



Budget Planning Strategy, Revenue And Control Of Non-Revenue Water (NRW) On Financial Performance Through SOP (Standard Operating Procedure) As An Intervening Variable At Perumda Air Minum Tirta Raharja Bandung

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ABSTRACT

This study aims to analyze the influence of Budget Planning Strategy, Revenue, and Unbilled Water (ATR) Control on Financial Performance at Perumda Air Minum Tirta Raharja Bandung, with Standard Operating Procedure (SOP) as an intervening variable. The research is based on the importance of operational efficiency and corporate governance in regional water utility companies, particularly in facing financial and technical challenges related to budgeting, revenue optimization, and the control of non-revenue water (ATR). SOP plays a vital role as a system that standardizes operational procedures, ensuring that activities are performed efficiently and contribute to improved financial performance. This study uses a quantitative approach with Partial Least Squares Structural Equation Modeling (PLS-SEM) for data analysis. The sample consists of 150 respondents, comprising operational and managerial employees at Perumda Air Minum Tirta Raharja, who are directly involved in budgeting, revenue management, ATR control, and SOP implementation. Data were collected through structured questionnaires using a 5-point Likert scale. The analysis was conducted using SmartPLS software to test the measurement model (outer model), structural model (inner model), and the mediating effect of SOP. The results show that Budget Planning Strategy, Revenue, and ATR Control have a positive and significant effect on SOP. Furthermore, SOP has a positive and significant effect on Financial Performance. In addition, SOP partially mediates the

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relationship between the three independent variables and Financial Performance. This indicates that better budgeting strategies, effective revenue management, and optimal ATR control, combined with well-implemented SOPs, contribute significantly to improved financial performance.

INTRODUCTION

In facing the complex challenges in water resource management in Indonesia, Regional Drinking Water Companies (PDAM), especially Perumda Air Minum Tirta Raharja Bandung, have a very important role in providing clean water for the community. However, to ensure that Perumda Air Minum In order for this to continue to carry out its duties effectively and efficiently, a good management system is required, which includes aspects of budget planning, revenue management, and control over the provision of clean water that is not become account (Non-Revenue Water/ATR).

Effective budget planning is key to achieving good financial and operational (Hidayat & Fitriani, 2019). A carefully prepared budget can provide a basis for optimal resource allocation, minimize waste, and ensure that every component of operational activities can run smoothly (R. P. Sari & Wijaya, 2020). In this context, a budget that aims to improve drinking water services must be supported by realistic and easily monitored revenues.

Unrecorded or unaccounted income is a major challenge for Perumda Air Minum Tirta Raharja Bandung. Unreceived Water (ATR) refers to water supplied to customers but not recorded in the payment system, either due to physical water loss / leakage, illegal connections, or other administrative errors (Sutrisno & Widodo, 2022). This phenomenon has the potential to reduce the potential revenue that can be obtained, which in turn can affect the financial performance and operational continuity of Perumda Air Minum .

On the other hand, control of Non- Revenue Water (ATR) must be carried out carefully and based on accurate data to ensure that each unit supplied is recorded properly (R. Kurniawan, 2023). With strict control, Perumda Air Minum Tirta Raharja Bandung is expected to be able to reduce the loss of income, increase accuracy in recording water consumption, and maximize the income received.

This control process can be supported by the implementation of Standard Operating Procedures (SOP). An effective SOP will not only help in operational management, but can also serve as a guideline in budget and revenue control (Suryanto & Dwiastuti, 2022). With a clear and structured SOP, Perumda Air Minum Tirta Raharja Bandung will have the right reference in planning the budget, managing revenue, and controlling Non- Revenue Water (ATR) . Standardized and standardized procedures can minimize uncertainty and improve operational performance, as well as improve overall finances (Pratama & Fitriani, 2022).

SOP also serves as an instrument to monitor the implementation of planned budget and revenue policies (Halim & Prasetyo, 2023). This can ensure that every step taken is in accordance with the organization's objectives, as well as assist in identifying and addressing problems that arise in the management of Unrevenue Revenue (ATR) and revenue.

The intervening variable in this study is the role of SOP as an instrument to mediate the relationship between budget planning, revenue, and control of Non- Revenue Water (ATR) on financial performance. The role of SOP is expected to improve the management flow and minimize the discrepancy between planning and realization, so that more optimal financial performance can be achieved (Marini, Yusmaniarti, Faradilla, & Setiorini, 2024).

Financial performance is an important indicator in measuring the effectiveness of all organizational activities (Wibowo & Sutrisno, 2021). In this case, optimal financial performance can be achieved if all budget management systems, revenues, and control of Non-Revenue Water (ATR) run according to plan and are based on established procedures. Therefore, this

study will examine how mature budget planning, proper revenue management, and structured control of Non-Revenue Water (ATR) can directly affect the financial performance of Perumda Air Minum Tirta Raharja Bandung, with SOP as an intervening variable that facilitates the process.

Many studies have shown that good budget planning, effective revenue management, and strict control of Non Revenue Water (ATR) (Nasution, 2021), if supported by strong SOPs, will result in optimal financial performance. This is in line with the findings of research by which revealed that SOPs function as factors that mediate the influence between operational variables and financial performance. With clear SOPs, budget and revenue management will be more structured, which in turn positively affects financial performance.

Overall, this literature shows that budget planning, revenue management, Non- Revenue Water (ATR) control , and SOP have a close relationship with the financial performance of the organization. The presence of SOP as an intervening variable has an important role in strengthening the relationship between these variables, and with good implementation, it can improve the financial performance of Perumda Air Minum Tirta Raharja Bandung.

Difference study This with a number of study previously is part big existing research more focus on relationships direct between HR strategy and retention employee without consider role satisfaction Work as intervening variable . Research that tests the influence of motivational strategies , rewards , training and development career to retention employee through satisfaction Work as a mediator is still very limited . Satisfaction Work can play role important as the bridge that connects HR strategy with decision employee For still work in the company .

In the study related planning budget , management income , control of Non- Revenue Water (ATR), and the influence of SOP on performance finance , there is a research gap that needs to be filled. be noticed that is Although control Non-Revenue Water (ATR) has become attention in drinking water sector , still there is gap in study related influence Management of Non - Revenue Water (ATR) performance finance . Many studies have focused on improving amount customers and efficiency water distribution , but No Enough to study How control leakage non -revenue water income (ATR) . systematic can influence achievement performance finance organization public like Tirta Raharja Drinking Water Company Bandung. Research This try fill the gap with evaluate contribution ATR control over repair performance finance , especially in context Regional Drinking Water Company .

Study This focus on management source water power , especially in matter control leakage income derived from from water that is not recorded Non -Revenue Water (ATR). Efficient water management , which includes Non- Revenue Water (ATR) control and improvement accuracy income , contributing to the provision of sustainable and more clean water services efficient . Improvement effective water management will help reach SDG 6 goal for ensure sustainable water availability and management for all .

LITERATURE REVIEW

Research on budget planning strategies, revenue, and control of Non-Revenue Water (NWR) on financial performance through Standard Operating Procedures (SOP) as an intervening variable is an important topic in the context of financial and operational management in public institutions, especially regional companies such as Perumda Air Minum Tirta Raharja Bandung. Literature related to this topic can be divided into several sub-fields, namely budget planning, revenue management, control of Non-Revenue Water (NWR) , the influence of SOP on organizational performance, and the relationship between variables that can affect financial performance.

Budget Planning

Budget planning is a very important initial step in managing the finances of an organization, including Perumda Air Minum Tirta Raharja Bandung (Nuryati & Sokarina, 2023). According to research by (Suryono & Halim, 2022), effective budget planning will ensure optimal allocation of funds for every aspect of infrastructure operations and maintenance. In the context of Perumda Air Minum, this strategy must accommodate the need to improve the quality of drinking water services and improve the distribution system without burdening the company's finances. According to (Mulyadi, 2019), good budget planning must include an analysis of available resources, revenue and expenditure projections, and clear spending priorities. This process requires a systematic approach to avoid waste and ensure that every budget issued has a maximum impact on achieving organizational goals. (Prawirosentono, 2020) emphasized that good budget planning not only allocates funds for operations, but also for infrastructure investment and maintenance that support smooth water distribution. Therefore, proper budget planning greatly affects operational efficiency and capacity to improve services to the community. According to transparent and performance-based budget planning allows companies to allocate resources efficiently and maximize revenue. In the context of Perumda Air Minum, this is important to support non-revenue water control (ATR) programs (Putra & Sari, 2023).

Meanwhile, research by (Wibowo & Sutrisno, 2021) shows that budget planning based on desired results (performance-based budgeting) will be more efficient in improving the financial performance of the organization. For Perumda Air Minum Tirta Raharja, good budget planning must prioritize the improvement and development of the distribution network and better management of revenue from customers.

Revenue Management

The revenue earned by Perumda Air Minum Tirta Raharja is highly dependent on the tariffs applied and the management of water resources. Setiawan & Purwanto (2022) shows that good revenue management requires regular tariff evaluation and the implementation of policies that support increasing revenue without burdening customers. Factors that affect revenue management include the high level of water leakage that is not accounts or Non-Revenue Water (ATR). According to (Daryanto & Sutrisno, 2020), a revenue strategy based on increasing the efficiency of operational cost management and infrastructure optimization can lead to sustainable revenue increases. (Hermawan dkk., 2023) showed that high levels of water loss significantly affect company revenues. Implementing technology to monitor and reduce Non-Revenue Water (ATR), such as the District Meter Area (DMA) system, can improve operational efficiency and revenue.

The study by (Halim & Kurniawan, 2023) states that revenue management through tariff increases, reduction of Non-Revenue Water (ATR), and supervision of the water distribution system can have a significant impact on the financial stability of Perumda Air Minum. With proper revenue planning, measurable revenue will contribute directly to improving financial performance.

Non-Revenue Water Control (ATR)

Control of Non-Revenue Water (ATR) or water leakage is a major issue in water management at Perumda Air Minum. Non-Revenue Water (ATR) includes water that is distributed but not recorded in the meter or customer payments, either due to consumption official not billed, leakage / physical loss or non-physical/administrative loss. Research by (F. Kurniawan, 2023) states that good ATR control has a significant impact on the stability of income and financial management of drinking water companies. (Brown, 2020) explained that with stricter supervision of water use and a transparent payment system, Perumda Air Minum can minimize revenue leakage and ensure finances remain secure.

A good Non-Revenue Water (NWR) control strategy must include regular infrastructure maintenance, meter reading system improvements, and monitoring of the distribution system to prevent leakage. This, according to (Pratama dkk., 2022), will reduce resource waste and increase operational efficiency, which ultimately has a positive impact on financial performance.

Standard Operating Procedure (SOP)

SOP serves as a guideline in running operations consistently and efficiently. According to (R. Sari & Riyadi, 2021), the implementation of good SOPs will reduce operational errors and ensure that every activity carried out is in accordance with established standards, including in budget planning and control of Non-Revenue Water (ATR). According to (Kotler & Keller, 2016), good SOPs can increase efficiency and reduce the risk of errors in implementing organizational policies. According to (Suryadi, 2023), the implementation of SOPs based on a risk management approach helps reduce water loss and improve the financial performance of drinking water companies. A clear SOP will ensure that every procedure carried out, whether in recording income, controlling water leaks, or maintaining infrastructure, can be carried out in a structured and efficient manner. This will help Perumda Air Minum Tirta Raharja in achieving its long-term goal, namely improving financial performance while ensuring that service quality is maintained.

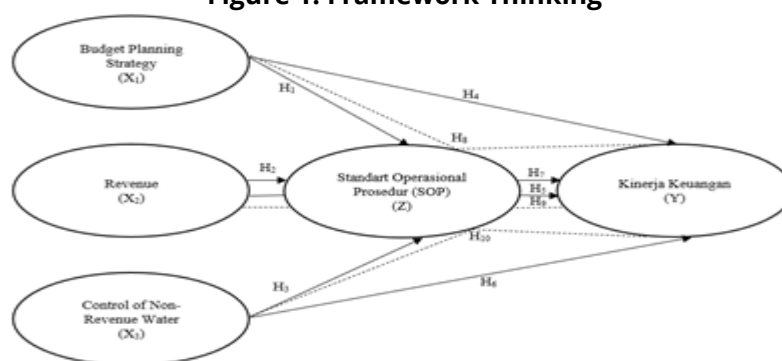
Financial performance

Financial performance is an indicator used to assess how well an organization manages its resources to achieve its financial goals (Fahreza, 2024). Financial performance is the main indicator of the success of implementing a budget planning strategy, controlling unused water . (ATR) , and SOP. (Rahmawati & Nugroho, 2023) found that operational efficiency supported by strategic planning and effective SOPs contributed to increased profitability of drinking water companies. According to (Y. Pujiyanto dan N. Mulyani, 2023), financial performance is influenced by various factors, including budget planning, revenue management, and control of Non-Revenue Water (ATR) . Previous research shows that organizations that are able to manage these three aspects well will have better financial performance, due to cost efficiency and revenue optimization achieved.

Research by (Setiawan & Purwanto, 2022) found that regional drinking water companies that successfully control Non- Revenue Water (ATR) and prepare budgets well, will obtain positive results in terms of financial performance. Good financial performance will be reflected in increased revenue, cost control, and the company's ability to meet its financial obligations. The study by (Sutrisno & Widodo, 2022) indicates that the implementation of a performance-based budget planning strategy, supported by optimal Non -Revenue Water (ATR) control and the implementation of structured SOPs, can increase revenue and reduce operational costs, thereby improving overall financial performance.

As for the framework thinking theoretical from study This that is as following :

Figure 1. Framework Thinking



Source: Data Processed, 2025

METHODS

This study uses a quantitative approach with the Partial Least Squares Structural Equation Modeling (PLS-SEM) analysis method to test the effect of Budget Planning Strategy, Revenue, and Non-Revenue Water Control (ATR) on Financial Performance, with Standard Operating Procedures (SOP) as an intervening variable. According to S. Hermawan & Amirullah (2016) quantitative research, it is research that tests hypotheses and examines the relationship between variables. In addition, this quantitative research was carried out officially and in a structured manner. This approach was chosen because it is able to explain the relationship between latent variables simultaneously, including mediating variables, and can be used in complex models with a relatively small number of samples. The study was conducted at the Regional Public Company (Perumda) Perumda Air Minum Tirta Raharja Bandung, which is one of the Regionally-Owned Enterprises (BUMD) engaged in clean water services in the Bandung area and its surroundings. The focus of the study is directed at managerial and operational aspects that are directly related to the budget planning process, revenue management, Non- Revenue Water Control (ATR), SOP implementation, and its overall influence on the company's financial performance.

The population in this study were all employees and operational and financial managers who worked in units directly involved in decision making, budget implementation, revenue monitoring, water distribution supervision, and the implementation of standard operating procedures at Perumda Air Minum Tirta Raharja. Given the wide scope of relevant work units, the researcher used a purposive sampling technique, which is a sampling technique based on certain considerations or criteria that are relevant to the research objectives. The main criteria in selecting samples are individuals who understand or have direct involvement in the budget system, revenue system, non-revenue water leakage control process, and the use of SOPs in their work environment. Based on these criteria, the number of samples was determined to be 150 people, which was considered sufficient to be analyzed using the PLS-SEM method, in accordance with the minimum sample size rules in structural modeling.

The data collection technique used in this study was the distribution of questionnaires directly and online to predetermined respondents. The questionnaire instrument consists of several closed statement items arranged based on the indicators of each variable in the study. Each item is measured using a 5-point Likert scale, ranging from a score of 1 (strongly disagree) to a score of 5 (strongly agree), in order to capture the level of perception and assessment of respondents towards each construct studied. Before being used in full, the questionnaire has gone through a pilot test to ensure the validity of the content and reliability of the instrument. The collected data were then processed using the latest version of SmartPLS software, with analysis stages including testing the outer model (convergent validity, discriminant, and reliability), testing the inner model (path coefficient test, R^2 , Q^2 values), and testing the mediation effect of SOP on the relationship between independent variables and dependent variables. All analysis results are used to answer the research objectives and test the previously formulated hypotheses, as well as provide theoretical and practical implications for the development of managerial strategies in clean water service providers, especially in the context of financial performance and operational governance.

RESULTS

Validity Test

Convergent Validity and discriminant validity are components to form validity measurements. Convergent Validity Analysis is determined using loading factor parameters and using AVE (Average Variance Extraced) values.

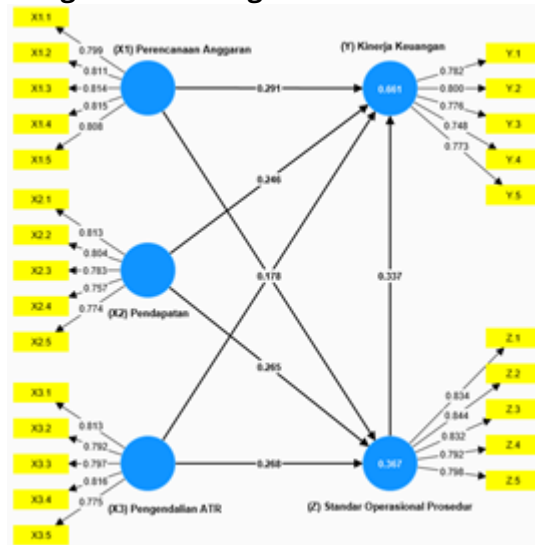
Convergent validity is the correlation between indicator scores and construct scores. The convergent validity value is the loading factor on the latent variable with its indicators and is expected to have a value of >0.7 and AVE >0.5 . The following are the loading factor values that can be seen in the table below:

Table 1. Loading Factor Value

Indicator	(X1) Budget Planning	(X2) Income	(X3) ATR Control	(Y) Financial Performance	(Z) Standard Operating Procedure
X1.1	0.799				
X1.2	0.811				
X1.3	0.814				
X1.4	0.815				
X1.5	0.808				
X2.1		0.813			
X2.2		0.804			
X2.3		0.783			
X2.4		0.757			
X2.5		0.774			
X3.1			0.813		
X3.2			0.792		
X3.3			0.797		
X3.4			0.816		
X3.5			0.775		
Y.1				0.782	
Y.2				0.800	
Y.3				0.776	
Y.4				0.748	
Y.5				0.773	
Z.1					0.834
Z.2					0.844
Z.3					0.832
Z.4					0.792
Z.5					0.798

Source: Researcher Processing (2025)

It can be seen in the table above that all indicators in this study are declared valid, this is because the loading factor value produced by each indicator is >0.7 . And it can be seen in the image below which is an image of the results of the loading factor test on the SmartPLS application as follows.

Figure 2. Loading Factor Test Results

Source: Researcher Processing (2025)

Another measuring tool in measuring validity is AVE (Average Variance Extracted). The AVE value must be >0.5 . It can be seen in the table below. That the Standard Operating Procedure Variable has the highest AVE value of 0.673. While the one with the lowest AVE value is the Financial Performance Variable with a value of 0.602.

Table 2. Average Variance Extracted (AVE) Value

Variables	Average variance extracted (AVE)
(X1) Budget Planning	0.655
(X2) Income	0.619
(X3) ATR Control	0.638
(Y) Financial Performance	0.602
(Z) Standard Operating Procedure	0.673

Source: Researcher processing (2025)

It can be seen from the table above that all AVE values of each variable are >0.5 . It can be concluded that *the loading factor* and AVE values have met *the Convergent Validity requirements*.

Discriminant Validity

In Discriminant Validity, there are several tests carried out, namely by looking at the Fornel Larcker value and cross loadings.

Fornel Larcker

The Fornel Larcker Criterion value and AVE value of each indicator were obtained from the smart pls output results as follows:

Table 3. Fornel Larcker Values

Variables	(X1) Budget Planning	(X2) Income	(X3) ATR Control	(Y) Financial Performance
(X1) Budget Planning	0.809			
(X2) Income	0.336	0.787		
(X3) ATR Control	0.460	0.535	0.799	
(Y) Financial Performance	0.604	0.603	0.617	0.776
(Z) Standard Operating Procedure	0.441	0.485	0.515	0.676

Source: Researcher Processing (2025)

The validity test of the characteristics through the *Fornell-Larcker criterion table* has the value of the first variable must be greater in the construct of each variable, as seen in the table above. The Budget Planning variable has a value of 0.809 greater than the construct of other variables, the Revenue Variable has a value of 0.787 greater than the construct of other variables, the Non- Revenue Water Control Variable (ATR) has a value of 0.799 greater than the construct of other variables and the Financial Performance Variable has a value of 0.776 greater than the construct of other variables. So it can be concluded that the construct of all variables has met the requirements of the discriminant validity test.

Cross loading

Table 4. Cross Loading Value

Indicator	(X1) Budget Planning	(X2) Income	(X3) ATR Control	(Y) Financial Performance	(Z) Standard Operating Procedure
X1.1	0.799	0.238	0.301	0.435	0.304
X1.2	0.811	0.325	0.458	0.484	0.391
X1.3	0.814	0.309	0.303	0.459	0.384
X1.4	0.815	0.243	0.424	0.529	0.390
X1.5	0.808	0.243	0.359	0.528	0.305
X2.1	0.203	0.813	0.340	0.476	0.369
X2.2	0.259	0.804	0.505	0.518	0.424
X2.3	0.314	0.783	0.415	0.474	0.387
X2.4	0.261	0.757	0.401	0.390	0.369
X2.5	0.286	0.774	0.436	0.499	0.355
X3.1	0.388	0.404	0.813	0.485	0.375
X3.2	0.354	0.373	0.792	0.502	0.447
X3.3	0.423	0.469	0.797	0.485	0.362
X3.4	0.391	0.539	0.816	0.573	0.500
X3.5	0.263	0.318	0.775	0.385	0.338
Y.1	0.455	0.449	0.438	0.782	0.551
Y.2	0.461	0.441	0.455	0.800	0.585
Y.3	0.363	0.497	0.472	0.776	0.477
Y.4	0.535	0.489	0.492	0.748	0.514
Y.5	0.516	0.463	0.533	0.773	0.491
Z.1	0.318	0.423	0.487	0.560	0.834

Z.2	0.383	0.364	0.401	0.600	0.844
Z.3	0.370	0.452	0.426	0.592	0.832
Z.4	0.375	0.322	0.367	0.532	0.792
Z.5	0.366	0.424	0.428	0.483	0.798

Source: Researcher processing (2025)

Based on the table above, it can be seen that each variable has a *cross loading factor value* above >0.7, meaning that the variables in this study have met the requirements.

Heterotrait-monotrait ratio (HTMT)

The HTMT ratio is required to be less than 1 so that it can be said to meet the discriminant validity requirements.

Table 5. Heterotrait-monotrait ratio (HTMT)

Variables	Heterotrait-monotrait ratio (HTMT)
(X2) Income <-> (X1) Budget Planning	0.392
(X3) ATR Control <-> (X1) Budget Planning	0.522
(X3) ATR Control <-> (X2) Income	0.614
(Y) Financial Performance <-> (X1) Budget Planning	0.702
(Y) Financial Performance <-> (X2) Revenue	0.713
(Y) Financial Performance <-> (X3) ATR Control	0.717
(Z) Standard Operating Procedure <-> (X1) Budget Planning	0.503
(Z) Standard Operating Procedure <-> (X2) Revenue	0.560
(Z) Standard Operating Procedure <-> (X3) ATR Control	0.582
(Z) Standard Operating Procedure <-> (Y) Financial Performance	0.786

Source: Researcher Processing (2025)

As can be seen in the table above, all variables have HTMT values below 1, so it can be concluded that these variables passed the HTMT test stage.

Reliability Test

The table showing the *Cronbach's alpha value* is as follows:

Table 6. Cronbach's Alpha

Variables	Cronbach's alpha
(X1) Budget Planning	0.868
(X2) Income	0.846
(X3) ATR Control	0.859
(Y) Financial Performance	0.835
(Z) Standard Operating Procedure	0.879

Source: Researcher Processing (2025)

From the table above, it can be seen that all indicators in each variable have met the reliability test requirements, namely a Cronbach's alpha value >0.6.

Structural Model Analysis (Inner Model)

Godness of Fit Test**R-Square****Table 7. R-Square Value**

Variables	R-square
(Y) Financial Performance	0.661
(Z) Standard Operating Procedure	0.367

Source: Researcher Processing (2025)

Based on the table above, it can be seen that the R-Square value of the Financial Performance Variable is 0.661, so this value is a sign that the Budget Planning Variable, Revenue Variable, Non- Revenue Water Control Variable (ATR) and Standard Operating Procedure Variable have an effect on the Financial Performance Variable by 66.1%. The remaining 33.9% is influenced by other variables. And the R-Square value of the Standard Operating Procedure Variable is 0.367, so this value is a sign that the Budget Planning Variable, Revenue Variable, Non- Revenue Water Control Variable (ATR) and Financial Performance Variable have an effect on the Standard Operating Procedure Variable by 36.7% and the remaining 63.3% is influenced by other variables.

F-Square

According to (Ghozali, 2021) *effect size* (f^2) is applied as a measure in determining the inverse of the model. The values f^2 consist of 0.02 (weak), 0.15 (moderate), and 0.35 (strong).

Table 8. F-Square Value

Variables	(Y) Financial Performance	(Z) Standard Operating Procedure
(X1) Budget Planning	0.183	0.064
(X2) Income	0.117	0.078
(X3) ATR Control	0.054	0.071
(Z) Standard Operating Procedure	0.212	

Source: Researcher Processing (2025)

Based on the table above, the Budget Planning Variable has an influence on the Financial Performance Variable of 0.183 (moderate) and on the Standard Operating Procedure Variable of 0.064 (weak). The Revenue Variable has an influence on the Financial Performance Variable of 0.117 (weak) and on the Standard Operating Procedure Variable of 0.078 (weak). The Non- Revenue Water Control Variable (ATR) has an influence on the Financial Performance Variable of 0.054 (weak) and on the Standard Operating Procedure Variable of 0.071 (weak). The Standard Operating Procedure Variable has an influence on the Financial Performance Variable of 0.212 (moderate).

Hypothesis Testing**Table 9. Hypothesis Test Results**

Variables	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
(X1) Budget Planning -> (Y) Financial Performance	0.291	0.287	0.068	4,248	0,000
(X1) Budget	0.229	0.231	0.080	2,849	0.004

Planning -> (Z) Standard Operating Procedure					
(X2) Revenue -> (Y) Financial Performance	0.246	0.250	0.070	3,511	0,000
(X2) Income -> (Z) Standard Operating Procedure	0.265	0.265	0.098	2,697	0.007
(X3) ATR Control -> (Y) Financial Performance	0.178	0.177	0.076	2,333	0.020
(X3) ATR Control -> (Z) Standard Operating Procedure	0.268	0.271	0.096	2,778	0.005
(Z) Standard Operating Procedure - > (Y) Financial Performance	0.337	0.341	0.079	4,274	0,000
(X1) Budget Planning -> (Z) Standard Operating Procedure -> (Y) Financial Performance	0.077	0.080	0.037	2,086	0.037
(X2) Revenue -> (Z) Standard Operating Procedure -> (Y) Financial Performance	0.089	0.090	0.040	2,242	0.025
(X3) ATR Control -> (Z) Standard Operating Procedure -> (Y) Financial Performance	0.090	0.094	0.044	2,076	0.038

Source: Researcher Processing (2025)

The criteria for accepting the hypothesis are if the T-Statistic is more than 1.96 and the P-Value is less than 0.05, then H_a is accepted and H_o is rejected, and vice versa, the hypotheses proposed are as follows:

First Hypothesis Test

Budget Planning Variable Has a Positive and Significant Influence on Financial Performance Variable. It can be seen from the regression coefficient value of 0.291. and from the results of data management there is a T-Statistic value of 4.248 which is greater than the T-Table value of 1.96 with a P-Value of 0.000 which is less than 0.05, therefore the Budget Planning Variable Has a Positive and Significant Influence on Financial Performance Variable.

Second Hypothesis Test

Budget Planning Variable Has a Positive and Significant Influence on Standard Operating Procedure Variable. It can be seen from the regression coefficient value of 0.229. and from the results of data management there is a T-Statistic value of 2.849 which is greater than the T-Table value of 1.96 with a P-Value of 0.004 which is smaller than 0.05, therefore the Budget Planning Variable Has a Positive and Significant Influence on Standard Operating Procedure Variable.

Third Hypothesis Test

Income Variable Has a Positive and Significant Influence on Financial Performance Variable. It can be seen from the regression coefficient value of 0.246. and from the results of data management there is a T-Statistic value of 3.511 which is greater than the T-Table value of 1.96 with a P-Value of 0.000 which is less than 0.05, therefore the Income Variable Has a Positive and Significant Influence on Financial Performance Variable.

Fourth Hypothesis Test

Income Variable Has a Positive and Significant Influence on Standard Operating Procedure Variable. It can be seen from the regression coefficient value of 0.265. and from the results of data management there is a T-Statistic value of 2.697 which is greater than the T-Table value of 1.96 with a P-Value of 0.007 which is smaller than 0.05, therefore the Income Variable Has a Positive and Significant Influence on Standard Operating Procedure Variable.

Fifth Hypothesis Test

Revenue Water Control Variable (ATR) is Positive and Significant on Financial Performance Variable. It can be seen from the regression coefficient value of 0.178. and from the results of data management there is a T-Statistic value of 2.333 which is greater than the T-Table value of 1.96 with a P-Value of 0.020 which is less than 0.05, therefore the Non- Revenue Water Control Variable (ATR) has a Positive and Significant Effect on Financial Performance Variable.

Sixth Hypothesis Test

Revenue Water Control Variable (ATR) Has a Positive and Significant Influence on the Standard Operating Procedure Variable. It can be seen from the regression coefficient value of 0.268. and from the results of data management there is a T-Statistic value of 2.778 which is greater than the T-Table value of 1.96 with a P-Value of 0.005 which is less than 0.05, therefore the Non- Revenue Water Control Variable (ATR) Has a Positive and Significant Influence on the Standard Operating Procedure Variable.

Seventh Hypothesis Test

The Standard Operating Procedure Variable Has a Positive and Significant Impact on Financial Performance Variables. It can be seen from the regression coefficient value of 0.337. and from the results of data management there is a T-Statistic value of 4.274 which is greater than the T-Table value of 1.96 with a P-Value of 0.000 which is less than 0.05, therefore the Standard Operating Procedure Variable Has a Positive and Significant Impact on Financial Performance Variables.

Eighth Hypothesis Test

Budget Planning Variable Has a Positive and Significant Influence on Financial Performance Variable Through Standard Operating Procedure Variable as a Mediating Variable. It can be seen from the regression coefficient value of 0.077. and from the results of data management there is a T-Statistic value of 2.086 which is greater than the T-Table value of 1.96 with a P-Value of 0.037 which is smaller than 0.05, therefore the Budget Planning Variable Has a Positive and Significant Influence on Financial Performance Variable Through Standard Operating Procedure Variable as a Mediating Variable.

Ninth Hypothesis Test

Income Variable Has a Positive and Significant Influence on Financial Performance Variable Through Standard Operating Procedure Variable as a Mediating Variable. It can be seen from the regression coefficient value of 0.089. and from the results of data management there is a T-Statistic value of 2.242 which is greater than the T-Table value of 1.96 with a P-Value of 0.025

which is smaller than 0.05, therefore the Income Variable Has a Positive and Significant Influence on Financial Performance Variable Through Standard Operating Procedure Variable as a Mediating Variable

Tenth Hypothesis Test

Revenue Water Control Variable (ATR) is Positive and Significant on Financial Performance Variable Through Standard Operating Procedure Variable as Mediating Variable. It can be seen from the regression coefficient value of 0.090. and from the results of data management there is a T-Statistic value of 2.076 which is greater than the T-Table value of 1.96 with a P-Value of 0.038 which is smaller than 0.05, therefore the ATR Control Variable has a Positive and Significant Effect on Financial Performance Variable Through Standard Operating Procedure Variable as Mediating Variable.

CONCLUSION

Based on the results of the study conducted at Perumda Air Minum Tirta Raharja Bandung, it can be concluded that the Budget Planning Strategy, Revenue, and Control of Non-Revenue Water (ATR) have a positive and significant influence on the company's Financial Performance, both directly and through Standard Operating Procedures (SOP) as an intervening variable. A good budget planning strategy encourages the preparation of effective Standard Operating Procedures (SOP), so that it can improve efficiency and accountability in the implementation of operational activities. Stable and increasing revenue also contributes to strengthening Standard Operating Procedures (SOP), especially in financing training, monitoring, and supervision of the implementation of operational standards. On the other hand, optimal control of Non- Revenue Water (ATR) plays an important role in maintaining operational stability and supporting the implementation of Standard Operating Procedures (SOP) more systematically. SOP has been proven to have a significant mediating role in strengthening the influence of these three variables on financial performance, which shows that the success of managerial strategies will be maximized if accompanied by the implementation of consistent and structured Standard Operating Procedures (SOP). Thus, the company's success in improving financial performance is highly dependent on the synergy between strategic planning, revenue management, control of Non- Revenue Water (ATR) , and the effectiveness of Standard Operating Procedures (SOP) as a link between internal process.

Based on the results of this study, it is recommended to the management of Perumda Air Minum Tirta Raharja Bandung to continue to strengthen the synergy between strategic budget planning, revenue management, and Non-Revenue Water (ATR) control with the implementation of consistent and structured Standard Operating Procedures (SOP). The company needs to periodically evaluate and update the SOP to remain relevant to operational dynamics and changes in the external environment. In addition, increasing human resource capacity through ongoing training is very important to ensure that SOPs can be implemented effectively. Investment in monitoring and supervision systems is also needed to ensure that ATR control runs optimally. With these steps, the company can achieve better and more sustainable financial performance.

Suggestions for Further Researchers are by Expanding Research Variables. Further research is suggested to add other variables that also have the potential to affect the company's financial performance, such as leadership, organizational culture, HR quality, or information technology. This is to obtain a more comprehensive picture of the factors that support increased financial performance.

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