improvement or continuous improvement has become a demand for every organization today. Various organizations are trying to improve themselves so as not to be left behind with the development of an increasingly advanced and globalized world. Organizations must provide opportunities for their members to always learn and develop so that they can have a positive impact on the organization. One thing that must be done is to develop a learning organization.

The results of this study are in line to Andi Junita and Muhammad Hermansyur (2014) [16] study, that stated organizations are tangible as learning organizations where members carry out the learning process both as individuals, groups and as members of the organization will tend to be ready to make changes both in cognitive, affective and psychomotor aspects.

by the employees. So that employees should improve the quality of service through education and development activities in terms of service.

## 5 Conclusion

Analysis to influence of knowledge management on Service Quality at the District Health Office found that variables of knowledge sharing, job procedures, technology, personal knowledge and learning organization have a positive and significant influence on service quality. While the technology variable is the biggest influence among other variables because of the benefits of using technology to facilitate communication and exchange information quickly and easily. And the learning organization variable is the lowest influence among other variables. The implementation of learning organization at the District Health Office is empowered by carrying out aspects of learning, organization, people, knowledge, and technology, carried out by sharing knowledge and ideas, both work and in general.

The District Health Office expected to maintain and be able to continue to develop technology systems on a scale in accordance with developments that occur because based on research conducted, technology variables are the most dominating variables, so they have the most positive impact on service improvement.

The implementation of the learning organization has been going well but not yet perfect. Employee leadership and cooperation are factors that support the implementation of a learning organization. The target of the learning organization in the District Health Office is employees and visitors, but its implementation is more visible in employee activities.

This research is also expected to contribute to the development of science related to knowledge management and service quality in the future so that it can enrich scientific studies.

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