# Analysis Of Innovation In Pekanbaru City Pdam Tirta Siak Services Through The Implementation Of The Clean Water Management Company (APPA) Application

#### Nurjanah

Universitas Islam Negri Sultan Syarif Kasim Riau, Kota Pekanbaru , Riau, Indonesia

## Abstract

The purpose of this research was to determine Service Innovation at Tirta Siak Regional Drinking Water Company (PDAM) Pekanbaru City. This form of research uses qualitative and descriptive methodologies. Data collection methods include interviews, observations, and documentation. Meanwhile, the research indicators include relative benefit, appropriateness, intricacy, testability, and simplicity of observation. Based on this research, it is possible to conclude that service innovation through the implementation of the Clean Water Management Company Application (APPA) at the Regional Drinking Water Company (PDAM) Tirta Siak, Pekanbaru City, has been running optimally, as evidenced by its use, which is in line with the needs of PDAM employees. However, something needs to be produced, which is application development, so that it can be used by PDAM Tirta Siak clients. **Keywords :** Innovation, Services, PDAM, Applications

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Corresponding Author: Nurjanah (Nurjanahjanah050403@gmail.com)

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## 1. Introduction

Everyone desires service, and it is clear that service is inextricably linked to people's lives. Service is a service that prioritises people's demands, simplifies their lives, accelerates the age of social implementation, and brings them joy. Acts as a public service administrator, so the government must find a social mission that can be used to provide for the interests and welfare of the people, as well as the value and strategic position of the government as an apparatus for the people's advancement and growth.

On the other hand, those who have the right to decent services are in a position to demand that the services they receive be acceptable or match what they can produce. The implementation of public services by government officials in many service sectors, particularly the public sector including the fulfilment of civil rights and basic community needs, continues to fall short of expectations. Satisfactory public services are highlighted in society through media and non-governmental organisations due to high demand. Government agencies, such as BUMDs (Regionally Owned Business Entities) that provide goods services, are encouraged to continuously upgrade their innovations.

Regionally Owned Enterprises (BUMD) are firms owned by the regional government with the goal of generating regional revenue (PAD). According to Law No. 23 of 2014, BUMD is a corporate company in which the regional government owns the majority or all of its capital. BUMD allows regional administrations to maximise their involvement in regional economic development (Suwardi, 2020).

According to Law No. 5 of 1962 concerning Regional Companies, BUMD can take the form of a PT (Limited Liability Company). Examples of BUMD companies include Regional Drinking Water Companies (PDAM), Regional Development Banks (BPD), Regional Municipal Transportation Companies, Regional Companies Slaughterhouse, Transjakarta, and many other regional companies.

The Regional Drinking Water Company (PDAM) is a Regionally Owned Enterprise (BUMD). The Regional Drinking Water Company (PDAM) is a regional organisation that supplies safe drinking water and is overseen and managed by the executive and legislative branches. Regional Drinking Water Companies (PDAM) are responsible for developing and managing clean water supply systems that serve all consumer groups at affordable pricing.

The Tirta Siak Regional Drinking Water Company (PDAM) is located in the city of Pekanbaru. Tirta Siak was founded in 1976, and the firm is fully responsible for managing, running, maintaining, adding, and enhancing clean water services in its operational areas. It has grown swiftly to increase clean water production capacity.

Tirta Siak Regional Drinking Water Company (PDAM), Pekanbaru City, is a public company that offers drinking water services to the community by delivering clean water to improve people's welfare and health. The Tirta Siak Regional Drinking Water enterprise (PDAM) Pekanbaru City is a regional enterprise overseen by the Mayor of Pekanbaru. This corporation was created by Regional Regulation (Perda) TK.1 Riau Province No. 7 of 1976.

As a company providing goods or services in the form of water needs, PDAM Tirta Siak is obligated to provide the best service to consumers/customers in accordance with the production standards required by consumers and is more oriented towards quality service, able to provide high quality water that meets the requirements of health, continuity, and innovation. So that PDAM Tirta Siak Pekanbaru City can sustain itself in the future, become an independent service provider company, and deliver results that the community, particularly Pekanbaru City, can trust and be proud of.

PDAM Tirta Siak currently serves 10 of Pekanbaru's 15 sub-districts, including Pekanbaru City, Sail District, Limapuluh District, Tenayan Raya District, Bukit Raya District, Marpoyan Damai District, Senapelan District, Payung Sekaki District, Sukajadi District, and Rumbai Pesisir District. Given Pekanbaru City's rapid expansion and growth, there is an increased demand for clean water sources. To give the finest service to clients, the clean water management process requires a high level of expertise and efficiency.

Several issues with clean water services at the Regional Drinking Water Company (PDAM) Tirta Siak in Pekanbaru City include yellow water, occasional traffic bottlenecks, delayed service response, four bills that have increased without explanation, and water costs that have risen unexpectedly. There is socialisation of the causes of the increase in water prices among PDAM consumers. This demonstrates that the function of public services has not been fully realised through appropriate timeliness, professionalism, and participation in this situation.

According to data on the number of PDAM Tirta Siak users, the PDAM Pekanbaru network must serve approximately 13,000 active consumers. PDAM Tirta Siak needs to innovate their services to boost employee performance and provide relevant information. PDAM Tirta Siak has begun to strengthen its services by enhancing its technical system through innovative usage of IT systems. PDAM Tirta Siak is cooperating with the IT business Batam Bees Corp to build the Clean Water Management business Application (APPA). The Clean Water Management Company (APPA) application, launched by PDAM Tirta Siak Pekanbaru City, is expected to increase service quality, company efficiency in responding to customer complaints, and overall company performance. The Clean Water Management Company (APPA) programme was built to streamline the process of providing various services to clients, such as handling bill payments, metre services, inventory management, dealing with leaks, managing work orders (WO), and using dashboards.

PDAM Tirta Siak has made several efforts, however the services supplied are still inadequate. For this reason, in an effort to improve its services, PDAM provides the most recent innovations regarding services that are based on the high number of customers who must be supplied and to optimise the quality of PDAM Tirta Siak's services through the installation of the Application.

#### 2. Method

This study employs descriptive research methodologies and a qualitative approach. As a result, the purpose of this research is to explain how PDAM Tirta Siak in Pekanbaru City provides services through application innovation. Data was gathered by visiting the Tirta Siak Regional Drinking Water Company (PDAM) and obtaining various types of information and descriptions of service innovations

implemented by PDAM Tirta Siak. The analysis process involves data reduction, data display, and generating conclusions.

#### 3. Results and Discussion

Public Service Innovation is the search for new things in a form, the discovery of new things that are different or improve something that already exists. An innovation was created by the Regional Drinking Water Company (PDAM) of Pekanbaru City, namely the Clean Water Management Company Application (APPA) to help employees provide services amidst the large number of PDAM customers that employees must serve, and to carry out all service activities in a timely manner. Through the Clean Water Management Company Application (APPA), employees or officers can report all activities into the APPA system without having to worry about losing data, and to support employee performance. The application of this application in this research adjusts implementation indicators according to the attributes or principles of service innovation according to Yogi Suwarno (2008) concerning Innovation in the Public Sector.

#### 1. Relative Advantage (Relative Advantage)

Relative advantage or Relative Advantage, an innovation must have advantages and more value compared to previous innovations. There is always a novelty value inherent in innovation which is a characteristic that differentiates it from others (Reski, 2023). There are benefits and satisfaction 44 in innovation from a public service innovation, one of which is through "APPA" (Clean Water Management Company Application). This application-based innovation certainly makes it easier for employees to provide services to customers by collecting all their service activities into one system. 1. The advantage of using the Clean Water Management Company Application (APPA) in providing services. The advantage of the Clean Water Management Company Application (APPA) is that it can make all the work of PDAM employees easier, where all work is recorded into one system which makes data security more guaranteed in customer service. the number is increasing every year.

By using the Clean Water Management Company Application (APPA), it becomes easier for employees to provide services to customers, where with the APPA application, officers simply enter the customer's ID number and all the desired services can be checked directly with the APPA system, where there are many types of complaint services. like:

- a. Customer mutation
- b. Unsubscribe
- c. Request for compliment tank d
- d. Bill installments
- e. Clogged pipes
- f. Valve is damaged
- g. Indication
- h. Differences in customer data
- i. Complaints of high bills
- j. Dead water
- k. Complaints of weak pressure.

All types of complaints are in the APPA system, just selected by PDAM officers. All problems or customer complaints can be checked immediately, one of which is complaints about high bills, where if a customer makes a complaint, they can check directly the reason for the increase in the bill and adjust it to the previous bill.

Using APPA has the benefit of being able to support services and work in serving customers more quickly, so that it can improve employee performance, then the service provided to customers will also be better with the Clean Water Management Company Application system (APPA).

The advantage of using the Clean Water Management Company Application (APPA) at PDAM Tirta Siak is that the service coverage becomes wider, in general the APPA work system will record all service activities in an IT system. In implementing the service, using the Clean Water Management Company Application (APPA) makes the service faster because all activities carried out will be monitored directly and are easy to control and evaluate. In this way, management can carry out monitoring so that it is easier for officers to respond to reports from customers and there are no officers who do their work not on time.

The services provided use the Clean Water Management Company Application (APPA). All services have a ticket system, such as customer complaints. With the ticket system, customers will not be able to complain about the complaint handling process because all the processes are carried out sequentially, with tickets that come in first being processed first. and depending on the number of queues, the more complaints there are, the longer the handling process will take.

#### 2. Compatibility

Innovation can facilitate the adaptation process and learning process towards innovation more quickly, innovation that is consistent with existing values and the needs of service recipients (Elawati, 2022). This innovation using the application system was implemented because it adapted to the number of complaints coming in and the increasing number of PDAM customers. The Clean Water Management Company (APPA) application is used by all employees/officers of the Tirta Siak Regional Drinking Water Company (PDAM) Pekanbaru City.

Using the Clean Water Management Company Application (APPA) is not complicated to use, as the features in the APPA system make officers respond more quickly to customer complaints without having to check and record all these activities manually.

One of the services using the APPA system is in the cashier section, where employees can carry out bill payment transactions. The service process can be carried out in the following way:

a. Customer provides customer ID

- b. The cashier checks the APPA system payment amount
- c. Customers pay according to the amount that has been checked via the application
- d. Print payment receipt.

From the results of observations and interviews, the author analyzes that the suitability of the APPA application is in accordance with employee needs and the features in it make it easier for officers to respond to customer complaints because its use is not complicated.

#### 3. Complexity

Complexity is the level at which an innovation is considered difficult to use and understand. Due to its new nature, innovation has a level of complexity that may be higher than previous innovations (Haryani, 2022). However, because an innovation offers a newer and better way, this level of complexity is generally not an important issue. Services carried out using the APPA system have challenges such as server problems or the large number of customer complaints that come in which makes service late.

The complexity of the APPA application experienced by officers was server disruption, when the lights went out which caused network loss. However, this problem is not a problem in service because the system that has an error due to server interference will return to functioning. From the results of the observations and interviews above, the author can analyze that the complexity of the APPA application is when there is a server disruption, especially when the power goes out which makes the network disappear, then the service using the APPA application makes the service slower because you have to take a ticket first even though the ticket can be used. taken online, and all activities carried out online must be reported back to the APPA system by the officer.

#### 4. Ease of Trying

Innovation can only be accepted if it has been tested and proven to have advantages or greater value compared to old innovations. An innovation must be able to demonstrate its superiority in order to be implemented (Danar, 2019). The Tirta Siak Regional Drinking Water Company (PDAM) Pekanbaru City tried innovations whether they were implemented or not, and the results can be said to be successful even though customers/community have not been able to install the application. Before launching to customers, the Tirta Siak Regional Drinking Water Company (PDAM) has carried out a soft launch internally on May 11 2022, which aims to simulate and improve before launching to customers, in order to facilitate interaction with the Clean Water Management Company Application (APPA).

APPA aims to make all employees' work easier in providing services to customers where all their activities are recorded in one IT system, everything that is done starting from the queue system, complaints and new connections, who does it or the officers will be recorded so that it is easy to check the history of all activities again. this service so that there are no longer any complaints that are delayed

in handling. From the results of the observations and interviews above, the author can analyze that services using the APPA application have gone through trials and can be accepted by PDAM Tirta Siak employees, where using the APPA application can make the work of employees easier, all service activities carried out are recorded in the system which can be checked again and no more delayed service.

## 5. Observability

An innovation must also be observable, in terms of how it works and produces something better. The innovation made must produce something better (Setiawan, 2019). From the implementation of this innovation, it can be seen that over time the service provided to customers is getting better with the Clean Water Management Company Application (APPA) system. But there are still shortcomings that need to be developed by the company.

The Clean Water Management Company (APPA) application is easy to understand and implement for PDAM Tirta Siak officers/employees. The use of the Clean Water Management Company Application (APPA) is only application-based which is only used by PDAM Tirta Siak employees. Using the Clean Water Management Company Application (APPA) system can improve service quality and professionalism, PDAM customers also do not need to go to PDAM Tirta Siak to make complaints, all complaints can be made online and will then be reported to the APPA system and monitored directly.

APPA is used to support officers in resolving customer complaints, and to make it easier for workers to complete important tasks in the field that are customer complaints, which can provide better service, even though the Clean Water Management Company Application (APPA) cannot be installed on the customer's smartphone.

From the results of the observations and interviews above, the author can analyze that it can be seen that services using APPA produce better services that do not make things difficult for users, and can support employee performance in resolving customer complaints, and even though you can collect tickets via online media, there are still many customers who come directly to PDAM Tirta Siak. overwhelmed in handling customer complaints which makes the process of handling customer complaints slow.

# 4. Conclusion

Based on data collection such as interviews with sources, direct observation in the field as well as documentation, researchers found that the Tirta Siak Regional Drinking Water Company (PDAM) service innovation through the use of the Clean Water Management Company (APPA) application has been running optimally even though there are several obstacles due to several factors. , including:

- 1. There are server problems such as system errors caused by the computer used by the employee being an old computer or an old version.
- 2. Lack of human resources to handle the field section which is not in accordance with the number of incoming tickets, so that field officers.
- 3. The APPA system still cannot be installed or accessed by PDAM customers.
- 4. Services using the Clean Water Management Company Application (APPA) at PDAM Tirta Siak can be said to be good and the service is good, because before this application PDAM still carried out all its services manually.

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