




The Influence of Implementation of Internal Control to Quality of Services

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ABSTRACT

This study aims to determine the influence of the implementation of internal control to service quality. The method used in this research is descriptive quantitative method by collecting data through library research and field studies through distributing questionnaires. The sampling technique used in this research is the saturated sampling method with a sample of 35 respondents who are employees of the "Perusahaan Daerah Air Minum (PDAM) Tirtawening-Bandung" in sections in the General Division unit. Analysis of the data used is simple linear regression analysis at a significance level of 5%. Results of this study indicate that the implementation of internal control has an influence to service quality, while the magnitude of the influence of the implementation of internal control in improving service quality is in "Perusahaan Daerah Air Minum (PDAM) Tirtawening-Bandung" is 69.7%.

INTRODUCTION

Directorate General of Water Resources states that the total water demand in Indonesia reaches 175 million m³/year. Consisting of domestic needs of 6.4 million m³/year, agriculture 141 million m³/year and industry 27.7 million m³/year, where more than 50% of water needs come from groundwater. Currently, the quality and need for raw water is very urgent. The government as the leading sector plays an important role in providing and ensuring the continued availability of raw water in the future. However, to fulfill raw water needs, other sectors and the community need to be supported (pu.go.id, 2020).

The government has an obligation to provide quality drinking water in sufficient quantity to remote areas. PDAM plays a role in providing drinking water that is clean, healthy and meets health requirements in an area. Therefore, PDAM must also continue to improve its performance in serving the community for the provision of drinking water. The Ministry of Public Works and Public Housing (PUPR) stated that Indonesia had 387 Drinking Water Companies (PDAM) in 2020. This number increased by 1.8% compared to 2019 which had 380 PDAMs. However, there are 239 PDAMs that are in the healthy category. Meanwhile, as many as 96 PDAMs are in the unhealthy category and 52 PDAMs are in the sick category (databok.katadata.co.id, 2020).

"Perusahaan Daerah Air Minum (PDAM) Tirtawening Kota-Bandung" is one of the service units in the city of Bandung which is engaged in drinking water and waste water management services. The main task of the "Perusahaan Daerah Air Minum (PDAM) Tirtawening-Bandung" according to Bandung Mayor Regulation Number 236 of 2009 is to engage in drinking water management and waste water management in the region, to improve community welfare which includes economic, social, health and public service aspects (pambdq.co.id, 2020).

The city of Bandung is geographically located in the middle of West Java province, thus as the provincial capital, Bandung has strategic value to the surrounding areas. The city, which was originally designed for only 200,000 residents, is now inhabited by more than 2 (two) million people due to the flow of immigrants from areas around Bandung. The growing population

and the high flow of urbanization into this city have resulted in a high population density reaching 10,899 people per Km² and in line with this, there is also an increase in demand for housing with supporting facilities including drinking water and waste water (pambdq.co.id, 2020).

"Perusahaan Daerah Air Minum (PDAM) Tirtawening-Bandung" to meet the need for clean water, the people of Bandung City have tried to provide services to meet the need for clean water also provide good quality services such as complaint resolution services. If a service can meet the needs and expectations of the community, then the service is said to be of high quality or satisfactory. Therefore, the focus of service quality is on the satisfaction of service recipients (Hardiyansyah, 2011: 36).

Table 1. Service Performance of PDAM Tirtawening-Bandung

	2016	2017	2018
Complaint Resolution Rate	99,43%	99,87%	100,00%

Source: Performance Book of "BUMD Penyelenggara SPAM 2019"

It can be seen from the Service Performance table of "PDAM Tirtawening-Bandung" that the level of settlement of customer complaints from year to year is increasing in quality. However, in its efforts to provide service to customers, it still cannot be separated from issues regarding the lack of quality of service provided. Various service issues are always related to the ability of the "PDAM Tirtawening-Bandung" in providing services to consumers.

One of them is the case that happened to consumers on Jalan Moch Toha Gang Curug Candung-Bandung: "We have had water difficulties for three days. We can't take a bath or wash. We are forced to take water from residents who have wells," Supiati told Tagar News in Bandung, Saturday 20 April 2019. Reported to PDAM by telephone, but so far there has been no response. A resident named Ami complained about the same thing. He admitted that he was confused as to why the water did not flow as usual. "I have reported it to the PDAM by telephone, but so far there has been no response," he said.

In the same place, Rachmawati complained that for three days she couldn't take a shower and couldn't wash. He can only use water for defecation and urination, and then he takes water from a neighbor's well which is used in rotation, and the rest uses rainwater. Rachmawati admitted that she had reported to the hotline number of "PDAM Tirtawening-Bandung" but there was no response. Likewise, through other hotlines, there is still no response. "I have complained to several contacts belonging to PDAM, until I was desperate, I tried to complain via PDAM's Instagram, but there was no response. I haven't showered and washed for three days. Please have a response from PDAM Bandung City. We, the customers of "PDAM Tirtawening-Bandung", buy, not ask." he said. Tagar News asked for confirmation from the President Director of "PDAM Tirtawening-Bandung", Soni Salimi regarding the termination of PDAM water lines to customers. Soni Salimi did not respond until this news was made. ([Tagar.id, 2019](#)).

Head of Complaints, Indonesian Consumers Foundation (YLKI) Aji Warsito said that PDAM Tirtawening should be able to visit its consumers directly. Aji appealed to the public if they were not satisfied with the services of PDAM Tirtawening to submit their complaints. "If there is a service that is not optimal and it is felt that it is intentional, the consumer can demand it," he said. He also warned that there would be no discrimination against consumers. PDAM customers, both industrial consumers and household consumers, must be treated equally. "Don't let there be differences, because all of them have the same rights from the services of business actors. If the consumers of the hotel industry have smooth water supply, while household consumers the water is not smooth, there is discrimination," said Aji. As previously reported, the Chair of the Indonesian Hotel and Restaurant Association for the West Java Region, Herman Muchtar, said that of the 475 hotels in Bandung, no one complained about the lack of water during this dry season. ([Bandungkita.id, 2019](#)).

The lack of customer satisfaction of "PDAM Tirtawening-Bandung" on the quality of complaint resolution services is evidenced by the results of the Community Satisfaction Survey Per

Respondent and Service Elements. 14 of 2017 conducted by the Research and Development Unit of "PDAM Tirtawening-Bandung".

Table 2. PDAM Community Satisfaction Survey 2019

No	Service Element	Average Value
U1	Requirements	2.79
U2	Systems, Mechanisms, and Procedures	2.74
U3	Completion Time	2.6
U4	Fees/ Tariffs	2.5
U5	Product Specification Service Type	2.77
U6	Implementing Competence	2.93
U7	Implementing Behavior	3.13
U8	Handling Complaints, Suggestions, and Feedback	2.2
U9	Facilities and Infrastructure	3.28

Source: R&D Tirtawening Blogspot

The results of the 2019 PDAM Community Satisfaction Survey, it can be seen the customer satisfaction with complaint resolution services is the lowest compared to customer satisfaction with other service elements.

The implementation of service tasks in the organization does not always run well as expected, because the management of the organization basically will not avoid the possibility of risks and threats. If this is not taken to account, it can ultimately affect service delivery, namely a decrease in service quality and in the end the service objectives are not achieved. To assist and direct the organization to achieve service goals, an integrated system is needed, so that the organization moves towards the goals that have been set. Internal control system is a system that can be implemented to help the organization achieve its goals. If the organization has internal control, the organization can anticipate various environmental changes that occur ([Djanegara in Nuryani Tadeko, 2017](#)).

As quoted by COBIT (2012), "Internal Control provides reasonable assurance that organizational goals can be achieved and undesirable things can be prevented or detected and corrected". Therefore, the "PDAM

Tirtawening-Bandung” to achieve the company’s goals, which is the filling the customer needs for service, the company requires efforts to achieve the implementation of internal control.

Based on the case that occurred in “PDAM Tirtawening-Bandung,” where there is still a lack of companies in providing services related to relevant information to customers and also the lack of communication by the company, especially in responding to customer complaints, the company needs to pay attention to the internal control component of the information and communication component. A good information and communication system can assist in making important decisions in service to customers, including service improvement and improvement (Nuryani Tadeko, 2017).

Similar studies on the effect of internal control on service quality have been carried out by previous researchers. Among them are research conducted by Nuryani Tadeko (2017) with research results showing that the implementation of an internal control system consisting of a control environment, risk assessment, control activities, information, and communication, as well as monitoring and service quality shows good results. Research conducted by Reza Abshar Abdurrahman (2018) concludes that internal control has a significant effect on service quality. Also, research conducted by Fifi Liyanti (2017) concluded that the control, information, and communication environment had a positive influence on service effectiveness. Based on the description of the

background above, the authors want to see how much influence internal control has on the quality of services, especially those that occur in the “PDAM Tirtawening-Bandung.”

METHOD

This study utilizes an explanatory, descriptive-quantitative design, commencing with an exhaustive literature review to conceptualize internal control constructs and service quality dimensions, followed by a cross-sectional field survey conducted over a four-week period during March–April 2025 in which a rigorously developed, pilot-tested, and expert-validated questionnaire was distributed to the entire population of 35 employees at PDAM Tirtawening–Bandung (saturated sampling); the gathered data were entered into SPSS for cleaning and screening, subjected to reliability analysis via Cronbach’s alpha and construct validity assessment through confirmatory factor analysis, and ultimately analyzed using simple linear regression at a 5 percent significance threshold ($\alpha = 0.05$) to precisely quantify the influence of internal control mechanisms—including control environment, risk assessment, control activities, information and communication, and monitoring—on the organization’s overall service quality .

RESULTS AND DISCUSSION

1.1. Implementation of service quality

Table 3. Recapitulation of respondents' responses of variable Y

No	Dimension	Actual Score	Ideal Score	%	Mean Score	Category
1	Tangibles	413	525	78.68	3.75	Good
2	Empathy	683	875	78.06	3.9	Good
3	Reliability	267	350	76.29	3.81	Good
4	Assurance	252	350	72	3.6	Good
5	Responsiveness	266	350	76	3.8	Good
Total		1881	2450	76.78	3.78	Good

Source: researcher data processing

Based on table above, information is obtained that the total actual score obtained from all the statements that form the service quality variable is 1881 and the ideal score is 2450, while the total percentage value obtained is 76.78% and the mean score is 3.78 included in the good category. This shows that the quality of services shown by the Tirtawening Regional Drinking Water Company (PDAM) Bandung City is included in the good category.

However, it still shows that there are weaknesses in the quality of services at PDAM Tirtawening, Bandung City, which still need to be addressed, considering that there are still several customer complaints regarding the lack of complaint resolution services provided by PDAM Tirtawening, Bandung City. Based on the research results, it can be seen the average score of the Assurance (Guarantee) indicator is the lowest, this means that PDAM Tirtawening Bandung City in improving the quality of services needs to pay more attention to providing timely guarantees in services.

Service quality is measured using 5 the Tangibles dimension, Emphaty dimension, Reliability dimension, Assurance dimension and Responsiveness dimension. The following is an explanation based on the results of calculation data regarding the quality of services at PDAM Tirtawening Bandung City for each indicator:

- Tangibles, Tangibles indicators at the Tirtawening Regional Drinking Water Company (PDAM) Bandung City have been implemented good, this is supported by an average score of 3.75 which is included in the good category. Even though it is included in the good category, the company needs to improve existing facilities to facilitate customer access.
- Empathy, Empathy indicator at the Regional Drinking Water Company (PDAM)

Tirtawening, Bandung City has been implemented good, this is supported by an average score of 3.9 which is included in the good category. Even though it is included in the good category, companies need to pay attention and respect each customer and better understand customer needs in-order-to provide customer satisfaction.

- Reliability, The Reliability Indicator at the Tirtawening Regional Drinking Water Company (PDAM) in Bandung City has been implemented good, this is supported by an average score of 3.81 which is included in the good category. Even though it is included in the good category, the company needs to provide reliable services as promised.
- Assurance, Assurance indicators at the Tirtawening Regional Drinking Water Company (PDAM) Bandung City have been implemented good, this is supported by an average score of 3.60 which is included in the good category. Even though it is included in the good category, companies need to provide reliable guarantees to customers, especially in terms of guarantees on time in providing services.
- Responsiveness, The Responsiveness Indicator at the Tirtawening Regional Drinking Water Company (PDAM) Bandung City has been implemented good, this is supported by an average score of 3.80 which is included in the good category. Even though it is included in the good category, companies need to provide services quickly, precisely, and carefully in providing services and responding to customer complaints well.

1.2. Implementation of internal control

Table 4. Recapitulation of respondents' responses of variable X

No	Dimension	Actual Score	Ideal Score	%	Mean Score	Category
1	APO	539	700	77	3.85	Good
2	BAI	551	700	78.71	3.94	Good
3	DSS	387	525	73.71	3.69	Good
4	MEA	400	525	76.19	3.81	Good
Total		1877	2450	76.61	3.82	Good

Source: researcher data processing

Based on the table above, information is obtained that the total actual score obtained from all the statements that form the internal control variable is 1877 and the ideal score is 2450, while the total percentage value obtained is 76.61% and the mean score is 3.82, which is included in good category. This shows that the internal control demonstrated by the Tirtawening Regional Drinking Water Company (PDAM) Bandung City is included in the good category.

However, it still shows that there are weaknesses in internal control at PDAM Tirtawening, Bandung City, which still need to be addressed, considering the lack of effective implementation of internal control in supporting services related to providing relevant information to customers and the lack of communication, especially in responding to customer complaints. Based on the research results, it can be seen the average score of the Deliver, Service and Support (DSS) indicator is the lowest, this means that PDAM Tirtawening Bandung City in improving internal control needs to improve risk management also follow up on the results of the analysis for prevention.

The implementation of internal control is measured using the Align, Plan and Organize (APO) dimension, the Build, Acquire and Implement (BAI) dimension, the Deliver, Service and Support (DSS) dimension, and the Monitor, Evaluate and Asses (MEA) dimension. The following is an explanation based on the results of calculation data regarding the implementation of internal control at PDAM Tirtawening, Bandung City:

- Align, Plan and Organize (APO) at the Tirtawening Regional Drinking Water Company (PDAM) Bandung City has been implemented well, this is supported by the average score of the Align, Plan and Organize (APO) indicator of 3.85 which is included in the good category. Even though it is included in the good category, companies need to pay attention to whether operational activities to help achieve the company's goals and objectives are running well or not.
- Build, Acquire and Implement (BAI) at the Tirtawening Regional Drinking Water Company (PDAM) Bandung City has been implemented well, this is supported by the

average score of the Build, Acquire and Implement (BAI) indicator of 3.94 which is included in the good category. Even though it is included in the good category, the company still needs to identify more thoroughly any possible risks that may occur.

- Deliver, Service and Support (DSS) at the Tirtawening Regional Drinking Water Company (PDAM) Bandung City has been implemented well, this is supported by the average score of the Deliver, Service and Support (DSS) indicator of 3.69 which is included in the good category. Even though it is included in the good category, companies need to improve risk management also carry out more follow-up on analysis results for prevention.
- Monitor, Evaluate and Assess (MEA) at the Tirtawening Regional Drinking Water Company (PDAM) Bandung City has been implemented well, this is supported by the average score of the Monitor, Evaluate and Asses (MEA) indicator of 3.81 which is included in the good category. Even though it is included in the good category, the company needs to increase monitoring and evaluation activities in assessing performance.

1.3. The effect of internal control to service quality

The regression equation model formed based on the research results:

$$Y = -4.307 + 1.072 X + e$$

From the regression model it can be explained:

1. If α = a constant of -4,307, this means that if the independent variable, namely the internal control variable, is considered constant (with a value of 0), then the dependent variable, namely the service quality variable, will have a value of -4,307.
2. If the regression coefficient value for the internal control variable shows 1.072, this means that if the internal control variable increases by (one) unit, then the dependent variable, namely the service quality variable, will experience an increase of 1.072.

Table 5. Hypothesis testing (t-test)

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-4.307	6.630		-.650	.520
	Internal Control	1.072	.123	.835	8.709	.000

a. Dependent Variable: Service Quality

Sources: Output Result of SPSS

Based on the results of the t test on the regression model, the significance value for the internal control variable was obtained at $0.000 < 0.05$ (real level of research significance). Apart from that, it can also be seen from the results of the comparison between t_{count} and t_{table} which

shows the t_{count} value is 8,709, while t_{table} is 2,034. From these results it can be seen $t_{count} > t_{table}$ is $8.709 > 2.034$, so it can be concluded that H_1 is accepted, meaning that partially the internal control variable has an effect to the service quality variable.

Table 6. Coefficient of determination

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.835 ^a	.697	.688	3.73332

a. Predictors: (Constant), Internal Control
 b. Dependent Variable: Service Quality

Sources: Output Result of SPSS

Based on the results of testing the coefficient of determination in table above, it shows that the R^2 value is 0.697, which means that the variability of the dependent variable, namely service quality, can be explained by the independent variable, namely internal control, in this study is 69.7%, while the remaining 30.3% is explained by other variables outside the research model.

The results of this research indicate that the implementation of good internal control can improve the quality of services at the Regional Drinking Water Company (PDAM) Tirtawening, Bandung City. It is hoped that the implementation of internal control with its principles will improve the quality of services within the company. The results of this research are in line with the results of research conducted by several other researchers including Nuryani Tadeko (2017), Fifi Liyanti (2017), and Reza Abshar A (2018) with research variables on internal control of service quality, The research

results show that internal control in the company is needed to support quality services in the company and the better the internal control carried out by the company, the more the quality of service will improve.

CONCLUSION

Based on the results of data analysis and discussions that have been carried out in this research, the conclusions:

1. The implementation of internal control at the Regional Drinking Water Company (PDAM) Tirtawening is good.
2. The quality of services at the Regional Drinking Water Company (PDAM) Tirtawening is good.
3. The implementation of internal control affects the quality of services at the Regional Drinking Water Company (PDAM) Tirtawening

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